



## **Evaluating the Social Domains within the Campus of Afyon Kocatepe University with the Pragmatic Dimension of the Semiotic Method**

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### **ABSTRACT**

University campuses, one of the most important places contributing to a city, are also important in terms of educational activities in addition to socio-cultural activities. In this concept, existence of places where social activities can take place is a sign in terms of social interaction and development of university campuses. It is necessary to place the units that will meet all needs of the campus users (students, academicians, administrators, technicians) in a certain order in university campuses. Today, design of university campuses, which have a big number of users, is getting more and more important. However, place analyses should be made for users' needs, and improvements should be made upon the collected data in the existing campuses. A study was made in Afyon Kocatepe University Campus, which was chosen for a domain study, for an analysis of positive and negative aspects of the existing domains such as the social domains, recreational domains, musical and art domains, eating domains, libraries, and domains for the disabled. First, the existing domains in the campus were categorized into parts as social, cultural, sports, art, and music. A twitter account titled "AKU Crowd" was opened on a social media platform in order to get findings about the use potential and development of these parts. In this concept, opinions of the AKU students about the development and change of the campus were taken with the hashtags #akudegisim and #akucrowd. Intensely-used parts in the campus were determined in accordance with the tweets of AKU students, and the data were prepared as a legend. Survey questions were prepared with the pragmatic approach to determine the features of the open and indoor places in parts with intense use potential in the campus. The survey questions were prepared differently for the domains and places in the parts created, and a total of 505



students responded to the survey from different parts. The data obtained from the domain study were evaluated with the statistical analysis method, and results were found related to sufficiency, use durations, accessibility, users' profile, and use potential of the social and cultural domains in the campus. In accordance with the data obtained from the survey results, recommendations were made in order to change the ANS campus into a domain where users can fulfil their academic, social, art, cultural, and sports needs.

**Keywords:** Semiotics, Pragmatic Dimension, Afyon Kocatepe University Campus, AKU CROWD

## ÖZET

Kente katkı sağlayan en önemli mekanlardan biri olan üniversite kampüsleri, eğitim-öğretim faaliyetlerinin yanı sıra sosyo-kültürel faaliyetleri açısından da önem taşımaktadır. Bu bağlamda sosyal etkinliklerin gerçekleştirilebileceği mekanların varlığı, sosyal etkileşim açısından ve üniversite kampüslerinin gelişimi açısından bir göstergedir. Üniversite kampüslerinde kampüs kullanıcılarının (öğrenci, akademik personel, idari personel ve teknik personel) tüm ihtiyaçlarını karşılayacak birimlerin, belli bir düzen içinde yerleştirilmeleri gerekmektedir. Günümüzde çok sayıda kullanıcı kitlesine sahip üniversite kampüslerinin tasarımı giderek daha fazla önem kazanmaktadır. Ancak mevcut kampüslerde ise kullanıcı ihtiyaçlarına yönelik mekan analizleri yapılarak, elde edilen verilere göre kampüslerde iyileştirme yapılması gerekmektedir. Alan çalışması olarak seçilen Afyon Kocatepe Üniversitesi Kampüsü'nde mevcut mekanlar arasında yer alan sosyal alanların, rekreasyon alanlarının, müzik ve sanat alanlarının, yemek yeme alanlarının, kütüphanenin, engellilere yönelik alanların pozitif ve negatif yönlerinin analizine ilişkin bir çalışma yapılmıştır. Öncelikle kampüste yer alan mevcut alanlar, sosyal, kültürel, spor, sanat, müzik alanları olmak üzere bölgelere ayrılmıştır. Bu bölgelerin kullanım potansiyeline ve gelişimine yönelik tespit yapmak amacıyla sosyal medya platformunda "AKU Crowd" başlığıyla bir twitter hesabı açılmıştır. Bu bağlamda, AKÜ öğrencilerinin kampüsün gelişimine ve değişimine yönelik fikirleri, #akudegisim ve #akucrowd etiketleriyle belirlenmiştir. Bu etiketler üzerinden AKÜ öğrencilerinin attıkları tweetler doğrultusunda kampüste yoğun olarak kullanılan bölgeler tespit edilmiş ve veriler lejant olarak hazırlanmıştır. Kampüste yoğun kullanım potansiyeline sahip bölgelerde bulunan açık ve kapalı mekanların niteliklerini belirlemeye yönelik pragmatik yaklaşımla anket soruları hazırlanmıştır. Anket soruları, oluşturulan bölgelerdeki alanlar ve mekanlar için farklı olarak hazırlanmıştır ve bölgelere göre toplam 505 öğrenciye anket yapılmıştır. Alan çalışmasından elde edilen veriler, istatistikî analiz yöntemi ile değerlendirilerek, kampüsdeki sosyal ve kültürel etkinlik alanı yeterliliği, kullanım süreleri, ulaşılabilirlik, kullanıcı profili ve kullanım potansiyeli ile ilgili sonuçlara



ulařılmıştır. Anket sonuçlarından elde edilen veriler dođrultusunda; ANS Kampüsünü, kullanıcıların akademik, sosyal, sanatsal, kültürel ve sportif gereksinimlerini karşılayabilecekleri bir alan haline dönüřtürmek amacıyla önerilerde bulunulmuřtur.

**Anahtar Kelimeler:** Göstergebilim, Pragmatik Boyut, Afyon Kocatepe Üniversitesi Kampüsü, AKU CROWD

## 1. INTRODUCTION

It is also necessary to take into account the principles of place organization, environmental design, and design when planning university campuses. Planning of open and indoor domains in university campuses is important in terms of providing a peaceful and quality environment both for faculty and students as well as quality of education. Also, university campuses are planned to meet recreational functions in addition to education and accommodation. Sports facilities, cultural facilities and open and green area arrangements, and the circulation system connecting these places to each other are the elements of the recreational function (Yılmaz, 1998).

In university campuses, domains and fittings such as open and green elements, boundaries of a campus, campus entries, active open recreational domains, passive open recreational domains, vehicle circulation system, pedestrian circulation system, plastic objects (fountain, sculpture, monument), junctions, outer space furniture (pergola, bench, bower), lighting, and vegetation reveal the quality of a campus (Dober, 1992).

According to Erkman, a campus consists of four main parts depending on its functions (study, relax and recreation, accommodation and transport): academic part, administrative part, relax and recreational part, and accommodation part (Erkman, 1990). A rich cultural unity is obtained created by students from different regions, different traditions, and different opinions (Çađlar, 1976). Also, activities (drama, exhibition, concert, sports matches, etc.) other than vocational education are important in terms of helping students take active roles in campus life and grow ready for social life.

Universities are not only institutions for providing jobs with academic education, but also are places where socio-cultural developments, art and sports activities take place, and where interaction and communication are there. In this concept, qualities of open and indoor places, social and art activities, and environmental arrangement of Afyon Kocatepe University ANS Campus, which comprised the area of the study, were analyzed through social media and statistical methods.



### **1.1.Semiotic Method**

Societies have exhibited different life styles in continuously changing physical and cultural environments and in different periods of time. Developments and changes in life styles have reflected on architecture, parts of architecture, and therefore on places. According to Izgi (1999), core of architecture is create a place, and arrange and supervise it so that it will provide certain functions. It is necessary to give a place a meaning and that it establish a relationship with the user in order to create quality and livable places. In this concept, social environment and cultural infrastructure of a place form a basis for reading it. Architectural characters and forms that create places and structures find a meaning in the concept of their environments.

Interpreting the signs attributed to architectural products and making architecture more efficient as a communicative language require a language phenomenon. Language in architecture is an entirety of signs thought about, discussed, perceived, and interpreted among architects, designers, users, observers, and customers, and these signs emerge in colors, tissues, forms, surfaces, and lines. In this concept, reading the signs in an architectural entirety or parts of it is possible through the semiotic method. Semantic (meaning), syntactic (form), and pragmatic (use) dimension forming a basis for semiotic method let architectural signs be read and communication be established.

Semiotics is the science of signs in its shortest and known definition. Semiotics, as a branch of science examining signs, researches human forming signs, establishing systems with signs, and communicating through these (Masiero, 2006). C. W. Morris, an American scientist, says that there are three dimensions of showing process: Syntactic dimension, semantic dimension, pragmatic dimension.

The syntactic dimension researches principles and relationships of combining of signs with others. The way signs come together to create a message is important. In the semantic dimension, meanings of a sign are important. The pragmatic dimension examines the effect of a sign (Okuyucu, 2011).

### **1.2.Pragmatic Dimension of Analyses through Semiotic Method**

The pragmatic dimension researches the relationships between the signs and the users of the signs, and behaviors of the users. Architectural signs are also among the factors most effective on behaviors and reactions of people. A pragmatic design is a rationalist one formed by taking experiences about functions and use as a basis. Form in pragmatic design is like the direct response of function. Places and elements of places, walls, doors, and windows only come together to serve to create the most suitable conditions for a



certain function. The form created after these processes becomes the product of a functional necessity. In the pragmatic approach, all elements comprising the form compositions are formed in accordance with the benefit.

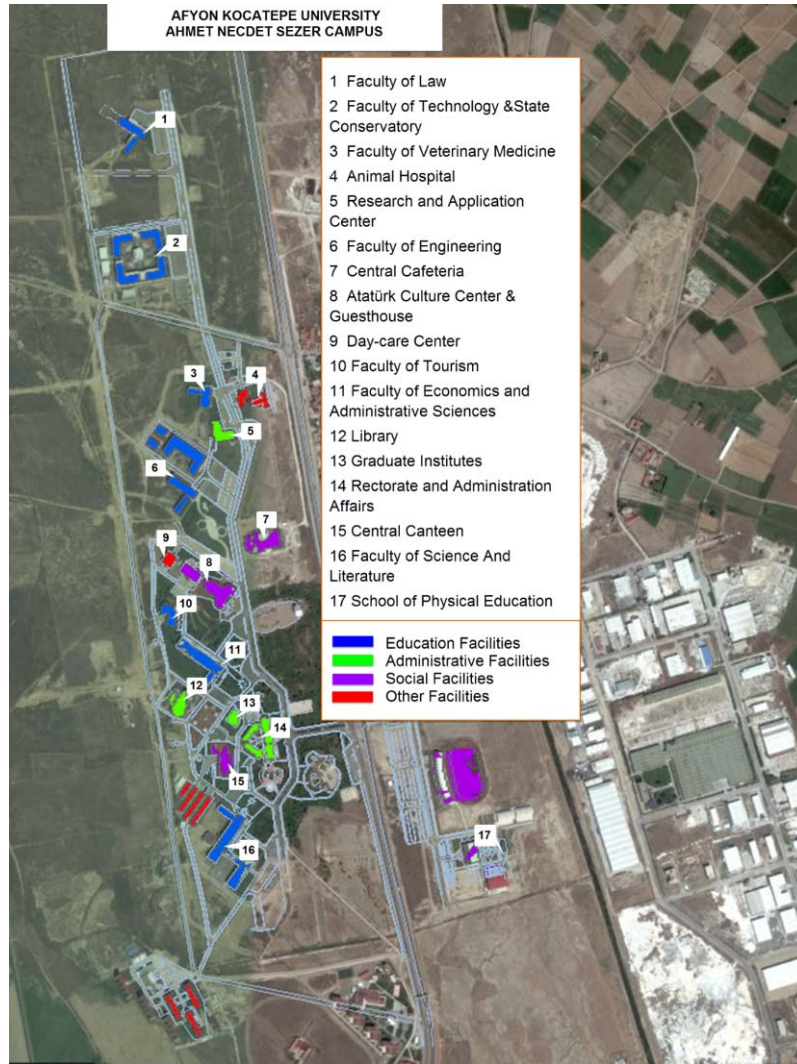
When evaluating the pragmatic dimension in semiotic analysis of the inner and outer places found in Afyon Kocatepe University ANS Campus and most-tweeted by the students, it is necessary to examine and read the functions, needs, and intended uses of the places. The data obtained from the regional distribution and use potential of the places in ANS Campus made it possible to evaluate the pragmatic dimension. The pragmatic dimension of the semiotic method is to reveal the social, cultural, and functional benefits of places and determine the needs for places within the scope of acts and psycho-social relationships of the users. Systematically processing the physical, formal, and social features of the inner and outer places in the concept of these relationships, needs and benefits made it possible to read the use of place through the pragmatic dimension. The features used as a scale to read the pragmatic dimension of the inner and outer places in ANS Campus are as follows:

- Allowing for easy transport thanks to location
- Furnishing of inner places
- Lighting of inner places
- Colors used in inner places
- Fittings of inner places
- Capacity of places
- Sufficiency of social domains (cinema, theatre, sports domains)
- Environmental arrangement in campus (walking trails, green areas)
- Sufficiency of domains for art and cultural activity

All of these implications were used to evaluate on pragmatic scale the inner and outer places selected by students in ANS Campus.

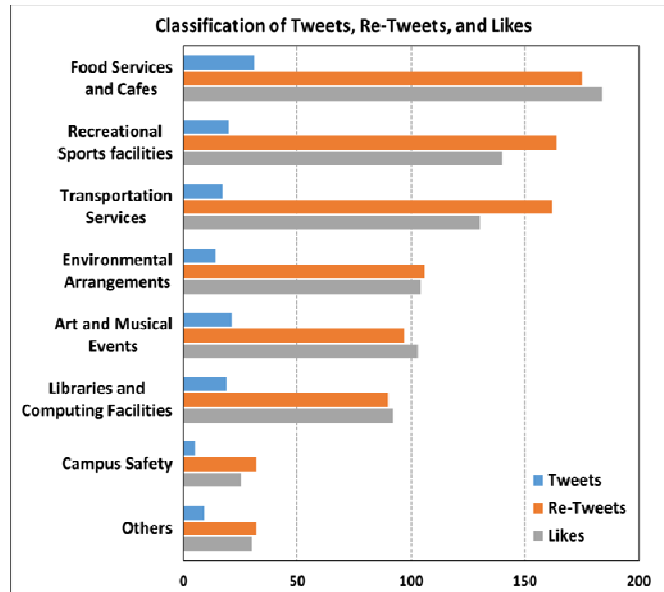
## **2. SCOPE AND METHOD OF STUDY**

Afyon Kocatepe University, chosen as the study area, started educational activities in the year 1992. Afyon Kocatepe University has 15 faculties, 5 institutes, 5 high schools, 1 state conservatory, and 15 vocational high schools. Ahmet Necdet Sezer (ANS) Campus is the biggest campus of the university, and it has 9 faculties, 2 high schools, and 1 state conservatory (Aku, 2018). Apart from the educational buildings, the campus has research centers, Ataturk Congress Center, central dining hall, Vadi Cafe, Kugu Cafe, Degirmen Cafe, GSF dining hall, sports areas, and dormitories (Figure 1).

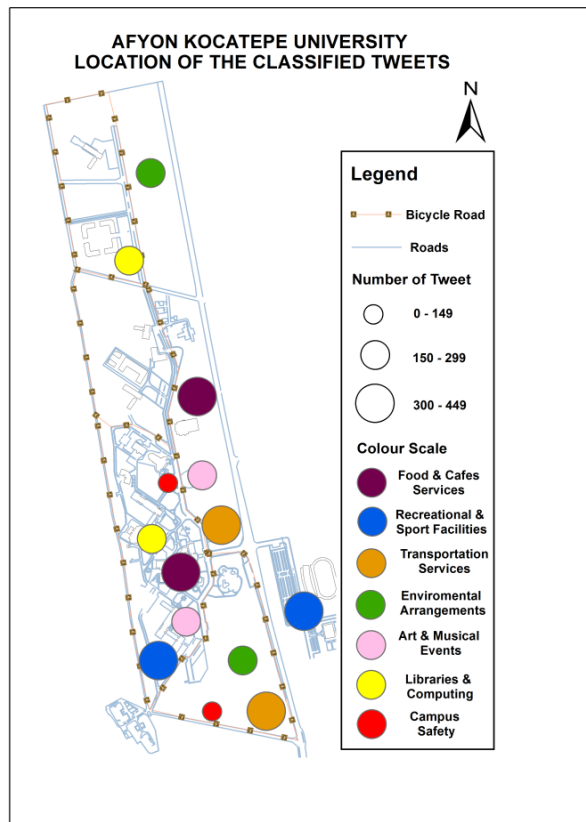


**Figure 1.** Satellite image of ANS Campus (Ugur, Dereli, Polat, 2016)

In the study about the qualities of the ANS Campus, the subtitles “dining areas and cafes, recreational and sports areas, transport, environmental arrangement, art and musical activities, library and informatics, and security” formed the main frame. The twitter account “AKU Crowd” was opened to allow for comments on these subtitles. This account helped get students’ comments with hashtags #akucrowd and #akudegisim. About 450 comments were taken, evaluated and categorized. The categorization was made according to number of tweets and locations in the ANS Campus by coloring (Ugur, Dereli, Polat, 2016) (Figure 2, 3).



**Figure 2.** Classification (Ugur, Dereli, Polat, 2016)



**Figure 3.** ANS Campus Location Categorization (Ugur, Dereli, Polat, 2016)

Locations in the campus were determined according to the personal opinions and comments of participating students made on twitter, a social platform, and the number of tweets. Survey questions were prepared about the most tweeted and most commented locations. In the scope of the study, a total of 505 students were surveyed regardless of



age, gender, discipline being studied, and grade level. The number of students surveyed is 505 in total, and about 100 students were surveyed for each location. On the survey, options "I agree, I have no idea, and I disagree" were given, and 3 point Likert scale was used. The students were asked questions with pragmatic approach about the sufficiency of the social and cultural activity areas in the campus, the periods of time they used these areas, accessibility, users' profile, locations of places, and qualities of places. Data from 450 surveys found suitable for statistical evaluation were evaluated through the package program SPSS 15.0 (Statistical Package for Social Sciences) in computer environment. The locations selected, the number of students surveyed, and the survey questions are provided on the tables.

**Table 1.** ANS Campus Locations

Cafes, Food Services	SportFacilitiesandRecreationalFacilities
Vadi Cafe	Art and Musical Events
Kuğu Cafe	EnviromentalArrangementsandLighting
Değirmen Cafe	Library
Central Cafeteria	

### **3. RESULTS**

Surveys were conducted in order to evaluate the locations being a social domain in the ANS Campus with the pragmatic dimension of the semiotic method. Evaluations were made according to the data from the questions, and digital inputs were expressed through graphics.

Cafes and dining areas were evaluated in four groups as Vadi Cafe, Kugu Cafe, Central Dining Hall, and Degirmen Cafe. 105 participating students in total were surveyed for the dining areas, about 26 students for each cafe. The questions about the dining areas were prepared with a pragmatic approach to determine the following criteria:

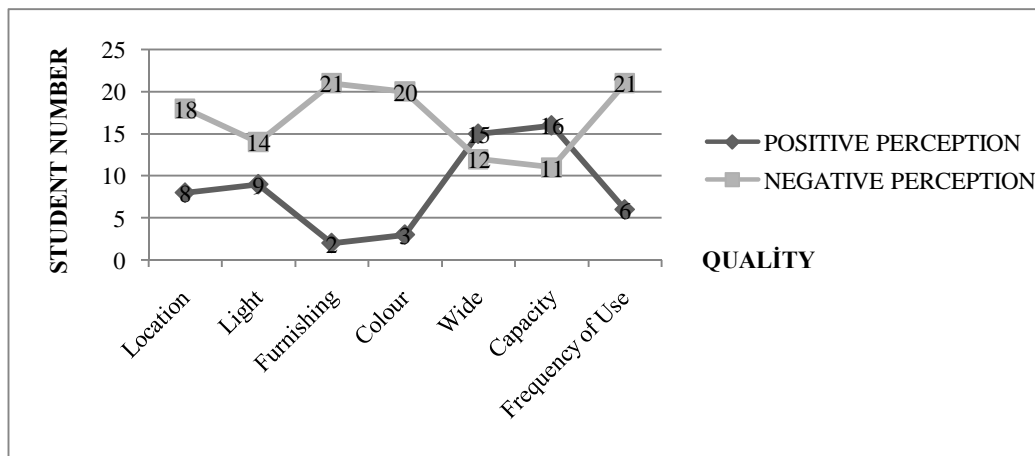
1. Location
2. Lighting of Place
3. Furnishing of Inner Place
4. Use of Color in Place
5. Spaciousness of Place
6. Capacity of Place
7. Frequency of Use of Place

Number of surveys applied for the dining areas are below.



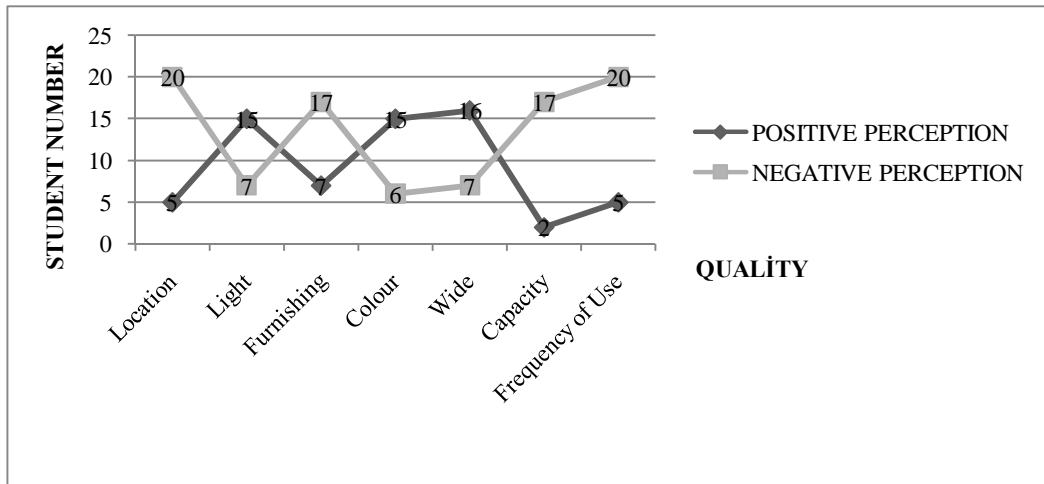
Vadi Cafe	Kuğu Cafe	Değirmen Cafe	Central Cafeteria	Total
28 student	25 student	26 students	26 students	105 students

Locational qualities of Vadi Cafe were analyzed in accordance with the criteria determined according to the pragmatic approach of the semiotic method. 28 students were surveyed, and about 2 students marked the option "I have no idea" for each group of questions. For pragmatic evaluation of the survey questions, the data obtained to assess the quality of place were transformed into digital inputs being positive and negative perception. The graphic of the data obtained about Vadi Cafe is provided below (Figure 4).



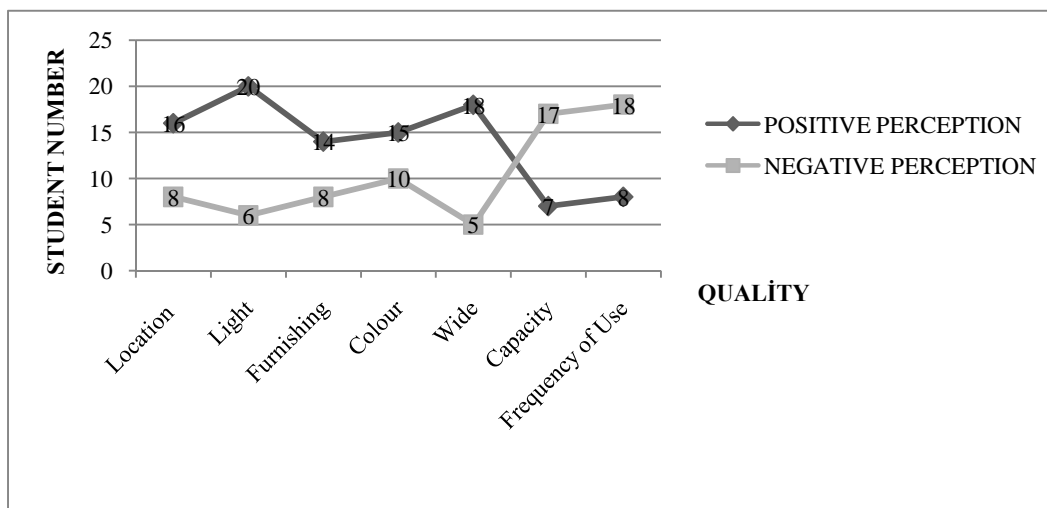
**Figure 4.** Survey Results for Vadi Cafe

Locational qualities of Kugu Cafe were analyzed in accordance with the criteria determined according to the pragmatic approach of the semiotic method. 25 students were surveyed, and about 5 students marked the option "I have no idea" for each group of questions. For pragmatic evaluation of the survey questions, the data obtained to assess the quality of place were transformed into digital inputs being positive and negative perception. The graphic of the data obtained about Kugu Cafe is provided below (Figure 5).



**Figure 5.** Survey Results for Kugu Cafe

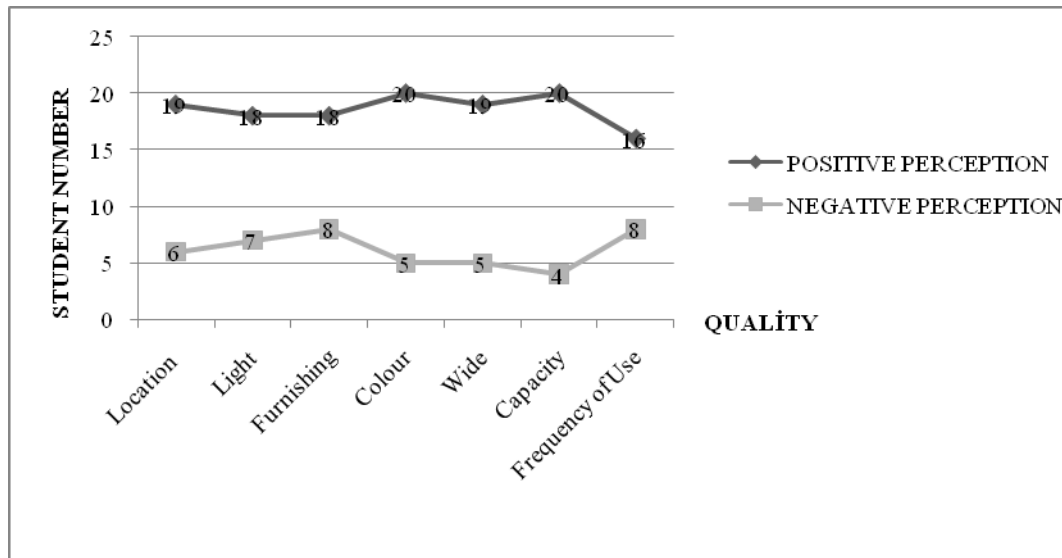
Locational qualities of Degirmen Cafe were analyzed in accordance with the criteria determined according to the pragmatic approach of the semiotic method. 26 students were surveyed, and about 2 students marked the option "I have no idea" for each group of questions. For pragmatic evaluation of the survey questions, the data obtained to assess the quality of place were transformed into digital inputs being positive and negative perception. The graphic of the data obtained about Degirmen Cafe is provided below (Figure 6).



**Figure 6.** Survey Results for Degirmen Cafe

Locational qualities of Central Dining Hall were analyzed in accordance with the criteria determined according to the pragmatic approach of the semiotic method. 26 students were surveyed, and about 2 students marked the option "I have no idea" for each group of questions. For pragmatic evaluation of the survey questions, the data obtained to

assess the quality of place were transformed into digital inputs being positive and negative perception. The graphic of the data obtained about Central Dining Hall is provided below (Figure 7).

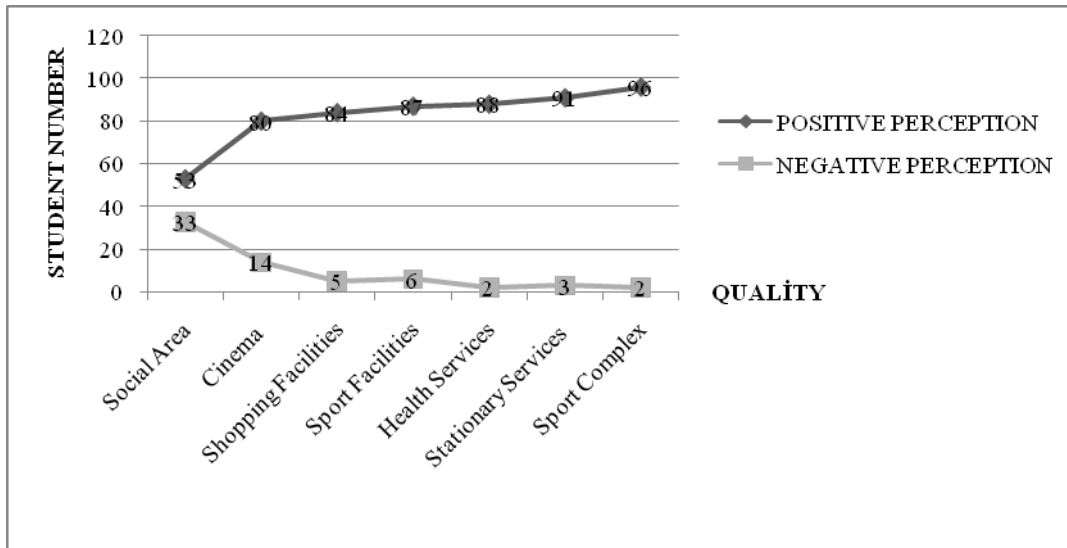


**Figure 7.** Survey Results for Central Dining Hall

The questions about the sports areas and social facilities were prepared with a pragmatic approach to determine the following criteria and applied to 100 students.

1. Sufficiency of sports areas
2. Demand for a cinema
3. Demand for shopping areas
4. Demand for sports facilities
5. Demand for medical services areas
6. Demand for stationery units
7. Demand for a sports complex

Locational qualities of sports areas and social facilities were analyzed in accordance with the criteria determined according to the pragmatic approach of the semiotic method. 100 students were surveyed, and about 9 students marked the option "I have no idea" for each group of questions. For pragmatic evaluation of the survey questions, the data obtained to assess the quality of place were transformed into digital inputs being positive and negative perception. Positive perception was evaluated through the data obtained from the comments made on having the titles (social area, cinema, shopping areas, sports facilities, medical services, stationery units, sports complex) comprising the inputs in the campus. The graphic of the data obtained about sports areas and social facilities is provided below (Figure 8).

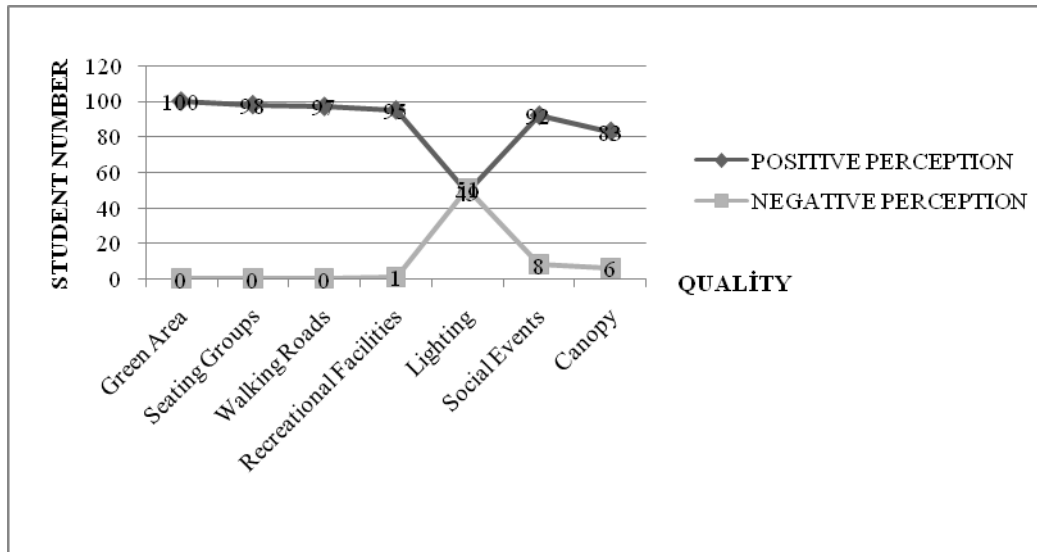


**Figure 8.** Survey Results for sports areas and social facilities

The questions about the environmental arrangement were prepared with a pragmatic approach to determine the following criteria and applied to 100 students.

1. Sufficiency of green areas
2. Demand for sitting groups
3. Demand for walking trails
4. Demand for social areas
5. Sufficiency of lighting
6. Demand for social activities
7. Demand for shades

Physical qualities of environmental arrangement were analyzed in accordance with the criteria determined according to the pragmatic approach of the semiotic method. 100 students were surveyed, and about 10 students marked the option "I have no idea" for each group of questions. For pragmatic evaluation of the survey questions, the data obtained to assess the quality of place were transformed into digital inputs being positive and negative perception. Positive perception is the values from the data about increasing the titles (green area, sitting groups, walking trails, social areas, lighting, social activities, shades) comprising the inputs. The graphic of the data obtained about environmental arrangement is provided below (Figure 9).

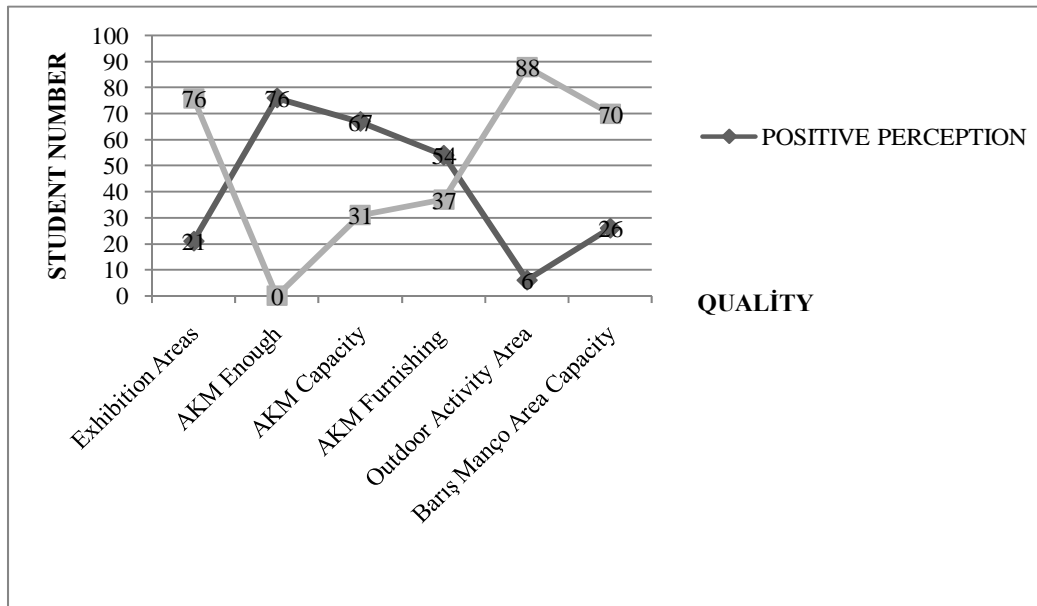


**Figure 9.** Survey Results for environmental arrangement

The questions about the art and musical areas were prepared with a pragmatic approach to determine the following criteria and applied to 100 students.

- 1.Sufficiency of exhibition areas
- 2.Sufficiency of Ataturk Cultural Centre
- 3.Capacity of Ataturk Cultural Centre
- 4.Furnishing of Ataturk Cultural Centre
- 5.Demand for areas for open air activities
- 6.Capacity of Baris Manco Square

Locational qualities of the areas where art and musical activities take place were analyzed in accordance with the criteria determined according to the pragmatic approach of the semiotic method. 100 students were surveyed, and about 11 students marked the option "I have no idea" for each group of questions. For pragmatic evaluation of the survey questions, the data obtained to assess the quality of place were transformed into digital inputs being positive and negative perception. Positive perception is the values obtained from the data about the sufficiency of the titles (multipurpose hall, Ataturk Cultural Centre, AKM capacity, AKM furnishing, areas for open air activities, Baris Manco Activity Area) comprising the inputs. The graphic of the data obtained about sports areas and social facilities is provided below (Figure 10).

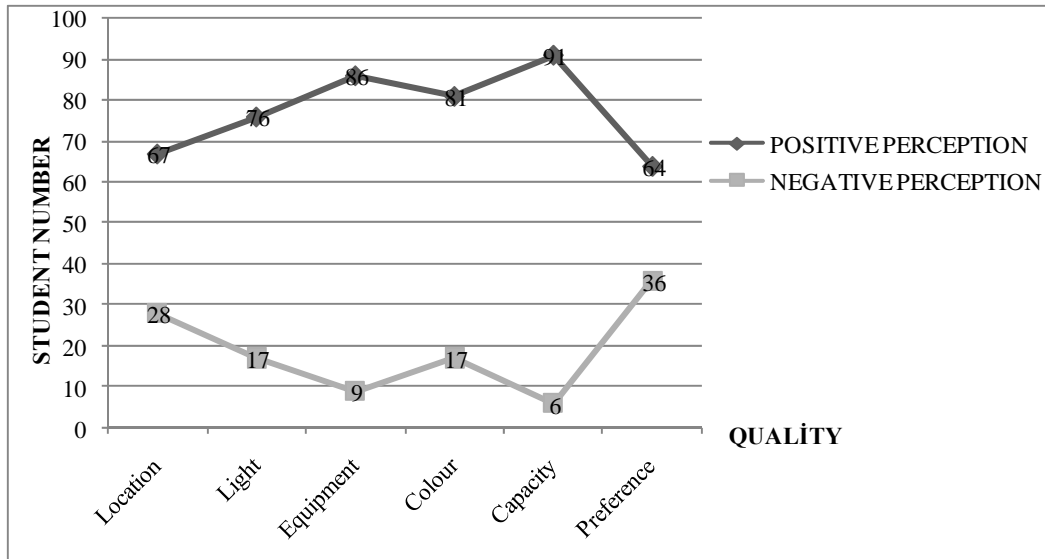


**Figure 10.** Survey Results for art and musical activity areas

The questions about the central library were prepared with a pragmatic approach to determine the following criteria and applied to 100 students.

1. Location
2. Lighting of place
3. Fittings of place
4. Colors used in place
5. Capacity of place
6. Preferability of place

Locational qualities of the library were analyzed in accordance with the criteria determined according to the pragmatic approach of the semiotic method. 100 students were surveyed, and about 6 students marked the option "I have no idea" for each group of questions. For pragmatic evaluation of the survey questions, the data obtained to assess the quality of place were transformed into digital inputs being positive and negative perception. Positive perception is the values obtained from the data about the sufficiency of the titles (Location, Lighting of place, Fittings of place, Colors used in place, Capacity of place, Preferability of place) comprising the inputs (Figure 11).



**Figure 11.** Survey Results for Central Library

#### 4.CONCLUSION AND EVALUATION

A twitter account with title "AKU Crowd" opened to categorize the activities and places in Afyon Kocatepe University ANS Campus into different locations was followed actively for several months. In this period, comments made in the twitter account were evaluated. Implications were made from the comments made on the use potential of the parts determined in the campus, and the data obtained were plotted. Data obtained for each location can be interpreted as follows:

- According to the survey results for the dining areas, it was concluded that location of Vadi Cafe was not found suitable by most of the students, that lighting of the inner place was insufficient, that the furnishing and colors used created a negative perception, that the capacity was sufficient, and that the cafe was not very often used. It was found that location of Kugu Cafe was not suitable, that the furnishing of inner place was not liked, but that colors used were perceived positively, that the place was spacious and lighted, and that the place was not very intensely used. It was concluded that location of Degirmen Cafe was suitable, that the cafe was lighted and spacious, that furnishing and colors used created a positive perception, but that the capacity was insufficient. It was perceived that location of the Central Dining Hall was suitable, that that the place was lighted and spacious, that students loved the interior design, that the capacity was sufficient, and that it was often used.
- According to the survey results for the sports areas and social facilities, the image is negative. It was concluded that social facilities were insufficient, and that there was a need for places such as cinema, shopping units, sports facilities, medical units, and stationery units. Also, although there were sports areas in the campus, these areas were found insufficient by the students, and suggestions were made for a new sports complex.



- According to the survey results for the environmental arrangement of the campus, it was concluded that green areas, sitting groups, and shades were insufficient, and that there was a need for walking trails, in short, it was necessary to increase the social activity areas. No negative comment was made on lighting of the campus.

- According to the survey results for the art and musical activity areas, it was perceived that there was a need for exhibition areas, open air activity areas, and that Baris Manco square was insufficient. It was found that the capacity of Ataturk Cultural Center was sufficient, but that its interior design could be different.

According to the survey results for the Central Library, it was concluded that its location was suitably chosen, that it was lighted and spacious, that its fittings were esthetic, that its capacity was sufficient, and that it was often used by the students.

From the data obtained from the survey results, and the comments made on the twitter account with title "AKU CROWD", implications were made about the physical, social and cultural features of the ANS Campus. According to the comments on five different locations, newly-built buildings and the interiors (Degirmen Cafe, Central Dining Hall, and Central Library) made a more positive perception for students. Previously-built buildings and the interiors were not found esthetic by students. However, negative comments on the social and cultural areas in the campus are very big in number. Creating areas and facilities suitable for art, cultural, social and sports activities at universities is the most important factor accelerating the self-improvement and being a social being for users. Within this concept, it is necessary to increase the social areas, the cultural activity areas, the sports areas, the green areas as part of environmental arrangement, and make the green areas more livable by adding sitting groups and shades so that they are not only decorative. It is also necessary to arrange walking trails, shopping areas, stationery units, and medical units in the campus. In order for the campus to have a dynamic structure, a design scenario with high rate of use, mobility, transparency, entirety, and esthetics tried to be created by taking into account the needs of the students, staff, and the users. The targets evaluated for the ANS Campus are important in terms of design studies for the future. This pilot study planning to be developed created a frame to determine the priorities in the process of campus designing.

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