



The Importance of Accessibility of Historical Buildings: Historical Ankara Train Station Sample

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Abstract

Accessibility is a concept that should apply to every area where people exist. Each discipline should produce in its field of expertise without ignoring this situation. In this study, it has been argued why accessibility is necessary in the context of architecture and therefore historical buildings. The claim is that architectural designs should be unifying, not divisive, and that every individual has the same rights to participate in social life. The problems we encountered during the implementation of this right and the processes of awareness formation in the world and in our country are discussed. With this study, it is aimed to raise awareness so that cultural assets, which are the most problematic area of accessibility, are accessible to every citizen, without forgetting that each of us is a candidate for disability.

1. INTRODUCTION

Zevi defined space as “the three-dimensional space that surrounds us” [61]. On the other hand Rasmussen uses the definition of “architecturally shaped void”. Physical space, the boundaries of which are drawn using physical elements; filled with environmental factors such as sound, temperature, light, humidity; experience, function, meaning, time and dimensions were determined and completed with the user. In order to create a 'satisfying' and 'balanced' space by considering all design inputs, it is necessary to master all the patterns of the elements of the space [6]. The user, who is the subject of the space, completes the formation process of the space. The user, who is essential for the space, is in constant interaction with the space he is in [37]. To fit the definition of the "architecturally shaped" place of Rasmussen the needs of the user must be considered.

The science of ergonomics, which is known as 'human engineering' in the USA and accepted worldwide; It includes making the information about the user and his environment and the data obtained during the design and implementation process suitable for users [30]. Bonney, Haslegrave, Howarth and Parsons, who are accepted as the authority in this field, used the parameters of comfort, performance and health in their studies [14] [27] [29] [42]. They agreed that the effects of these parameters on users are interconnected. Another factor to consider when evaluating environmental ergonomics is individual differences. These differences can be diversified from physical and physiological differences between users to individual differences (such as illness/stress status, emotional state change) that occur in the same person over time.

The spaces we design as architects form the buildings, and the building groups form the living environments, thus the cities. The users, which should be considered when designing a space, are also an effective factor in shaping cities. As Montgomery said, it is important to decide what is important for quality of life, comfort and happiness in a city where people will participate in daily life with everyone and be happy to live [36]. At this point, the concept of usable spaces for everyone comes to the fore. Kat

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Holmes, in her book *Mismatch: How Inclusion Shapes Design*, mentions that when creating a product or a system, designers often think about their target audience and overlook everyone else. For example, some products are not user-friendly for left-handed people, people with disabilities, or even for different age groups. Design that excludes a consumer segment will not reach its full market potential [28]. The most problematic area of this participation, which will be provided with universal access, is the historical environment, which is included in daily life within the cultural and natural heritage and multi-faceted concrete connections are established with the past [55]. Considering that with characteristic structures and distinctive features as irreplaceable part of cultural identity, it is valuable that these areas are also an example of accessibility in architecture [45]. While preserving the cultural and natural heritage, it will be the right approach to include them in daily life and ensure that they are livable spaces. International Human Rights Law, especially the United Nations Declaration of Human Rights, mentions the importance of individuals with disabilities benefiting from their fundamental rights in health, public, cultural structures and other common spaces [58]. Studies on accessibility regulations for the disabled in Turkey are hardly found. In this study, the concept of usable spaces for everyone are clarified, and the regulations for the use of historical buildings and their surroundings are discussed through accessibility, and the necessity of historical buildings to be accessible areas for everyone argued.

2. METHOD

In this study, the issue of accessible design for everyone is mentioned. While addressing this issue, studies on design and accessibility in the literature were examined. In addition, the concept of accessibility was mentioned, and the laws and regulations in the world related to accessibility were examined. The accessibility studies in our country were mentioned, and the surroundings of the station building with daily intensive circulation were evaluated within the scope of the Accessibility Monitoring and Inspection Form for Open Spaces.

3. THE CONCEPT OF ACCESSIBILITY

Güngör, mentions that the emergence of the concept of "Accessibility"; the American has come across experimental 'rehabilitation education' studies at the University of Illinois, twin towns campus of Champaign and Urbana. In the late 1940s, most of the students enrolled in the university were disabled by war wounds. As a result of the studies carried out with the support of the American Veterans' Federation and such institutions, the "rehabilitation education" work carried out by Tim Nugent has repercussions. In this study, Tim Nugent talked about his belief that wheelchair-dependent people should also have the educational opportunities that other people have, and the ideal that disabled people, no matter how badly disabled, can be able to do their own work with education and motivation [25].

Hanson emphasizes that today there is an increase in poorly designed, inadequate buildings and objects, which negatively affects people's access to and use of the environment [26]. In order for all individuals to be included in social life, the fulfillment of all necessary physical and architectural requirements in the built environment, at the city scale, includes accessibility [48]. In order for the individuals forming the society to be included in the socio-cultural life, access to all designs from the spatial scale to the product scale should be provided. Public spaces are at the forefront of the areas where we maintain our daily lives. There is a necessity to provide equal opportunities for everyone in these places. At the beginning of these requirements is accessibility [19].

Prepared by Sabancı University in 2013, "For Turkey Without Barriers: Where Are We on the Road?" According to the report; Approximately 67% of disabled people cannot access sidewalks, 60% cannot access pedestrian paths and crossings, places such as markets, shops, restaurants, public buildings, banks and patisseries [46]. Due to the importance of this situation, different definitions related to the concept of accessibility have emerged. Andrade, Dorneles and Bins Ely mention that accessibility depends on the inclusiveness of designs and that designers who take human diversity into account should be involved in the design phase [7]. Curl et al.'s definition of accessibility is the basic concept in transportation planning [1]. Andrade et al. define it as designing products, buildings and cities that all individuals can use equally comfortably, safely and independently, regardless of their limitations [7]. According to Geurs and Wee,

there are misunderstandings about the concept. This makes it difficult to find its functional and theoretical meaning [22]. According to Baş, accessibility includes not only people with physical or mental disabilities, but also conditions such as illness and old age [11]. Karagöz defines the concept of "disability" (yeti yitimi) and mentions that accessibility is a necessity not only for disabled individuals but also for individuals defined as disadvantaged groups. He listed this group as follows; pregnant women, strollers, children, the elderly, overweight individuals, individuals with Sotos syndrome or tall individuals, individuals with Turner syndrome or short stature, and persons with disability [33]. The concept of "accessibility" is just entering our lives but it should be thought integrative with design. In the simplest terms, it is possible to define accessibility as 'every individual can reach and use any place/space he/she wants' [24].

4. DEFINITION OF DISABLED IN STANDARDS

The Americans with Disabilities Act (ADA) includes the concept of disability; defined as individuals with physical or mental impairments that limit one or more of the individual's vital activities [3]. In the United Nations Convention on the Rights of Persons with Disabilities; Persons with physical, mental, intellectual or perceptual impairments that hinder their full participation in society on an equal basis with other individuals are classified as disabled [57]. The World Health Organization evaluated the definition of disability within the scope of health. Impairment: It refers to the deficiency or imbalance in the psychological, anatomical or physical structure of the person. Disability: It is defined as the loss or limitation of the ability to do work compared to a person who can be defined as disability and normal. Handicap: It is expressed as the inability to perform activities that are considered normal according to the gender, age, social and cultural status of the person as a result of deficiency or disability [60].

Republic of Turkey 5378 Disabled Law Article 3 c section, has defined the disabled as follows; It refers to the individual who is affected by the attitudes and environmental conditions that restrict his full and effective participation in society on equal terms with other individuals due to the different levels of loss in his physical, mental, spiritual and emotional abilities. In part 1 of the same article, public service structures are explained as follows; official buildings used for public service, places of worship, special education and private health facilities; cultural buildings such as cinemas, theatres, operas, museums, libraries, conference halls and entertainment buildings such as casinos and wedding halls; commercial buildings such as hotels, private dormitories, office buildings, offices, arcades, bazaars; means sports facilities, public parking lots and similar public buildings [50]. The Turkish Standards Institute defined accessibility as: (TSE TS 9111, 2011:3); It is to ensure that every individual can easily access and use every area and every service they want. Persons with any disabilities, wheelchair users, all kinds of buildings are accessible, allowing the users to enter and exit easily, move inside and benefit from all the services offered here, without assistance, under normal conditions of use [54]. Accessibility is defined in section 4(1)-b of the Accessibility Monitoring and Inspection Regulation of the Ministry of Family and Social Services: Buildings, open spaces, transportation and information services, and information and communication technology are safely and independently accessible and usable by the disabled [10].

5. TYPES OF DISABILITY

There are different types of disabilities: the physically (orthopedically) handicapped, the visually impaired, the hearing impaired, the mentally handicapped, the temporarily disabled, and the speech impaired. Within the scope of this study, an evaluation will be made considering the physical, visual and auditory disability status.

5.1. Physically Disabled

The World Health Organization has defined physical disability as follows: A child with orthopedic disability is a child who cannot benefit from education and training adequately due to a disorder or disability in the musculoskeletal, nervous system and joints. Physical disabilities were mentioned for the first time in the Regulation on Children in Need of Special Education, which was issued in 1962. According to the definition here, physical disability; It is defined as people who have disabilities in the

shape and structure of bone and muscle joints or who show impairments in muscle strength development coordination and control. Physical disability is divided into two. Classified as “Walking Disabled” and “Wheelchair-bound Disabled” [38].

5.2. Visually Impaired

It is classified according to the degree of vision loss. They are divided into visually impaired people who can see very little and those who can't see at all. Individuals who have a well-sighted eye with a visual power of 1/20 and a visual angle not exceeding 20 degrees and those with no vision are defined as visually impaired (blind) [53] [41].

5.3. Hearing Impaired

Healthy hearing is the functioning of the inner, middle and outer ear and auditory pathways as they should be. Disease, damage or abnormalities in one or more of these parts cause hearing loss [56]. Hearing disability is defined as the inability of the person's hearing level to adapt to social life, the negativities that occur in his development, and the inadequacy of verbal communication skills [40].

6. ACCESSIBLE ARCHITECTURE

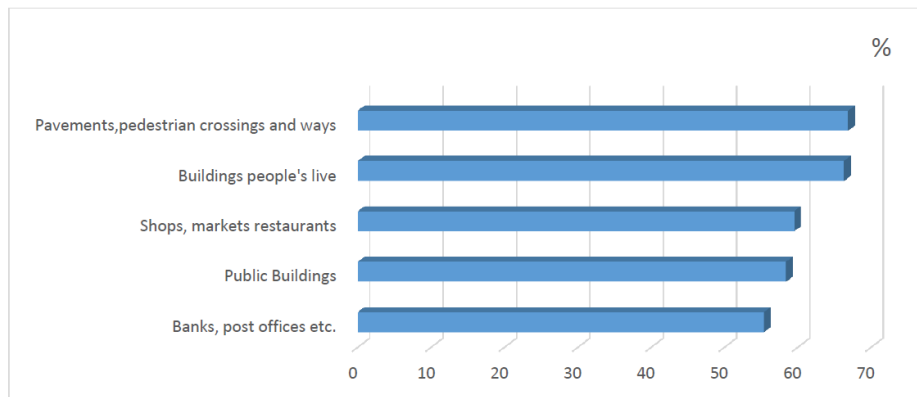
Although design is as old as human history, the human factor in design has come to the fore in the last 60 years. Examination of human abilities and limited areas has enabled this subject to become a science that has reached a universal dimension [52]. The important thing is to evolve the perspective that limits the individual's contribution to society with his physical characteristics, to a perspective that sees people's right to participate in society independent of their physical abilities [43]. According to Person et al., the reflection of the mentioned developments on design approaches covers a period of 50-60 years. The concept of accessibility is adopted as an inclusive concept with aspects related to culture, diversity and context that are not limited to physical barriers [2]. Şahin mentions that the environments that children experience are educational and positive/negative supportive in the formation of their characters [47]. In researches on the effect of the human factor on designs, it is seen that the concept of ergonomics, which prioritizes the abilities and needs of individuals, is examined. According to the definition of the International Organization for Standardization, considering the concept of ergonomics in designs contributes to the effectiveness and efficiency of the design, improves the working conditions of people and reduces the possible negative effects of the designed products on human health, safety and performance [31].

In Turkey, serious problems are encountered in the practical arrangements of accessible cities and buildings [46]. For example; Among the disabled types, legal sanctions were tried to be avoided with the applications of ramps for only walking disabled people. Architectural designs should be made suitable for all individuals in the society, not just because of regulations or legal sanctions. The important thing is to create equal, accessible designs for all [18].

Implementing accessibility only for new designs would be an incomplete approach. Historical buildings also need to be accessible places. In the understanding of sustainable conservation, importance should be given to the accessibility of the historical building and its environment during the restoration phase. Cultural assets are the living history of society, and it is a human right for every individual to access these places. Heating systems, lighting, etc., to make these spaces suitable for today's comfort level. is used. The need for these spaces to be accessible is no less important. The important thing is to come up with the right solution with the joint work of experts in this field. At this point, it is necessary to define the concept of protection correctly. He defines pet protection as follows;

- Making a building fit for a socially beneficial purpose
- Taking all actions that prolong the life of cultural heritage.

According to this definition, the building must be accessible in order to be used in accordance with its identity. In addition, it is important that they can be used to increase the value of historical places. Therefore, accessibility should be seen as a public service [19]. In our country, there is a perception that accessibility is achieved by building ramps for wheelchair users and by applying tactile surfaces for visually impaired people. Most of the details and materials applied in recent years are inaccurate. This is due to the lack of control of what is stated in the standards, the ignorance of the controllers, and the misapplications that cause confusion [8]. Access to places such as transportation vehicles and stopping points of these vehicles, parking lots and entrance, ticketing, information, waiting areas, food places, stairs, toilets, escalators, elevators or bands in order to provide access to historical buildings and their surroundings; should be with written, visual and audio prompts. If these signs are visual, they should be of sufficient size and in striking colors and textures. While arranging routes between historical monuments in the historical city center, individuals in various categories such as wheelchair users, individuals with vision problems, the elderly, children, and those carrying baby strollers should be taken into account [23] [13].



Graph 1. The suitability of the physical environment for people with disabilities [35]

7. CULTURAL ASSETS IN LAWS AND REGULATIONS

Until the 17th century, it was observed that studies were carried out for the protection of ancient artifacts, but this situation was not institutionalized. The foundations of the "Stylistic Recomposition" view were laid in the 19th century, when "Christopher Wren" claimed that it was necessary to complete an incomplete building with the same style as of the second half of the 18th century [16]. In the 19th century, Viollet-le Duc was the person who laid the scientific foundation of the restoration, arguing that the entire structure should be rebuilt with the parts that were never completed, and that the parts that were later articulated should be removed [4]. At the beginning of the 20th century, "Gustavo Giovannoni" carried the concept of restoration to an international dimension [4]. The document named "Charter of Athens", created in Athens in 1931 with the contributions of Giovannoni, was adopted by experts at the "1st International Conference of Architects and Technicians on the Protection of Historical Monuments" [16]. The restoration was scientifically accepted in 1964 with the "Venice Charter" prepared by the "International Council of Monuments and Sites (ICOMOS)" [34]. Today, international organizations such as "ICOMOS", "ICCROM", "UNESCO", "Council of Europe", DOCOMOMO carry out their studies on conservation.

In our country, the Law No. 2863 on the Protection of Cultural and Natural Assets, which came into force in 1983, the Law No. 3386 enacted in 1987, the Decree Law No. 652 in 2011, and the Law No. 6498 in 2013, are still valid today [39]. There are other laws enacted in 1983 that are important for the protection of cultural assets. National Parks Law No. 2873, Expropriation Law No. 2942, Bosphorus Law No. 2960.

As Arslantaş mentioned in her study, among the problems faced by disabled citizens throughout their lives are the inability to use public spaces effectively due to architectural practices, the inability to benefit from public services properly, and the inability to fulfill their civic duties without assistance [9]. In order

for people with disabilities to benefit from public services, buildings and the built environment must have regulations in accordance with Turkish Standards TS12576 and TS 9111 [5]. In the annexes of the Accessibility Monitoring and Inspection Regulation, there is the question of 'Is the building registered according to the Regulation on the Detection and Registration of Immovable Cultural and Natural Assets to be Protected?' If the building is registered, no action is taken regarding accessibility [23]. According to this article, historical buildings and their surroundings do not have to provide accessibility. However, in the USA (ADA / American with Disabilities Act) there is a statement that 'Historical buildings cannot be excluded from ADA requirements' [32]. TR The Accessibility Guide published by the Ministry of Family, Labor and Social Services is implemented in new structures. Considering the headings in the guide, parking lots, entrance ramps, access to upper floors, toilets, information desk, cafe, sales units can be made accessible, and new proposals can be developed under the supervision of experts when deemed necessary. Sensitive countries are transforming historical places into accessible areas for everyone. This situation does not harm historical places, on the contrary, it allows them to be experienced by more citizens.

8. EXAMINATION OF THE HISTORICAL ANKARA TRAIN STATION WITHIN THE SCOPE OF THE ACCESSIBILITY GUIDE

Minister of Transport and Infrastructure Adil Karaismailoğlu stated that the maximum number of passengers carried daily is 31 thousand [53]. When the approach to the station building, where human circulation is so high, is examined within the scope of standards, it has been determined that there are some deficiencies. The reason for examining the station building is that it is a building that people have to use in line with their needs. In addition, it is an area visited by different user groups due to the fact that there are buildings that serve more than one need in the site.

According to Annex II: For Open Spaces; Accessibility, Monitoring and Inspection Form [50], A.Sidewalks; Station site does not provide items; A7, A10, A13, A28b, A30, A50, A50a, A51, A54, A56, A57, A58, A75, A76, A81, A88, A127, A128, A131, A133, A145, A165, A184.

According to Annex II: For Open Spaces; Accessibility, Monitoring and Inspection Form [50], C.Stops; Station site does not provide items; C.I.1, C.I.2, C.I.3, C.I.13.

According to Annex II: For Open Spaces; Accessibility, Monitoring and Inspection Form [50], D.Parking; Station site does not provide items; D.I.5, D.I.17, D.I.19, D.I.20, D.I.24, D.I.35.



Figure 1. Sidewalk-crosswalk (A50, A128, A131)



Figure 2. Guide blind tracks on sidewalk (A.7)



Figure 3. Ramp-stairs (A.6, A50, A56, A57, A88)



Figure 4. Sensible surface on ramp (A50, A127)



Figure 5. Ramp (A.30, A50, A133, A165, D.I.5, D.I.17, D.I.19, D.I.20, D.I.24, D.I.35)



Figure 6. Sidewalk (A.10, A28, A184, C.I.1, C.I.2.)



Figure 7. Drainage problem (A145)



Figure 8. Stairs and ramps without handrail (A51, A54, A76, A81, A88)



Figure 9. Bus stop (C.I.1, C.I.2, C.I.3, C.I.13)

9. CONCLUSION

Rosso et al. mention that physical movement restrictions of disabled individuals negatively affect social participation, losses in social participation cause functional decrease and this situation negatively affects the functioning of the disease. At this point, it emphasizes that the interaction of physical function disability with social participation is cyclical [44]. In this context, the Farringtons point out that social inclusion can be achieved through social justice and therefore more accessible design is needed to increase social inclusion [21]. Vanderveen et al. refer to the necessity of eliminating attitudinal barriers to physical disability for the development of social sustainability [59]. When we look at the practices in Turkey, it is seen that the awareness about the disabled and accessibility is not at a sufficient level [17]. Sufficient progress has not been made in the implementation of accessibility-related regulations, many of the regulations do not comply with the standards specified in the legislation [15]. The concept of accessibility should be evaluated within the scope of the concept of “equality” and “right”. As Bauman puts it; Space is an important part of communicating [12]. Historical places are places where we communicate not only with the period we live in, but also with our history. It is a requirement that these spaces be equally accessible and usable for all. It is important that this requirement is adopted by every member of the society, especially by decision makers, before the practices related to accessibility. The fact that accessibility is not adopted within the scope of rights and equality is the first of the obstacles to the achievement of the purpose of the regulations. If this awareness is reached as a society, it will evolve into a situation where accessibility in every living area and design will become a part of the product rather

than an extra consideration. As architects, this awareness should be created in the education process in order to better understand the disabled individuals and to make the right design. There is no need for complex equipment and large funds to understand these people. An architect or aspiring architect can experience the accessibility of the building with their eyes closed. With a wheelchair, he/she can experience the difficulties experienced from the outside of the building to the inside of the building. Empathy with people with disabilities can be achieved with simple but effective methods. It is an important design input to serve the needs of people within the framework of design that puts people in the center in the architectural profession. It is also the main problem in the end product that must be solved first. At this point, equal provision of human needs and rights should be a feature that should be naturally provided from the created artificial environment [25]. Further studies on the accessibility of the selected building shall be conducted within the scope of the graduate thesis being prepared by the autor.

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