IMPACT OF THE RAPID INCREASE IN THE NUMBER OF UNIVERSITIES ON UNIVERSITY STRUCTURE AND SOCIETY

IREM KOSE and DILSAT DENIZ BINDAL

Architecture Dept, Hasan Kalyoncu University, Gaziantep, Turkey

Universities are important units, which to enable transition from basic education to vocational field and consist of academicians, students, administrative staff, locates in campuses where are accepted as small-scale city. Campuses should provide user’s needs such as sociocultural improvement with its physical structure. In recent years, number of universities in Turkey has increased rapidly and uncontrollably. Buildings has constructed made without sufficient analysis of the area. It takes a lot of time to build the campuses and there is no space in the city, so instant solutions are created. Besides, buildings that are rised vertically in random areas occur. The aim of this study is to examine the development of university campuses and structures through examples, to determine the changes of structures and to reveal positive and negative effects of these changes on the social environment. In the method of study, the effects of the university campus and its structures on the society, is handled comparatively. Firstly, the parameters of the university buildings that affect the society were determined in line with the literature review. Thus, it has been evaluated in several universities in Turkey. Besides, the positive and negative effects of the university building types are given comparatively. In the study, it was concluded that university areas serving at structure scale are weak in supplying with community needs. Also, suggestions have been made to ensure that university structures can respond to the society needs.

Keywords: Campus, Campus design, User effect, Campus planning, Enviromental effect.

1 INTRODUCTION

Universities constitute the final stage of the education system that plays an important role in Turkey's development, are organizations that both train the manpower at a high level required by the society and offer their services for the benefit of society and individuals by conducting scientific research (Yıldızoğlu 2006). In the last 20 years, universities have been the most affected institutions by the developments in the field of education in Turkey. In 2000, where the number of universities was 71 including government and private, in 2020 this number has raised to 203 (Figure 1). In the last 20 years, 132 universities have been established, with an increase of approximately 185% in the number of universities. Apart from these, there are still universities that are planned to be opened and are in the phase of establishment. Along with this rapid increase in the number of universities, there is no city left without a university.
Figure 1. Distribution of the number of universities in Turkey over the years.

Nowadays, when universities are first established, they usually start to serve in any building in the city. Then, planning is made for these universities in line with their needs, and campuses are designed. Looking at the existing universities, it is seen that some of the campuses are in the design phase and provide education in temporary buildings, some provide education in blocks of buildings in the city, and some provide education by starting partial use in the campus and the construction of the missing buildings are carried out. It is observed that well-established universities continue their education in existing campuses but grow on macro and micro scale by making designs and applications in line with their new needs.

2 FINDINGS

2.1 Development of Physical Structure of the University

The physical structures of universities have changed over time. While the buildings were gathered around the yard in the past, they later turned into complex structures with different settlement models. In the past, universities were located in different places in the city, as we call “city universities”. However, in recent years, universities have started to become cities on their own, and new cities called “university cities (campuses)” have emerged (Hatiboğlu 2000). Nowadays, with the rapid increase in the number of universities, universities that remained in the city as before started to be established. However, their establishment in the city is not similar to the qualifications of the old universities called “city universities”. A distinctive university character, stuck in single buildings, has emerged, and "building universities" have begun to be established as of its structure. Thus, many university buildings models have emerged.

2.1.1 City university

Educational buildings were included in the complexes in the Ottoman period. One of the many functions they consist of in the complex is educational buildings. With the acquisition of the word university, firstly the buildings with courtyards were used as universities, then they settled in large areas within the city as their number increased, as it was convenient in possibilities. With the increasing needs of universities over time, they needed growth and development. These needs
at the beginning were tried to be solved with additional buildings. Universities, which could not grow due to limited areas within the city, started to search for a place and established new settlements in the empty spaces in the city. Thus, they had to serve on many campuses by dispersing to different regions within the city.

There are many positive and negative aspects when we look at the relationship of city universities with the city and society. Universities' being in the city is seen as positive in terms of reducing the distance between the society and the university and facilitating cohesion. The use of facilities such as university meeting rooms, social areas, libraries, recreation, and sports by the people of the city, and the university's ability to benefit from the city facilities, enables a natural and strong communication between the university and the city (Begeç 2002). However, technological developments and changing and increasing needs make the development of universities stuck in the city difficult. The dispersal of the university, which could not find a place, to different regions caused a communication gap within the university itself. This situation was seen as negative as it does not allow the development and unity of the university.

2.1.2 University cities (Campus)

University cities are campuses that have started to move away from the city center due to environmental conditions. When we look at the meaning of the word campus; according to Dober (2000); University campuses are educational textures that, due to their functional structures, contain different areas of use or side by side and tend to grow physically. He stated that they accommodate urban functions such as study, accommodation, recreation, and transportation on a smaller scale.

The fact that universities cannot develop due to the lack of sufficient reserve areas from the city center and their distance from the city weakens the communication between the university and the society. It greatly reduces the social and cultural effects of campuses in the city. As a result of such isolation, the public is constantly unfamiliar about university life, and the integration of the communities living on the campus and the city becomes more difficult (Birkan 1972). In addition to these negative aspects, the university's openness to growth and development, its appeal to more students, the increase and diversity of social opportunities it can benefit from in its society, the ease of access to the university with its strong transportation network, and the establishment of a campus equipped with advanced technologies are positive aspects.

2.1.3 Building universities

It is a university structure model that emerged with the rapid increase in the number of universities. Turkey has established at least one university in each city. For these established universities to start their activities immediately, they were obliged to squeeze into the buildings in the city. Or, since there was no possibility to establish a campus, they settled in vertical building blocks consisting of several buildings. To provide education and training services as soon as possible, they have settled in individual buildings by producing solutions in the short term. They are squeezed into small spaces inside the city, as there are no large areas. Universities have many needs including administrative, social, accommodation, and educational buildings. Instead of solving these needs in separate areas, they tried to be separated from each other by settling on the floors of the buildings. It is no different from basic educational buildings.

Although it is thought that their presence in the city strengthens their connection with the society, their doors to society remained closed because they could not fully meet the necessary
facilities and needs. Since they are located in a single building, capacity can only meet the needs of students.

2.2 Parameters Affecting the University-City-Community Relationship

2.2.1 The location of the university concerning the city

University buildings can be inside the city as well as outside the city. Universities in the city are seen as positive in terms of social relations. The university must be integrated with the city and mutually benefit the city. However, there are also universities in the city with closed doors. For this reason, the fact that the university is only in the city is not sufficient in terms of social relations, but it should also be checked whether it is suitable for community use.

2.2.2 Size of the city

The size of the city has also affected the university-city relationship. Universities in big cities have supported the intellectual life of the city but have not been the focal point of local life. Student life in such universities has been a combination of campus activities and life in the city itself. In small cities, the university has the opportunity to dominate urban life and positively affect the quality of life in the city. For example, Anadolu University in Eskişehir, Turkey is the best example of developed mutual positive relationships and interactions (Oktay 2007).

2.2.3 The texture of university buildings

The texture of university structures is important for social relations. It is important that the university has a widespread and open texture and is in harmony with the urban texture. In this way, the university can serve society and it does not go against the city. The fact that the university has a dense and closed texture contrary to the urban texture causes it to close its doors to society. It ceases to be inviting for the city and turns its back to the city.

2.2.4 Social infrastructure of universities

Thanks to the social areas and cultural activities within the university, the society actively uses the universities. For this reason, the social infrastructure of universities should be sufficient and large enough to meet the needs of society. Meeting the needs of university users only causes the social relationship to weaken.

2.2.5 Areas where the university contributes to social needs

The university has also become a center for meeting the needs of the city and its region in areas such as industry, agriculture, animal husbandry, medicine, and engineering. The university should serve the environment and help the development of the city throughout its scientific fields. Whether they have the necessary research areas for this or not, is important for the development of society.

2.2.6 Contribution of the University to the urban economy

Universities, which benefit the welfare of the city, contribute directly to the economy. For this, university users should be able to blend easily into the city so that they can contribute to the city economically and create mobility.
2.2.7 Transport network

Transportation to the universities in the city can be provided by both pedestrian and public transportation. An effective transportation network should be established between the university campuses outside the city and within the city, and transportation should be provided easily in accordance with economic conditions. The society and users should easily reach the university and benefit from the opportunities. Therefore, the transportation network must be solved correctly and easily.

2.3 The Comparison of Different Structured Universities in Turkey in Terms of Contribution to Society

There are 3 types of universities in Turkey in terms of university physical structure. In this study, the university has been examined for each type. Çukurova University as a city university, Yıldız Technical University as a university city, Bahçeşehir University and İzmir Demokrasi University as a building university were examined (Table 1). In the table below, a comparison is made according to the parameters affecting the university-society relationship.

<table>
<thead>
<tr>
<th>Name of the University</th>
<th>Yıldız Technical University</th>
<th>Çukurova University</th>
<th>Bahçeşehir University</th>
<th>İzmir Demokrasi University</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Building Images</td>
<td>City University</td>
<td>University City (Campus)</td>
<td>Building University</td>
<td>Building University</td>
</tr>
<tr>
<td>University Structure Type</td>
<td>Yıldız</td>
<td>Yalova</td>
<td>Beşiktaş South</td>
<td>Üçkuyular</td>
</tr>
<tr>
<td>Campus Name</td>
<td>1911</td>
<td>1973</td>
<td>1998</td>
<td>2016</td>
</tr>
<tr>
<td>Year of Establishment</td>
<td>Urban</td>
<td>Urban Periphery</td>
<td>Urban</td>
<td>Urban</td>
</tr>
<tr>
<td>Location</td>
<td>Beşiktaş region</td>
<td>Şanlıurfa region</td>
<td>Beşiktaş region</td>
<td>Karabağlar region</td>
</tr>
<tr>
<td>The Size of the City and Its Hinterland</td>
<td>Widespread-open</td>
<td>Widespread-open</td>
<td>Frequent closed</td>
<td>Frequent closed</td>
</tr>
<tr>
<td>Campus Texture</td>
<td>Partially enough</td>
<td>Sufficient</td>
<td>Insufficient</td>
<td>Insufficient</td>
</tr>
<tr>
<td>Campus Social Infrastructure</td>
<td>Partially enough</td>
<td>Sufficient</td>
<td>Insufficient</td>
<td>Insufficient</td>
</tr>
<tr>
<td>University's Contribution to Social Needs</td>
<td>Partially enough</td>
<td>Sufficient</td>
<td>Insufficient</td>
<td>Insufficient</td>
</tr>
<tr>
<td>Contribution of the University to the Urban Economy</td>
<td>Sufficient</td>
<td>Sufficient</td>
<td>Sufficient</td>
<td>Sufficient</td>
</tr>
<tr>
<td>Transportation Network</td>
<td>Easy</td>
<td>Easy</td>
<td>Easy</td>
<td>Easy</td>
</tr>
</tbody>
</table>

Table 1. Comparison of the properties of universities.
3 CONCLUSION AND RECOMMENDATIONS

University structures were examined according to the parameters given in the study. Looking at the campus texture, it is more positive for the city university and campuses to have communication with the society as they have widespread and open planning. Communication with the public is weak because the building universities are frequent and closed.

When we look at the social infrastructure of the campus, it was insufficient because the city universities are old, and they do not have the opportunity to grow. Since the campuses have sufficient reserve areas, they can have the necessary social infrastructure. Since the building university tries to fit into the building block, it can only meet its basic needs and serve only its user. There is not enough infrastructure to open the university for public use. In this parameter, the relationship between the city university and the building university has remained weak.

In terms of contributing to social needs, while city universities and campuses can provide sufficient service, building universities cannot contribute to society scientifically because their use of space was insufficient due to their limited spaces. In this sense, the social relationship with the building universities remained weak.

When we look at the economic contribution, it is seen that all universities provide a solid floor to the city. Thanks to the potential of the students coming to the university meeting the needs in the city, it contributes to society economically. Since the student potential of all university types benefits from the city, the economic fold was found to be positive.

The transportation network plays an effective role in the access of people living in the city to the university. Since the city university and the building university are in the city, they can be reached both by walking and by public transportation. Since campus universities are generally located on or outside of the city periphery, transportation on foot is difficult and social mobility can be difficult. However, due to the solid transportation networks established for these universities, it has become easier to reach campus universities. When we look at it from this point of view, it is easier for society to reach all university types, and the access of all university types in the community relationship is considered positive.

As a result, when we examine the building universities in line with the parameters we have given above, they are weak in terms of contribution to society and urban relation compared to the city and campus universities. To bring these universities to the city, in the short term, residential areas should be found in areas close to residential areas in the city to meet their missing equipment. In the long term, they should establish campus universities in large areas on or outside the city periphery.

References