AN ALTERNATIVE APPROACH FOR EVALUATING URBAN-SPATIAL QUALITIES OF CONTEMPORARY SHOPPING SPACES

In this chapter, it is intended to establish a new approach for the evaluation of spatial characteristics of contemporary shopping centres. They can be considered as public spaces particularly from the viewpoint of their potential to create ‘shopping places with social attributes’. In this approach, the characteristics of shopping centres that were established to be transmitted from shopping places in traditional settlements will be developed into a systematic method. A case study will be evaluated through this framework in the following chapter.

In this framework, primarily current urban design theories, as well as approaches for the evaluation of architectural space will be reviewed. These approaches will be exploited at the phase of formulating spatial characteristics transmitted from traditional settlements to shopping centres. Then, the results deduced from above-studied approaches will be matched spatial characteristics transmitted from shopping spaces in traditional settlements into our time towards a new method of evaluation.

Two types of space could be identified in the studies about space in architecture. The first among them is the interior space in which humankind performs various activities within clearly defined boundaries. The other is the exterior space, which is left outside the buildings and shaped with the physical definition of the exterior walls of buildings as well as other elements. In cities, exterior space, or in other words urban space are three-dimensional arrangements that accommodate various actions of citizens. The privacy level of urban spaces is reduced to lowest possible among various types of spaces. These spaces are open to the use of all individuals inhabiting in a city. These individuals actualise diverse activities as social beings in these places.

A decline in the use of public spaces and gradual deterioration of existing urban spaces initiate the process of transformation as discussed in the second chapter of this thesis. The major reasons for this are the diminution of pedestrian density in the streets and roads of contemporary city, and the limitation of the functions of streets into vehicular uses. Such transformation entails an embrace of urban-public spaces within buildings, and re-creation of urban areas within buildings at architectural scale. This urban transformation could be strikingly observed in contemporary shopping
centres that aim to create an environmentally controlled pedestrian environment enabling social interactions.

Therefore, in this study, common spatial qualities of shopping spaces in traditional settlements will be taken as evaluation criteria for the analysis of shopping centres from the viewpoint of spatial organisation. In order to establish these qualities, current urban design theories and approaches for the evaluation of architectural space will be reviewed. Along this way, a flow developing from larger scale to small, and from public to private space will be followed as can be explained in the below.

1) Ascertainment of the components brought together by the transformation of shopping units and buildings in urban spaces in traditional settlements as well as the organisation types of these components. The objective is to search for the traces of components, forming traditional urban core, such as paths, squares, landmarks, in contemporary shopping centres, and to set forth whether these are similarities between these traces and characteristics of the traditional city fabric.

2) Determining the evaluation criteria for architectural space and different approaches to the issue. The reason behind this endeavour is that a thorough scrutiny and a synthesis of former methods and approaches to analysis of building and spaces in order to develop an alternative analytical approach.

3) Investigation of design criteria for contemporary shopping centres. The reason is the formation of foundations required for matching the spatial characteristics of shopping centres with the evaluation criteria about urban and architectural space that were previously studied.

Thus, it is aimed to establish a new analysis approach towards an investigation about the spatial organisation of contemporary shopping centres. First, various approaches for the evaluations of both urban and architectural spaces are considered together. Second, they are matched with the spatial characteristics of traditional shopping spaces.

4.1 Major Theories on Urban Space Design

In this section, the characteristics about the spatial organisation of traditional urban structure will be analysed departing from the hypothesis about the transformation of traditional urban core within shopping centres. Primarily, essential elements of the traditional settlement will be defined. Then different methods and approaches developed
in architectural history for the evaluation of these spaces will be examined. In this scope, works of Moughtin (1992), Alexander (1977), Lynch (1960), Norberg-Schulz (1971), Trancik (1986) and Krier (1979, 1991) who theorised formal analysis approaches to urban space will be elucidated. Here, it is of utmost importance to establish common characteristics among these methods and approaches. Because how the criteria derived from these approaches would be transmitted to architectural space will be determined in the next section.

Various scholars put the approaches about the study of urban space forward in many guises. However, what constitutes the common ground of these theories is that urban space is usually conceived as three different but complementary components; squares, streets, and buildings. In this section, squares and streets, among them, will be deployed and the approaches put forth for the analysis of these components will be elucidated. The main reason to focus on these components is that ‘shopping places with social attributes’ can be realised in the latter component among the solids (buildings) and voids (squares, streets).

Moughtin, in ‘Urban Design; Street and Square’, asserts that a city is composed of squares, circulation elements (paths) and buildings (Moughtin 1992). According to him, when urban space is considered as three-dimensional elements, and building façades as their two-dimensional boundaries, urban space becomes ‘figure’ as a positive element and buildings become its ‘ground’. When similarly classifying urban space as positive or negative spaces, Alexander also suggests an analysis of figure-ground relationship in order to identify positive space (Alexander 1977, p.518-519). Analysis of figure-ground relationship constitutes the first phase for the formal classification of the relationships between the building masses and the surrounding voids. In almost all cities and regions, there is an order, a tissue model, that is to say, the chain of relationships between building masses the form the solids and enclosing open areas that form voids. For instance, Trancik classifies figure-ground relationships of urban spaces, from typological point of view, into six different groups as; grid, angular, curvilinear, radial-concentric, axial and organic (Figure 4.1). In almost every urban space, one or more of these categories may have existence at different scales and relationships. The theory of figure-ground, in that sense, plays a major part particularly from the viewpoint of urban-pattern analyses. This approach is particularly significant in order to identify urban-public spaces that are operative in the urban structure and to put forward their level of effectiveness in the formation of urban structure (Figure 4.2, Figure 4.3).
Today, it can be clearly seen that, urban areas are increasingly becoming much more introverted and traditional urban areas are progressively becoming architectural spaces that are totally isolated from exterior within buildings, which are built in a special way to address different purposes. Therefore, figure-ground analyses which are usually used to study urban space, is also remarkably helpful in understanding relationships pertaining to various spatial organisations within singular buildings. For this clear reason, figure-ground analysis could be a major device to be referred in establishing the similarities between contemporary shopping buildings and traditional shopping spaces.

Figure 4.1 Six typological patterns of solids and voids.

Figure 4.2 Successful positive urban space. Piazza del Campo, Siena. Figure-ground plan.
Lynch, in his ‘The Image of the City’ of 1960, defines the legibility of a city and its components, which help one to orient within it as paths, edges, districts, nodes and landmarks (Figure 4.4) (Lynch 1960).

It is plausible to observe Lynch’s criteria, also in the types of buildings which accommodate public spaces within themselves. Seen in this context, the existence of paths and nodes in contemporary shopping centres gains utmost significance. The major reason behind such significance given to this couple is that paths and nodes are the primary components to connect particularly the voids in urban fabric, from the perspective of ‘shopping places with social attributes’. For example, paths comprise the circulation network, which connect different functional zones in cities and provide continuity through serial vision. Horizontal and vertical circulation elements, which provide movement within a building which is shaped in strong resemblance to city, considerably contribute to the spatial organisation, influence the quality of design and corresponds to the components named as paths by Lynch. Nodes, which constitute the other urban component, are strategic areas from the viewpoint of ‘urban legibility’. Generally, the places where several paths join together can be regarded as nodes. They usually have the qualities of focal and combining qualities, and have the attributes to inform users about their orientation within cities. Again, it is also possible to see the components, named nodes, within buildings in which social spaces are accommodated, such as shopping centres. In that case, another method of analysis that will be used in this chapter should be Lynch’s ‘organisation of paths’ and the ‘distribution of nodes’.
Norberg-Schulz, in ‘Existence, Space and Architecture’, puts forward the components of existential and architectural spaces with frequent references to Lynch (Norberg-Schulz 1971). According to Norberg-Schulz, primary components which provide orientation within existential space are; centre and place, direction and path, and area and domain. Here, centre and place is a general area where members of the society gather and have public attributes. Qualities such as proximity, centralisation and closure are required for the development of the concepts of centre and place. These concepts in relation to the existence of districts, paths and nodes in urban space are essential components required in the existential space of an individual.

According to Norberg-Schulz, proximity, centralisation and closure usually exist in most of the urban spatial organisations. These qualities correspond to the concept of cluster, row and enclosure respectively. Nevertheless, contemporary city, today, has become throughout the ages so complicated that these concepts are no longer capable of explaining the city. Thus, Norberg-Schulz asserts that district, street and square, which can comply with these concepts, could be assumed as essential components of a city. At this point, according to Norberg-Schulz, the characteristics, which an urban space should have, are regarded as domain texture, path continuity, and enclosure of square. Today, therefore, criteria of proximity, centralisation and enclosure put forth by Norberg-Schulz for urban space can be used as the components of the analysis approach.

Figure 4.4 Diagrams of the spatial elements of the city.
that will be developed, in this chapter, for spatial analysis of shopping centres as an exemplary type of the ‘internalisation’ of contemporary city within buildings.

Trancik, in ‘Finding Lost Space’, gives an account of three different approaches to the evaluation of urban space (Trancik 1986, p.97). These are *Figure-Ground Theory*, *Linkage Theory* and *Place Theory* (Figure 4.5). These three approaches are significant because of the possibilities they unfold for both the analysis and design of urban space.

![Figure 4.5 Trancik’s Diagram of urban space theories.](source: Trancik, R., Finding Lost Space, Van Nostrand Reinhold, New York, 1986, p.98)

That figure-ground analysis is among the methods that will be utilised in this study was previously stated in the section in which theories of Moughtin and Alexander on figure-ground relations were examined.

Linkage theory, moreover, is based on the scrutiny of streets-roads, pedestrian paths and other open areas that connect different districts in an urban area. It has been a frequently referred approach as a design inclination during 1960s. In that regard, the systems of circulation and relationships become a criterion of arrangement in the organisation and design of spaces and sub-regions that exhibit different characteristics within an urban space. In this theory, one could speak of a circulation diagram rather than spatial diagram in figure-ground theory. Trancik explains the system of relationships in an urban space on the basis of Fumihiko Maki’s classification of spatial relation types (Figure 4.6). According to this categorisation, there are three types of linkage schemes in an urban space; *compositional form*, *mega form*, and *group form*. Linkage theory can also take place as an analytical approach in the method of spatial
analysis to be developed in this chapter in order to be able to investigate spatial relationships and organisation schemes in the customer circulation areas (malls).

Krier, in ‘Urban Space’ of 1979 classifies squares, which is an essential urban component. In his classification, rules of geometrical formation are determining factors rather than historical development patterns. While some of the spaces analysed by Krier are the squares that have existed in history, the others are his own designs for squares to be designed in the future. In the first phase of his classification squares are categorised into three groups according to their geometric forms. These are square, triangle and circle. In the next stage, each of these groups are further divided into groups as; regular and irregular. In the following phase, each group is subdivided into groups according to the dimensions, angles, positions of buildings and objects within, and types of functions. Thus, numerous types of squares could be deduced (Figure 4.7). When the spatial order established in contemporary shopping centres is analysed, one cannot fail to notice that there are gathering spaces quite similar to those in the town squares within these buildings. Therefore, another method or device of analysis to be used in this chapter is Krier’s geometric classification.
Consequently, urban design theories, which are included in the approach to be developed to determine the spatial features of contemporary shopping centres, are listed below:

1) Figure-ground analysis (Moughtin, Alexander, Trancik)
2) Organisation of paths and distribution of nodes (Lynch)
3) Proximity, centralisation, enclosure (Norberg-Schulz)
4) Linkage theory (Trancik)
5) Geometric classification (Krier)

4.2 Major Theories on Architectural Space Design

While the one aspect of the spatial transformation process, as discussed above, can be explained with theories regarding the organisation of urban space, the other aspect of the very same transformation, which constitutes the problem area of this thesis, can be explained through theories, which analyse architectural space. Therefore,
the works of Ching, Krier, and Clark&Pause, which theorise basic formal analysis
approaches in architecture, will be reviewed.

At this stage, the relations between the approaches for the analyses of urban
structure, as studied in the previous section, and those for the analyses of architectural
space will be investigated. In the next stage, which of these approaches, and to what
extent, is reflected to contemporary shopping space will be elucidated.

The first among these works is ‘Architecture; Form, Space and Order’ (Ching
1996) by Francis D. K. Ching. He tackles the issue of how components of form and
space are brought together.

Ching, starts with the scrutiny of basic elements such as; points, lines, planes, and
volumes which constitute the space. The concepts of two-dimensional surface, and
three-dimensional mass and volume are tackled. In the next stage, spatial combinatory
relationships of the spaces defined with vertical and horizontal delimitations are
elucidated. These are; space within space, interlocking spaces, adjacent spaces and
spaces connected with another space (Figure 4.8). Spatial organisation types are;
central, linear, radial, cluster and grid organisations (Figure 4.9, Figure 4.10, Figure
4.11).

![Figure 4.8 Ching’s Spatial Organisation Types I.](Source: Ching, F. D. K.; Architecture: Form, Space and Order,, Van Nostrand Reinhold, New York, 1996, p. 179)

In the approach to be developed in this chapter for the analysis of contemporary
shopping centres, Ching’s spatial combinatory relationships and spatial organisation
types take place as essential components of the approach.
Krier, in ‘Architectural Composition’ (Krier 1991) aims to define the elements that make the architectural form and to put forward the compositional set of rules that
determine the combination of these elements. Krier, in this work, quite similarly to Ching’s approach, states that the characteristics such as axis, symmetry, hierarchy by size; by shape; by placement, rhythm, datum and transformation are the compositional rules in architecture.

Axes, spatial hierarchy and rhythm among the rules of composition as put forth by Krier, will also be used as the other components of the alternative analysis approach to be established in this study. The primary reason behind their selection is the fact that they are the determining qualities in the spatial organisation of contemporary shopping centres. Axial arrangement signifies orientation, and correct orientation is of ultimate importance in order to provide circulation continuity in shopping centre. Spatial hierarchy is influential in establishing the relations both between the components of shopping centre (shopping units and circulation areas), and with the spatial configuration of the city from the viewpoint of size, form and location. Rhythm helps to apprehend the association between the rhythmic qualities of the units of shopping centres and those of traditional urban space.

In the method of analysis suggested by Clark and Pause (1985), in ‘Precedents in Architecture’, it is emphasised that characteristics regarding architectural form and space are examined rather that social, politic, economic and technical aspects of architecture. It is intended to investigate and interpret the end product during the analysis of spatial formation process.

The criteria used in the analysis of Clark and Pause are determined as; structure, the way natural light is received, massing, relationships of plan to section, circulation to use space, relationship of unit to whole, relationship of repetitive to unique, symmetry and balance, geometry, additive and subtractive, hierarchy (Figure 4.12).

Circulation scheme, geometry and hierarchy among the criteria, which Clark and Pause uses, are considered as concepts associated with ‘place’ since they coincide with theories discussed above, and also selected as the components of the alternative analysis approach.
Consequently, from the above discussions, it is clear that the intended evaluation approach should concentrate specifically on formal analysis approaches within the broader framework of architectural design theories. These theories included in the alternative approach to be developed for analysing spatial and morphological attributes of contemporary shopping centres are listed below:

1) Ching’s classification of spatial combinatory relationships and spatial organisation types are taken as basic components of the intended alternative evaluation approach.

2) Krier’s formal language about architectural space regarding axes, spatial hierarchy and rhythm is included as major devices of the evaluation approach.

3) Clark and Pause’s analytical approach regarding the relationships among circulation scheme, geometry and hierarchy is adopted as the main rationale to formulate formal attributes developed in Krier’s and Ching’s studies.

4.3 Major Theories on Shopping Space Design

In this section, components, which affect the design of shopping space, will be inferred from the theoretical approaches that so far refined form larger scales and scopes towards the specific subject of shopping spaces.

Above-listed theories on urban design, lays the foundations for the architectural design criteria that can also be adopted for contemporary shopping centres. In other words, the criteria, which are influential in the design of contemporary shopping centres, usually derive from the design characteristics of contemporary shopping centres. The idea of cities’ gradual transformation within this building typology is now
much more classified. Thus, the type has become a building in which functions of traditional urban core is re-organised and urban space is simulated with its formal attributes (Figure 4.13). While contemporary shopping centre appears as a transformed form of urban centre, it is a contemporary urban space, which leads the transformation of the characteristics of above-named urban components into those of interior spaces.

Figure 4.13 Town Center of Cobb
(Source: Rathbun, R. D., Shopping Centers and Malls, Book-2, Retail Reporting Corporation, 1988, p.79)

One of the most salient issues in the design of shopping centre undoubtedly is the degree of its commercial success. Therefore, the potential of these buildings to attract the maximum number of customers is the most vital issue. Particularly when the recent developments are examined, one can be convinced that the endeavour to transfer the vitality and movement of the city centres into shopping centres is clearly a product of such a commercially oriented thinking. Shopping centre as an alternative city centre, commercial success, in fact, is always at the foreground while the centre offers its customers various functions of the city in a tranquil medium isolated form vehicular traffic, protected form winter cold and summer heat.

In order to achieve the recreation of an image of city centre in a shopping centre, various precautions are devised. The efforts to take daylight into these spaces as much as possible; the design of shop fronts almost exactly like the shop windows in traditional shopping streets of the city; and the choice of sound-reflective materials
rather that sound-absorbing ones simply for the simulation of the background noises of city centres are only few examples of this sort. The main reason behind all these endeavours is the need to be able to simulate the complexity of city centre in order for this building type to attract more people, through re-creation of the lighting, surface qualities, sounds and even odour of the city centre (Figure 4.14, Figure 4.15).

Figure 4.14 Chadstone Center  

Figure 4.15 The Gallery at Harborplace  
(Source: Rathbun, R. D., Shopping Centers and Malls, Book-2, Retail Reporting Corporation, 1988, p.15)
On the other hand, it is also notable that shopping centre schemes usually accommodate various types of the organisation of traditional shopping spaces of cities. That is to say, streets of the city are turned into customer circulation areas, while squares are transmitted as glass-covered atriums, and finally the buildings are transferred as department stores. During this transformation, various elements of the urban space are usually taken into the building without any major alteration; the only significant change is that this complex building has become a much more controlled public space (Eyüce 2000).

As known, different functions other than shopping yet still commercial and pertaining to city are accommodated within contemporary shopping centres. These functions transmitted from the city itself into the building are mostly designed in a manner, which they are not united with shopping spaces. The main reason for this is to supply the centre with more functions to attract mere customers and to keep them for longer periods of time within the building yet to organise this group of functions and spaces at different storeys or areas than shopping, simply because of concentrating customers’ attention continuously on shopping. Meanwhile, a formation independent from time and space (i.e. removal of the sense of differentiation between day-night, summer-winter from space) may obviously impair the sense of ‘social place’ and leave merely the characteristics of ‘shopping space’, as discussed in Chapter 2. A spatial organisation independent from time and space may cause the building to create its own abstract time, and even to enforce this time onto its users. In that case, the image of the ‘unity of social place-shopping place’ that is intended to be re-created in shopping centres in unavoidably replaced with a commercialised organisation of social space.

As can be seen all over the globe, the most salient feature of the ‘bazaar picturesque’ is the human beings themselves, which move, make noise, shop, and exhibit (Figure 4.16). Therefore, the preservation of old bazaar so quality of being a space belonging mainly to humans is a crucial planning problem (Kuban 2001, p.84). In this context, the fact of ‘internalisation of building’ as well as the design problem and criteria associated with should be reviewed. For this reason, it would be convenient primarily to define the problem areas regarding the creation of ‘place’ in shopping centres, then to determine design criteria for shopping centres regarding the solution of these problems.
The first among these problem areas is the relationship of the gathering spaces that are designed to provide a context for social interactions to the definition and legibility of these spaces. The other problem area is the organisation of customer circulation areas within shopping centres. These problem areas will be defined below, and relevant design criteria will be elucidated.

**4.3.1 The Problem of Definition and Legibility of Interior Space in Shopping Centres**

In order to create an image of a city segment in shopping centres to accentuate its qualities of ‘place’, one or more gathering spaces in the building are required depending on the size of the shopping centre (Figure 4.17). Covering their roof with transparent elements and providing the reception of daylight into the space enhance the perception of these spaces as a part of the city. From the other hand, these spaces should be well defined. The definition of space helps the legibility of the interior space of shopping centre. Thus, the first among the problems regarding the creation of ‘place’ in shopping centres is the definition, thus legibility of space.

Design criteria envisaged towards the solution of these problems are as follows:
• The design of these spaces as focuses for social activities, and as nodes, which would help the legibility of space.
• The organisation of the distribution of nodes within space in a manner to enhance the legibility of space.
• Enclose of these areas for social interactions with various architectural elements in order to further define them.
• Design of these spaces for various social purposes in a way that their geometric-spatial characteristics would be similar with those of the squares in traditional urban space.
• The establishment of the figure-ground equilibrium between shopping units and gathering spaces in accordance with that of traditional city so that the existence of social spaces within the building is enhanced.

Figure 4.17  Galleria at Erieview
(Source: Rathbun, R. D., Shopping Centers and Malls, Book-2, Retail Reporting Corporation, 1988, p.93)

4.3.2 The Problem of Organising Customer Circulation Areas

In order to reflect the tissue characteristics of shopping places in traditional settlements in shopping centres, and to emphasise the qualities of ‘place’, it is necessary to design customer circulation areas in a way to form an ensemble with the gathering
spaces. However, a non-optional, yet legible circulation system is envisaged in the design of such buildings. Therefore, provision of orientation, continuity and fluidity of circulation areas is a significant problem of spatial organisation related with the commercial success of shopping centres (Figure 4.18, Figure 4.19).

Figure 4.18 Parque Arauco

Figure 4.19 Town Center of Cobb
(Source: Rathbun, R. D., Shopping Centers and Malls, Book-2, Retail Reporting Corporation, 1988, p.80)
The design criteria suggested for the solution of those problems are:

- The organisation of customer circulation areas in shopping centres in a manner to make user stay longer within the building via a continuous circulation system, and yet design of these spaces in a form of an optional and multi-directional circulation system quite similar to that of traditional shopping centres, rather than a circulation route on one single direction with no option.

- The design of customer circulation areas in a length (100-125 m.) to provide users to wander around within a reasonable period of time yet without reducing the competitiveness of shop units among themselves. In the case of increasing their length, it should be interrupted with various means such as different social function, squares, and landscape arrangements etc. purely to maintain the required perception of length. Again, in the case of increasing the length, establishment of secondary circulation areas so that an optional circulation system can be achieved.

- Establishment of figure-ground equilibrium between shop units and circulation areas as in the traditional urban fabric, thus enhancement of social spaces within the building.

- Transmission of rhythmic characteristics of the spatial organisation in traditional urban space into contemporary shopping centres.

- Foundation of a hierarchical order between circulation areas and gathering spaces in a similar manner with that of traditional city.

Consequently, when common points of these criteria, which are tackled through two main titles, are systematised, the architectural evaluation approach below could be derived.

1) Creation of nodes to enhance social interactions and legibility,
2) Enclosure of social spaces,
3) Foundation of the geometric-spatial characteristics on the basis of typological input,
4) Establishment of figure-ground equilibrium
5) Provision of the continuity of customer circulation areas,
6) Provision of multi-dimensional and optional circulation system
7) Provision of the appropriate length for customer circulation areas,
8) Accentuation of rhythmic characteristics of spatial organisation
9) Establishment of hierarchical spatial order.
The relations of this approach (and its components) with the creation of ‘shopping places with social attributes’ in connection with previously studied architectural and urban design theories will be established in the following section that is section 4.4.

4.4 A New Approach for Spatial Analysis of Shopping Centres and Malls

In this section, an alternative evaluation approach for the analysis of contemporary shopping centres will be developed by matching of the spatial characteristics transmitted from traditional shopping spaces to contemporary ones, as derived at the end of the third chapter, with *urban-architectural* components derived from theories ranging from urban scale to shopping space. These urban and architectural components are given in Table 8. In this chart, the first column displays the qualities regarding the formation of ‘place’, as deduced from urban design theories reviewed in the previous phase. The second column shows how characteristics regarding ‘place’, as inferred from architectural theories are matched with urban design criteria in the first column.

Table 8 Relationship between Components of Urban and Architectural Design Theories to be used in the Analysis of Contemporary Shopping Centres

<table>
<thead>
<tr>
<th>MAIN PRINCIPLES OF URBAN DESIGN THEORIES</th>
<th>MAIN PRINCIPLES OF ARCHITECTURAL DESIGN THEORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure-ground analysis</td>
<td>Classification of spatial organisation types</td>
</tr>
<tr>
<td>Organisation of paths</td>
<td>Axes</td>
</tr>
<tr>
<td>Linkage theory</td>
<td>Circulation scheme</td>
</tr>
<tr>
<td>Continuity</td>
<td>Rhythm</td>
</tr>
<tr>
<td>Distribution of nodes</td>
<td>Classification of spatial combinatory relationships</td>
</tr>
<tr>
<td>Proximity</td>
<td>Spatial Hierarchy</td>
</tr>
<tr>
<td>Enclosure</td>
<td>Enclosure</td>
</tr>
<tr>
<td>Geometric classification method</td>
<td>Geometry</td>
</tr>
</tbody>
</table>

When the characteristics of ‘shopping places with social attributes’ in shopping centres are considered with the theories matched in Table 8, the evaluation approach shown in Table 9 can be developed.

The major phases in the development of this evaluation approach are as follows:

- Determining the spatial qualities of ‘place’ (legibility, density, mixed-use, unity of social structure-urban fabric, serial vision, proximity, centralisation, enclosure, figure-ground equilibrium, formal diversity) as elucidated in Chapter 2.
• Matching these spatial characteristics with those pertaining to shopping spaces in both Western and Anatolian cities, and consequently, determining spatial characteristics which can be transmitted from traditional shopping spaces of Anatolian cities into contemporary shopping centres in Turkey.

• Interrelations of these spatial characteristics with urban and architectural design theories as well as the design criteria for shopping centres, as elucidated in Chapter 4, and developing an alternative approach both for evaluating shopping centres from the viewpoint of their potential of creating ‘shopping places with social attributes’, and for formulating how characteristics of shopping spaces in traditional Anatolian cities into contemporary shopping centres.
<table>
<thead>
<tr>
<th>Evaluation Criterion</th>
<th>Definition</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical criterion</td>
<td>Identifying the region that was the shopping space of the traditional city centre</td>
<td></td>
</tr>
<tr>
<td>Functional criterion</td>
<td>Identifying the region in which shopping activity is more concentrated in comparison to other areas</td>
<td></td>
</tr>
<tr>
<td>Spatial criterion</td>
<td>Identifying the region where tissue characteristics differ from other districts</td>
<td></td>
</tr>
<tr>
<td>Spatial criterion</td>
<td>Type of linkage schemes (compositional form, megaform, group form)</td>
<td>Linear/planar distribution</td>
</tr>
<tr>
<td>Spatial criterion</td>
<td>Characteristics of the linkages</td>
<td>Continuity of linkages</td>
</tr>
<tr>
<td>Spatial criterion</td>
<td>Number of path junctions on nodes (whether or not they are optional)</td>
<td></td>
</tr>
<tr>
<td>Spatial criterion</td>
<td>Lengths of linkages</td>
<td>0-50, 50-100, 100-150 m</td>
</tr>
<tr>
<td>Spatial criterion</td>
<td>Orientation and angles of linkages</td>
<td>Linear/angular</td>
</tr>
<tr>
<td>Spatial criterion</td>
<td>Rhythmic characteristics of plot-sizes</td>
<td>Existence/absence of rhythmic order</td>
</tr>
<tr>
<td>Spatial criterion</td>
<td>Spatial characteristics</td>
<td>Piecemeal/monolithic</td>
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<tr>
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<td>Complex/simple</td>
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<td>Free and organic/strict and regular</td>
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<td>Spatial criterion</td>
<td>Geometric-typological characteristics</td>
<td>Square, circle, triangle and their combinations</td>
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<tr>
<td>Spatial criterion</td>
<td>Level of enclosure</td>
<td>Enclosed, semi-enclosed, unenclosed</td>
</tr>
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<td>Spatial criterion</td>
<td>Balance of shopping activity-social activity (functional diversity)</td>
<td>Shopping dominant</td>
</tr>
<tr>
<td>Spatial criterion</td>
<td>Equilibrium of shopping and social activities</td>
<td>Social activity dominant</td>
</tr>
<tr>
<td>Spatial criterion</td>
<td>Distribution types</td>
<td>Linear/planar</td>
</tr>
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<td>Figure-ground relationship</td>
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<td>Axial</td>
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<td>Spatial criterion</td>
<td>Spatial hierarchy</td>
<td>Existence/absence of hierarchical order</td>
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<td>Classification of spatial organisation</td>
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</tr>
<tr>
<td>Spatial criterion</td>
<td>Linear</td>
<td>Radial</td>
</tr>
<tr>
<td>Spatial criterion</td>
<td>Cluster</td>
<td>Grid</td>
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<tr>
<td>Spatial criterion</td>
<td>Classification of spatial combinatory relationships</td>
<td>Space within space</td>
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<tr>
<td>Spatial criterion</td>
<td>Interlocked spaces</td>
<td>Adjacent spaces</td>
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<tr>
<td>Spatial criterion</td>
<td>Spaces connected with another space</td>
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As can be seen in Table 9, suggested approach consists of three successive phases:

- Definition of the shopping district under analysis
- Definition of the spatial elements of the shopping district and their characteristics
- Investigation of the characteristics regarding the spatial organisation in the shopping district

Through this approach, two types of consequences can be obtained:

1) That traditional ‘unity of social place-shopping place’ is sustained through spatial characteristics transmitted from traditional to contemporary shopping spaces.

2) That traditional ‘unity of social place-shopping place’ could not be preserved, mainly because spatial organisation is established merely on the basis of commercial success.

The first among these plausible results is materialised by means of transmitting traditional spatial characteristics into shopping centres. Organic street layout circulation scheme that is group formed, optional; nodes that are designed as piecemeal, complex, free, organic shapes, and distributed in planar arrangements, which are the essential characteristics of traditional shopping spaces in Anatolian city, are actually the qualities contributing to the formation of ‘shopping places with social attributes’. Moreover, provision of rhythmic and hierarchical order, high level of enclosure and equilibrium of shopping and social activity also influences the creation of ‘shopping places with social attributes’. In accordance with these qualities, figure-ground relationships, among the characteristics of spatial configuration, spatial hierarchy, types of spatial organisations and spatial combinatory relationships have much more variable and flexible characteristics.

The second of the above-listed consequences, on the other hand, is usually realised in the case of spatial characteristics oriented to pure-commercial success are more influential in the design. These characteristics are, regular street scheme, a circulation scheme that is arranged in compositional or group form, linearly distributed with non-optional linkages and mostly in linear shape, and nodes having simple geometric forms associated with simple, strict and regular spatial characteristics. Additionally, existence of neither rhythmic nor hierarchical order, low level of enclosure and imbalance between shopping and social activities in shopping centres further encourages spaces of sole commercial success. Again, here, attributes of spatial
configuration displays variable characteristics according to the organisation of above-named components.

In the fifth chapter, it is aimed to suggest a series of spatial criteria within the framework of approach developed here for the future development of shopping spaces in Balikesir.