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RECONSIDERING THE PUBLIC ROLE OF ART MUSEUMS:
AN ANALYSIS OF EDUCATION PROGRAMS OF MODERN AND
CONTEMPORARY ART MUSEUMS IN ISTANBUL FOR VISITORS WITH
VISUAL IMPAIRMENTS

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SANAT MÜZELERİNİN TOPLUMSAL ROLÜNÜ YENİDEN
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EĞİTİMLERİNİN ANALİZİ

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- 3) Accessibility
- 4) Disability
- 5) Visitors with Visual
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DEDICATION

I dedicated this thesis to my beloved mother and father.

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LIST OF ABBREVIATIONS

- ADA: The American Disability Act
- CRPD: The Convention on the Rights of Persons with Disabilities
- DDA: The Disability Discrimination Act
- EU: The European Union
- GETEM: The Assistive Technology and Education Laboratory for Individuals with Visual Disabilities at the Boğaziçi University
- HRBA: Human Rights-Based Approach
- ICOM: International Council of Museums
- MET: The Metropolitan Museum
- MoCT: The Ministry of Culture and Tourism
- MoMA: The Museum of Modern Art
- NGOs: Non-governmental Organizations
- SSM: The Sakıp Sabancı Museum
- TurkStat: Turkish Statistical Institute
- UDHR: The Universal Declaration of Human Rights
- UN: The United Nations
- UNESCO: The United Nations Educational, Scientific and Cultural Organization
- UPIAS: The Union of the Physically Impaired Against Segregation
- V&A: The Victoria & Albert Museum
- WHO: The World Health Organization

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ABSTRACT

In the 21st century, with the changing definition of museums, their social roles begin to come to the fore and are discussed. Museums aim to be accessible to everyone and be more inclusive and democratic public spaces. In this respect, especially since the 1960s and 1970s, various educational programs and exhibitions have been increasingly held for visitors with visual impairments in museums in different parts of the world. However, works on making museums more accessible in Turkey, including for blind and partially sighted visitors, just began in the 2000s and are very limited. This study aims to investigate and evaluate the education programs of the modern and contemporary art museums in Istanbul for the visitors with visual impairments, and to learn the expectations of blind and partially sighted visitors from museums, and to reveal the knowledge that enables them to find solutions to the problems they encounter in museums. In this context, the studies of modern and contemporary art museums in Istanbul for blind and partially sighted visitors were investigated. For this purpose, interviews were held with people who organize education programs for the blind and partially sighted visitors in three private modern and contemporary art museums in Istanbul (Istanbul Modern Art Museum, Sakıp Sabancı Museum, and Arter), and their education programs were examined. In addition, this thesis aims to present strategies for museums to be more accessible and inclusive for blind and partially sighted visitors.

Keywords: Art Museums, Museum Education, Accessibility, Disability, Visitors with Visual Impairments

ÖZET

21. yüzyılda müzelerin değişen tanımıyla toplumsal rolleri daha çok ön plana çıkmakta ve tartışılmaktadır. Müzeler, herkes tarafından erişilebilirliği, daha kapsayıcı ve demokratik birer kamusal mekân olmayı hedeflemektedirler. Özellikle 1960'lı ve 1970'li yıllardan itibaren dünyanın çeşitli yerlerindeki müzelerde, görme engelli ziyaretçilere yönelik çeşitli eğitim programları ve sergilerin arttığı gözlenilmiştir. Ancak Türkiye'deki müzelerde, görme engelli ziyaretçiler de dâhil olmak üzere, erişilebilirlik konusundaki çalışmalar, 2000'li yıllar itibariyle başlamıştır ve oldukça sınırlıdır. Bu tezde, İstanbul'daki modern ve çağdaş sanat müzelerinin, görme engelli ve kısmi görme engelli ziyaretçilere yönelik eğitim programlarının araştırılmasını ve değerlendirilmesini, bu müzelerin görme engelli ziyaretçilerin beklentilerini öğrenmeyi ve problemlerine çözüm bulmalarını sağlayan bilgi birikiminin ortaya çıkarılmasını amaçlamaktadır. Bu kapsamda, İstanbul'daki modern ve çağdaş sanat müzelerinin görme engelli ve az gören ziyaretçilere yönelik yaptıkları çalışmalar araştırılmıştır. Bu amaçla, İstanbul'daki üç özel modern ve çağdaş sanat müzesinde (İstanbul Modern Sanat Müzesi, Sakıp Sabancı Müzesi ve Arter) görme engellilere yönelik eğitim veren kişilerle söyleşiler gerçekleştirilmiş ve yapılan eğitim programları incelenmiştir. Bu tezde, görme engelli ve kısmi görme engelli ziyaretçiler için müzelerin erişilebilir ve kapsayıcı olmalarını sağlayacak stratejiler önerilmesi hedeflenmektedir.

Anahtar Kelimeler: Sanat Müzeleri, Müze Eğitimi, Erişilebilirlik, Engellilik, Görme Engelli Ziyaretçiler

INTRODUCTION

Since the beginning of the establishment of museums, they have focused on preserving and exhibiting works of art. Therefore they were more object-oriented. However, with the change in the late 20th century and the beginning of the 21st century, museum visitors became the central point of museums. Thus the social roles of museums came to the fore and they became more human-oriented (Uralman, 2012). Museums started to appeal to individuals from all parts of the society and became democratic public spaces where visitors could socialize, have fun and learn. The International Council of Museums' (ICOM) defines museums as;

“a non-profit, permanent institution in the service of society and its development, open to the public, which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study and enjoyment” (ICOM, 2007).

In the 1960s the relationship between museums and visitors was considered simple and one-dimensional. It was the museums that held power and authority in this relationship. Over time, museums fundamentally changed and began to recognize not only the diversity in society but also their role in it. They organize programs and exhibitions in order to serve the interests and needs of all visitors (Reeve & Woollard, 2006). Thus, contemporary museums became dynamic spaces of social change and development by acting for a person, not for an object (Karadeniz, 2015, p. 405). In other words, museums started to give more emphasis on the experience of their visitors, besides exhibiting and conserving their collections. So, not only the functions of museums but also their definition and also their position in the geography in which they are established. In this respect, one can argue that museum is an evolving term. Its notions and forms of definitions vary in different languages all around the world. This situation generally affects how the museum perceives

itself. All the above-mentioned changes and developments have brought the social role of museums to come to the fore (Brown & Mairese, 2018).

In addition, museums represent societies historically, socially, scientifically, and artistically. In museums, visitors find opportunities to socialize with others, including museum professionals such as educators and curators. (Leinhardt et. al., 2000). Therefore, museums organize various events, education programs, and exhibitions on themes such as accessibility, social inclusion, and social equality to get to know visitors, identify their demands and needs, and increase visitor potential and diversity.

In the second half of the 20th century, educational programs became part of museum agendas. While programs had been mostly organized for school groups until the 1950s, the scope of education in museums expanded, especially in the last three decades with the research on education methods for different visitor groups such as families and people with disabilities (Akmehmet, 2012). Educational programs for blind and partially sighted visitors in various museums from various parts of the world started in the 19th century and increased and diversified in the 1960s and 1970s (Reidmiller, 2003; Haines, 2021). Today, various accessible programs and events are held in different parts of the world for blind and partially sighted visitors.

In Turkey, museums started to organize activities for visitors with disabilities after the 2000s (Menda et al. 2013). Except for several museums, most of the museums do not have regular educational programs and necessary accessibility facilities or have limited accessibility devices such as audio descriptions for visitors with visual impairments (Polat, 2019). Most of the museum exhibition designs often include accession barriers against visitors with visual impairments (Ginley, 2013). So, most of the museums are not accessible for blind and partially sighted visitors.

It is the most natural right of blind and partially sighted visitors to visit the museum, learn and socialize like everyone else. Therefore, for visitors with visual impairments, there are several ways to make the museum experience accessible. Visitors' experiences can be reinforced through their senses of touch and hearing. In this manner, museums should produce labels and booklets in Braille and large print, and tactile diagrams, allow these people to touch exhibited artworks or their replicas, provide tactile paving, necessary lighting, audio description, etc. When museums adapt these accessibility facilities for visitors with visual impairments to their systems, they will become more inclusive, universal, and democratic institutions.

This thesis is comprised of four parts. In the first part, it is aimed to provide background information to the reader. Therefore, a historical framework has been drawn regarding visitors with visual impairments and museums in the Turkey and in the world. Also, in some parts, the opinions of the participants with visual impairments were included. In addition, the two most common disability theories, the medical model and the social model are discussed to put the importance of adaptation of the social model of disability. Also, the definition and types of visual disability are mentioned.

In the second part, the importance of learning in museums for people with visual impairments is discussed. In addition, recent increasing pressure on museums concerning social exclusion is mentioned. Also, the universal design and grounds for museums' adaptation to its systems are dealt with. Furthermore, in this part, the universal design is explained. Accessibility works required for blind and partially sighted visitors in museums are explained one by one.

In the third part, in the context of the interviews with museum professionals of Sakıp Sabancı Museum and Istanbul Museum of Modern Art and Arter, their educational programs and exhibitions for visitors with visual impairments were discussed in detail.

In the fourth part, the deficiencies of the accessibility facilities for the blind and partially sighted museum visitors in Turkey, which are elaborated during the research, were identified and discussed.

RESEARCH QUESTIONS

In this thesis, it is aimed to search and evaluate modern and contemporary art museums which organize educational programs and exhibitions for blind and partially sighted visitors. The motivation behind the research is that there are relatively few studies on this subject. Besides, modern and contemporary artworks are often difficult to understand or interpret, and it may seem difficult to explain these works to individuals with visual impairments. Despite this general bias, it is also intended to reveal that visitors with visual impairments can access and experience artworks when the necessary accessibility works are done. Therefore, I took the following questions as a base for my research:

- What kind of educational programs and exhibitions are held for the accessibility and experiences of visitors with visual impairments in Istanbul's modern and contemporary art museums?
- Are accessibility works for visitors with visual impairments sufficient in the modern and contemporary art museums in Istanbul?
- How do various accessible educational programs and exhibitions affect the museum experience of visitors with visual impairments?

Following sub-questions are also studied in the research:

- Why do museums need to adopt the social definition of disability in order to be more democratic and inclusive spaces?
- What is the contribution of museums for visitors with visual impairments to make them learn art?

- Why should museums adopt the universal design to become more democratic and inclusive spaces?
- What are the expectations of blind and partially sighted visitors from museums?

METHODOLOGY

In this thesis, a qualitative method applying open-ended questions and interviews was conducted. A few museums in Turkey organize exhibitions and educational programs for visitors with visual impairments. Therefore, three private modern and contemporary art museums in Istanbul, the Sakıp Sabancı Museum, Istanbul Museum of Modern Art, and Arter that have educational programs for blind and partially sighted visitors, were chosen as case studies.

It is because of the fact that various exhibitions and educational programs for blind and partially sighted visitors have been organized in these museums. Therefore, I conducted in-depth interviews with each museums' professionals to understand and evaluate their accessibility programs. During the research, I also inquired from various museums from Istanbul and other cities in Turkey about their accessibility programs for visitors with visual impairments. I learned that they do not organize educational programs for blind and partially sighted visitors. In addition to these interviews, I asked open-ended questions to 10 people with visual impairments, who visit museums, to understand their previous experiences.

LIMITATIONS

There are relatively a few studies on the museum accessibility of blind and partially sighted visitors in Turkey. Also, since it is difficult to find visitors with visual impairments with sufficient experience and knowledge about museums in Turkey, I conducted interviews with very few people. In addition, while I was planning the research for my thesis, I had designed a museum tour with the blind and partially sighted museum visitors I interviewed. I wanted to observe their museum

experience. I could not physically attend the museums' programs that I have examined and realize these plans due to the global COVID-19 pandemic.

1. MUSEUMS AND VISITORS WITH VISUAL IMPAIRMENTS

1.1. DISABILITY AND VISUAL IMPAIRMENT

1.1.1. What is Disability?

The number of people with disabilities in the world is increasing day by day due to various reasons like congenital causes and other diseases, natural disasters, accidents etc. Therefore every human being is a potentially disabled individual. Today, it is thought that more than one billion people have some form of disability. This number constitutes approximately 15% of the world's population. Almost 190 million (3.8%) individuals aged 15 and older suffer from severe organizational difficulties according to a recent figure of the World Health Organization (WHO, 2021).

In Turkey, according to the Turkish Statistical Institute (TurkStat) there are 4.876.000 people with at least one impairment (aged 3 and over) which corresponds to about 6.9% of Turkey's population. This figure is 5.9% for males and 7.9% for females¹. Also, the number of registered individuals with disabilities in the National Disability System is 2.511.950, which is composed of 1.414.643 males and 1.097.307 females². 775.012 of them are severely disabled (Engelli ve Yaşlı İstatistik Bülteni 2021-Haziran).

According to the Convention on the Rights of Persons with Disabilities, disability “is an evolving concept and that disability results from the interaction between

¹In order to obtain cross-country comparable population statistics, the United Nations recommends that countries carry out a population and housing census in the years that end with 0. Therefore the last survey is conducted to estimate the distribution of people with disabilities in provinces under the survey of 2011 Population and Housing Census in 2011 (Engelli ve Yaşlı İstatistik Bülteni 2021-Haziran, p.4).

² These rates do not include people who have not registered to obtain a Disability Health Board Report from approved hospitals and have not applied for government services (Engelli ve Yaşlı İstatistik Bülteni 2021-Haziran, p.16).

persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others” (CRPD, 2008). On the other hand, according to Turkey’s Law on Disabled People dated 2005 and numbered 5378, the individual with a disability is

“the person is affected by the attitudes and environmental conditions that restrict the person's full and effective participation in society on equal terms with other individuals due to the loss of the person's physical, mental, spiritual, and sensory abilities at various levels” (The Law on the Disabled People, 2005).

Despite the intensity of the disabled population, there is no globally agreed definition. As it is an “evolving term” (The World Report on Disability, 2011), it is seen that each institution or discipline makes a definition according to its own perspective. Although disciplines approach the notion of disability within their own focus, within an eclectic setting, they need to continue to improve the relationship of disability with other disciplines. Within this scope, international and national institutions and foundations conduct scientific research to supply multiple services and carry out various studies and applications (Akçalı, 2015, p.7).

1.1.2. Theories on Disability

Until the 1970s, disability was considered an area of concern to the medical field. After the rise of the disability movement within the social mobility of the 1960s, disability began to be discussed outside medicine. Thus, disability studies have become a field of study within social sciences (Önver, 2012, p.35). Towards the end of the 1960s and coming of "the age of affluence", individuals with disabilities started to aware of themselves and be organized around the issues of income, employment, rights, and social life instead of merely rehabilitation and institutional care (Finkelstein, 2004, p. 13). Previously, social movements were generally based on religion, class, and nationality; however, with the in 20th century, its agenda

enlarged towards the prevention of discrimination against women and people with disabilities (Önver, 2012, p.35). The disability movement and its struggle have led to the redefinition of disability, questioned the ability of non-disabled people to speak on behalf of people with disabilities, and raised the demand that people with disabilities should become decision-makers. The most fundamental and early examples of the disability movement simultaneously emerged in the United States and the United Kingdom in the 1960s. The political climate of the 1960s inspired Vietnam War veterans and disabled college students in the United States. In the United Kingdom, groups have emerged that demand that welfare policies be developed by taking into account the people with disabilities (Yardımcı, 2015, p. 20). Thus, due to the increased awareness of people with disabilities themselves and their rights, new organizations started to emerge during this time.

One of the first and most significant organizations was Disablement Income Group (DIG), founded in 1965 in the UK. DIG generally focused on “campaigning for national income to compensate for disability” (Finkelstein, 2004, p. 13). Nevertheless, DIG was not successful as it built its campaign only on the income of people with disabilities. On the other hand, DIG was a significant organization because it has encouraged people to discuss disability and disability issues and led to the establishment of more comprehensive organizations (Finkelstein, 2004, p. 14).

In 1972 the Union of the Physically Impaired Against Segregation (UPIAS) was founded by Paul Hunt in the United Kingdom. UPIAS comprised of “a small and hardcore group of people with disabilities, inspired by Marxism who rejected the liberal and reformist campaigns of more mainstream disability organizations” (Shakespeare, 2010, p. 266). UPIAS published a document titled *Fundamental Principles of Disability* in 1976. The paper argues that “disability is something imposed on top our impairments by the way we are unnecessarily isolated and excluded from full participation in society” (UPIAS, 1976). So UPIAS accuses society to be responsible for creating physical disabilities for people with

disabilities. Therefore, UPIAS aims to end discrimination against individuals with disabilities and replace them with opportunities to participate in all aspects of social life, such as “...to live independently, to undertake productive work and to have full control over their own lives” (Shakespeare, 2010, p. 266) and to redefine disability.

Current debates continue on Disability Studies. The formation of models related to disability shows that the connection with the disability movement also has an effect. Strengthening the disability movement and revealing its social ties is an important step in starting the discussions on the way of theorizing. There are different and various models of disabilities such as medical, social, professional, tragic, religious or moral, legitimacy, etc. Although there are such a wide variety of models, the medical and social models of disability have been discussed more (Önver, 2012, p.38). Therefore, both medical and social models will be briefly discussed in the next section.

1.1.2.1. The Medical Model of Disability

The medical model emerged in the mid-1800s with advances in the field of medicine and rehabilitation (Arıkan, 2002). Medicine deals with a disability as an illness and tries to treat or rehabilitate it (Önver, 2012). Therefore, the field focuses on disability rather than a person with a disability. The medical model automatically assumes that all persons with disabilities are ‘restricted’. Regardless of its type, disability has been studied mainly in terms of the medical model. Within the framework of the medical model, disability is largely explained based on the individual's disability and pathology. In other words, people with disabilities are in a different position compared to 'normal' individuals in a society due to their various disabilities and inadequacies (Arıkan, 2002).

Also, according to Mike Oliver (1990), one of the co-founders of UPIAS, it is also significant to understand that the medical model was influenced by capitalism,

which was influential at the time it emerged. He claims that the medical model carries parts of capitalist thought. Therefore, according to him, it is significant to understand its relation to capitalism. Oliver states that "...the oppression that disabled people face is rooted in the economic and social structures of capitalism which themselves produce racism, sexism, homophobia, ageism and disablism" (Oliver, 1996, p.33).

Thomas (2002) summarizes Oliver's theory as follows: people with disabilities began to be systematically excluded from direct participation in economic activity due to the working hours in factories requiring a standard work pace, intensity and dexterity. Many individuals with disabilities were unable to sell their labor power in such conditions while they became increasingly socially dependent and excluded from the generalized commodity production economy. As time progressed, the dependency of people with disabilities was reinforced and policies aimed at solving the 'social problem' they caused were based on institutionalization and medicalization. The exclusions and dependencies experienced by the people with disabilities in the twentieth century in the field of employment, education, social assistance services, culture, etc., whether in institutional or community settings, can be traced back to this earlier economic decline of them (pp. 46-47).

Furthermore, according to Oliver (1990), the medical model has adopted individualism, the core idea of capitalism, and argues that disability is the fault of an individual. In particular, this approach defines disability as a 'tragedy' situation that happens to individuals from birth or later, that is, a 'deficiency' or 'disease' situation arising from the individual self. The individual who is assumed to be the source of the disability is thought to be the person who needs to adapt to the environment (normal society). Therefore, there are two ways to do it. One of them is the struggle of the people with disability. People with disabilities must adapt to the conditions of the society they live in by changing their point of view and their "consciousness". The other one is social intervention. In this situation, most of the time people with disabilities are presented as passive and subordinate, on the other

hand, ‘normal’ people or institutions are seen as active and problem solvers. Therefore, ‘normal’ people of institutions can intervene to reduce or eliminate the disability. The style of intervention can be made within the scope of different definitions such as “treatment”, “rehabilitation”, “bringing to life”, “social responsibility”, “help” and so on, depending on the attitude and policy of the person and/or institution that intervenes from outside (Şentürk, n.d., pp. 1-2).

According to Önver (2012), the International Classification of Impairments, Disabilities and Handicaps’ classification, the WHO’s, best summarizes the medical model. The medical model accepts the definitions of WHO and puts it into on practice. Medical professionals are recognized as the authority on these issues. As a result of seeing the disability as a disease, the approach to disability is treatment-oriented. Disability is considered an individual problem and a personal tragedy. This theory also affects and determines public policies. The content of these policies consists of care, treatment, rehabilitation services, and social assistance. People with disabilities are considered passive recipients of services (p. 47).

In addition, the medical model has been providing fundamental opportunities for people with disabilities. For example, strengthening diagnosis, treatment, rehabilitation and monitoring programs, and careful preparation of prevention programs have increased the quality of life of people with disabilities and their relatives (Arıkan, 2002).

1.1.2.2. The Social Model of Disability

Reformulation of disability as a form of social oppression rather than in purely medical or welfare-related terms began in the UK began in the 1970s. Groups or people with disabilities started to consolidate to resist their displacement to residential institutions, their segregation from employment, their opportunity to earn their life, and the imposition of poverty on them. As a matter of fact, these

political struggles subsequently gave birth to new radical ideas about disability (Thomas, 2002, p. 39). According to the social model of disability, as firstly stated by the UPIAS in 1976, it is the society that makes individuals disabled, not their mental or physical disabilities (Shakespeare, 2010; Oliver, 2004). Also, the social model of disability has influenced the political position of disability movements, and it has become a political issue (Terzi, 2004). Oliver states that "...it was the way society responded to us as an oppressed minority" (Oliver, 2004, p. 7). In other words, it is not the inadequacy of impairments of individuals with disabilities, but it is the shortage of society's awareness on the course.

The social model is developed to reveal the problems arising out of the social oppression and exclusion that people with disabilities encounter. Therefore, Mike Oliver invented the phrase the social model of disability to change the understanding of disability, which turned out to be a milestone in Disability Studies and disability movements first of all in the UK. This is because of the fact that the social model affected a fundamental social and political change in terms of disability (Thomas, 2004, p. 21).

Furthermore, "by identifying social barriers which should be removed, the social model has been effective instrumentally in the liberation of disabled people" (Shakespeare, 2010, p.270). When people with disabilities become aware of the social model, they experience a kind of enlightenment, they become free, they believe they can do something, and perhaps for the first time they have the opportunity to see that most of their difficulties are due to social reasons (Thomas, 2002, p.40). "The social model has been effective psychologically in improving the self-esteem of disabled people and building a positive sense of collective identity" (Shakespeare, 2010, p.270). The social model is also beneficial for a uniting call for all disability organizations (Thomas, 2002, p.40).

While expressing the demands of people with disabilities regarding their living environment, they also tried to redefine them as active individuals (Şentürk, n.d.).

Therefore *The Fundamental Principles of Disabilities* claims physical disability as “social oppression” by arguing that:

“as lacking part of or all of a limb, or having a defective limb, organ or mechanism of the body; and disability as the disadvantage or restriction of activity caused by a contemporary social organization which takes no or little account of people who have physical impairments and thus excludes them from participation in the mainstream of social activities.” (UPIAS, 1976).

In addition, according to Şentürk (n.d.), the social model also opposes a one-sided examination of particular problems. The reason is the presence of various factors within the society that creates social barriers and restricted environments which prevent individuals to participate in all aspect of life. For this reason, both societies and governments should remove and change barriers and obstacles from every area of life to create a barrier-free environment (Oliver, 1996). In this way, a barrier-free environment provides a more inclusive social environment and convenience to different social segments.

1.1.2.3. The Comparison of the Medical Model and the Social Models of Disability

Shakespeare (2010) differentiated the medical model and the social models of disability. To him, the medical model describes disability as an individual shortfall (p.270). Therefore, people with disabilities are oppressed and alienated from society. Also, in the medical model, the exclusion of individuals from social environments is understandable and considered normal (Şentürk, n.d.). In addition, the medical model of disability focuses on the deficiency and impairment of the individuals with disabilities while ignoring their needs. Therefore, it lowers

expectations and leads people with disabilities to lose control of their lives, right to choose, and freedom (Australian Federation of Disability Organisation, n.d.).

On the other hand, disability is defined as a social creation by the social model of disability (Shakespeare, 2010, p. 270). Therefore, it is aware of the barriers faced by people with disabilities and works to confiscate these barriers. This helps people with disabilities to be independent and have an equal social life and to believe their selves by identifying the barriers (Australian Federation of Disability Organisation, n.d. & Shakespeare, 2010). Also, the social model is questioning the exclusion of individuals from any social environment. Besides, while the medical model deals with the bodily part (impairment) of disability, the social model focuses on the barriers that disability creates by social practices (disability) (Şentürk, n.d.). In sum, the social model of disability is much more inclusive.

1.1.2.3. The Human Rights-based Approach to Disability

The human rights-based approach (HRBA) started to emerge with the introduction of the UN Universal Declaration of Human Rights in 1948 and has become significant after the introduction of the CRPD in 2008 in terms of dealing with existing discriminations, inequalities, and barriers (Rioux & Carbert, 2003; Katsui, 2008). The UN Sustainable Development Group (n.d.) defines the human rights-based approach as “a conceptual framework for the process of human development that is normatively based on international human rights standards and operationally directed to promoting and protecting human rights”. Human Rights-based approaches puts forward the significance of non-discrimination, inclusion, and empowerment towards groups of people, who left behind, such as women, individuals with disabilities, migrants, elderly, and children (Chrichton et. al., 2015). Therefore, HRBA aims to motivate and increase the responsibilities of duty-bearers (i.e. government) to exercise human rights and support right-holders (i.e. people with disabilities) to demand their rights (Chrichton et. al., 2015; Joffe, 2010). According to the UN Sustainable Development Group (n.d.). the human

rights-based approach needs principles, universality, indivisibility, equality and non-discrimination, participation and accountability in order to guide and increase duty-bearers to exercise human rights and support right-holders to demand their rights.

According to Quinn & Degener (2002) “disability is a human rights issue” (p.3). Because individuals with disabilities are denied autonomy and experience inequalities at various points in life, also they are exposed to violations of dignity (The World Report on Disability, 2011). The human rights-based approach reflects a paradigm shift towards people with disabilities, which has taken over a place last twenty years (Quinn et. al, 2002). HRBA sees individuals with disabilities as active citizens, subjects, and right owners, so they can make their own decisions and claim their rights (Njelesani et. al, 2012; Quinn et al., 2002). Besides, HRBA has a similar ideology with the social model of disability. They both accept disability as a social creation therefore it is the society that prevents people with disabilities from accessing services and claiming their legal and social rights (Njelesani et. al, 2012). In short, HRBA deals with the inequalities and barriers that individuals with disabilities face within the context of international human rights. Therefore, there has been a crucially important shift towards to human rights-based approach to disability all over the world.

1.1.3. Definition, Classification and Causes of Visual Impairment

According to the figures of the World Health Organization dated 2021 a minimum of 2.2 billion people around the world are affected by blindness and vision impairment. Of those, 1 billion have a vision impairment that is preventable or one that has yet to be resolved. Also, according to the World Health Organization, this number includes those with moderate or severe distance vision impairment or blindness due to undetected refractive error (88.4 million), cataract (94 million), glaucoma (7.7 million), corneal opacity (4.2 million), diabetic retinopathy (3.9 million) and trachoma (2 million), as well as near vision impairment due to

undetected presbyopia (826 million) (WHO, 2021). According to the last survey of the 2011 Population and Housing Census of TurkStat, 1.039.000 people have difficulty in seeing in Turkey. The ratio of this to the total population is 1.4 %. Also, 478.000 of them are men and 561.000 are women. In addition to that, the number of registered individuals have difficulty in seeing in the National Disability System is 215.076, corresponding to 9.53% of the total rate of disability (Engelli ve Yaşlı İstatistik Bülteni 2021-Haziran, pp.7-17).

Visual impairment is the inability of the eye to perform its visual function due to damage to the structure of the eye for various reasons. The level of visual impairment is not the same for each individual. Persons with visual impairment are classified as blind and have a low vision based on the level of impairment (Özyürek, 1998).

Also, according to Şafak (2005), there are two different definitions for both blind and low vision according to their visual acuity and functional vision: legal definition and educational definition (p. 13). The process of diagnosing individuals with visual impairments is carried out according to the legal definition in Turkey (Şafak, 1996, p.1). Therefore, according to the legal definition,

“People with a visual acuity of 20/200 or less in the well-sighted eye and a visual field of less than 20 degrees are called blind. Individuals with visual acuity less than 6/18, equal to or less than 3/60, or a visual field of less than 10 degrees are also called to have a low vision. The legal definition includes the evaluation of distance visual acuity and visual field. It is used to decide whether the visually impaired person can benefit from legal opportunities” (Dönmez et. al., 2017, p. 224).

However, the legal definition is not found useful for educators since few of those who are legally recognized as visually impaired lack of vision power. Most of them

can benefit from vision power at certain rates. Due to these restrictions of the legal definition, an educational definition is required (Özgür, 2013). Therefore, educators preferred the educational definition of visual impairments. Accordingly, the people with visual impairments are those who are severely affected by the loss of visual acuity and need to continue their education by Braille and audiobooks. Those with low vision are visually impaired who can read normal print with a magnifying glass and large print (Özyürek, 1998). Individuals with visual impairment can continue their lives by using various materials and tools for the differences in their sensory characteristics (Dönmez et. al., 2017).

Furthermore, Douglas and McLinden (2005) claim that visual impairment is a broad term, which describes a broad continuum of visual function loss. There are many aspects of visual function, such as visual acuity (detail resolution), accommodation (focus ability), the field of vision (the area that can be seen), color vision, and light adaptability (p.26). WHO also warns and create awareness of the fact that reduced or absent eyesight can have significant and long-lasting impacts on all aspects of life, such as falling behind the daily personal activities, the communication with society, the opportunities for education and employment, and the ability to access public services (WHO, n.d.).

There are various causes for visual impairment. According to Dönmez et al. (2017) and Özgür (2013), causes of visual impairment include injuries, accidents and heredity. Also, some disorders such as cataracts, refractive errors, glaucoma, macular degeneration, corneal opacity, diabetes, trachoma, retinopathy of prematurity and onchocerciasis can cause blindness or visual impairment. In addition to these, the inflammatory diseases that are faced by the mother during pregnancy, the late or difficult birth, consanguineous marriages, blood incompatibility, rubella, vitamin A and B deficiency, natural syphilis, and the use of pleasurable substances could also cause blindness or visual impairment. Besides, it is hard to determine the prevalence all around the world because of the diversity of reasons for visual impairments and how this varies throughout countries,

environments, cultures and economic restrictions (Douglas & McLinden, 2005, p.27).

1.2. VISITORS WITH VISUAL IMPAIRMENTS AND MUSEUMS IN THE WORLD

Touching was a commonly applied phenomenon and significant sense in the museums until the end of the 18th century. Visitors were allowed and expected to touch museum items, including even the stored ones in drawers (Classen, 2007). Handling objects was encouraged because touching was seen as a logical method to learn and enjoy museum collections (Classen, 2005; Candlin, 2020). During the 19th century, the working classes were allowed access to museums, and the restrictions on visiting hours and special visiting days were removed. Therefore, the number of museum visitors increased to dramatic levels (Candlin, 2020). Also, in the 19th century, the inability to control a massive amount of visitors and the development of display techniques such as lighting reduced the need to touch the museum artifacts, so the fundamental role of sight in the cultural sphere had changed (Bacci & Pavani, 2014). Therefore, the touching experience was no longer allowed in museums as of the 19th century. Besides, according to Classen and Howes, this change occurred because of the improvement of industrial capitalism and the increasing usage of visualizing techniques (Candlin, 2020).

On the other hand, in the 19th century, one of the founding reasons of museums is to educate and inform individuals who do not have a chance to educate themselves. Also, museums were seen as places to unite people from all parts of society. Therefore, museums are considered as ideal institutions for social equality which is achieved through learning. There are several reasons which led museums to be seen as ideal educational institutions. These include the idea that working and middle-income individuals wanted to educate themselves, the concept of leisure time, the belief that art could civilize the individual, and that museums create equal spaces where all parts of the society could meet, and international effects (Hooper-

Greenhill, 1999). According to Classen (2005), today's museums are result of the of the 19th century social and sensory ideals.

Johann Wilhelm Klein started a museum movement for blind visitors. Klein first prepared and used a collection of touchable models for people with visual impairments in Vienna from 1804 to 1809. His museum is constituted of almost 5000 specimens which are dedicated to all phases of the education and history of people with visual impairments. However, during the World War II, Klein's museum was destroyed. This museum movement for the blind moved outside Vienna (Coon, 1953).

Dr. Michael Anagnos, the Director of the Perkins Institute was the first person in America who attempted to create a museum collection for blind and partially sighted people in the 1850s. In the beginning the collection started with an assortment of anatomical models that Anagnos brought from Germany. In 1881, the collection expanded and started to cover more than 1261 items (Coon, 1953).

In addition, educational programs were organized for blind and partially sighted visitors in Europe in the 19th century. The German Blind Museum in Berlin was founded by director Karl Wulff at the Royal Institute for the Blind in Steglitz in 1806 (Museums Portal Berlin, n.d.). In 1898, the Museum prepared a forty-page booklet that contained all of the objects for educational purposes (Reidmiller, 2003). The Museum was moved to its current building in 1906. The Museum is devoted to the history of blind and partially sighted individuals in Germany. The history of people with visual impairments is exhibited by photos, paintings, aids, and devices. Also, visitors could experiment with writing tools, try out games and touch objects in a training room. The exhibition was divided into areas. A section is devoted to tools and examples of the history of reading and writing such as the Braille Alphabet. In the other sections, there are works on the past and present vocational education and the materials used for the education of people with visual

impairments. In another section of the exhibition, the artisanal and artistic works of the people with disabilities were included (Museums Portal Berlin, n.d.).

The American Museum of Natural History held a series of talks and handling sessions for people with visual impairments in 1909 (Coon, 1953; Grosvenor & Macnab, 2013). In 1910 the museum organized more lectures and arranged a permanent exhibition for people with visual impairments. Other museums are influenced and followed by this development and started to serve people with visual impairments (Reidmiller, 2003). In 1916, the Boston Children's Museum started to offer classes for children with visual impairments (Stevens, 2015, p. 26). Besides, thirty-nine museums in the UK organized unique opportunities for visitors with visual impairments to display museum collections in 1931 (Coon, 1953).

In 1913, J. A. Charlton Deas who was the Librarian and Chief Director of Sunderland Public Libraries, Museums and Gallery, undertook experiments in the museum to help blind and partially sighted people in the United Kingdom. He worked with adults with visual impairments and organized five touching sessions with related lectures. These sessions were held on Sundays and took three hours while the museum was closed to the general visitors. For instance, participants were supplied with necessary painting materials in one of the workshops and the usage of the materials has been explained to the participants. Then, participants examined original paintings and their tactile versions by touching them. After the workshop, participants touched museum objects from the natural history collection along with listening to their annotated explanations. In the last session, participants touched prehistoric objects. In addition, the same workshop is also introduced to blind students and arranged on Monday mornings (Grosvenor & Macnab, 2013).

According to Weil (1999), museums had an inward focus on the growth, care, and research of their collections. However, they changed their perspective on a more outward style to educate individuals. One of the reasons behind such a shift was an increase in the number of museums after World War II. Museums were in need of

new financial resources other than governmental funds in order to maintain their sustainability. Thus, museums started to reconsider their social responsibilities to attract sponsors, private foundations, and non-governmental sources (Weil, 1999).

Besides, the veterans of World War II demanded more rights, and they raised awareness on disability issues. Also, the civil rights movements started to take shape in the 1960s. The groups with disabilities, who take advantage of these situations, demanded equal access and opportunities by participating in these movements (Anti-Defamation League, n.d.). Even during the disability movements the definition of disability has changed. After colonialism, multicultural societies' desire to determine their representation in museums, the questioning of the cultural diversity of the nation-state and its inadequacy in terms of international and transnational identities, the reduction of the funds of museums, the learning of entrepreneurship by management staff and the emergence of new cultural entrepreneurs have been effective in rethinking the museum-society relationship (Ünsal, 2012, p.13).

Museums and galleries all over the world started to renew themselves. This renovation resulted in the emergence of new aspects in museology, such as new architectural designs of museums, new display methods, and archive techniques, most significantly new ways of interaction and communication between museums and individuals. Old structures were started to be replaced at the end of the 20th century to prepare for a new era. Various social institutions and foundations are changing their roles and potentials including museums and galleries (Hooper-Greenhill, 1994, p. 6).

Between 1949-1951, the London Science Museum made a special exhibition for blind adults and arranged exhibits in a special room for touching (Coon, 1953). By the 1960s and 1970s, the need for museum services for individuals with special needs started to increase. For example, in 1975, the University of Leicester Museum Studies and Adult Education Departments and the Museum Education Service

Group held a joint conference to identify the learning difficulties and possibilities of various disability groups, such as blind and partially sighted, deaf, and people with physical disabilities and discussed the works of national and local organizations and the physical necessary arrangements in the buildings (Sorrell, 1975, as cited in Hooper-Greenhill, 1999).

In the early 1970s, the Museum of Modern Art (MoMA) introduced Touch Tours for visitors with visual impairments (MoMA, n.d.). Blind and partially sighted visitors could experience sculptures through touching with a glove under the guidance of a museum professional. Also, the Museum produced Braille and large print brochures of these sculptures. In 1984, MoMA incorporated elevators, ramps, and other features to the building in order to be more accessible to people with disabilities (MoMA, n.d.).

Also, the Exhibition of Sculpture for the Blind was opened in the Tate Gallery in 1976 in England. Within the scope of this exhibition, sculptures some of which were taken from the collection and some specially provided were opened to the touch of blind and partially sighted visitors. This exhibition set an example for other exhibitions held during the 1980s (Hooper-Greenhill, 1999, p. 160).

United Nations Educational, Scientific and Cultural Organization (UNESCO) has published a fundamental document in 1981, named Museums and Disabled Persons, about the accessibility of individuals with disabilities. This document includes the current understanding of UNESCO on disability, shows solutions to the museums to become more accessible, and puts forward accessible museum examples from different parts of the world. Also, the document shows ways for museums to reevaluate their visitor profile and addresses existing issues regarding the full involvement of individuals with disabilities in museums and makes recommendations to improve accessibility (Museums and Disabled Persons, 1981).

The year 1981 was designated as “the International Year of Disabled Persons” by the United Nations. In this period, an action plan, “the World Programme of Action Concerning Disabled Persons” was prepared. This international document has enabled the implementation of the necessary legal regulations for people with disabilities in many countries. In addition, thanks to this action plan, individuals with disabilities have gained various economic and social opportunities and started to participate more in all parts of life (UN, n.d.). These regulations include issues such as participation in social life, increasing educational opportunities, rehabilitation, and providing accessible public services. According to Baş (2016), the legal regulations and projects regarding the participation of people with disabilities in tourism gained momentum at the end of the 20th century and the beginning of the 21st century in various countries. Disability legislation varies from country to country, and the museums needed to take into account the regulatory context under which it works and comply with the required legal requirements (Ambrose & Paine, 2006, p. 39). Therefore, states made laws, regulations or acts to ensure, sustain, improve and encourage the participation of individuals with disabilities in cultural activities.

The United States signed the American Disability Act (ADA) in 1990. The ADA was developed after the disability rights movement, which gained significance after World War II (Stevens, 2015, p.26). According to Beth Ziebarth, the Director of the Accessibility Program at the Smithsonian Institution, the most crucial point to understand is that the ADA was a civil rights law for individuals with disabilities (Stevens, 2015, p.26). It is introduced because individuals with disabilities “...wanted to get rid of outdated stereotypes and to be more fully included in society— whether it was employment, being able to go to the dry cleaners in your neighborhood or going to your local museum” (Ziebarth as cited in Stevens, 2015, p.26). According to the ADA, it is mandatory to apply the criteria set out in the assessment of current museum buildings and all new museum buildings on a national scale to have accessible buildings and make facilities, programs, and services accessible to every people (Salmen 1998; Stevens, 2015). John Salmen

published a guideline named *Everyone's Welcome: Americans with Disabilities Act and Museums* in 1999. Salmen puts forward the ways to understand accessibilities in the museum environment and shows a detailed guideline for the museum to become more accessible and universal towards visitors with disabilities.

The United Nations Standard Rules on Equalization of Opportunities for People with Disabilities was issued in 1993. The purpose of the Standard Rules is to make governments take action in terms of accessibility and equality opportunities for people with disabilities. Even though not legally binding, the regulations also serve as a base for methodological and economic cooperation (UN, n.d.). According to the Rules,

“States should develop strategies to make information services and documentation accessible for different groups of persons with disabilities. Braille, tape services, large print and other appropriate technologies should be used to provide access to written information and documentation for persons with visual impairments” (Rule 5 Paragraph 6).

Also, “states should promote the accessibility to and availability of places for cultural performances and services, such as theatres, museums, cinemas and libraries, to persons with disabilities” (Article 10 Paragraph 2, the United Nations Standard Rules on Equalization of Opportunities for People with Disabilities, 1993).

The United Kingdom introduced the Disability Discrimination Act (DDA) in 1995, which is the most comprehensive legislation for people with disabilities. Besides, it aims to end discrimination against people with disabilities and enhance access in various parts of life such as employment, etc. (The Council for Museums Archives and Libraries, 2001). According to the Act, museums and other public institutions have to make necessary adjustments in order to ensure the accessibility of people

with disabilities. From 2004, DDA becomes legally binding for museum and gallery professionals in terms of enabling people with visual impairments access to art (Candlin, 2003). In 2010, the DDA was renewed and re-named as the Equality Act 2010. Like the previous version, the Act protects the rights of individuals and ensures social equality. Therefore, according to the Act, institutions, workplaces or any kind of organization should make appropriate adjustments to guarantee the access of people with disabilities. The measures include, for instance, providing ramps, automatic doors, more lighting, signs, and making doorways wider. If individuals need more special access requirements, the following should also be provided: BSL interpreters, the Braille Alphabet, audio descriptions, extra employees (Citizens advice, n.d.). Therefore, museums need to apply these adjustments to turn their museums into a democratic place and to make their collections accessible to everyone (Equality Act 2010).

According to Treinen (2021), “in 2002, the claims of the disability rights movement were taken on by a Committee of the General Assembly of the UN that started discussing the UN Convention on the Rights of Persons with Disabilities (UNCRPD)” and it is entered into force on May 2008. The Convention complements other international human rights treaties (UN, n.d.). The purpose of the CRPD is “to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity” (the CRPD, article 1, 2008). According to the CRPD’s article 30,

“States Parties recognize the right of persons with disabilities to take part on an equal basis with others in cultural life, and shall take all appropriate measures to ensure that persons with disabilities. Enjoy access to cultural materials in accessible formats. Enjoy access to television programmes, films, theatre and other cultural activities, in accessible formats. Enjoy access to places for cultural performances or services, such as theatres,

museums, cinemas, libraries and tourism services, and, as far as possible, enjoy access to monuments and sites of national cultural importance” (the CRPD, 2008).

As the first general human rights convention of the UN to determine and watch the rights of people with disabilities, CRPD embraces the social model of disability and builds upon this model (Harpur, 2012). As stated in UN, it “...does not introduce or recognize any new human rights of persons with disabilities, but rather clarifies the obligations and legal duties of States to respect and ensure the equal enjoyment of all human rights by all persons with disabilities” (UN, n.d.).

Since the end of the 20th century, the number of museums was increased all around the world. Besides, their exhibitions and collections started to appeal to all parts of society. Therefore they became more accessible and democratic places (Ross, 2004). Moreover, at the beginning of the 21st century, museums started to revise themselves and their previous practices and changed their old philosophies. This can be explainable by the fact that the emerging new trends about culture and society, as well as new policy initiatives, led museums to re-question their goals and to redesign their performance and their pedagogy. Also, with the effect of postmodernism, museums have passed into the post-museum period as labeled by Hooper-Greenhill (Hooper-Greenhill, 2007).

There are two fundamental dimensions of the emerging post-museums. One of them is the changing ideology of the relationship between culture and museum visitors. The second one is the promotion of a more equal and egalitarian society. In addition to these, it is also accepted that culture represents, reproduces, and constitutes individuals and requires ethical and social responsibility (Hooper-Greenhill, 2007). Moreover, Kylie Message (2006) explains post-modern museum with the term “new museology”. According to her, new museology are dedicated to exhibition artifacts, cultural materials, and experiences of visitors. Unlike the old museums, new museology are not only the places that collect, research, and exhibit the

artifacts but also want to blur disciplinary boundaries, become an inclusive and attract more visitors. In other words, according to Marstine (2005), visitors are no longer passive consumers, and museums are no longer didactic centers in the transmission of knowledge. Instead the post-museums "...listens and responds sensitively as it encourages diverse groups to become active participants in museum discourse" (Marstine, 2005, p.19).

Contemporary museums are aware of the importance of exhibitions in ensuring social justice, emphasizing cultural diversity, ensuring visitor participation, and developing social cohesion in the context of social function. With these changes in philosophy and practice, museums started to play a more central social role and diversify their social functions. In this direction, the variety of museums is also increasing. Since the early 2000s, museums have been opened by taking into account various ethnic identities, children, women, immigrants, multiculturalism, and people with disabilities (Karadeniz, 2014, p. 408).

Over the past decade, the 'sensory turn' has caused several modern museums to reconsider their sensory restrictions and how they might revive sensory opportunities for making people experience with artifacts. The push for touching at museums and galleries has been realized in the leadership of activists and campaigners with visual impairments. It has resulted in the establishment of plenty of tactile museums across the world, as well as the development of special collections providing opportunities such as handling tours and alternative events dedicated to the concrete interaction with artifacts (A Renaissance of Touch in the Museum, 2016).

1.2.1. Educational Activities of the Modern Art Museums for the Visitors with Visual Impairments in the World

In the section below, some modern art museums in the world that have programs, facilities, and exhibitions for blind and partially sighted visitors are given as an example.

1.2.1.1. Modern Art Museums

The Prado Museum in Madrid organized an exhibition called “Touching the Prado” for visitors with visual impairments. Within the scope of this exhibition, the museum made 3D tactile replicas of six famous paintings. Also, the exhibition included audio guides, text in Braille Alphabet, large print, and opaque glasses. Furthermore, the Museum has launched audio guides service that includes fifty-three paintings detailed descriptions (The Prado Museum, n.d.).

The British Museum in London welcomes guide dogs. The Museum prepared large print guides and Braille books with tactile drawings for selected galleries and some temporary exhibitions. Also, these guides are available online. Blind and partially sighted visitors can touch some objects in the Egyptian sculpture gallery and the Parthenon galleries. Also, the Museum offers object handling sessions at hands-on desks for some galleries. Furthermore, guided tours are organized for visitors with visual impairments but they should make a booking. If partially sighted visitors need magnifiers they can borrow from information desks. The Museum also arranges lighting according to exhibitions and they share the lighting information of rooms on the internet (The British Museum, n.d.).

The Metropolitan Museum (MET) of Art in New York welcomes guide dogs. The Museum offers descriptive guided tours and guided touch tours in the Museum’s galleries including Ancient Roman and Egyptian sculpture and American architecture. Also, blind and partially sighted visitors are allowed to touch a wide

range of objects. An audio guide is available and free of charge for those visitors and also transcripts are also available in large print. Large print booklets can be found at the entrance of some exhibitions. Moreover, MET offers two programs for visitors with visual impairments: “Picture This!” and “Seeing Through Drawing”. Within the scope of the “Picture This!” program, curators, guest speakers, and access educators share their opinions about artworks using detailed description, touching and other activities. In addition, within the scope of the “Seeing Through Drawing” event, visitors with visual impairments can learn drawing methods within particular workshops in which they capture know-how knowledge with specific materials, audio description, and creative response to artworks (The Metropolitan Museum, n.d.).

The Centre Pompidou in Paris welcomes guide dogs. The museum offers “See and hear” audio description tours, which is organized in various areas every month, and accompanied by trained museum staff for visitors with visual impairments. Also, the Central Pompidou has set up a special website for people with disabilities, which visitors can access information and resources they need. In the Museum library, there are special rooms for blind and partially sighted visitors. The Museum also offers tactile tours and each tour is focused on different objects. Sensory maps are available to help visitors. Besides, the Centre Pompidou developed the “Center Pompidou Accessibility” application which visitors can download. All press releases and guidebooks of the museum can be downloaded from the website (The Centre Pompidou, n.d.).

In 2010, Türel Süt, a Turkish painter, developed an art project called “Sense the Colors” with the understanding that “art is for everyone, not only for those who can see the world”. This project addresses the senses of touch, hearing, and even smell of visitors. Within the scope of this project, while visitors are touching the tactile paintings, they can also listen to the information about the artworks. The most striking feature of the exhibition is that visitors can even smell the scents specific to colors and feel the changing temperature. For instance, visitors with visual

impairments can perceive green through the scent of freshly-cut grass or they can sense hot yellow through increasing temperature. This project is awarded a golden key by the International Center for Blind People. The Sense the Color Project has been exhibited in 15 cities in Germany and Switzerland so far and turned into a museum in Switzerland's Münsterlingen district (Umurbilir, 2015).

The National Gallery in London was founded in 1824. The collection of the Museum contains over 2,300 artworks from the 13th to the beginning of the 20th century. The purposes of the Gallery are to enable all visitors to enjoy and experience the collections, to sustain easy physical access to collections for everyone and to ensure the accessibility to both information and scholarship about the collections and the gallery's works. The National Gallery has a wide range of learning programs for different visitors and physical accessibility solutions (The National Gallery, n.d.). Visitors with visual impairments are among the groups that the National Gallery provides accessibility facilities. Within the scope of these facilities, the Gallery welcomes guide dogs, provides large print floor plans, large print labels for both permanent and temporary exhibitions, contrasting signage, and there are information in Braille Alphabet and tactile diagrams for some paintings and organizes the "Art Through Words" sessions for visitors with visual impairments (A. Murray, personal communication, July 16, 2019).

According to Anna Murray, the Communities and Access Programmer of the National Gallery, paintings are 2D artworks, so it cannot be possible to touch and explore them. Therefore, the Gallery arranges the Art Through Words, which is a verbal description session, every month for blind and partially sighted audiences. In every session, a different painting of a different artist is discussed by a trained museum educator. As the entire collection of the Gallery is quite large, they try to make sure to have diversity in terms of the subject of the paintings and not to repeat themselves. During these sessions, high-quality large-scale prints (Figure A. 1) and raised line (tactile) drawings of the selected painting (Figure A. 2) and portable lights and magnifiers are provided for audiences with visual impairments. The high-

quality large-scale prints are produced by the photography team of the Gallery. While tactile drawings are produced, not every detail of the painting is included to prevent confusion. Thus, the tactile drawings include the primary subjects of a painting. The operation of these sessions proceeds as follows: First of all, the museum presenter introduces himself/herself and asks audiences to introduce themselves. Then the presenter gives background information about the painter and the painting. After this general introduction, the presenter makes an in-depth audio description of the painting while the audience follows the presenter from the tactile drawing and large-scale prints. These sessions are run in the mood of the conversation. In addition, in some sessions, related authentic and meaningful handling objects and soundscapes are used depending on the painting. At the end of the sessions, the presenter and the blind and partially sighted audiences visit the painting in its original location (A. Murray, personal communication, July 16, 2019).

In addition, various worldwide contemporary art museums have been organizing educational programs and exhibitions for visitors with visual impairments. Examples of these museums that organize such programs are given below.

The Tate Modern Museum in London welcomes guide dogs. All exhibitions have large print guides and magnifiers, while colored overlays are located in exhibition entrances. There is an audio guide and a guidebook to help find each artifact. Detailed audio descriptions of the works are available in audio guides that provide additional information about the artist and the period in which the work was made. Audio description tours are held four times a year under the leadership of an artist with visual impairments (Tate Modern, n.d.).

The Museum of Modern Art (MoMA) in New York offers the “Art inSight” program for visitors with visual impairments. This program runs monthly and free of charge. Museum educators give a detailed verbal description of artworks and visitors participate in discussions about themes, artists, and exhibitions. Visitors

also can find an audio description of some artifacts on the internet. The MoMA welcomes guide dogs. Guide books are available in large print and Braille Alphabet from the information desk. The Museum also offers visual descriptions of key works from the collection. They are available free of charge from audio desks or visitors can download them from the MoMA App (The Museum of Modern Art, n.d.).

The Victoria & Albert Museum (V&A) in London was established in 1857. The V&A is the world's largest museum of art and design. The permanent collection constitutes over 2.3 million objects that span over 5,000 years of human history (Victoria & Albert Museum, n.d.). The purposes of the V&A are to enable all visitors to enjoy its art and design collection and to experience the cultures that created them, also to inspire contemporary design artists (Ginley, 2013). The Victoria & Albert Museum started its first education talks for people with visual impairments in 1985 following the requests from local blind communities (B. Ginley, personal communication, July 19, 2019). Therefore, the V&A is one of the leading museums in terms of accessibility of people with disabilities, especially for blind and partially sighted visitors. To become a more accessible museum, the Museum employed a Disability and Access Officer in 2002, Barry Ginley, the first blind employee of the V&A. The Museum created the FuturePlan project to redevelop the museum site, make it more accessible, and improve visitor facilities. The project has been realized for 17 to 20 years (B. Ginley, personal communication, July 19, 2019). Within this project, the V&A included accessible talks and events, tactile books, Braille Alphabet, touch objects, audio descriptions, art workshops and staff training into its system (Ginley, 2013).

Today the V&A has permanent touch objects in the vast majority of galleries, which can be touched by any visitor. However, touch objects are designed specifically to help interpretation for visitors with visual impairments. Most of the objects are accompanied by Braille information. For instance, The V&A permanently exhibits a Ming Vase, made in 1550 during the Ming Dynasty. The vase can be touched by

every visitor, and there is Braille information located next to it (Figure A. 3). In case touching the original objects is not possible, the Museum also has replica objects. Besides, there are monthly touch and description tours for visitors, which can be booked. These programs focus on both the permanent collection and special exhibitions. Also, the V&A offers an audio description of many objects, which visitors can listen, and download from the website of the Museum. Furthermore, The V&A makes collaboration with the Royal National Institution for Blind People to produce tactile images. There is a tactile museum plan booklet, and tactile books with a description of artworks in several galleries to enhance interpretation (B. Ginley, personal communication, July 19, 2019). The Museum has large print labels and welcomes guide dogs (Victoria & Albert Museum, n.d.). Moreover, the V&A offers a planned series of workshop activities to express the interpretation of objects, including for blind and partially sighted visitors (Ginley, 2013). In addition, the V&A gets feedback from visitors with visual impairments to enhance these facility programs and meet the demand. Lastly, according to Ginley, it is significant to have trained staff to serve visitors with disabilities. Therefore, the museum staff received disability awareness training from him (B. Ginley, personal communication, July 19, 2019).

1.3. VISITORS WITH VISUAL IMPAIRMENTS AND MUSEUMS IN TURKEY

Turkey's historical relations with museums and museology are based on a recent past. Museums emerged to preserve Turkey's rich historical and cultural heritage and as fruits of the 19th century's Westernization efforts to establish contemporary institutions (Özkasım & Ögel, 2005, p. 97). In Turkey, museums were founded by the state until the 1980s. They are governed by the central government and not autonomous. They cannot determine their staff, make decisions, and they are obligated to implement already defined policies. State museums have continued their existence as passive institutions since the time they were established (Ünsal, 2009).

Also, at the beginning of the Republic, the relationship of the individual with the state was not constructed on rights and freedoms, but on duties and responsibilities towards the state. In this period, opening a new museum was seen as one of the duties of the state on the road to modernization while the individual's visit to the museum was an indicator of fulfilling the responsibility to the state. The visitors in state museums, which are shaped around the axis of conservation and Westernization, were not perceived as actors, but as individuals who become citizens as they visit. However, the state did not succeed in Westernization for the majority of the masses, forming new classes, and spreading the 'Republic discipline' which is aimed at through museums. Therefore, such a failure has resulted in a weak and detached relationship between the state museums and the public (Ünsal, 2009).

The period after the 1980s is marked by globalization and the privatization of the cultural industry. As noted by İnce, et al. (2011) “this period has seen the completion of the commodification of culture, with neo-liberal policies turning collaboration between public and private sectors into the main motor for the creation and dissemination of ‘national culture’” (p. 194). Unlike many European countries' cultural policies and organizational strategies, the emergence of

neoliberalism in Turkey handed over the arts and cultural sector to companies and the private sector (Yıldız, 2020, p.5). Thus, major international financial and industrial groups, primarily banks, have taken a position in the cultural sector with the museums and cultural centers they have established in their names, etc. (İnce et. al., 2011).

The privatization of culture as a result of neoliberal policies has affected the relationship between the state and society. During this process, the state was pacified and de-functionalized. Thus the state lost its role as an arbiter, which used to ensure the continuity of the reconciliation between different groups in society. The withdrawal of the state from many areas caused the emergence of new positions that were later filled by new actors (Pınarcıoğlu & Işık, 2001, pp. 34-35). Also, according to Başaran (2007),

“Moreover, as not being detached from the market rules, culture also turned into a competitive area for making profit. In this sense, the culture, which had been state and nation-focused in the past became more inclusive, fragmented and inclusive of the different practices of power groups” (p. 65).

On the other hand, since the beginning of the 21st century, the understanding of ‘new museology’ was started with the opening of private museums in Turkey. Private museums, unlike traditional museums, want to attract as many audiences or customers as possible (Artun, 2008). According to Ünsal (2009), private museums worked with a new museology understanding that promotes the public interest and prioritizes the participation of civil society; and they started a new era in Turkish museums by emphasizing local identities, multiple identities, and democracy. The private sector claimed that they have undertaken the responsibility of transforming, developing, and civilizing society in order to create a legitimate social image for everyone (Başaran, 2007; Ünsal, 2009). Although the participatory and inclusive museum understandings, which are the components of the new museology, made

an impact in the short term in Turkey due to the closeness of private museums to the business world, it could not exceed the “corporate social responsibility project” dimension (Ünsal, 2009, p. 173).

It should also be noted that, in the light of all these discussions, private museums are also putting their signature to cultural projects to emphasize their social roles. Cultural activities of private companies, in particular banks, include notions such as social sensitivity and artistic benefit, as well as corporate social responsibilities, and they bear social benefit sensitivity. For instance, Pera Museum’s Learning Programs are designed for kids, young, and adults. The programs aim to make art accessible and to create awareness for museum visit. Pera Museum organizes an online program called “Pera Enabled” for students with special educational needs within the learning programs. In this program, students attend online events and take part in workshops (The Pera Museum, n.d.).

In the 21st century, many social creators, especially non-governmental organizations caused cultural change. The processes of rediscovering the effects of groups with multicultural characteristics, such as those from different local, and ethnic backgrounds, that feel economically and culturally out of society and the desire to try new forms of democratic participation are counted among the social creators. They rediscover their influence, and have the willingness to experiment with new forms of democratic participation and demand representation in social, political, and cultural spheres. (Karadeniz, 2018; Ünsal, 2009).

Furthermore, the reasons why cultural policies in Turkey started to be discussed by non-governmental organizations towards the end of the 1990s is that “the broadening out of Turkish civil society debate on cultural policy coincides with the period when country’s EU accession became a priority of governments run by political parties of all ideological stripes” (İnce, et. al., 2011, p. 195). In addition, Turkey’s entrance process to the European Union also had a crucial impact in the formation of new legislation involving disability rights, as well as the increase in

available funding for individuals willing to make research on issues of disability (Bezmez & Yardımcı, 2010, p. 609). Thus, in 2005, Turkey passed the Law on the Disabled People no. 5378, which is the first legislation that addresses people with disabilities. According to article 3, paragraph d of the mentioned law, discrimination based on disability is “any discrimination, exclusion or restriction based on disability before the full and equal use or enjoyment of human rights and fundamental freedoms in political, economic, social, cultural, civil or any other field” (the Law on the Disabled People, 2005).

Also according to article 7, “in the built environment, compliance with accessibility standards is ensured in the planning, design, construction, manufacturing, licensing, and inspection processes in order to ensure the accessibility of people with disabilities” (the Law on the Disabled People, 2005). As stated in Law no. 5378, the fundamental rights and freedoms of all Turkish citizens are entitled to an equal degree. In this respect, necessary arrangements should be made regarding the participation of individuals in social life regardless of their disability. As other people do, people with disabilities have the right to travel and learn new information from the different places they visit. Akıncı (2013), states that removing obstacles in front of all people for their full participation in social life is a significant indicator of contemporary society (p.413). According to Bezmez and Yardımcı (2010), there are no legal sanctions in case of breach of the Law no. 5378. Public spaces in most cities are still inaccessible. The opinion of the participant with visual impairment number 10 on this issue is as follows,

“After all, the history is ours. We do not have a separate history as you and me. If one of the elements that make up a nation is historical unity, I think it is my right to reach all of them like everyone else, to have more or less the same information as everyone else”.

The Ministry of Culture and Tourism (MoCT) has attempted to improve state museums within the scope of contemporary cultural policies and practices since 2009. In this context, the Ministry has initiatives regarding making museums child-friendly, making appropriate improvements for visitors with disabilities, using technology within the museum, obtaining consultancy services, and returning illegally smuggled artifacts from abroad (Karadeniz, 2014, p. 264). Within the scope of the modernization process and improving the existing state museums in Turkey, new goals were adopted such as establishing child education workshops in most of the museums, opening city museums, offering various services to visitors with disabilities, and especially in private museums, opening museums on intangible cultural heritage, opening museums of interest to represent all parts of the society. Within this process, it can be said that museums have taken initiatives for visitors with disabilities. For instance, for visitors with visual impairments, initiatives such as using the Braille Alphabet, making sensible roads, putting the disabled elevator, making replicas of the works are observed in museums (Karadeniz, 2018; Karadeniz, 2014).

As a counter argument, museums founded by the MoCT are established and organized in order to converse the cultural heritage. Therefore, state museums have adopted a more conservation-oriented museology approach. Thus, they do not give enough attention to issues such as, “communication with the public, specialization, presentation of material, financing, or style of work. As a result, despite the fact that they are repositories of a shared cultural heritage, museums have remained state institutions almost entirely cut off from the public” (Dinçer, et. al., 2011, p. 226). Dinçer, et. al. explain the reasons as follows: the museum management is not autonomous, the relationship with the society is inadequate, there is a lack of quality evaluation of services, museology is not recognized as a career and the communication infrastructure is inadequate.

Moreover, Aydınoğlu (2019) evaluated the relation of the state museums and public in Turkey as a part of her doctoral dissertation in 2010. According to her study,

although state museums make some attempts on public relations, it has been determined that these works are not sufficient because they are not autonomous. Even though state museums want to improve their relations with the public, it is understood that they cannot achieve this goal as desired. Compared to the past, the number of events organized by state museums has increased, but they are not sufficient when compared to developed countries. Some shortcomings are noteworthy such as lack of social responsibilities. In museums, projects with non-governmental organizations, preparing educational workshops, and activities that fulfill social responsibility are not sufficient. The events organized by state museums are generally limited to conferences, talks, or ethics programs; however, there is a problem about their "sustainability". The number and variety of activities in state museums are not as high as in private museums due to the financial and technical inadequacies and bureaucratic obstacles (Aydınoğlu, 2019).

In addition, private museums are aware of the importance of museum activities. For this reason, private museums organize various events and make an effort for the "sustainability" of these events. However, the support of private museums in social responsibility projects is still not sufficient. These projects are mostly limited to projects for individuals with visual and hearing impairments. Private museums also organize various programs for different groups, especially for children, according to need or on special occasions. Lastly, social responsibility projects have increased recently in Turkish museums. However, private museums have much more various museum activities than state museums. There are only a few activities in state museums. These efforts should be raised to the level of Western countries by collaborating with non-governmental organizations or foundations (Aydınoğlu, 2019).

In 2010, Istanbul was elected as one of the European Capitals of Cultures. Within the effect of this, the Istanbul Metropolitan Municipality has accelerated its accessibility practices and formed the Coordination Council of Accessible Istanbul for Everybody in 2008. Representatives of the Istanbul Municipality, local

governments, non-governmental organizations, and individuals with disabilities took part in this committee. By the year 2012, the Council had conducted 50 meetings to make Istanbul an accessible city for individuals with disabilities. Also, the Istanbul Municipality provides consultancy and training services within the institution and to district municipalities, public institutions and organizations, and non-governmental organizations. People can reach information and guidelines about accessibility via the “Accessible Istanbul for Everybody” website (Menda et al. 2013).

To fulfill the modern functions of Turkey’s museums, *the Museum Management and Business Models for Turkey Recommendations Report* is prepared by the Directorate of Cultural Heritage and Museums of Istanbul 2010 European Capital of Culture Agency in 2010. The report aims at providing modern museum approaches and practices for Turkish museums. To this aim, the report made recommendations concerning the identification and correction of the deficiencies, creating appropriate conditions to modernize museums, converting museums into places of education, ensuring that museums appeal to all parts of the society, and making museums accessible and sustainable. Furthermore, according to the report, museums could reach individuals by diversifying their collections while existing collections could be displayed in various ways or used to establish new museums. Also, museums need to create new collection policies considering all parts of society, cultural needs, regional or local characteristics. To be able to become a modern and accessible museum for the public, museums should have education halls, libraries, and auditoriums; and they should make necessary arrangements for people with disabilities and children. In addition, museums should work with public relation specialist and take feedback from visitors to become more accessible to the public (Aksoy et. al., 2010).

In 2013, the “Accessible Istanbul for All” Project was launched by the Istanbul Metropolitan Municipality. Within this project, Istanbul Metropolitan Municipality planned to bring Istanbul to a level that can compete in global tourism in terms of “accessibility” by developing applications for the accessibility needs of the people

with disabilities in the field of culture and arts. For this purpose, this project aims to provide accessibility solutions especially for museums in Istanbul, support the participation of people with disabilities in cultural and artistic activities without the need of anyone's assistance, and contribute to the cultural change and transformation provided by the people with disabilities in line with the knowledge and vision they acquire as a result of museum visits. Other goals include making museums work in coordination with other museums and related non-governmental organizations, facilitating collaboration with social stakeholders, which are composed of other sectoral components, and raising awareness about the accessibility needs of people with disabilities (Erişilebilir Turizm, Engelsiz İstanbul, n.d.). This project contains 21 museums in Istanbul: the Topkapı Palace, the Hagia Sophia, the Istanbul Archaeological Museum, the Chora Museum, the Great Palace Mosaic Museum, the Turkish and Islamic Arts Museum, the Istanbul Museum of the History of Science and Technology in Islam, the Rahmi M. Koc Museum, the Istanbul Museum of Modern Art, the Istanbul Aviation Museum, the Sakıp Sabancı Museum, the Istanbul Toy Museum, the Yıldız Palace, the Galata Mawlawi House Museum, the Miniature, the Panorama 1453 Historical Museum, the Basilica Cistern, the City Museum, the Istanbul Fire Museum, the Asian Museum, the Cartoon and Humor Museum (Dincer et. al. 2019, pp. 6-7).

Furthermore, Istanbul Health Museum which was opened by the Istanbul Health Directorate, published *Engelsiz Müze Rehberi (the Guidebook for Accessible Museums)* in 2011. The main goal is to guide museums on how to become accessible museums for people with disabilities. According to this guidebook, the exhibition standards for different types of disabilities vary across museums. These standards include criteria for accessible building design to make exhibition spaces accessible as well as suggestions on original applications. In addition, the accessible museum standards for blind and partially sighted visitors include highlighting the importance of guide dog practice, a solution to help them visit the museum with their canes, audio descriptions, and the possibilities to touch the artwork. Furthermore, they highlight the importance of large fonts and highly contrasting

color schemes in visual displays for partially sighted visitors (Kaynak & Çolak, 2011).

Today, according to the statistical data of the General Directorate of Cultural Heritage and Museums, there are 467 museums in Turkey in 2019. 199 of them are state and 268 of them are private museums. Also, according to these data, Istanbul hosts the greatest number of museums in Turkey. There are 13 state and 62 private museums in Istanbul (TurkStat, 2020). Some of the museums have their websites and some of them can be reached on the website of the MoCT website. In Turkey, state museums' collections mainly focus on archaeological and ethnographic objects. On the other hand, private museums mostly focus on various subjects such as art, local history, the phenomenon of women, children's culture, politics, immigration, and regional characteristics, etc. (Karadeniz, 2015). Nevertheless, both access possibilities and educational programs for blind and partially sighted visitors in Turkey are very limited (Polat, 2019, p.87).

1.3.1. Educational Activities of the Museums for the Visitors with Visual Impairments in Turkey

The state and private museums that have access and educational programs for visitors with visual impairments in Turkey include the Beşiktaş JK Museum, the Istanbul Museum of Modern Art, the Museum of Anatolian Civilizations, the Museum of Batman, the Museum of Seljuk Civilisation, the Rahmi M. Koç Museum, the Sakıp Sabancı Museum and the Şehit Cuma Dağ Natural History Museum.

1.3.1.1. Private Museums

Turkish private museums which organize educational programs for visitors with visual impairments in various provinces are given below.

The Beşiktaş JK Museum in Istanbul was renovated and re-opened its doors to visitors in 2017. With this renovation, the Museum became more accessible for people with disabilities with various facilities. More specifically for blind and partially sighted visitors, there is tactile paving from the entrance door of the Museum, texts in the Braille Alphabet, various handling objects such as emblems and cups, and audible videos about the Museum in kiosks and the documentary section (Beşiktaş JK Müzesi Özel Konuklarını Ağırladı, 2017).

A mutual study was carried out between Rahmi M. Koç Museum and the Six Dots Foundation for the Blinds to enable visitors with visual impairments to benefit from the museum and educational activities in 2004. Every year students from the Rehabilitation School of Six Dots Foundation for the Blinds and Visually Impaired Primary-Secondary Schools and Special Education Centers visit the museum when the museum is relatively quiet. They tour in groups of five on a route specially prepared for them. During this event, they experience riding a tram and submarine as well as flying a plane. They listen to the sounds of machines and engines. Besides, in the Leonardo: Universal Genius exhibition held in 2006, design competitions were held which include designing ‘a vehicle that travels both on land, sea and air’ for children aged 2-9. For the age group 10-18, the theme was to ‘design the future machine that will think and solve the problems that may occur a few centuries later.’ The children with visual impairments participated in the same theme of the event. After the evaluations, an award ceremony was held in the conference hall. Also, the labels created with the Braille Alphabet for the blind and partially sighted visitors were mounted on the label stands of the exhibition units, and these labels were given to them in printed catalogs for their further examination at their schools (Bayam, 2017, pp. 425-426). The opinion of the participant with visual impairment number 4 on this issue is as follows:

“Whenever the Rahmi Koç would call us for an exhibition, they carefully selected the sections that we could touch or benefit. Once I was very impressed by the Da Vinci exhibition. They

received Braille labels from the school to place on each machine. The reason for that is they were not like any machines of today. So when we got there, we touched the machine because they are not like any machine today. We read the labels and understand what we were touching. But as I read on, they realized that the pairing was wrong. They asked someone who knows to come to later and read this so that they can match it again. Of course, they took care of it, I read it, they labeled it again. Thus, it became clear that they both wanted to do the job properly and wanted us to understand”.

1.3.1.2. State Museums

Turkish state museums which organize educational programs for visitors with visual impairments in various cities are given below.

The Museum of Anatolian Civilizations in Ankara has been working on a project for three and a half years to become an accessible museum for blind and partially sighted visitors. In this respect, it is planned to construct tactile paving and prepare informative panels and booklets in Braille. Besides, twenty-two unique and prominent artworks from Anatolian history were selected to be scaled and prepared. In addition to these, visitors with visual impairments will get information about these artworks through audio descriptions and Braille Alphabet. It is also planned to provide necessary lighting for visitors with visual impairments (M. Yıldırım, personal communication, March 04, 2021).

The Batman Museum Directorate has prepared the “Accessible Museum” project for the Museum of Batman. In the museum section made for blind and partially sighted visitors, there are replicas of unique works. Visitors with visual impairments can grasp the size and shape of the work by touching these replicas. The headset in front of the work and the description written in the Braille Alphabet

provide information about the work. Thanks to the tactile pictures and alphabets of the items in the museum, visitors with visual impairments can easily access the information about the historical sites while obtaining information about the artifacts. Blind and partially sighted visitors can easily recognize all the halls of the museum, disabled toilets, and other study rooms thanks to the museum plan in the Braille Alphabet, and can easily access the plan of the whole museum without any help. Visitors can easily visit the museum without the need thanks to the tactile paving that extends from the outer door of the museum to the museum exhibition halls. Visitors with visual impairments can easily know where and on which floor they are and they are directed towards the area they wish to go with the tactile Braille Alphabet letters placed on the handrails. The Batman Müzепark area can be navigated through the “Sesli Adımlar” (Audible Steps) application that runs on Android phones and allows a voice guidance system on the phone. In this way, when the visitors approach the items and specific areas, the necessary information about the item and the area can be easily presented to visitors with visual impairments (Batman Müzesi Müdürlüğü'nde Gerçekleştirilen Engelsiz Müze Projesi, 2015).

In the Museum of Seljuk Civilization, there is tactile paving for visitors with visual impairments. Also, there are replicas of the artworks and labels in the Braille Alphabet for blind and partially sighted visitors to get information about Seljuks. (Selçuk Uygurlığı Müzesi, 2020). The opinion of the participant with visual impairment number 7 on this issue is as follows:

“I learned that the Anatolian Seljuk Museum became accessible in Kayseri. I bought a ticket. Just for that museum, I went there for a tour. For example, I touched them very nicely. They wrote information about that historical artifact on a tablet with the Braille Alphabet. You can read their explanation in them, and I made a very nice museum tour with my own experience by touching and learning about that museum without any support

from anyone. It was a very good feeling and impossible to describe. I wish everything and everywhere become accessible. I think we should not be limited. It was a good experience”.

The Şehit Cuma Dağ Natural History Museum has the Visually Impaired Section. In this section, examples are exhibited in a folding showcase. There are labels and brochures written in the Braille Alphabet for visitors with visual impairments. Also, visitors having a low vision are provided an environment illuminated by powerful lamps with labels and brochures written in capital and bold letters. To consolidate the information, an audio CD has been prepared, describing the museum and its natural history. Visitors perceive the samples by touching them and get information through the labels written in the Braille Alphabet. In addition, educated museum researchers accompany the visitors (Şehit Cuma Dağ Tabiat Tarihi Müzesi, 2020).

Apart from the accessibility works carried out for the blind and partially sighted visitors in museums, the following section includes the general comments of visitors with visual impairments about the accessibility deficiencies in Turkish museums.

Most of the participants do not want to visit museums as they feel insecure due to the barriers. The opinion of participant number 1 on this issue is as follows “I wouldn't want to visit a museum alone; due to the lack of accessibility I feel uncomfortable”. In addition, the participant number 2 says that: “I want to run away from art. Why shouldn't I run away? It doesn't prioritize people, it prioritizes artists and art, it doesn't prioritize me, it doesn't care about me.”

Tactile paving is one of the fundamental accessibility practices for blind and partially sighted visitors to move around safely. However, most of the museums in Turkey do not have tactile paving. The participant number 5 states: “the tactile paving allows us to navigate in control and a certain order. Also, there have signs, with those, it can be understood there is an object where the sign is”. In addition to

this, a tactile museum plan also helps visitors with visual impairments to move around museums. The opinion of participant number 3 on this issue is as follows: “there must be a plan at the entrance of museums for the people with visual impairments. Like, when you go 30 m, it must indicate that there is this room on the right, when you go 3 m, then says there is this room on the left, here are the stairs, etc. Something describing the museum must be at the entrance such as a map”.

Sufficient and proper lighting is crucial for partially sighted visitors’ sight. However, most of the museums in Turkey do not have sufficient lighting. The participant number 8 states: “I am a person with low vision. It is significant for me that the environments of the museums are illuminated and enlightened. Touching can be very meaningful for someone who has no sight, but it is also valuable for me to have the contrasts in that environment”.

Labels or texts written in the Braille alphabet help individuals with visual impairments to learn about artworks by reading. However, most of the museums in Turkey do not use Braille both in their permanent and temporary exhibitions. The participant number 1 states: “there should be labels and panels written in Braille Alphabet. In this way, I can get information about museums or artifacts by reading.”

Both the audio description and touching are significant to learn, experience, and understand the artworks. The participant number 5 says: “I think the audio description is a must. In other words, I think the audio description is indispensable for people with visual impairments”. The opinion of the participant number 6 on touching is as follows: “you know museums, it is inconvenient to touch them. Because if everyone touches the item, it would be deformed: but for us, visually impaired, this can be made of plastic or something else as a replica. Something like this is necessary for the visually impaired to visualize the item in their minds.”

These accessibility deficiencies of Turkish museums are identified by Turkish blind and partially sighted museum visitors. To become more accessible and inclusive, the museums should do necessary accessibility works.

2. INCLUSIVE MUSEUMS AND ACCESSIBILITY FOR VISITORS WITH VISUAL IMPAIRMENTS

2.1. EDUCATION IN MUSEUMS FOR VISITORS WITH VISUAL IMPAIRMENTS

At the beginning of the 19th century, one of the reasons for the foundation of museums was to educate and unite individuals (S. Buyurgan & U. Buyurgan, 2020 p.92). Educational programs in museums have gained importance since the second half of the 20th century (Hooper-Greenhill, 1999, p. 29). Also, today, the main purpose of museum education programs is to maximize the educational potential of the museum and reach different audience groups. Most museums today organize various activities for people with disabilities, children, youth and adults, families and school groups. In addition, as a result of the developments in the education system in many countries at the beginning of the 20th century, some concepts gained greater importance. Experience-based learning, individual differences, and problem-solving have made the museum-school relationship more crucial (Akmehmet, 2012, pp. 196-197).

However, the environments prepared and presented to visitors during the museum visits are affected by some factors such as the size, function, financing, staff, collaborations, goals, policy, collection, and presentation of museums. Furthermore, the educational function of the museums is not limited to activities within the museum. Various other activities are also carried out outside the museum. Apart from the functions of the museum, various educational programs, loan services, and social projects are carried out (Akmehmet, 2012; S. Buyurgan & U. Buyurgan, 2020).

Educational programs for the museum's collection should be well prepared. With these programs, visitors from all age groups can be guided, educated, and informed. Thanks to museum education, the museums play an active role in gaining

knowledge as well as cultural, and artistic vision. In this way, visitors receive historical, artistic, and functional information about the collection and have a power of evaluating and awareness of evaluating and preserving it (Atasoy, 1999, p. 149).

Educational environments such as conferences, film screenings, museum tours and workshops are offered in museums. During museum tours, objects and collections are examined in the museum's exhibition halls. Meanwhile, visitors observe, explore, and participate in activities such as question & answer sessions, drawing and writing events drama shows, and workshops. Some other activities include discussion about museum works, watching movies, telling stories, filling out worksheets, group works and studies (Akmehmet, 2012, p. 200). Within the possibilities of museums, some of these workshops are run by professionals such as artists, scientists, or poets (Hooper-Greenhill, 1994, p. 168). For example, while drama and music works are carried out for visitors with visual impairments at the Istanbul Museum of Modern Arts, some artists are also supported from time to time (M. Tütüncüoğlu & D. Saltan, personal communication, November 25, 2020).

It is necessary to create the entire environment for the visitors to have meaning integrity. For this purpose, inaccessible artworks can be learned with the help of auxiliary materials such as replicas and models selected from the artworks. Besides, role-plays in a different environment are also provided for museum education (Atasoy, 1999, p. 149).

In addition, Hooper-Greenhill indicates the educational functions of museum by stating that “examining a small group of objects will demand the use of the skills of observation, comparison, summarising, classification, criticising, looking for assumptions, collecting and organising information, hypothesising and imagining” (Hooper-Greenhill, 1994, p. 168). Beside, according to İlhan (2013), museum education helps the individual keep up with the changing world and prevents people from alienating their environment. It enables people to connect the past with the future and to think about the future. Museums allow people to link the past with the

present and to think of the future. The works of art exhibited in the museum create a bridge between people and allow objects to be integrated into their lives. It enables people to understand political, cultural, social, scientific, economic and environmental relations. It encourages research and improves the museum economy (p.303). According to Harrison (1963), museums reveal and develop the sense of excellence in human beings by displaying works of art. However, education gives the ability to compare and gain knowledge. Also, it shows the links between items that didactic education cannot reveal, awakens people's thoughts and leads them to observe and make an inference.

Until the 1980s, Turkish museums had been object-centered. Later on, museums adopted a human-centered museology understanding, which accepts that the main function of the museum is education. Such an understanding is valid today. With the creation of education departments in private museums, whose number has increased in the 2000s, school programs have started to be implemented in museums. Most private museums offer various services by commissioning education experts in the museum and establishing education departments. However, there is no department of education or experts within the department of education in most of the state museums in Turkey (Akmehmet, 2012, p. 202).

2.2. THE IMPORTANCE OF LEARNING IN MUSEUMS

Looking back at the ICOM's current definition of museums, contemporary museums are no longer places that only display their collections. Beyond preserving and exhibiting them, museums have now become educational institutions. In this way, museums aim to improve the education level of the society while developing their communication with the public. However, there is an ongoing discussion about the scope of the education, and learning functions of museums. Hooper-Greenhill claims that countries implement different learning systems and diverse styles based on various theories and approaches of professionals. Since people come from different levels and educational backgrounds, their perspective towards

education might lead to distinctive purposes, processes and outcomes (Hooper-Greenhill, 2007, p.3)

Furthermore, according to Hooper-Greenhill (2007), there has been a shift in England from 'museum education' to 'learning at the museum'. This shift represents a focal philosophical change in the understanding of the educational functions of museums. However, there is ambiguity in the educational role of the museum. It refers to the aim of the museum as a whole for some; among others, it reveals the work of expert museum personnel. Learning at the museums is not the same as in the schools. Museums' environments are rich and surprising in terms of both exhibition and display. Therefore, museums can both arouse curiosities and trigger new ideas. On the other hand, due to the varieties and differences of the museums, there is no certain curriculum for all museums. Learning at museums is realized through physical and bodily engagement: movement is inevitable, and it affects the style of learning. Learning at the museum is potentially more open-ended, more individual, more unpredictable, and more flexible (Hooper-Greenhill, 2007).

According to Ambrose and Paine (2006), in recent years, 'education', museum teaching for children and 'to learning' imply that all ages are benefiting from the museum for themselves. Learning is not only about facts but also includes emotions and experiences. Learning is something that every person does; it is very much personal. While people are learning, they also socialize with their environment. Therefore museums are special places where visitors gain personality characteristics (p. 46). Thus, museums are important educational places for both children and adults. Learning is an active process of gathering information. However, this process is very unique for every individual as every human being has different characters and experiences. According to Falk and Dierking, there are seven significant factors, i.e. the inspirations of previous knowledge and experience, subsequent and supporting experiences, motivation and manners, culture and background, social intercession, design and presentation and the

physical setting in understanding the nature of the learning at the museum (Falk and Dierking 2000 as cited in Ambrose & Paine, 2006, p. 47). These are several important factors when individuals conceptualize the knowledge they learn.

Learning at the museum is significant because it helps individuals to shape their identities. This is because of the fact that learning at the museum is immersive. It demands open-minded and receptive attention while building experience and intuition and evoking emotions (Hooper-Greenhill, 2007, pp. 178-179). With experiential learning, people can generate and convert their experiences into knowledge, abilities, manners, values, emotions, beliefs and senses (Jarvis et. al., 2003). However, Piaget stated that active learning and learning through experience or playing is more suitable for young children while analytical and symbolic learning is much more suitable for young people and adults (Hooper-Greenhill, 2007, p. 172). On the other hand, according to contemporary learning theorists, this point of view is mistaken: the experience-based intuitive learning and response should not be abandoned as it remains to be one of many learning strategies. The importance and value of immersive experiences are embodied for younger learners, and the value and significance of immersive experiences are well illustrated by the research data. But this learning style is equally significant for learners of all ages (Hooper-Greenhill, 2007, p. 172).

To provide learning experiences and opportunities for adults in the museums, Black (2005) proposes a list of suggestions. Among them, some can be helpful to improve the experience of people with visual impairments such as active usage of objects and original materials, providing social learning opportunities a good understanding of prior knowledge, experience and interests and being based on real-life experience (p.144).

Furthermore, museum programs, events, and activities are also significant both to meet the needs of specific target groups and provide additional income for museums as these kinds of activities are mostly arranged through grants and sponsorships.

Also, museums can decide whether they organize these activities free or with charge according to their museum policies. Museums can organize programs, events, or activities either inside or outside. Like it is mentioned above, participation is a significant way of learning for people of all ages. Considering their specific target groups, museums need to make arrangements required for these types of activities. For instance, museums need to provide arrangements required for people with disabilities to physically access to the museum. Also, museums should prepare suitable accessible activity programs for all visitors including people with disabilities (Ambrose & Paine, 2006, pp. 63-64). Therefore, "...previously excluded members of society can gain greater self-confidence and self-esteem" (Black, 2005, p. 125) with participation in museum activities.

Blind and partially sighted people need education in order to maintain their lives and to gain basic daily life skills (S. Buyurgan & U. Buyurgan, 2020, p.98). Their education "differs according to the age at which the visual impairment occurs and the degree of visual impairment. Education programs for blind and partially sighted people consist of; benefiting from the visual residue, orientation (adaptation) and independent education, daily living skills and social skills, reading, writing, and listening" (Üçüncü & Kütükçü, 2014. p. 35). Besides, in the learning of people with visual impairments touching, hearing, other senses and exclusive learning techniques, accessible learning materials (Braille, large print, tactile materials etc.) and different places are significant (S. Buyurgan & U. Buyurgan, 2020; Dönmez et. al. 2017).

The teaching of each field takes place in museums impressively. For example, an art museum is one of the most important venues for informing, questioning and developing new thinking schemes. Therefore, museums are among the essential learning places for people with visual impairments that contain various artifacts. To be able to become learning places for blind and partially sighted visitors, museums need to organize special programs and make necessary physical adjustments (S. Buyurgan & U. Buyurgan, 2020, p.98). For instance, touch tours, relief maps,

Braille alphabet, large print, tactile materials, magnifiers, and technological arrangements etc. In this regard, Serap Buyurgan made a research to put forward the necessity of these special programs for visitors with visual impairments. She set a tour to the Museum of Anatolian Civilizations for students from the Department of Education for Visually Impaired including a blind student from the same department. The blind student made a tactile and aural museum tour with a specialist from the education department. It is understood that at the end of the museum tour student could learn lifestyles, beliefs, and arts of the Anatolian Civilizations. Also, the blind student had an excited, eager and concrete learning day. In addition, students understood the importance of learning at the museum, and museum specialists have learned to design a museum tour for visitors with visual impairments (S. Buyurgan & U. Buyurgan, 2020, p.98).

In short, people with visual impairments need different educational tools. Some of these tools are large print-outs, the Braille alphabet, magnifiers as well as audible devices such as cassette players. Emphasis should be placed on teaching materials and activities that enable blind and partially sighted visitors to understand by touching. In cases where touching is not possible, physical description of the environment, teaching material, and objects should be explained in detail with audio description. It is also essential to benefit from the senses of touch, hearing, smell, and taste to facilitate visitors' learning (Polat, 2019, pp. 27-28).

2.3. MUSEUMS AND SOCIAL INCLUSION

Museums have been in contact with society since they were established. The number of museums has increased and they also diversified over time. "...Most museums and galleries have interpreted their role in relation to social inclusion as synonymous with cultural inclusion by seeking to widen access to their services" (Dodd & Sandell, 2001, p. 12). Therefore, it is significant to talk about social inclusiveness, which is essential for museums' relationship with society.

The concepts of social exclusion and inclusion “... have generated multifarious understandings depending on the environment within which they have been applied or considered. As complex, multi-layered concepts the ways in which they have been appropriated and interpreted within various contexts have sometimes been startlingly different” (Sandell, 2003, p. 47). On the other hand, for the creative industries, the meaning of social exclusion and inclusion remain fluid, ambiguous, and evolving. Both of the terms have a very recent history within the museum field (Dodd & Sandell, 2001, pp.8-9).

For the first time, the concept of exclusion emerged in France in the 1970s to describe those who fell outside the social security system of the state. Based on the definition of France, each country has made an intellectual and philosophical definition of exclusion that suits them in different political, academic, and professional areas. Therefore, the meaning of social exclusion shifts and varies from context to context. (Sandell, 1998, 405). Since then, social exclusion has been used in various fields as a concept expressing inequality and disadvantages, such as poverty or marginality. Although exclusion has various meanings due to its use in many areas, the common feature in all of them is the multidimensional and interconnected state in which the emphasis is on unequal and unfavorable being of social exclusion. Also, exclusion has a multidimensional nature and a holistic concept. In other words, the social exclusion could not benefit from rights and services (Dodd & Sandell, 2001, pp.8-9). Therefore it is showing “ ... how an individual or group might experience disadvantage within, or exclusion from, social, political, economic and cultural systems” (Dodd & Sandell, 2001, p. 9). Socially excluded people are those with disabilities, the poor, those who are discriminated against because of gender, ethnicity or culture, race, religion those with chronic illnesses, children, the elderly, etc. (Khan, 2012).

Furthermore, until the beginning of the 19th century, museums had not been open to the public. Even today, although museums are open to everyone, some deficiencies are observed in practice. Therefore, according to Sandell (1998),

museums can be seen as a representation of institutionalized exclusion in many ways. For some of the museums, their operation system hinders or prevents the access of some visitors. Museums can be seen as institutions that exclude groups, who are socially, economically, and politically excluded by society. The people with disabilities belong to these groups who are not able to express their stories and themselves and have restricted access. Therefore, there has been an increasing pressure on museums on social exclusion, which was responded to recently. Most of the museums from various countries are generating their social role, aim and effect by collaboration with health, welfare, social services, and other agencies to enhance themselves in terms of relieving disadvantages (Sandell, 2003, p. 46).

According to the Group of Large Local Authority Museums Report on museums and social inclusion (2000), for a long time, museums were appealed to a particular type of visitor profiles: mainly white, middle class, etc. In recent times, museums have become a social agent of inclusion with factors, such as new laws, administrative, curatorial changes, staff training, new programs, and events in museums. There are seven impacts of museums as a social agent of inclusion. The first one is personal growth and development. Museums help individuals to increase their self-worth, confidence, and creativity. The second is community empowerment. Museums can empower society to increase their self-esteem, make them proud of their history, and encourage them to control their lives. The third is the representation of inclusive groups. Museums and galleries have a chance to represent all parts of society, so they can go against stereotypes and promote social cohesion and tolerance. The fourth is promoting healthier communities. The fifth is enriching educational accomplishment and endorsing long-term learning. The sixth is tackling unemployment. Museums can offer a wide range of job opportunities to every individual, for instance, people with disabilities. The seventh is tackling crime. Museums can be effective in the reduction and prevention of crime (GLLAM Report).

Museums can contribute to social inclusion on three levels; personal, community-wide, and societal. At the personal level, people can gain self-esteem, confidence, and creativity with the engagement museum. At the community level, for social regeneration, museums make communities develop their self-determination and increase the confidence and skills to take control over their lives and to build their neighborhoods. At the societal level, thanks to the participation of unrepresented communities within their collections and displays, museums can promote tolerance, and inter-community respect while also challenging the stereotypes. (Sandell, 2003, p. 45).

According to Black (2005), an inclusive museum will use alternative ways to reach all parts of society. To accomplish this, it will create a warm, welcoming, friendly and supportive atmosphere and responsive museum personnel to prevent 'not knowing how to behave'. Both the building and exhibitions will be accessible to all, and every visitor uses the same routes and participates in the same museum activities. Different exhibition solutions will use to meet the various needs of visitors. There will be a regular program of museum activities and events. Also, the museum tries to ensure that all visitors from different environments would be pleased with their museum experience and would desire to revisit the museum (p. 64).

In this respect, the concept of barriers is also worth mentioning. According to Black (2005), barriers exist within society and museums that makes museums unable to reach their audiences. These barriers include a lack of constitutional governance, ongoing fear of alienating existing museum visitors, lack of resources, lack of confidence, and possible fear of the unknown. If museums want to be active public spaces within their societies, they need to collaborate with those communities, such as people with disabilities, to eliminate the barriers (p.54).

2.4. UNIVERSAL DESIGN

Universal Design is described as “the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design” (Hartley, 2015, p.42). The term, universal design, was coined in the 1980s by an architect, Ronald Mace, who is a wheelchair user and founder and director of the Center for Universal Design at North Carolina State University (Hartley, 2015, p. 42). The main purpose of this design is to make things as accessible as possible for many users as possible with many different forms and functions (Brown, 2014, p.18). “By considering the diverse needs and abilities of all throughout the design process, universal design creates products, services and environments that meet peoples' needs” (National Disability Authority, n.d.).

Ronald Mace and the Center for Universal Design developed seven principles of universal design through which every institution can make necessary adjustments. The first one is ‘equitable use’, where the design is marketable and handy for each and every individual in society. The second is ‘flexibility in use’ where the design includes a wide range of personal preferences and facilities. The third is ‘simple and intuitive use’, i.e. the use of the design is easy to recognize, irrespective of the individual's knowledge, experience, and verbal skills, or current level of concentration. The fourth is ‘perceptible information’, amounting that the design transfers required knowledge to the individual without any external conditions or the person’s sensory abilities. The fifth is ‘tolerance for error’, i.e. the design diminishes potential incidents or unintentional problems. The sixth is ‘low physical effort’, that is the design can be applied effectively and with a minimum of lassitude. The seventh is ‘size and space for approach and uses’, which provides proper size and space for approach, reach, and manipulation regardless of individual’s posture, and mobility (Hartley, 2015, pp.42-43).

These seven principles of universal design emphasize the need to configure so that all potential users can use the same experiences, environments, and items. The

overall goal is to provide an equal environment or experience to any person, regardless of their abilities. In this context, individuals with special needs are not considered as a deviation from the norm, but only as a part of the rich diversity of humanity (McGinnis 2017, as cited from Yurtsever, 2018, p.29). These principles have been increasingly used in the design of exhibitions (Braden, 2016, p.4).

When the universal design is evaluated in the context of museum exhibitions, museums can become accessible and inclusive by offering accessibility solutions to every visitor (Brown, 2014, p.18). Universal design creates environments and artifacts that are accessible to all, including people with disabilities. Museums need to design exhibitions and learning programs that all visitors can experience in order to reach a larger range of visitors with or without disabilities (Hein, 1998; Salmen, 1998). For instance, large prints and good lighting are necessary components for any exhibition. Since they allow both partially sighted and other visitors to read comfortably and have better viewing (Salmen, 1998, p.4). Accessibility is not only significant for people with disabilities but also necessary for every museum visitor. Thus, using universal design in museums is essential for making museums both accessible and inclusive for all museum visitors from various segments.

Universal design is also significant for the accessibility of individuals with visual impairments. In this respect, blind and partially sighted visitors engage with the museum from several accessibility facilities; touch tours, audio description, tactile learning, and tactile paving for their navigation. Touch tours, audio descriptions, and tactile learning are significant facilities for learning in the museum for visitors with visual impairments. During their museum visit, visitors with visual impairments can access basic information about the museum or exhibition and complete their mental image of artifacts through these tools. When these accessibility solutions are realized properly blind and partially sighted visitors can engage and receive rich information about objects, artifacts, and museums (Brown, 2014, pp.19-20). Also, with tactile paving, people with visual impairments can walk around without the need of anyone.

There are various museums that apply universal design into their exhibition. The Natural History Museum of London is one of them. Because of its inclusiveness strategy, the Museum implemented the universal design into its structure (Brown, 2014, p.19). The Natural History Museum of London tries to meet the needs of its visitors with or without disabilities. For the blind and partially sighted visitors, it offers large-print versions of materials, tactile and Braille books, and guide dogs. Also, trained staff members are assigned in case assistance is asked for (The Natural History Museum of London, 2021).

“While commonly applied in architectural and physical space design, the spirit of universal design can be applied globally within cultural institutions when designing educational opportunities, promotional materials, exhibition content, and many additional practices” (Starr, 2016 p.19). Thus, universal design can help museums to provide inclusive and meaningful experiences for the blind, partially sighted and other visitors.

2.5. WHAT IS ACCESSIBILITY?

According to the Convention of the Rights of Person with Disabilities, accessibility is

“to enable persons with disabilities to live independently and participate fully in all aspects of life, States Parties shall take appropriate measures to ensure to persons with disabilities access, on an equal basis with others, to the physical environment, to transportation, to information and communications, including information and communications technologies and systems, and to other facilities and services open or provided to the public, both in urban and in rural areas. These measures, which shall include

the identification and elimination of obstacles and barriers to accessibility” (CRPD, 2008, Article 9).

Accessibility is a fundamental right for people with disabilities in order to use their rights, live independently, and to take part in all aspects of public life. In this context, it is necessary to provide accessible measures and instruments in all areas of life. Therefore, the accessibility rights of people with disabilities are protected by national and international codes. For instance, the United States of America introduced the ADA in 1990. In this Act, there are mandatory rules and suggestions that museums should follow to become accessible museums. In 1998, Salmen prepared a guidebook, namely, *Everyone’s Welcome: Americas with Disabilities Act and Museums*. In this guidebook, Salmen mentions providing universal, inclusive, and accessible museums for visitors with disabilities. Also, Salmen explains the accessibility standards in detail and notes that museums should consider the variation in the types of disability groups. In 1995, the United Kingdom issued the DDA, which was renewed in 2010 as the Equality Act, to eliminate the discrimination against people with disability, protect their rights, and make all parties adopt necessary accessibility arrangements. Accessibility works in Turkey gained momentum with the Disability Law enacted in 2005. With the accession to the UN the CRPD in 2009, legal and administrative works have accelerated to solve the problems faced by individuals with disabilities in accessing rights and services (Çağlar, 2012). UNESCO published a fundamental document named *Museums and Disabled Persons* in 1981. The purpose of this document is to enable museums to reevaluate their visitor profiles, to draw attention to the accessibility of visitors with disabilities in museums, to create inclusive places for visitors with disabilities and to give accessibility solutions or suggestions for different types of disabilities. In Turkey, Istanbul Health Museum, opened by the Istanbul Health Directorate, published the *Engelsiz Müze Rehberi (The Guidebook for Accessible Museums)* in 2011. The main goal is to guide museums on how to become accessible museums for people with disabilities. According to this guidebook, there are exhibition standards for different types of disabilities and various museums.

For individuals to establish a relationship with society and bond with social life, access to information plays a crucial role in reaching the necessary services today. Therefore, access to information is one of the basic conditions for participation in public service areas such as education, health, economy, social and cultural life. It is the most natural right for persons with disabilities to access places where different types of information such as scientific, technical, artistic, and daily information are produced or presented (Akçalı, 2015, p.26). The museum is one of the preferred places that enables all visitors to obtain information directly, orientates students towards research and examination and makes them actively participate in the learning process, provides an environment for permanent learning through doing and experiencing, motivates creative power and thought, and enables the individual to express himself/herself better by giving a feeling of a free environment (Özsoy & Mercin, 2003, p. 307). Also, according to article 30 of the Convention on the Rights of Persons with Disabilities,

“States Parties recognize the right of persons with disabilities to take part on an equal basis with others in cultural life, and shall take all appropriate measures to ensure that persons with disabilities; Enjoy access to cultural materials in accessible formats; Enjoy access to places for cultural performances or services, such as theatres, museums, cinemas, libraries and tourism services, and, as far as possible, enjoy access to monuments and sites of national cultural importance” (CRPD, 2008).

For this reason, museums should be places where there are no barriers to participation as they offer wide and varied opportunities regardless of one's identity and ability (Salmen, 1998, p. 2). In the past, museums exhibited collections and presented information in a passive way (Ambrose & Paine, 2006) whereas, in recent times, the preferences of museum visitors, including people with disabilities as it is

implied in the social definition of disabilities, have changed. They want to be more active while engaging with museums. Museums need to draw the attention of their visitors by ensuring their active participation (Ambrose & Paine, 2006).

However, museum visitors with disabilities often face barriers when they interact with museum collections and environments, stemming from various factors such as untrained staff showing improper behaviors (Mesquita & Carneiro, 2016). Therefore, “accessing museums has been difficult for people who are blind or partially sighted often due to objects being placed in glass cases creating barrier to access” (Ginley, 2013, p.1). Due to the barriers, blind or partially sighted visitors rarely visit museums because they feel uncomfortable and frustrated if the staff would not understand their needs (Ambrose & Paine, 2006; Mesquita & Carneiro, 2016).

As a result of the barriers, they experience problems, feel excluded and limited. Barriers to accessibility can cause difficulties or obstacles that prevent people with disabilities from gaining what they need from museum access (Barriers to Access, n.d.) and participating in all aspects of society. Therefore, policymakers and museum managers should provide suitable facilities and services to blind and partially sighted visitors to prevent “high costs” in their museum experiments (Mesquita & Carneiro, 2016, p.376). To become accessible venues, museums need to make necessary arrangements for all visitors.

According to Salmen, “to museums, accessibility means making the site's exhibits and programs available to all visitors” (Salmen, 1998, p. 3). In the study of Hurtada et al. (2012), the accessibility of museums can be evaluated in two main areas: the first is the accessibility to the physical environment such as proper display methods and the latter is the content. In terms of museum accessibility, the objective “is to eliminate most physical, communication, and policy or procedural barriers” (Salmen, 1998, p. 3) and to create an open atmosphere for the dialogue between the artwork and viewer for all visitors, including persons with disabilities (Art Beyond

Sight, n.d.). According to Mesquita & Carneiro (2016), this is crucially important because the experience of blind and partially sighted visitors highly depends on “the accessibility of the premises” (p. 374).

Eventually, museums serve for the benefit of the public. They need to take account of their visitors’ curiosities, cares, likes or dislikes, needs, and wishes. In order to accomplish this, museums need to know, understand and have sympathy with their visitors. Also, museums need to consult and work with experts (Ambrose & Paine, 2006) and people with visual impairments to attract such people into museums. The main idea is “nothing about us without us”, which has been significant within the disability rights movements. Visitors with disabilities should be part of museum planning and work like curators, historians, artists, etc. (Bienvenu, 2015).

Moreover, according to Salmen (1998), an accessible museum should have nine pillars: 1) The museum should have a statement of commitment including “accessibility” in its code of conduct. 2) The museum should appoint one or more coordinators of accessibility according to its size. 3) The museum should organize an Accessibility Advisory Council to consult people with disabilities. 4) All museum staff should be trained on accessibility and strategies for serving all visitors. 5) The museum should periodically conduct a review of existing facilities, programs, and policies. 6) After the examination of its facilities and programs, the museum should implement short and long-term accessibility objectives such as removing barriers and conducting effective communication. 7) Accessibility should be promoted and advertised in the museum. 8) The museum should establish a complaint procedure. 9) The Museum should conduct evaluation questionnaires for permanent review of accessibility efforts to meet the needs of all visitors.

Just like everyone, visitors with visual impairments have particular characteristics. Thus, they have different kinds of learning and understanding styles and preferences. Therefore, offering them a variety of options is allowing visitors with visual impairments to have much more engagement with the museum. These

options that can help people with visual impairments are relief map, Braille Alphabet, large print, tactile diagrams, audio description, touch tours (Art Beyond Sight, n.d.), tactile paving, lighting, and colorization.

2.5.1. Accessibility of the Museum Sites for Visitors with Visual Impairments

2.5.1.1. Tactile Paving

Visitors with visual impairments need tactile paving to find their way, perceive dangers and directions, and move independently and safely. Thus, the accessibility of museum sites for blind and partially sighted visitors starts with the entrance and continues with the navigation inside the museum. It is necessary to have tactile paving at the entrance and, if possible, inside the museum. Visitors with visual impairments encounter various obstacles while moving inside the museum. To find a way in the museum by the blind and partially sighted visitors is one of the most significant issues in their museum experiences (Mesquita & Carneiro, 2016, p. 377).

There are two types of tactile paving; a guiding surface and a warning surface in Turkey. Guiding surfaces on grounds should be implemented to lead blind and partially sighted people from one point to another. The width of these surfaces should be between 30 cm - 60 cm. Guide juts need to protrude 4mm-5mm. The warning surface should be used only in case of a particular danger or a decision point. For instance, it can be used to indicate the presence of relief maps. The walking surface signs should not be implemented at the start and end of the ramp. The profiles of the warning surfaces must protrude 4 mm - 5 mm. The tactile paving applications in the building should start from the entrance and continue until the tactile map. In addition, visual contrast should be provided to lead blind and partially sighted visitors. The used material should be in a contrasting color with the surrounding surface (Gümüş, 2020).

2.5.1.2. Relief Map

Also, according to Mesquita and Carneiro (2016), relief maps are among the fundamental features to grant a good perspective of a certain location (p.377) and navigate around the museum. Therefore, “a high-contrast, low-glare tactile map with raised lines and lettering is an excellent and universal way to provide directional information on the museum layout. Museum perimeter, entrances, exhibit spaces, restrooms, telephones (including TTY), restaurants, gift shops, etc., should be clearly marked” (Salmen, 1998, p. 59). The tactile map should be designed based on the building. The bottom surface of the tactile map should be 90 cm high from the ground and the depth should be a maximum of 90 cm. It should be placed at an angle of 30 degrees when the depth is 70-90 cm. Only crucial information should be present on the tactile map or floor plan. Illumination on the surface of the map should be non-dazzling and between 350 lux and 450 lux (Gümüş, 2020).

2.5.1.3. Lighting and Color

Most people with visual impairments need and benefit from good lighting. It helps people to have a good vision and get the most of individuals’ sight (RNIB, n.d.). Therefore, from the beginning, entrances should be easily found by everyone, including visitors with visual impairments. Museums need to ensure good visibility of museum entrance by using necessary material, color, and lighting in order to be easily recognized (Gümüş, 2020; Mesquita & Carneiro, 2016). Also, “good lighting makes all the difference to a museum. How we see, perceive and understand an object is crucially affected by the character of the light falling on it” (Ambrose & Paine, 2006, p. 90). Improper lighting, lack of contrast, and the presence of shadows can adversely affect the viewing of visitors with visual impairments.

Sufficient and appropriate lighting can assist all visitors, especially partially sighted visitors, to move securely within a museum, experience the collection, and read

labels (Salmen, 1998, p. 105). Therefore, it is crucial to avoid using too much or very low lighting on spaces and casting shadows or glare on objects and labels by using localized or spotlighting (Mesquita & Carneiro, 2016; Salmen, 1998). “Spotlights cast deep shadows or create pools of light on a flat walking surface, giving a false impression that the area is not level” (Salmen, 1998, p. 106). In order to avoid this, lighting should be used very carefully. Most of the time museums should provide a minimum level of general illumination. The minimum illumination used in the museum should be 100 lux; but for sensitive objects, this level can be 50 lux. Labels’ illumination levels should be between 100-300 lux (Salmen, 1998; Kaynak & Çolak, 2011). In addition, it is also fundamental to use contrast in the museum. Because, “people with visual impairments need at least a 70 percent contrast in color value to differentiate between surfaces or objects” (Salmen, 1998, p. 107).

2.5.2. Accessibility of the Exhibition, Objects and Their Interpretation for Visitors with Visual Impairments

Although museums provide relevant information about collections, implement successful display techniques and provide richly illustrated guidance, many remain insufficient for visitors with visual impairments. For that reason, museums can make various offerings for visitors with visual impairments, including Braille Alphabet, large-print material, audio description, a touch tour, and different tactile facilities.

2.5.2.1. Braille Alphabet and Large Print

The texts and labels which are written in Braille Alphabet are very useful for visitors with visual impairments. It is crucial to carefully and correctly position the Braille panels next to the objects (Ginley, 2013). In order to accomplish this, “panels with braille labels should be mounted at a convenient angle, on a slight upward slope rather than flat on the top of a surface, which becomes very tiring to

work with after a while” (Hooper-Greenhill, 1994, p. 108). According to Ginley (2013), the following requirements are significant for the production and management of the installation process of Braille. As a general principle, Braille labels, panels, and booklets should contain the same information as the print label. In some cases, Braille labels, panels, and booklets could contain different information. The determined height of the panels from the floor should be no less 76 cm, thus children or wheelchair users can also access and read information. All Braille labels, panels, and booklets must be checked by a Braille reader before installation (Ginley, 2013). Also, “the Braille reader should also be available during installation and on hand to check that the panels are being installed at the correct object” (Ginley, 2013).

In addition to Braille, large-print is also one of the useful interpretation tools for partially sighted visitors. In this way, they can read the texts more easily. The following requirements should follow in the production of large prints. The font size should be between 16 and 18 points and be selected from neutral typefaces such as Helvetica or Ariel. Use of italic, bold, large blocks of capital letter and underlining should be kept at a minimum. Appropriate line spacing should be applied in the text as well as appropriate spacing between paragraphs. The paper should be non-glossy and thick to prevent show-through. The tables should be located carefully to allow tracking from one column to the next. The text should be horizontal. There should be good contrast between text and background. Graphics, charts, or pictures should be converted to text or enlarged (Art Beyond Sight, n.d.; the University of Oregon, n.d.; UK Association for Accessible Formats, 2012). In addition to large print, individuals with low vision also benefit from magnifier solutions in their lives. There are various electronic instruments that museums could offer their visitors to magnify artifacts and their explanations. Visitors can carry these special equipment throughout their experience during the museum. (Mesquita & Carneiro, 2016). Therefore, museums can adopt the most suitable magnifier for their system.

2.5.2.2. Audio Descriptions

Braille Alphabet and large prints are very useful for those people with visual impairments, only if they can read and see. Therefore, audio description is another access opportunity for visitors with visual impairments. Audio description differs from audio guides, the most common method in museums. Audio description provides narration of the visual elements such as costumes, theater, movies, and museums exhibitions, etc. Thus, it allows people with visual impairments to experience art events more completely (Synder, n.d., p.1). The audio description includes a detailed verbal description of the artworks: “the visual is made verbal and aural and oral” (Synder, 2005, p.937).

Art Beyond Sight (n.d.) offers guidelines for museum educators and art teachers etc. to write successful audio descriptions. First of all, an audio description should start with standard information of artifacts’ label specifying such as artist, title, date etc. Then the description should move on to an overview of the subject matter and composition of the work. After giving the overview, the description should orient the visitors by using the position of the number on a clock. The terms “right” and “left” can be ambiguous terms unless they are qualified. The description should indicate the importance of the technique and medium employed to make the item and focus on the style of the artifact. The word choice is one of the most significant factors in audio description. Therefore, clear and precise language is fundamental. The description should not contain ambiguous and figurative language. The audio description should be more vivid and particularized. Also, for better understanding, audio description can refer to other senses of visitors and if there is an opportunity, visitors should be given the opportunity to touch the original artworks. According to Joel Synder (2005), museum professionals make the museum experience more accessible and meaningful for every visitor by using vivid audio description techniques. Besides, when the museum's directional information is added to portable audio description players, which visitors can carry throughout their

experience, people with visual impairments can move around without assistance and experience collections (pp. 937-938).

2.5.2.3. Tactile Diagrams

In museums, tactile images can broaden the experiment for individuals with visual impairments by special descriptions because it enables visitors for further interpretation of collections. Tactile diagrams are used to convert pictures into a tactile language. They allow individuals to touch and handle work of art, maps, three-dimensional objects and environment, etc. (Art Beyond Sight, n.d.; Braden, 2016). “They can be produced in the form of tactile diagrams (raised line drawings of images) or textured replicas (reproductions that use textures to convey meaning), and they can be created through a variety of methods” (Nordlund, 2016, p.26) but they are not relief reproductions of the artwork (Kardoulas, n.d.).

Art Beyond Sight (n.d.) offers guidelines for museum educators and art teachers, etc. to create tactile diagrams of various artifacts. First, it is significant to simplify the images. The diagram should contain only the most important aspect of the artwork. Both the verbal description of the artifact and diagram should be relevant; otherwise, they will cause confusion. In the diagram, different types of lines should be used according to the significance of the image’s subjects. If artwork is too complicated then it might need to be divided into two to four pieces (Kardoulas, n.d.; Art Beyond Sight, n.d.). “After all the objects have been reduced to simple outlined shapes, the forms are filled with patterns. When filling a shape with a pattern, there must always be a one-eighth inch of space between the shape’s outer border and the pattern’s border” (Kardoulas, n.d.). Also, educators can add patterns into a diagram by using an Exacto knife. In addition, it categorizes images into three: a simple image, a complex image, and a highly complicated image. Both basic and intricate images can transform into tactile diagrams. However, if an image has too many details, it might not be possible to transform it into a tactile diagram (Kardoulas, n.d.; Art Beyond Sight, n.d.).

Furthermore, tactile diagrams without audio descriptions have no meaning for users. Therefore they should always work together. In this way, the user can follow the diagram in a logical and orderly manner. Also, the description of the diagram should include background and historical information about the artwork and a detailed description of the actual work (Kardoulis, n.d.).

2.5.2.4. Touch Tour

Everyone enjoys being able to touch as well as look at items. Touching is a crucial method for people to experience things. It is, of course, vital for individuals with visual impairment (Ambrose & Paine, 2006, p. 84). Most of the time touching is not allowed in museums due to loan agreements or sensitivity of objects. However, “...touch installations enhance the experiences that people with sight difficulties have, making their visit more engaging, informative and stimulating, allowing greater independence and inclusion” (RNIB, n.d.).

Museums should try to allow visitors with visual impairments to interpret artworks by touching (Ambrose & Paine, 2006; Nordlund, 2016). Touching is one of the great opportunities for those visitors to understand and experience the shape, texture, weight, and temperature of the objects (Candlin, 2020). According to the study of Candlin (2003), even though touching is a first-hand source for learning about museum objects, it does not make any sense for visitors if there is no description. Therefore, description is an indispensable extension of touching. When touching is not possible, “the museum may however wish to consider creating good-quality replicas for such purposes. Replicas, if used, should be well made, but be marked clearly to show that they are replicas” (Ambrose & Paine, 2006, p. 84). In addition to replicas, museums can also use models, props, handling objects that convey one aspect of work (Art Beyond Sight, n.d.).

Art Beyond Sight (n.d.) recommends tips for guided touch tours. First of all, while welcoming a group, the narrator should give a verbal description of the space in order to orient visitors. While moving around the museum, the narrator should give a brief verbal description of the spaces to give a sense of the scope of the exhibition or museum. The guided touch tour should be limited to three to five objects. Also, the tour group should be limited to three to six people at most. The narrator should know all details about the object and give a verbal description of it. When objects cannot be touched, the museum can offer tactile diagrams. The narrator must allow additional time for visitors to examine the objects.

2.5.2.5. Three-Dimensional Printing

“Three-dimensional (3D) printing is a process where a physical object is created from a three-dimensional computer model through successive material layering” (O’Brien et. al., 2016). To producing 3D materials, a 3D printer is used. The three-dimensional printer printing thin layers upon layers using materials such as plastic, metal, ceramics, cement, biomaterial, and play dough etc. which are digitally obtained by the use of computer-aided programs (Sönmez et. al, 2018). Today, 3D printers have been used in every field and are becoming more and more common. One of the usage purposes of 3D printers is education. According to Schelly et. al (2015) 3D printers are useful in various academic field. Because, they provide touchable, and high-quality physical models for the purpose of educational and detailed research (Horowitz & Schultz, 2014).

One of these educational areas is museums. Most of the time, visitors with visual impairments cannot touch museum objects due to the conservation rules therefore, they have to make do with audio descriptions or tactile versions of artifacts if provided. Although these accessibility studies are significant, they may be insufficient in some cases. For instance, a 2D tactile version of an architectural artifact is insufficient for blind and partially sighted visitors to fully understand. Therefore, with the developments in technology today, some museums reproduce

museum objects using three-dimensional printers. 3D printers are used in three different areas in museums. First is, 3D printing exhibitions, second is handling purposes and third is restoration of damaged museum objects (Short, 2015). With 3D printer technology, both national and international museums' objects can be turned into a format that can be touched, examined, and worked. 3D printers provide benefits for individuals to concrete and permanent learning by seeing and handling (Karaduman, 2017). Besides, "three-dimensional interpretations can recreate not only basic composition and color but also translate stylistic properties such as texture and brushwork into a touchable experience" (Art Beyond Sight, n.d.). In this way, visitors with visual impairments can engage museums more easily and concretely.

2.5.2.6. Web Accessibility

The growing impact of the internet and technology on individuals' life is undeniable. People with disabilities often benefit from the internet, including blind and partially sighted. Therefore, web accessibility is one of the fundamental required features. Web accessibility means "...that websites, tools, and technologies are designed and developed so that people with disabilities can use them" (Web Accessibility Initiative, n.d.). It provides internet experiments to the people with disabilities by allowing them perceive, understand, and navigate (Web Accessibility Initiative, n.d.).

Along with physical and information accessibility, web accessibility is also significant for museums to ensure equal access and equal opportunity and remove barriers for individuals with disabilities, including blind and partially sighted users. While making websites accessible, they should be designed to work simultaneously with assistive technologies, such as screen readers, magnification software, text readers, etc. (Berkley Web Access). According to Bahram (2021), there are ten best practices to improve the web accessibility of museums. First, there should be a textual description of all meaningful images on a museum website. Second, while

preparing the heading, attention should be paid to the color, emphasis, size, and correct coding. Because using proper heading and correct coding is significant for screen reader users to navigate websites. Third, there should be various options for videos or voice records such as audio descriptions, sign language, subtitles, etc. Fourth, while preparing the websites there should be proper color and contrasts for people with visual impairments. Fifth, the programmatic label is necessary for internet users with disabilities to use websites more effectively. Therefore, the buttons on the websites should be prepared using different labels for users with various disabilities. Sixth, an accessible website should work well when zoomed in to at least 200 percent. Also, text-based zoom and optical zoom are different things, therefore while zooming on a website it is significant to make sure that these two work well together. Seventh, mouse usage should not be obligatory for all interactive controls since some users cannot use it. Eighth, an effective link text should be descriptive, therefore unnecessary words should not be used. Otherwise, phrases like click here may lose their effectiveness if they are not descriptive. Ninth, page developers should allow users to control speech and braille output from screen readers when they are reading the page. By doing this, developers must identify the language of the code. Tenth, while creating accessible websites, it is fundamental to use codes that can be run by all software that is suitable for blind and partially sighted people (Bahram, 2021).

4. ACCESSIBLE MODERN AND CONTEMPORARY ART MUSEUMS FOR VISITORS WITH VISUAL IMPAIRMENTS IN ISTANBUL: CASE STUDIES

During the research process of this thesis, many private modern and contemporary art museums in Istanbul were asked whether they organize accessible exhibitions and educational programs for visitors with visual impairments or not. These museums are Elgiz Museum, Istanbul Toy Museum, Pera Museum, Sadberk Hanım Museum, Evliyagil Museum, the Museum of Innocence, Borusan Contemporary, the Doğançay Museum, Semiha Berksoy Museum, Sakıp Sabancı Museum, Istanbul Museum of Modern Art and Arter. However, within all of these museums, only Sakıp Sabancı Museum, Istanbul Museum of Modern Art, and Arter organize accessible exhibitions and education programs for visitors with visual impairments, so they were chosen as case studies.

4.1. Case Study: The Sakıp Sabancı Museum

The Sakıp Sabancı Museum (SSM) is one of the museums that organizes accessible programs or exhibitions for people with disabilities from time to time. SSM was opened in 2002. The building of the Museum, named Atlı Köşk, was once a permanent home of the Sabancı Family. In 1998, the mansion was given to the Sabancı University by the Sabancı Family to be transformed into a museum. The collection of the Museum consists of the furniture and private art collections of the Sabancı Family. Aside from the permanent collection, SSM also hosts temporary national and international exhibitions. The Sabancı Museums presents inclusive, extensive, borderless, and transdisciplinary experiences with the Museum space and its digital channels. As the Museum states in the websites, today the Sakıp Sabancı Museum offers a comprehensive understanding of museology with its rich collection, temporary international exhibitions, conservation units, educational programs, and various events (The Sakıp Sabancı Museum, n.d.).

4.1.1. The Sakıp Sabancı Museum and Education Programs for Visitors with Visual Impairments

Sakıp Sabancı Museum aims to become an accessible museum for everyone at international standards. For this reason, since the date it was opened, SSM has organized educational programs for children, youth, and adults with mental and physical disabilities. Within the scope of these educational programs, SSM collaborates with various municipalities, the Six Points Foundation of the Blind, the Spastic Children's Foundation of Turkey, and other institutions and formations. To reach more people, the Sabancı Museum collaborates with the Six Points Foundation of the Blind on various issues such as the preparation and announcement of educational programs for visitors with visual impairments (H. Arslaner, personal communication, January 23, 2021).

In 2005, the Sabancı Museum held its first major and international exhibition, "Picasso in Istanbul". In this respect, there were educational programs for visitors with impairments, including blind and partially sighted. For the visitors with visual impairments, A3 files were prepared, which include tactile versions of exhibited paintings and their explanation in large print (Figure A. 4) and Braille (Figure A. 5). While preparing the files, SSM worked with blind and partially sighted individuals from the Six Points Foundation of the Blind. Apart from the Museum, the files were sent to all visually impaired associations, schools, and relevant municipalities in Turkey. Also, twenty-nine works selected from the exhibition are described in detail using audio guides. In addition, ninety-minute films and documentaries were screened within the scope of the events (Figure A. 6) (H. Arslaner, personal communication, January 23, 2021).

The Sabancı Museum held "the Master Sculpture Rodin" in Istanbul exhibition in 2006. The Rodin Museum in Paris loaned 203 artworks to be exhibited. Within the scope of this exhibition, there were educational programs for blind and partially sighted visitors. Before these programs, an officer from the Sabancı Museum

received training in the education department of the Rodin Museum for a month to gain knowledge and experience about activities for blind and partially sighted visitors (H. Arslaner, personal communication, January 23, 2021).

In addition, various workshops and programs for visitors with visual impairments were prepared and done with the guidance of museum experts from the Rodin Museum during the first fifteen days, which were then continued by Sabancı Museum employees. In these workshops, similar sculptures were made using plaster together with visitors with visual impairments. Moreover, with special permission from the Rodin Museum, blind and partially sighted visitors were able to touch the twelve sculptures in the exhibition (Figure A. 7) for detailed examination. Also, information labels of these artworks were prepared in Braille Alphabet (H. Arslaner, personal communication, January 23, 2021).

The museum staff accompanies groups with impairments upon request and describes the museum with audio descriptions. In addition to these, the Sakıp Sabancı Museum aims to become accessible for visitors with impairments. Therefore, it carries out a project for this purpose. SSM plans to make tactile paving, produce replicas, prepare audio descriptions, print labels and booklets in Braille, and large print for visitors with visual impairments. In this regard, it is in contact with institutions such as the Assistive Technology and Education Laboratory for Individuals with Visual Disabilities at the Boğaziçi University (GETEM) (H. Arslaner, personal communication, January 23, 2021).

“The Past Present Istanbul” exhibition was held in late 2021. In the exhibition, 23 artists come together to determine the situation in Istanbul. Within the scope of the Sabancı Foundation's program, called Changemakers, collaboration was made with the Erişilebilir Her Şey Platform (Everything Accessible Platform) for this exhibition. Annotated explanations of all the works in the exhibition, interviews, and artist biographies were prepared in Braille by the Erişilebilir Her Şey Platform (Figure A. 8). Also, the tour route of the exhibition was prepared by the Erişilebilir

Her Şey team. All these contents were added to the panels in the exhibition with QR codes. Blind and partially sighted visitors can access the exhibition content by scanning these QR codes. In addition to the individual disabled participants, the exhibition was visited by school groups with visual impairments (Figure A. 9) and institutions such as the Association of Blinds of Turkey, etc. (H. E. Yıldız, personal communication, November 18, 2021). However, SSM does not have this kind of accessible solutions for its permanent collection for blind and partially sighted visitors.

4.2. Case Study: Istanbul Museum of Modern Art

The Istanbul Museum of Modern Art was founded as one of the modern and contemporary museums in 2004 in Istanbul by Eczacıbaşı Family. The collection of the Museum constitutes the private art collection of the Eczacıbaşı Family. Aside from the permanent collection, Istanbul Modern also hosts temporary national and international exhibitions. Furthermore, Istanbul Modern makes long-running architectural collaboration with The Museum of Modern Art (MoMA) and educational collaborations with the Centre Pompidou that are continuously renewed. Istanbul Modern aims to make art easily accessible to different parts of society. For this reason, it organizes various training programs for different groups such as individuals with disabilities. (The Istanbul Museum of Modern Art, n.d.).

4.3.1. The Istanbul Museum of Modern Art and Education Programs for Visitors with Visual Impairments

Istanbul Modern is one of the museums that organizes programs and events for visitors with disabilities. After a series of observations and interviews with museum visitors, Istanbul Modern started its first project, called WE MEET, for children with special learning needs in 2005. In this project, children with special learning needs and children with normal development at the high school level come together three times and produce artistic works related to their subjects. In 2009, Istanbul

Modern responded positively to a group of foreign blind visitors' requests for taking photographs. After that, Istanbul Modern noticed its deficiency in terms of blind and partially sighted visitors. Due to its egalitarian approach, Istanbul Modern started the Color I Touch Project for blind and partially sighted children (Figure A. 10), adolescents, and adults. Collaborations were made with different institutions and associations and the project has taken its current form over time. It is declared that this project is not only significant for art but also has pedagogical importance (M. Tütüncüoğlu & D. Saltan, personal communication, November 25, 2020).

The Color I Touch Project consists of several educational studies. Within the scope of the project, there are audio description tours, activities aimed to improve motor skills, dramas, touch tours with permission, and movie screens with audio descriptions. When these studies are detailed with examples, for instance, visitors with visual impairments are allowed to touch the sculptures with special permission. During this activity, visitors can feel the object in three dimensions. If the statue has a dress, it is produced from the same fabric, and an opportunity is created for the visitors to understand it by touching it. Another example is, Bedri Rahmi Eyüpoğlu's painting, named Han Kahvesi. While the audio description of the painting is made, folk songs from Aşık Veysel and the sounds of teaspoons are used in the background. Therefore, these elements allow visitors to feel the atmosphere in the painting (M. Tütüncüoğlu & D. Saltan, personal communication, November 25, 2020).

During drama and music studies, support is received from some artists from time to time. As a drama, they try to portray scenes or figures in paintings. Also, during the workshops, the visitors first feel the materials given to them (Figure A. 11) then the activities are carried out using specially prepared raised canvases, paints, or the collage technique. For example, as a workshop, a still life painting is described, while visitors are given samples of the fruits and vegetables found in the painting. Then, they are made to work with clay to improve their motor and skill abilities (M. Tütüncüoğlu & D. Saltan, personal communication, November 25, 2020).

The same programs are carried out with blind and partially sighted adults. However, only the language and description used in the audio description, and the materials used in the workshop are different. At the end of the events, surveys are conducted among the blind visitors, teachers, and parents. According to the results of the surveys, they evaluate the programs and events positively and express their satisfaction (M. Tütüncüoğlu & D. Saltan, personal communication, November 25, 2020).

References taken from daily life have been utilized to describe the colors of the exhibited works for blind and partially sighted visitors. While describing the size of a piece of art, they do live examples. For instance, while describing a painting of Alaettin Aksoy, children are made to stretch their arms to visualize its size. Furthermore, visitors with visual impairments can touch the 3D reproduction of paintings with permission (M. Tütüncüoğlu & D. Saltan, personal communication, November 25, 2020).

While the project was being projected, Istanbul Modern benefited from sponsorships. But as the sponsors have withdrawn, the project continues with the remaining materials. The Museum staff receives training to communicate and meet the demands of the blind and partially sighted visitors. Also, Istanbul Modern explained its accessibility facilities to the Centre Pompidou Museum in Paris in a meeting. The Social Project Department follows the international accessibility facilities, and they made Istanbul Modern collaborate with the Six Points Foundation of the Blind (M. Tütüncüoğlu & D. Saltan, personal communication, November 25, 2020).

Moreover, the Special Education Project Protocol was signed between Istanbul Modern and the Istanbul Provincial Directorate of National Education in 2018. This project aims to encourage and enable students with impairment to attend and benefit from the art education programs and workshops of Istanbul Modern. Within the

scope of this project, students can see, touch, and feel the exhibited works, learn basic knowledge of art such as color, texture, and line, and have the chance to reinforce what they have learned at school (M. Tütüncüoğlu & D. Saltan, personal communication, November 25, 2020).

During the worldwide coronavirus pandemic, Istanbul Modern held online workshops with children with low vision once or twice a month. In these workshops, examples from both the Istanbul Modern collection and art history are supported by contrasts, colors, and sounds in a way that the low-sighted can easily understand. After the presentation, an artwork is produced (M. Tütüncüoğlu & D. Saltan, personal communication, November 25, 2020).

4.3. Case Study: Arter

Arter was founded by the Vehbi Koç Foundation in 2010 as an accessible, sustainable, and vibrant cultural platform for everyone in its building on Istiklal Street. In 2019, Arter moved to its new building in Dolapdere. The collection of Arter includes more than 1,300 artworks of 400 both international and national artists. The collection covers paintings, drawings, sculpture, print, photography, film, video, installation to sound, light, and performance-based practices from the 1960s to the present. Arter aims to unite artists and visitors through its contemporary collections and exhibitions. (Arter, n.d.).

4.3.1. Arter and Education Programs for Visitors with Visual Impairments

Arter welcomes everyone, thus to become an accessible cultural platform, it offers various services and events according to multiple abilities and needs of visitors (Arter, n.d.). Since 2016, in the context of the Arter's Learning Programme, it has been planning accessible activities for visitors with disabilities, including blind and partially sighted visitors, with an egalitarian approach. While planning the activities for visitors with visual impairments, Arter consulted to the Erişilebilir Her Şey,

GETEM at the Boğaziçi University, and other relevant NGOs, and benefited from the master thesis of one of the team members. The Learning Programme team aims to create a space to think and interpret Arter's current exhibitions and conceptual frameworks of the works in its collection. It builds a space for discussion among visitors and participants and presents this area through the events and contents (M. Özer, personal communication, May 07, 2021).

One of these contents prepared within the scope of the Learning Programme is “Access Tours” which consist of guided tours that appeal to the various senses of visitors with different abilities. For instance, “Access Tour: Sign Language” is a tour for individuals with hearing impairments. A guide from the Arter Guide team explains selected artworks in current exhibitions in Turkish Sign Language. On the other hand, “Access Tour: Verbal Description and Tactile Material Tours”, is carried out by making audio descriptions of artworks with the use of reproduced tactile materials (Figure A. 12 and Figure A. 13). In addition, within the scope of the Words Are Very Unnecessary exhibition, which is one of the opening exhibitions of Arter in 2019, “Audio Description and Tactile Materials Tour” was organized for blind and partially sighted visitors. In this respect, replicas were made using the materials applies in the production of the artworks. While visitors with visual impairments were visiting the exhibition by touching the replicas, this experience was reinforced with audio descriptions (M. Özer, personal communication, May 07, 2021).

In the context of the Erişilebilir Her Şey, the Learning Programme team of Arter, exhibition guides, and other field teams receive “Communication and Behavior Training for Field Teams” within the budget of the Learning Program. In this way, they learn how to communicate with people with different abilities, including blind and partially sighted individuals, and guide them in the physical environment. In addition, thanks to audio description training, the Learning Program team and exhibition guides are informed about the correct language and the delicacy of description (M. Özer, personal communication, May 07, 2021).

References and practices taken from daily life have been utilized to describe the exhibited works for blind and partially sighted visitors. For example, while describing the size of a piece of art, some analogies are used such as "fit in the palm of your hand" and "two feet wide". In addition, the positioning of an object regarding the direction of the clock, or a detailed description of the place where the work is located can be counted as alternative examples. By using these and similar steps, the participants are provided opportunities to visualize and complete the image of the work in their minds (M. Özer, personal communication, May 07, 2021).

Due to the COVID-19, which has been effective all over the world since 2019, activities for visitors with visual impairments have been suspended for a short time (M. Özer, personal communication, May 07, 2021).

4. DISCUSSION

Museum educations, programs, and events for visitors with visual impairments have been started in Europe and the US since the 19th century (Reidmiller, 2003). There are various accessibility facilities such as touch tours, tactile diagrams, Braille and large print, audio description, etc. in different museums. Twenty years ago, during the Symposium of SANART, Oruçoğlu said that Turkish museology was established with the copying of the contemporary 19th century Western museums and this old order has continued until today (Özkasım & Ögel, 2005). However, Turkish museology reached the standards of contemporary museology in terms of exhibition techniques, curatorial studies, and spaces, etc. in the last twenty years. We can see examples of this at the Troy Museum, Baksı Museum, Istanbul Naval Museum, Ankara Museum of Painting and Sculpture, and Odunpazarı Modern Museum, etc. On the other hand, considering visitors who need accessibility works, such as blind and partially sighted visitors, it is understood that there are not enough programs and facilities both in state and private museums. This situation reveals one dimension of insufficiency of the social role of Turkish museology.

In addition, with the privatization, which is the result of neoliberal policies, the Turkish government has been become a passive actor and withdrawn from many areas. Thus, culture, one of the areas left blank by the state, has become the new market of private companies and institutions while new cultural institutions, private galleries, and festivals, etc. have emerged. Moreover, with the influence of the private sector in cultural spheres, education and social responsibility projects started to develop in museums. However, according to Başaran (2007), the private sector claimed that their involvement in the culture was to supply the deficiency and fulfill their social responsibilities. For instance, Türkiye İş Bankası started its institutional history studies in the late 1990s to transfer the history of the bank, which reflected the establishment and development story of Turkey, to future generations and opened the Isbank Museum in 2007 (Türkiye İş Bankası Müzesi,

n.d.). Their arbiter roles allow them to decide which objects, artworks, and artistic items are worthy to be exhibited or performed or which artists should be funded. This situation draws attention to how passive and inadequate the role of the state museums in social activities is. Also, "...the corporations which support these activities, top executives working in corporations, the curators or managers of cultural institutions - all the power groups- struggle to be hegemonic in the cultural field and compete with each other by means of art" (Başaran, 2007, 119). It is understood that this hegemonic structure created by the private sector in the cultural field is only for individuals from a certain class. Also, they do not adequately address all segments of society, including the individuals with visual impairments, and leave them out of this denominator.

On the other hand, according to article 27 of the Universal Declaration of Human Rights (UDHR), "everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits" (UDHR, 1948). Also, according to article 27 of the Constitution of the Republic of Turkey "everyone has the right to study and teach, express, and disseminate science and the arts, and to carry out research in these fields freely" (he Constitution of the Republic of Turkey, 1982). As stated in the Declaration and the Turkish Constitution, every individual of the society has the right to participate in cultural life equally. Accessibility tools to be offered in museums are not simply facilities; they are the birthrights of individuals.

Turkey introduced Law 5378 in 2005, which is the first law about people with disabilities. This law aims to promote, protect and ensure the rights of people with disabilities in topics such as healthcare, workforce, education, and participation in social life. Although the law supports the participation of people with disabilities in social and cultural life and points out the necessary accessibility works, these works are almost non-existent since there are not enough enforcement mechanisms.

In addition, according to Law 5378 Article 3 Paragraph c,

“the person is affected by the attitudes and environmental conditions that restrict the person's full and effective participation in society on equal terms with other individuals due to the loss of the person's physical, mental, spiritual, and sensory abilities at various levels” (the Law on the Disabled People, 2005).

According to this law, the definition of person with disabilities in Turkey is based on the medical definition. The medical model defines disability as a personal deficiency. From this point of view, the exclusion of people with disabilities from social environments is understandable and considered normal. On the other hand, the social model defines disability as a social phenomenon. Therefore, it questions the exclusion of individuals from any social environment and tries to remove barriers for people with disabilities. Thus, Turkey should adopt the social definition of disability to provide a more inclusive environment.

The Republic of Turkey, Ministry of Family and Social Services publishes the monthly the Disability and Ageing Statistical Bulletin. The number of people with disabilities was written according to the data from the 2011 census in the June 2021 issue. Although a census was made in 2020, the number and rate of people with disabilities have not been updated. This situation reveals one dimension of the deficiency in the area, making it difficult to identify the need for an equal environment or experience. Therefore, this data needs to be updated and shared transparently.

Through conducting interviews with museum professionals, three Istanbul modern and contemporary museums, Sakıp Sabancı Museum, Istanbul Museum of Modern Art, and Arter, were examined in terms of accessibility criteria for blind and partially sighted visitors, such as tactile paving, touch tours, audio description, Braille and large print and workshops, etc.

These three modern and contemporary art museums organize programs and exhibitions for some groups with disabilities, including blind and partially sighted, in Turkey with an egalitarian and inclusive policy and sense of responsibility. Although they do not have the necessary accessibility facilities for all groups with disabilities, they can be shown as examples of inclusive museums in Turkey as far as they do.

In this respect, while organizing programs and exhibitions for visitors with visual impairments, these three museums make collaborations with various municipalities, institutions, and foundations. The fact that museums collaborate with various institutions, realize their deficiencies and needs, and request the necessary help, shows how seriously they take their work and give importance to the individual.

On the other hand, these three museums do not have tactile paving outside and inside the museums. This situation restricts individuals with visual impairments from navigating safely outside and inside the museum alone as they may encounter various obstacles in these areas. In addition, these three museums offer audio descriptions for blind and partially sighted visitors. Also, while describing exhibited works, both Arter and Istanbul Modern use daily life practices as references. With the detailed verbal description of artworks, visitors with visual impairments can have better perception and experience.

Various opportunities are offered on a project basis at the Sakıp Sabancı Museum. During the Picasso in Istanbul exhibition, tactile versions of exhibited paintings and their explanation in large print and Braille are prepared, and films and documentaries were shown. In addition, within the scope of the Master Sculpture Rodin in Istanbul exhibition, blind and partially sighted visitors touched objects with special permission, and they made plaster replicas of sculptures in the workshop. Also, there were Braille labels of artworks. However, none of these accessibility facilities have been adapted to the permanent collection of the

museum. This situation shows the deficiency of Sabancı Museum which wants to be an accessible museum at international standards. The Past Present Istanbul exhibition is the first accessible exhibition organized by the Sabancı Museum in 15 years. The descriptions of the works in the exhibition have been made accessible using the Braille alphabet and QR code. However, the fact that Sabancı Museum has not organized any accessible exhibitions in 15 years shows its inadequacy in this regard. On the other hand, the Sabancı Museum does not have an education unit, and when needed, it provides the necessary assistance from outside.

Istanbul Modern has a permanent project towards blind and partially sighted visitors. The Color I Touch Project consists of several educational works. Within the scope of the project, there are audio description tours, workshops, dramas, touch tours with permission, and movies with audio descriptions. Also, Istanbul Modern pays attention to the contrast of colors for partially sighted visitors, unlike the other two museums I have reviewed. However, there are no labels and booklets written in large print and Braille in the museum. In addition, Istanbul Modern carries out this project mostly with blind and partially sighted schools or visitor groups of such people, not for individuals. This situation reveals another lack of its accessibility.

Arter organizes an education program called “Access Tour: Verbal Description and Tactile Material Tours” for blind and partially sighted visitors. Within the program, Arter makes audio descriptions and uses reproduced tactile materials of selected artworks. Also, within the scope of the Words Are Very Unnecessary exhibition, “Audio Description and Tactile Materials Tour” was organized for blind and partially sighted visitors. Within the exhibition, replicas of artworks are produced, which visitors can touch, and this experience was reinforced with audio descriptions. However, there are no labels and booklets written in large print and Braille in the museum.

The websites of these three museums were examined in terms of accessibility. Accordingly, only Arter's website has an accessibility section containing the

necessary information for visitors with disabilities. In addition, the staff of these three museums received training to communicate with people with disabilities and meet their needs.

The National Gallery and Victoria & Albert Museums in London, as in many museums around the world, offer various accessibility works for blind and partially sighted visitors in their both permanent and temporary collections. Thus, blind and partially sighted visitors have the opportunity to engage in various artworks and museum environments and can interact with each other. Thus, the Sakıp Sabancı Museum, Istanbul Museum of Modern Art, and Arter should develop accessibility works on permanent and temporary collections and expand the existing instruments. In this way, they will become much more inclusive and accessible museums at international standards.

CONCLUSION

Museum educations and programs for visitors with visual impairments in various parts of the world started in the 19th century. One of the reasons for this is that they intended to educate and inform individuals who cannot find the opportunity to develop themselves. As of the 20th century, museum programs and educations for blind and partially sighted visitors have diversified and increased. Museums were affected by political, economic, and social transformations. Like all other institutions, they started to renew themselves and increase their potential. In addition, the disability movement, which emerged in this period, lead people with disabilities to demand their rights and to take part in other fields such as cultural spheres. Thus, the social model of disability has been produced as an alternative to the medical model. Also, states have enacted laws which impose accessibility measures and enable people with disabilities participate in cultural life. Museums are part of these legislative initiatives. Today, various museum education and programs are organized for visitors with disabilities, including the blind and partially sighted visitors, in museums in different parts of the world.

In Turkish museums, works for visitors with disabilities, including blind and partially sighted visitors, have started since the 2000s. State museums assumed the task of helping the establishment of a nation-state as well as protecting and exhibiting the artifacts. Therefore, the social role of state museums has generally been neglected. With the spread of privatization in the 1980s, private museums were opened, and various social responsibility projects were started. New museology has begun in Turkey, and museums have started to develop content for different social groups such as people with disabilities, children, and women in order to become more inclusive. Within the scope of these contents, children's workshops and accessibility studies, etc. have been made. Today, although there are various museum programs and education for visitors with visual impairments in museums, these are not sufficient.

People with visual impairments need various accessibility measures in their education and social lives. The use of other senses, especially touch and hearing, and accessibility opportunities are significant in their education. As for everyone in museums, it is one of the fundamental learning areas for blind and partially sighted individuals. Some of these tools are materials, such as large print, Braille, magnifying glass, audio guide, tactile material, tactile paving, replicas, and appropriate lighting. That's why museums need to use a variety of accessibility instruments to become more inclusive and democratic spaces. For this purpose, universal design shows the methods to all spaces, including museums, of becoming more inclusive, democratic, and accessible premises.

This study sought a valid answer to the question of what kind of educational programs and exhibitions are held for the accessibility and experiences of visitors with visual impairments in Istanbul's modern and contemporary art museums. In the literature, there are various studies written about visitors with visual impairments and museums. However, this study discusses the educations and programs of Sakıp Sabancı Museum, Istanbul Museum of Modern Art, and Arter for blind and partially sighted visitors. For this purpose, interviews were held with museum officials. In the light of the findings, it has been understood that all museums have audio guide services, but none of them have tactile paving and labels and booklets written in Braille and large print. It is noted that one of the museums prepared labels and booklets with relief pictures, Braille alphabet, and large print on an exhibition basis, visitors were allowed visitors to touch the exhibited sculptures with special permission, and showed films and documentaries.

One of the museums has a permanent learning project for visitors with visual impairments. This project includes audio descriptions, tactile tours, workshops, dramas, and audio description films. Also, it was paid attention to the contrast of colors for partially sighted visitors. In one of the museums, it was determined that there is an education program for blind and partially sighted visitors. Within the scope of this learning program, replicas of the exhibited works were made to enable

visitors to touch, and their experiences were reinforced with audio descriptions. Finally, all museums cooperate with various institutions and provide necessary training to their employees about accessibility and communication with people with disabilities.

Besides, I would like to make some suggestions in terms of making museums accessible to visitors with visual impairments. The *Engelsiz Müze Rehberi (Guidebook for Accessible Museums)*, published in 2011, aims to show museums ways to become accessible for visitors with disabilities. According to this guide, there are multiple exhibition standards for different types of disabilities and museums. Also, the guide stresses the importance of guide dogs, accessibility practices to help people visit the museum with walking sticks, audio descriptions, and touching artifacts for blind and partially sighted visitors. In addition, the significance of large prints and the use of highly contrasting colors on the screens are revealed for the partially sighted museum visitors (Kaynak & Çolak, 2011). However, the guide was published in 2011. It should be updated with the guidance and cooperation of relevant institutions and individuals, and museums should be encouraged to adapt their systems to it. Besides, while developing the guide, it should include the methods and benefits of using 3D printers in museums. Because, three-dimensional printing can help visitors with visual impairments to engage museums more easily and concretely.

In recent years, with the increase in awareness towards people with disabilities in Turkey, new organizations have emerged such as BlindLook, Erişilebilir Her Şey, and Bongo Art. These three organizations lead the way in making museums and various institutions accessible spaces for people with disabilities. BlindLook designed Audio Simulation, an audio-focused accessibility technology, to make every product and service accessible to people with visual impairments. Besides, while companies and brands transform into an accessible and inclusive platform with BlindLook, they gain EyeBrand, a global certificate (BlindLook, n.d.). Erişilebilir Her Şey provides various consultancy and educational programs

regarding different accessibility works so that brands and companies can become accessible spaces (Eriřilebilir Her řey, n.d.). For example, exhibition guides and other field teams of Arter receive “Communication and Behavior Training for Field Teams” from them. Also, Sakıp Sabancı Museum cooperated with Eriřilebilir Her řey in transforming "the Past Present Istanbul” exhibition into an accessible one. Bongo Art Project is a social initiative that aims to make museums accessible to individuals with visual impairments and the works tactile with replicas and audible with audio descriptions. In this respect, Bongo Art collaborates with the Museum of Anatolian Civilizations in Ankara. Within this collaboration, twenty-two unique and prominent artworks from Anatolian history were selected to be scaled and prepared for blind and partially sighted visitors (Bongo Art Project, n.d.). Accessibility works and educations of these social enterprises are provided by experts. Therefore, they increase the inclusiveness of the institutions they cooperate with to become barrier-free spaces. Today, some museums benefit from the educations and opportunities offered by these three social enterprises from time to time. However, these studies are generally on a project basis. Therefore, museums need to do the necessary work to create a permanent system within their bodies through these collaborations. In addition, each museum must have an education unit to maintain and develop an accessible and inclusive system created within its own body.

In addition, the United States signed the American Disability Act (ADA) in 1990. ADA aims to reduce inequalities toward people with disabilities. It includes some mandatory criteria such as facilities, programs, and services for museums to turn them into an accessible environment for all people. While mentioning this act, I did not intend to make a comparison. It is to set an example for the Turkish legislators to make a suitable act for the Turkish museum system. It should be borne in mind that this US law has made most museums accessible to everyone, including visitors with visual impairments.

The museums need to get feedback from visitors with visual impairments to enhance their accessibility programs and meet the demand. Besides, tactile versions of the 2D paintings can be produced to enable individuals with visual impairments to perceive them. Blind and partially sighted visitors should be enabled to touch the artworks or replicas in the museums. Inaccessible museums can be made accessible by cooperating with the necessary institutions.

This study examined the education programs and exhibitions organized by three private modern and contemporary art museums in Istanbul for people with visual impairments. Further research in this field would require investigation of other types of museums and comprehensive data collection from blind and partially sighted museum visitors. In addition, to draw attention to museums' accessibility, more research should be done on different types of disabilities and museums.

REFERENCES

- Akçalı, Ş. (2015). Görme Engellilere Yönelik Tasarlanan Mekanların Erişilebilirlik Standartları Kapsamında İrdelenmesi: Görme Engelli Kütüphaneleri [Master dissertation, Dokuz Eylül University]. Yöktez.
- Akıncı, Z. (2013). Management of Accessible Tourism and Its Market in Turkey. *International Journal of Business and Management Studies*, 2(2), 413- 426. https://www.researchgate.net/publication/261875914_Management_Of_Accessible_Tourism_And_Its_Market_In_Turkey
- Akmehmet, K. T. (2012). Müze Eğitimi: Okul Programları. In Ertürk, N. & Uralman, H. (Eds.), *Müzebilimin ABC'Sİ* (pp. 57-71). Ege Yayınları.
- Aksoy, S., Kartaler, Y. & Altaylı, A. (2010). *Türkiye Müzeleri İçin Yönetim ve İşletim Modeli Öneri Raporu*. İstanbul 2010 Avrupa Kültür Başkenti Ajansı Kültürel Miras ve Müzeler Direktörlüğü.
- Ambrose, T. & Paine, C. (2006). *Museum Basics*. Routledge.
- Anti-Defamation League. (n.d.). A Brief History of the Disability Rights Movement. <https://www.adl.org/education/resources/backgrounders/disability-rights-movement>
- A Renaissance of Touch in the Museum. (November 28, 2016). In Touch: Digital Touch Communication. Retrieved April 25, 2021, from <https://in-touch-digital.com/2016/11/28/a-renaissance-of-touch-in-the-museum/>
- Arıkan, Ç. (2002) “Sosyal Model Çerçevesinde Özürlülüğe Yaklaşım” *Ufukun Ötesi Bilim Dergisi*, 2 (1), 11-25.
- Art Beyond Sight. (n.d.). *Audio Described Media*. <http://www.artbeyondsight.org/handbook/acs-audiodescribed.shtml>
- Art Beyond Sight. (n.d.). *Braille and Large Print*. <http://www.artbeyondsight.org/handbook/acs-braillelarge.shtml>
- Art Beyond Sight. (n.d.). *Tactile Diagrams*. <http://www.artbeyondsight.org/handbook/acs-tactile.shtml>
- Art Beyond Sight. (n.d.). *Tactile Patterns*.

- <http://www.artbeyondsight.org/handbook/acs-tactilepatterns.shtml>
- Art Beyond Sight. (n.d.). *Touch Tours and Other Tactile Experiences*.
<http://www.artbeyondsight.org/handbook/acs-touchtools.shtml>
- Art Beyond Sight. (n.d.). *Verbal Description*.
<http://www.artbeyondsight.org/handbook/acs-verbal.shtml>
- Art Beyond Sight. (n.d.). *What are Accessibility Tools Used by People with Low Vision?*. <http://www.artbeyondsight.org/handbook/acs-whattools.shtml>
- Art Beyond Sight. (n.d.). *What is a Tactile Diagram? Create Tactile Diagram for the Persistence of Memory Narrative for Guidance of the Hands*.
<http://www.artbeyondsight.org/ahttps/dali-touch.shtml>
- Arter. (n.d.). *Hakkımızda*. <https://www.arter.org.tr/hakkimizda>
- Arter. (n.d.). *Interpreted Tactile Reproduction of the İsimsiz, by Elisabetta Di Maggio, 2010* [Photograph]. Istanbul.
- Arter. (n.d.). *Interpreted Tactile Reproduction of the Otuz Üç Fotoğrafla Heykelin Anlatımı, by Osman Dinç, 1986* [Photograph]. Istanbul.
- Artun, A. (2008). Müzecilikte Kamusalılığın Kaynakları ve Özel Müzeler. In Önen, B. Z., Tunç, G. & Türkyılmaz, M. (Eds.), *Geçmişten Geleceğe Türkiye’de Müzecilik I Sempozyum Bildiriler Kitabı* (pp. 97-103). VEKAM.
- Atasoy, N. Y. (1999). Çağdaş Eğitimde Müzenin İşlevi. In Atagök, T. (Ed.), *Yeniden Müzeciliği Düşünmek* (pp. 147-153). Yıldız Teknik Üniversitesi Basım-Yayın Merkezi.
- Australian Federation of Disability Organisations. (n.d.). *Social Model of Disability*. <https://www.afdo.org.au/social-model-of-disability/>
- [A visitor touches the sculpture from the Master Sculpture Rodin in Istanbul exhibition]. (2011). [Photograph]. Engelsiz Müze Rehberi.
- Aydınalp, Ş. G. I. (2019). *Müze İletişimi*. Akademik Kitaplar.
- Bacci, F. & Pavani, F. (2014). “First Hand,” Not “First Eye” Knowledge: Bodily Experience in Museums. In Levent, N. & Pascual-Leone, A. (Eds.), *The Multisensory Museum: Cross-Disciplinary Perspectives on Touch, Sound, Smell, Memory and Space*, (pp.17-28). Rowman & Littlefield.
- Bahram, S. (2021, January 07). *10 Best Practices of Accessible Museum*

- Websites. American Alliance of Museums. <https://www.aamus.org/2021/01/07/10-best-practices-of-accessible-museum-websites/>
- Baş, M. (2016). *Engelli Turizmi*. Nobel.
- Başaran, P. (2007). The Privatization of Culture and the Development of Cultural Centers in Turkey in the Post-1980s [Master dissertation, Boğaziçi University]. Yöktez.
- Bayam, E. (2017). Rahmi M. Koç Müzesi'nde Eğitim. *Milli Eğitim*, (214), 419-433. Retrieved from: <https://dergipark.org.tr/tr/download/article-file/441196>
- Beşiktaş JK Müzesi Özel Konuklarını Ağırladı. (April 11, 2017). Beşiktaş JK Resmi İnternet Platformu. Retrieved February 20, 2020, from https://bjk.com.tr/tr/haber/69689/besiktas_jk_muzesi_ozel_konuklarini_agirladi.html
- Bezmez, D. & Yardımcı, S. (2010). In Search of Disability Rights: Citizenship and Turkish Disability Organizations. *Disability & Society*, 25(5), 603-615. <https://www.tandfonline.com/doi/abs/10.1080/09687599.2010.489312>
- Bienvenu, B. (2015). Museums and ADA @25 Progress and Looking Ahead. *Museum and Accessibility* (pp.29-34). Retrieved from https://www.aamus.org/wp-content/uploads/2018/01/2015-Sept_Oct-Museums-and-Accessibility.pdf
- Black, G. (2005). *The Engaging Museum: Developing Museums for Visitor Involvement*. Routledge.
- BlindLook. (n.d.). *EyeBrand*. <https://www.blindlook.com/tr/eyebrand>
- BlindLook. (n.d.). *EyeLearn*. <https://www.blindlook.com/tr/eyelearn>
- BlindLook. (n.d.). *Hikayemiz*. <https://www.blindlook.com/tr/hakimizda>
- Bongo Art Project. (n.d.). *Hakkımızda*. <http://www.bongoartproject.com>
- Bongo Art Project. (n.d.). *Müze*. <http://www.bongoartproject.com>
- Braden, C. (2016). Welcoming All Visitors: Museums, Accessibility, and Visitors with Disabilities. *UM Working Papers in Museum Studies*, 12, 1-15. <http://ummsp.rackham.umich.edu/wp-content/uploads/2016/10/Braden-working-paper-FINAL-pdf.pdf>

- Brown, K. & Mairesse, F. (2018). The Definition of the Museum Through its Social Role. *Curator The Museum Journal*, 61(4), 525-539. <https://onlinelibrary.wiley.com/doi/full/10.1111/cura.12276>
- Brown, M. C. (2014). Accessing Dioramas Through Touch for Visitors with Vision Loss. [Master dissertation, The University of the Arts].
- Buyurgan, S. & Buyurgan, U. (2020). *Sanat Eğitimi ve Öğretimi Eğitimin Her Kademesine Yönelik Yöntem ve Tekniklerle*. Pegem Akademi.
- Candlin, F. (2003). Blindness, Art and Exclusion in Museums and Galleries. *International of Art and Design Education*, 22, 100-110. <https://www.semanticscholar.org/paper/Blindness%2C-Art-and-Exclusion-in-Museums-and-Candlin/11279e9c79bf4bf173eed2f791eebaf8a2ec9d25>
- Candlin, F. (2020). Museums, Modernity and the Class Politics of Touching Objects. In Chatterjee, H. J. (Ed.), *Touch in Museums Policy and Practice in Object Handling*, (pp. 9-20). Routledge.
- Centre Pompidou. (n.d.). *Accessibility*. <https://www.centrepompidou.fr/en/visit/accessibility>
- Cevahiroglu, A. S. (2019). *The Magdalen Reading by Rogier van der Weyden 1438* [Photograph]. Istanbul.
- Cevahiroglu, A. S. (2019). *The Ming Vase from 1550* [Photograph]. London.
- Cevahiroglu, A. S. (2019). *Tactile version of the Magdalen Reading by Rogier van der Weyden 1438* [Photograph]. Istanbul.
- Cevahiroglu, A. S. (2021). *Explanation of the Self-portrait by Picasso 1918* [Photograph]. Istanbul.
- Cevahiroglu, A. S. (2021). *The Self-portrait by Picasso 1918* [Photograph]. Istanbul.
- Chrichton, J., Haider, H., Chowns, E. & Browne, E. (2015). Human Rights: Topic Guide. *Governance and Social Development Resource Centre*, University of Birmingham. <https://gsdrc.org/wp-content/uploads/2015/07/rights.pdf>
- Citizens Advice. (n.d.). *Duty to make reasonable adjustments for disabled people*.

<https://www.citizensadvice.org.uk/law-and-courts/discrimination/what-are-the-different-types-of-discrimination/duty-to-make-reasonable-adjustments-for-disabled-people/>

Classen, C. (2005). Touch in the Museum. In Classen, C. (Ed.), *The Book of Touch*, (pp. 275-286). Routledge.

Classen, C. (2007). Museum Manners: the Sensory Life of the Early Museum. *Journal of Social History*, 40(4), 895-914.
<https://www.jstor.org/stable/25096398>

Coon, N. (1953). *The Place of the Museum in the Education of the Blind*. American Foundation of Blind.

Çağlar, S. (2012). Engellilerin Erişilebilirlik Hakkı ve Türkiye’de Erişilebilirlikleri. *Ankara Üniversitesi Hukuk Fakültesi Dergisi*, 61(2), 541-598.
<https://dergipark.org.tr/tr/download/article-file/624016>

Dincer, F. I., Ozcit, H., Cifci, İ., Sezer, B., Kahraman, O. C. & Sahinoglu, S. (2019). Accessible Museums for Visually Impaired: A Case Study from Istanbul. *Journal of Tourismology*, 1-14.
https://www.researchgate.net/publication/336600723_Accessible_Museums_for_Visually_Impaired_A_Case_Study_from_Istanbul

Dinçer, İ., Enlil, Z., Ünsal, D., Yılmaz, B., Karabacak, E. (2011). Tarihi ve Kültürel Miras. In Ada, S. (Ed.), *Sivil Toplum Gözüyle Türkiye Kültür Politikası Raporu* (pp. 75-85). İstanbul Bilgi Üniversitesi Yayınları.

Dodd, J. & Sandell, R. (2001). Misunderstanding of Exclusion and Inclusion. In Dodd, J. & Sandell, R. (Eds.). *Including Museums Perspectives on Museums, Galleries and Social Inclusion* (pp. 7-19). RCMG.

Douglas, G. & McLinden, M. (2005). Visual Impairment. In Lewis, A. & Norwich, B. (Eds.), *Special Teaching for Special Children? Pedagogies for Inclusion* (pp. 26-40). Open University Press.

Dönmez, N. B., Sümer, A. & Uyaroglu, B. (2017). Görme Engelli Çocuklar ve Eğitimleri. In Baykoç, N. (Ed.). *Özel Gereksinimli Çocuklar ve Özel Eğitim* (pp. 217-237). Eğiten Kitap.

Engelli ve Yaşlı Hizmetleri Genel Müdürlüğü. (2021). *Engelli ve Yaşlı İstatistik*

Bülteni, Haziran 2021 [Data Set]. T.C. Aile, Çalışma ve Sosyal Hizmetler Bakanlığı.

https://www.aile.gov.tr/media/85040/eyhgm_istatistik_bulteni_haziran_2021.pdf

Erişilebilir Her Şey. (n.d.). *Neler Yapıyoruz?*.

<https://www.erisilebilirhersey.com/neler-yapiyoruz/>

Erişilebilir Turizm, Engelsiz İstanbul. (n.d.). Herkes İçin Erişilebilir İstanbul.

Retrieved February 22, 2021, from <https://erisilebilir.istanbul/sayfalar/calismalar/accessible-tourism-unimpeded-istanbul>

Equality Act 2010 (n.d.). Collections Trust. Retrieved February 14, 2020, from

<https://collectionstrust.org.uk/resource/equality-act-2010-2/>

Finkelstein, V. (2004). "Representing Disability" In Swain, J., et al (Ed.), *Disabling Barriers-Enabling Environments* (pp. 13-21). Sage Publications.

Fundamental Principles of Disability, UPIAS and the Disability Alliance (1976).

<https://disability-studies.leeds.ac.uk/wp-content/uploads/sites/40/library/UPIAS-fundamental-principles.pdf>

Ginley, Barry. (2013). Museums: A Whole New World for Visually Impaired

People. *Disability Studies Quarterly*, 33(3). <https://dsq-sds.org/article/view/3761/3276>

Grosvenor, I. & Macnab, N. (2013). 'Seeing Through Touch': The Material World of Visually Impaired Children. *Educar em Revista*, 49, 39-57.

<https://www.scielo.br/j/er/a/33tVvBv3BjG8GG8VbQRhkwS/?lang=en>

Gümüş, D. Ç. (2020). *Erişilebilirlik Klavuzu*. Aile Çalışma ve Sosyal Hizmetler Bakanlığı Engelli ve Yaşlı Hizmetleri Genel Müdürlüğü.

https://www.aile.gov.tr/media/65613/erisilebilirlik_kilavuzu_2021.pdf

Haines, C. E. (2021). Please Touch: The History of Museum Accessibility for Blind Visitors. *Museum Studies at Tufts University*. Retrieved September 07,

2021, from <https://sites.tufts.edu/museumstudents/2021/07/27/please-touch-the-history-of-museum-accessibility-for-blind-visitors/>

Harpur, P. (2012). Embracing the New Disability Rights Paradigm: The Importance

- of the Convention on the Rights of Persons with Disabilities. *Disability&Society*, 27(1), 1-14.
<https://www.tandfonline.com/doi/abs/10.1080/09687599.2012.631794>
- Harrison, M. (1963). Eğitim ve Müzeler. In *Müzelerin Teşkilatlanması Pratik Öğütler* (pp. 109-120). ICOM Türkiye Milli Komitesi Yayınları.
- Hartley, M. (2015). Shifting the Conversation: Improving Access with Universal Design. *Exhibitionist*, 34(2), 42-48.
https://static1.squarespace.com/static/58fa260a725e25c4f30020f3/t/594c508c2994cad174c37165/1498173590171/11.+EXH+Fall+2015_Hartley.pdf
- Hein, G. E. (2002). *Learning in the Museum*. Routledge.
- Hooper-Greenhill, E. (1994). *Museums and Their Visitors*. Routledge.
- Hooper-Greenhill, E. (1999). *Müze ve Galeri Eğitimi* (B. Onur, Ed.). Ankara Üniversitesi Çocuk Kültürü Araştırma ve Uygulama Merkezi Yayınları.
- Hooper-Greenhill, E., Sandell, R., Moussouri, T. & O’Riain, H. (2000). Museums and Social Inclusion The GLLAM Report.
https://leicester.figshare.com/articles/report/Museums_and_social_inclusion_the_GLLAM_Report/10076672
- Hooper-Greenhill, E. (2007). *Museums and Education Purpose, Pedagogy, Performance*. Routledge.
- Horowitz, S. S. & Schultz, P. H. (2014). Printing Space: Using 3D Printing Digital Terrain Models in Geosciences Education and Research. *Journal of Geoscience Education* 62, 138-145.
<https://www.tandfonline.com/doi/citedby/10.5408/13-031.1?scroll=top&needAccess=true>
- Hurtado, C. J., Seibel, C. & Gallego, S. S. (2012). Museums for all. Translation and Interpreting for Multimodal Spaces as a Tool for Universal Accessibility. *Monografías de Traducción e Interpretación*, 4.
https://www.researchgate.net/publication/234115418_Museums_for_All_Translation_and_Interpreting_of_multimodal_spaces_as_a_tool_for_Universal_Accessibility
- Isar, Y. J. (1981). Museums and Disabled Persons. *Museum International*, 33(3).

- UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000127328>
- İlhan, A. Ç. (2013). Disiplinlerarası Müze Eğitimi Anabilim Dalı. In Çok, A. & Karadeniz, C. (Eds.), *Prof. Dr. Bekir Onur'a Armağan Çocuklar, Gençler ve Müze Eğitimi* (pp. 295-320). Anı Yayıncılık.
- İnce, A., Öncü, A. & Ada, S. (2011). Cultural Policy in Turkey Today: Introduction and Overview. In Ada, S. (Ed.), *Turkish Cultural Policy Report A Civil Perspective* (pp. 191-200). İstanbul Bilgi Üniversitesi Yayınları.
- International Council of Museum. (2007). *Museum Definition*.
<https://icom.museum/en/resources/standards-guidelines/museum-definition/>
- İstanbul Modern Sanat Müzesi. (n.d.). *Hakkında*.
https://www.istanbulmodern.org/tr/muze/hakkinda_3.html
- İstanbul Modern Sanat Müzesi. (n.d.). *Students at the workshop* [Photograph].
https://www.istanbulmodern.org/tr/egitim/sosyal-projeler/dokundugum-renk_712.html
- İstanbul Modern Sanat Müzesi. (n.d.). *Children at the workshop* [Photograph].
https://www.istanbulmodern.org/tr/egitim/sosyal-projeler/dokundugum-renk_712.html
- Jarvis, P., Holford, J. & Griffin, C. (2003). *The Theory & Practice of Learning*. Kogan Page.
- Joffe, K. (2010). Enforcing The Rights of People with Disabilities in Ontario's Developmental Services System. *Law Commission of Ontario*. Retrieved from:
https://www.lco-cdo.org/wp-content/uploads/2010/11/disabilities_joffe.pdf
- Karadeniz, C. (2014). Müzenin Toplumsal İşlevleri Bağlamında Türkiye'deki Devlet Müzeleri ile Özel Müzelerde Çalışan Uzmanların Kültürel Çeşitlilik ve Müzenin Ulaşılabilirliğine İlişkin Görüşlerinin İncelenmesi. *Uluslararası Sosyal Araştırmalar Dergisi*, 7(2), 405-422.
https://www.sosyalarastirmalar.com/cilt7/sayi35_pdf/5sanattarihi_arkeoloji/karadeniz_ceren.pdf
- Karadeniz, C. (2015). Çağdaş Müze ve Kültürel Çeşitlilik: Arkeoloji Müzesi

- Uzmanlarının Kültürel Çeşitliliğe İlişkin Yaklaşımlarının Değerlendirilmesi. [Doctoral dissertation, Ankara University]. Yöktez.
- Karadeniz, C. (2018). Müze Kültür Toplum. İmge Kitapevi.
- Karaduman, H. (2017). Sosyal Bilgiler Eğitiminde 3 Boyutlu Yazıcıların Kullanımı. *Anadolu Journal of Educational Sciences International*, 7(3), 590- 625. <https://dergipark.org.tr/tr/download/article-file/398123>
- Kardoulis, T. (n.d.). *Guidelines for Making Tactile Diagrams and Accompanying Narratives*. Art Beyond Sight. <http://www.artbeyondsight.org/handbook/acs-tactileguidelines.shtml>
- Katsui, H. (2008). Downside of the Human Rights-Based Approach to Disability in Development. Working Paper. Institute of Development Studies Helsinki University. Retrieved from: https://www.sylff.org/wp-content/uploads/2008/12/downside_of_hrba_katsui_hisayo.pdf
- Kaynak, A. & Çolak, C. (2011). Engelsiz Müze Rehberi. İstanbul Sağlık Müdürlüğü. http://www.istanbulsaglik.gov.tr/w/smuzesi/belge/engelsiz_muze_rehberi.pdf
- Khan, S. (2012). Topic Guide on Social Exclusion. GSDRC. <https://gsdrc.org/docs/open/se10.pdf>
- Kültür Varlıkları ve Müzeler Genel Müdürlüğü. (2015). *Batman Müzesi Müdürlüğü'nde Gerçekleştirilen Engelsiz Müze Projesi*. <https://kvmgm.ktb.gov.tr/TR-149154/batman-muzesi-mudurlugunde-gerceklestirilen-engelsiz-mu-.html>
- “Kültürel Miras 2019”. Retrieved from: <https://tuikweb.tuik.gov.tr/PreHaberBultenleri.do?id=33633>
- Leinhardt, G., Tittle, C. & Knutson, K. (2000). Talking to oneself: Diary Studies of Museum Visits. *Museum Learning Collaborative Technical Report MLC-04*. <https://www.lrdc.pitt.edu/mlc/documents/mlc-04.pdf>
- Marstine, J. (2005). Introduction. In Marstine, J. (Ed.) *New Museum Theory and Practice an Introduction*. (pp. 1-36). Blackwell Publishing.
- Menda, E., Balkan, N. & Berkay, N. (2013). Engelsiz Türkiye İçin Yolun

- Neresindeyiz? Mevcut Durum ve Öneriler. Sabancı Üniversitesi.
- Message, K. (2006). The New Museum. *Theory, Culture & Society*, 23(2–3), 603–606.
<https://journals.sagepub.com/doi/abs/10.1177/0263276406023002110#>
- Mesquita, S. & Carneiro, M. J. (2016). Accessibility of European Museums to Visitors with Visual Impairments. *Disability and Society*, 31(3), 373–388.
<https://www.tandfonline.com/doi/abs/10.1080/09687599.2016.1167671?journalCode=cdso20>
- Museums Portal Berlin. (n.d.). *German Blind Museum Berlin*.
<https://www.museumsportal-berlin.de/de/museen/deutsches-blinden-museum-berlin/>
- Natural Disability Authority. (n.d.). *What is Universal Design*.
<https://universaldesign.ie/what-is-universal-design/>
- Natural History Museum. (n.d.). *Access*.
<https://www.nhm.ac.uk/visit/access-at-south-kensington.html>
- Njelesani, J., Cleaver, S., Tataryn, M. & Nixon, S. (2012). Using a Human-Rights-Based Approach to Disability in Disaster Management Initiatives. In Sorin Cheval (Ed.), *Natural Disasters* (pp. 21–46). Intechopen. Retrieved from:
https://www.researchgate.net/publication/221926893_Using_a_Human_Rights-Based_Approach_to_Disability_in_Disaster_Management_Initiatives
- Nordlund, S. M. (2016). Sensory Immersion: Multisensory Resources for Walk-in Visitors with Visual Impairments or Blind at an Art Museum. [Master dissertation, The University of Texas].
<https://repositories.lib.utexas.edu/handle/2152/39457>
- O'Brien, E. K., Wayne, D. B., Barsness, K. A., McGaghie, W. C. & Barsuk, J. H. (2016). Use of 3D Printing for Medical Education Models in Transplantation Medicine: A Critical Review. *Curr Transpl Rep*, 3, 109–119. <https://link.springer.com/article/10.1007/s40472-016-0088-7#citeas>
- Oliver, M. (1990). *The Politics of Disablement*. London: Macmillan Press Ltd.
- Oliver, M. (1996). *Understanding Disability: From Theory to Practice*. London: McMillan Pres Ltd.

- Oliver, M. (2004). "If I had a hammer: the social model in action" In Swain, J., et al (Ed.), *Disabling Barriers-Enabling Environments* (pp. 7-12). Sage Publications.
- Önver, M. Ş. (2012). Kentsel Mekân Sakatlık İlişkisi Bağlamında Yerel Yönetimlerin Politikaları: İstanbul Büyükşehir Belediyesi Üzerinden Bir İnceleme (Niteliksel Bir Araştırma). [Doctoral dissertation, İstanbul University]. Yöktez.
- Özgür, İ. (2013). *Engelli Çocuklar ve Eğitimi Özel Eğitim*. Karahan Kitabevi.
- Özkasım, H. & Ögel, S. (2005). Türkiye’de Müzeciliğin Gelişimi. *İTÜ Dergisi*, 2(1), 96-102. <https://core.ac.uk/download/pdf/230194485.pdf>
- Özsoy, V. & Mercin, L. (2003). Sanat (Resim) Eğitiminde Müzelerin Kullanılmasında İlgili Kurum ve Kuruluşların Karşılıklı Görev ve Yükümlülükleri. *Türk Eğitim Bilimleri Dergisi*, 1(3). <https://dergipark.org.tr/tr/pub/tebd/issue/26131/275245>
- Özyürek, M. (1998). Görme Engelliler. In Eripek, S. (Ed.), *Özel Eğitim* (pp. 129-152). T.C. Anadolu Üniversitesi Yayınları.
- Pera Müzesi. (n.d.). *Pera Engelsiz*. <https://www.peramuzesi.org.tr/pera-ogrenme/grup/pera-engelsiz/6>
- Pera Müzesi. (n.d.). *Pera Öğrenme Hakkında*. <https://www.peramuzesi.org.tr/pera-ogrenme-hakkinda>
- Pınarcıoğlu, M. & Işık, O. (2001) Kent Yoksullarının Ağ İlişkileri: Sultanbeyli Örneği. In *Toplum ve Bilim Sayı 89*, 31-61. Birikim Yayınları
- Polat, B. D. (2019). Görme Engelli Öğrencilerin Sanati Öğrenmesinde Müzelerin Katkısı [Doctoral dissertation, Gazi University]. Yöktez.
- Quinn, G., Degener, T., Bruce, A., Burke, C., Castellino, J., Kenna, P., Kilkelly, U. & Quinlivan, S. (2002). *The Current Use and Future Potential of United Nations Human Rights Instruments in the Context of Disability*. United Nations. Retrieved from: <https://www.ohchr.org/Documents/Publications/HRDisabilityen.pdf>
- Reeve, J. & Woollard, V. (2006). Influences on Museum Practice. In Lang, C. &

- Reeve, J. & Woollard, V. (Eds.), *The Responsive Museum Working with Audiences in the Twenty-First Century* (pp. 5-17). Ashgate.
- Reidmiller, L. L. (2003). Art For the Visually Impaired and Blind: A Case Study of One Artist's Solution. [Doctoral dissertation, The Ohio State University]. https://etd.ohiolink.edu/apexprod/rws_etd/send_file/send?accession=osu1054144608&disposition=inline
- Rioux, M. & Carbert, A. (2003). Human Rights and Disability: The International Context. *Journal on Developmental Disabilities*, 10(2). https://www.researchgate.net/publication/37156515_Human_Rights_and_Disability_The_International_Context
- Ross, M. (2004). Interpreting the New Museology. *Museum and Society*, 2(2), 84-103. <https://journals.le.ac.uk/ojs1/index.php/mas/article/view/43/0>
- Royal National Institute of Blind People. (n.d.). *Lighting*. <https://www.rnib.org.uk/sight-loss-advice/reading-home-and-leisure/your-home/lighting>
- Royal National Institute of Blind People. (n.d.). *Tactile images, maps and Touch Installations*. <https://www.rnib.org.uk/rnib-business/tactile-images-maps-and-touch-installations>
- Sakıp Sabancı Müzesi. (n.d.). *Müze Hakkında*. <https://www.sakipsabancimuzesi.org/hakkimizda>
- Sakıp Sabancı Müzesi. (2005). *Students at the Picasso in Istanbul Exhibition* [Photograph]. Istanbul.
- Sakıp Sabancı Müzesi. (2021). *Annotated explanation of an artwork in the Past Present Istanbul exhibition in Braille* [Photograph]. Istanbul.
- Sakıp Sabancı Müzesi. (2021). *Students at the Past Present Istanbul exhibition* [Photograph]. Istanbul.
- Salmen, J. P. S. (1998). Everyone's Welcome: The Americans with Disabilities Act and Museums. American Association of Museums. <https://eric.ed.gov/?id=ED437754>
- Sandell, R. (1998). Museums as Agents of Social Inclusion. *Museum Management*

and *Curatorship*, 17(4), 401-418.
<https://www.tandfonline.com/doi/abs/10.1080/09647779800401704?needAccess=true&journalCode=rmmc20>

Sandell, R. (2003). Social Inclusion, the Museum and the Dynamics of Sectoral Change. *Museum and Society*, 1(1), 45-62.
<https://journals.le.ac.uk/ojs1/index.php/mas/article/view/13>

Schelly, C., Anzalone, G., Wijnen B. & Pearce, J. (2015). Open-source 3-D Printing Technologies for Education: Bringing Additive Manufacturing to the Classroom. *Journal of Visual Languages and Computing*. 28, 226-237.
https://www.researchgate.net/publication/331333011_Open-Source_3-D_Printing_Technologies_for_Education_Bringing_Additive_Manufacturing_to_the_Classroom

Selçuklu Uygarlığı Müzesi. (n.d.) *Görme Engelli Uygulamalarımız*.
<http://www.selcuklumuzesi.com/ustmenu.asp?id=22&euid=3&sid=22>

Shakespeare, T. (2010). The Social Model of Disability. In Lennard. J.D., (Ed.), *The Disability Studies Reader* (pp. 266-273). Routlage.

Short, D. B. (2015). Use of 3D Printing by Museums: Educational Exhibits, Artifact Education, and Artifact Restoration. *3D Printing and Additive Manufacturing*, 2(4), 209-215.
https://www.researchgate.net/publication/283489307_Use_of_3D_Printing_by_Museums_Educational_Exhibits_Artifact_Education_and_Artifact_Restoration

Snyder, J. (n.d.). Fundamentals of Audio Description. *Audio Description Associates*.
https://audiodescribe.com/about/articles/fundamentals_of_ad.pdf

Snyder, J. (2005). Audio Description: The Visual Made Verbal. *International Congress Series 1282*, 935-939.
<https://www.sciencedirect.com/science/article/abs/pii/S0531513105009817>

Sönmez, S., Kesen, U. & Dalgıç, C. (2018). 3 Boyutlu Yazıcılar. 6. *Uluslararası*

Starr, R. E. (2016). Accessibility Practices & The Inclusive Museum: Legal Compliance, Professional Standards, and the Social Responsibility of Museums. [Bachelor of science degree dissertation, Rochester Institute of Technology].

<https://scholarworks.rit.edu/cgi/viewcontent.cgi?article=10388&context=theses>

Stevens, G. (2015). Museums and ADA @25 A Look Back. *Museum and Accessibility*. 26-28. Retrieved from https://www.aam-us.org/wp-content/uploads/2018/01/2015-Sept_Oct-Museums-and-Accessibility.pdf

Şafak, P. (1996). Görme Engelli Öğrencilerde Sınıf İçi Uygun Olan Çalışma Davranışlarını Arttırmada Dönüştürülebilir Sembol Pekiştireç Uygulamasının Etkililiği [Master dissertation, Gazi University]. Yöktez.

Şafak, P. (2005). Birlikte Eğitim Ortamındaki Görme Yetersizliğinden Etkilenmiş Öğrencilere Gezici Öğretmenlik Düzenlemesine Göre Verilen Destek Hizmetin Etkililiği [Doctoral dissertation, Gazi University]. Yöktez.

Şehit Cuma Dağ Tabiat Tarihi Müzesi. (n.d.). *Maden Tetkik ve Arama Genel Müdürlüğü*. Retrieved February 20, 2020, from <https://www.mta.gov.tr/v3.0/muze/gorme-engelliler-bolumu>

Şentürk, Y. (n.d.). “Sakatlık ve Sosyal Teori: Toplumbilim Kuramlarındaki “Normal” Özneyi Yeniden Düşünmek(Taslak)”. Retrived June 20, 2021, from https://www.academia.edu/802475/SAKATLIK_ve_SOSYAL_TEOR%C4%B0_TOPLUMB%C4%B0L%C4%B0M_KURAMLARINDAK%C4%B0_NORMAL_%C3%96ZNEY%C4%B0_YEN%C4%B0DEN_D%C3%9C%C5%9E%C3%9CNMEK

Tate Modern. (n.d.). *Accessibility*. <https://www.tate.org.uk/visit/tate-modern>

T.C. (2005). *The Law on the Disabled People*.

https://www.legislationline.org/download/id/7085/file/Turkey_Law_disabled_people_2005_en.pdf

- Terzi, L. (2004). The Social Model of Disability: A Philosophical Critique. *Journal of Applied Philosophy*, 21(2), 141-157.
<https://onlinelibrary.wiley.com/doi/abs/10.1111/j.0264-3758.2004.00269.x>
- The British Museum. (n.d.). *Accessibility*.
<https://www.britishmuseum.org/visit/accessibility-museum>
- The Constitution of The Republic of Turkey. (2019).
<https://www.anayasa.gov.tr/en/legislation/turkish-constiution/>
- The Council for Museums Archives and Libraries. (2001). *Disability Directory for Museums and Galleries*.
https://www.accessibletourism.org/resources/uk_museumsand-galleries_disability_directory_pdf_6877.pdf
- The Indiana University. (n.d.). *Barriers to Access*.
<https://accessibility.iu.edu/understanding-accessibility/barriers-to-access.html>
- The Metropolitan Museum of Art. (n.d.). *Accessibility*.
<https://www.metmuseum.org/visit/accessibility>
- The Museum of Modern Art. (n.d.). *Accessibility*.
<https://www.moma.org/visit/accessibility/#individuals-who-are-blind-or-have-low-vision>
- The Museum of Modern Art. (n.d.). *MoMA Through Time*.
https://www.moma.org/interactives/moma_through_time/1970/welcoming-all-visitors/
- The National Gallery. (n.d.). *Access Policy*.
<https://www.nationalgallery.org.uk/about-us/organisation/policies/access-policy>
- The National Gallery. (n.d.). *Blind and Partially Sighted Visitors*.
<https://www.nationalgallery.org.uk/visiting/access/blind-and-partially-sighted-visitors>
- The National Gallery. (n.d.). *Collection Overview*.
<https://www.nationalgallery.org.uk/paintings/collection-overview>
- The Prado Museum. (n.d.). *Touching the Prado*.

<https://www.museodelprado.es/en/whats-on/exhibition/touching-the-prado/29c8c453-ac66-4102-88bd-e6e1d5036ffa>

The United Nations. (1948). *The Universal Declaration on the Human Rights*.

<https://www.un.org/en/universal-declaration-human-rights/>

The United Nations. (1993). *The United Nations Standard Rules on Equalization of Opportunities for People with Disabilities*.

<https://www.un.org/development/desa/disabilities/standard-rules-on-the-equalization-of-opportunities-for-persons-with-disabilities.html>

The United Nations. (2008). *The Convention on the Rights of Persons with Disabilities*. <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html>

The United Nations. (n.d.). *World Programme of Action Concerning Disabled Person*.

<https://www.un.org/development/desa/disabilities/resources/world-programme-of-action-concerning-disabled-persons.html>

The United Nations Sustainable Development Group. (n.d.). *Human Rights-Based Approach*. <https://unsdg.un.org/2030-agenda/universal-values/human-rights-based-approach>

The University of California, Berkley Web Access. (n.d.). *Types of Assistive Technology*. <https://webaccess.berkeley.edu/resources/assistive-technology>

The University of Oregon. (n.d.). *Converting a Document to Large Print*. https://pages.uoregon.edu/atl/alt_text/LARGEPRINT.HTML

The Victoria & Albert Museum. (n.d.). *About us*.

<https://www.vam.ac.uk/info/about-us>

The Victoria & Albert Museum. (n.d.). *Visitors with Visual a Visual Impairment*.

<https://www.vam.ac.uk/info/disability-access#visitors-with-a-visual-impairment>

The World Health Organization and The World Bank. (2011). *The World Report on Disability*.

https://www.who.int/disabilities/world_report/2011/report.pdf

Thomas, C. (2002). Disability Theory: Key Ideas, Issues and Thinkers. In Barnes,

- C., Oliver, M. & Barton, L. (Eds.), *Disability Studies Today* (pp. 38-57). Polity Press.
- Thomas, C. (2004). Disability and Impairment. In Swain, J., French, S., Barnes, C. & Thomas, C. (Eds.), *Disabling Barriers- Enabling Environments* (pp. 21-27). Sage Publications.
- Treinen, L. (2021). Do Not Touch! Blind People in Museums and the Value of Inclusion. *Land* Retrieved, November, 09, 2021. <https://www.land.lu/page/article/077/338077/DEU/index.html>
- Türkiye İş Bankası Müzesi (n.d.). *Hakkımızda*. <https://www.issanat.com.tr/turkiye-is-bankasi-muzesi/hakkimizda>
- UK Association for Accessible Formats. (2012). *UKAAF Minimum Standards: Clear and Large Print*. <https://www.ukaaf.org/wp-content/uploads/2020/03/MS03-UKAAF-Minimum-standards-Clear-and-large-print.pdf>
- Umurbilir, E. (2015, October 4). Bu Müzede Görme Engelliler Renkleri Hissediyor. *Anadolu Ajansı*. <https://www.aa.com.tr/tr/kultur-sanat/bu-muzede-gorme-engelliler-renkleri-hissediyor/428653>
- Uralman, H. (2012). Müze Dökümantasyonunun Kapsamı. In Ertürk, N. & Uralman, H. (Eds.), *Müzebilimin ABC'Sİ* (pp. 57-71). Ege Yayınları.
- Üçüncü, M. & Kütükcü, Ş. (2014). *Özel Eğitimde Araç ve Materyal Geliştirme*. Vize Yayıncılık.
- Ünsal, D. (2009). Türkiye’de Kültür Politikaları Açısından Müze Oluşumları. In Ada, S. & İnce, A. (Eds.), *Türkiye’de Kültür Politikalarına Giriş* (pp. 151-178). İstanbul Bilgi Üniversitesi Yayınları.
- Ünsal, D. (2012). Müze, Katılım ve Yurttaşlık. In Ertürk, N. & Uralman, H. (Eds.), *Müzebilimin ABC'Sİ* (pp. 13-23). Ege Yayınları.
- Web Accessibility Initiative. (n.d.). *Web Content Accessibility Guidelines (WCAG) Overview*. <https://www.w3.org/WAI/standards-guidelines/wcag/>
- Weil, S. (1999). From Being About Something to Being for Somebody: The Ongoing Transformation of the American Museum. *Daedalus*, 128(3), 229-258. <https://www.jstor.org/stable/20027573>

- World Health Organization. (2021). *Blindness and Vision Impairment*.
<https://www.who.int/news-room/fact-sheets/detail/blindness-and-visual-impairment>
- World Health Organization.(2021). *Disability and Health*.
<https://www.who.int/news-room/fact-sheets/detail/disability-and-health>
- World Health Organization. (n.d.) *Eye Care, Vision Care, Vision Impairment and Blindness*. https://www.who.int/health-topics/blindness-and-vision-loss#tab=tab_1
- Yardımcı, S. (2015). Sakatlık ve Siyaset. In Çayır, K., Soran, M. & Ergün, M. (Eds.), *Engellilik ve Ayrımcılık: Eğitimciler İçin Temek Metinler ve Örnek Dersler* (pp. 19-30). Karekök.
- Yurtsever, E. Ö. (2018). Özel Gereksinimli Bireylere Yönelik Müzelerde Düzenlenen Müze Eğitimi ve Fiziki Koşullarının Durumu (Ankara İli Örneği) [Master dissertation, Gazi University]. Yöktez.
- Yıldız, E. (2020). An Overview of Cultural Literacy in Turkey through Private Contemporary Art Institutions and Independent Arts and Cultural Spaces under the AKP Rule. *Critical Arts*.
<https://www.tandfonline.com/doi/abs/10.1080/02560046.2020.1829669>

LIST OF IN-DEPTH INTERVIEWS

- Cevahiroglu, A. S. (July 16, 2019). “Interview with Anna Murray”, London.
- Cevahiroglu, A. S. (July 19, 2019). “Interview with Barry Ginley”, London
- Cevahiroglu, A. S. (November 25, 2020). “Interview with Melda Tütüncüoğlu & Dicle Saltan”, Istanbul.
- Cevahiroglu, A. S. (December 21, 2020). “Interview with Participant 1”, Istanbul.
- Cevahiroglu, A. S. (December 22, 2020). “Interview with Participant 3”, Istanbul.
- Cevahiroglu, A. S. (December 22, 2020). “Interview with Participant 4”, Istanbul.
- Cevahiroglu, A. S. (December 22, 2020). “Interview with Participant 6”, Istanbul.
- Cevahiroglu, A. S. (December 26, 2020). “Interview with Participant 8”, Istanbul.
- Cevahiroglu, A. S. (January 16, 2021). “Interview with Participant 7”, Istanbul.
- Cevahiroglu, A. S. (January 23, 2021). “Interview with Hüma Arslaner”, Istanbul.
- Cevahiroglu, A. S. (January 27, 2021). “Interview with Participant 2”, Istanbul.
- Cevahiroglu, A. S. (February 02, 2021). “Interview with Participant 5”, Istanbul.
- Cevahiroglu, A. S. (February 02, 2021). “Interview with Participant 9”, Istanbul.
- Cevahiroglu, A. S. (February 03, 2021). “Interview with Participant 10”, Istanbul.
- Cevahiroglu, A. S. (March 04, 2021). “Phone call with Murat Yıldırım”, Istanbul.
- Cevahiroglu, A. S. (May 07, 2021). “Interview with Meltem Özer”, Istanbul.
- Cevahiroglu, A. S. (November 18, 2021). “Interview with Hande Erkent Yıldız”, Istanbul.

APPENDIX



Figure A. 1: High resolution picture of the Magdalen Reading by Rogier van der Weyden 1438, Istanbul, 2019, Ayşenur Sümeyye Cevahiroğlu.



Figure A. 2: Tactile version of the Magdalen Reading by Rogier van der Weyden 1438, Istanbul, 2019, Ayşenur Sümeyye Cevahiroğlu.



Figure A. 3: The Ming Vase, made in 1550, London, 2019, Ayşenur Sümeyye Cevahiroğlu.

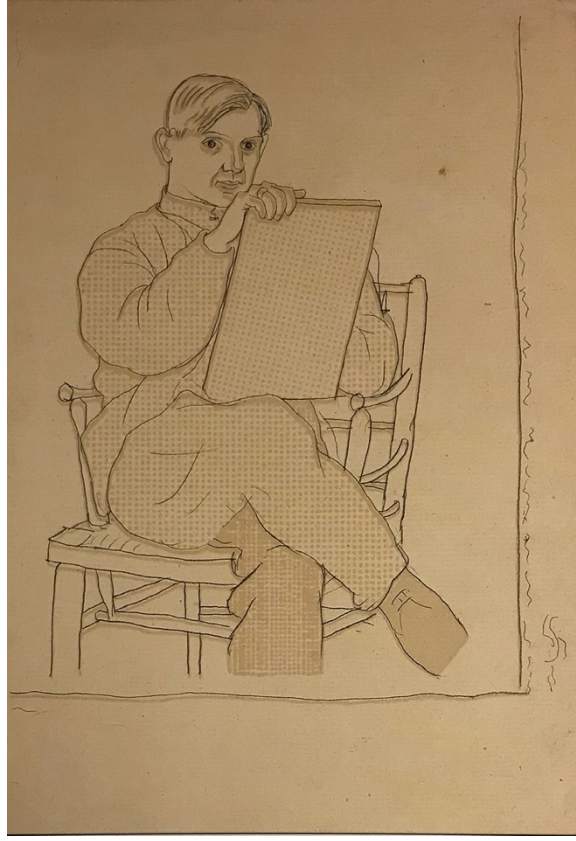


Figure A. 4: Tactile and large-print version of the Self-portrait by Picasso 1918, Istanbul, 2021, Ayşenur Sümeyye Cevahiroğlu.

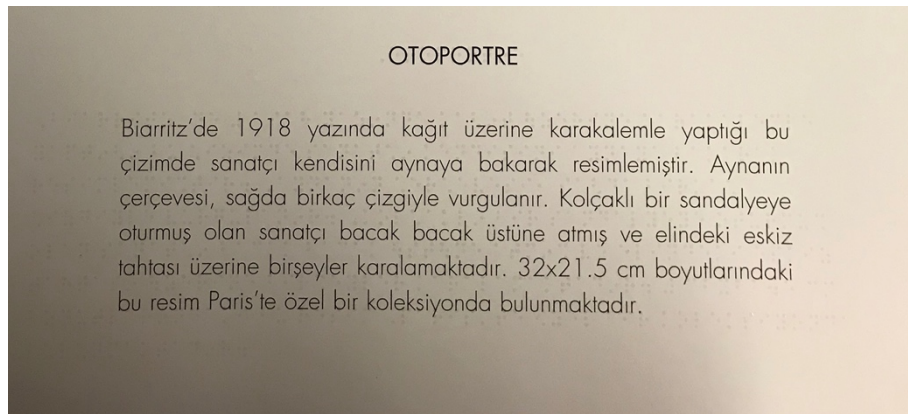


Figure A. 5: Explanation of the Self-portrait in Braille and large-print, Istanbul, 2021, Ayşenur Sümeyye Cevahiroğlu.



Figure A. 6: Students at the Picasso in Istanbul exhibition, 2005, Istanbul, Sakıp Sabancı Museum.



Figure A. 7: A visitor touches the sculpture from the Master Sculpture Rodin in Istanbul exhibition, 2011, Engelsiz Müze Rehberi.

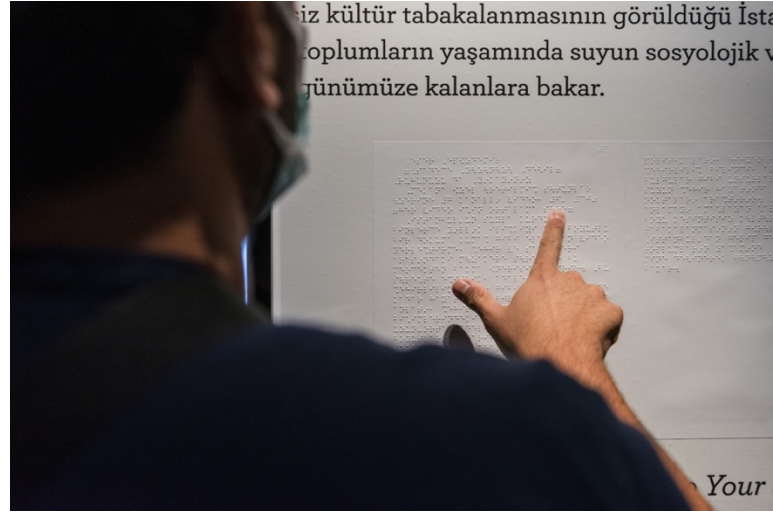


Figure A. 8: Annotated explanation of an artwork in the Past Present Istanbul exhibition in Braille, 2021, Istanbul, Sakıp Sabancı Museum.



Figure A. 9: Students at the Past Present Istanbul exhibition, 2021, Istanbul, Sakıp Sabancı Museum.



Figure A. 10: Students at the workshop, n.d., Istanbul, the Istanbul Museum of Modern Art.



Figure A. 11: Children at the workshop, n.d., Istanbul, the Istanbul Museum of Modern Art.



Figure A. 12: Interpreted tactile reproduction of the *İsimsiz*, by Elisabetta Di Maggio, 2010, Arter.



Figure A. 13: Interpreted tactile reproduction of the *Otuz Üç Fotoğrafla Heykelin Anlatımı*, by Osman Dinç, 1986, Arter.