A Syntactic Analysis of Recent Changes in CBD of Balikesir, Turkey

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Abstract
The effects of globalization felt all over the world have an ever increasing effect on the changing structure of our cities. During the last decade, the effects are especially felt drastically in smaller Anatolian cities such as Balikesir. Unlike major cities who already have multi-centered organization, the city center of Balikesir i.e. the central business district has kept its location and prominence as the only center while the city boundaries has been constantly growing and expanding. Until recently, the location of the city center usually referred to as Carsi was not much different from where it was at 14th century while the city was under the rule of Karesi Beylik. In recent years, the city started to change with an ever increasing rate paralleling the changes lived in the world. One of the major changes in Balikesir city center has been the relocation of intercity terminal to the outskirts of the city and in its place relocating the public transportation center, which was completed by the end of 2005. There are also two major regeneration projects within the same district: Akincilar neighborhood and Train Station Urban Regeneration and Renewal Projects. The aim of this research is to syntactically analyze and describe the effects of recent changes in the urban macroform of CBD district of Balikesir using space syntax methodology. For this aim, the axial maps of the city are prepared for before and after these changes introduced, which are then analyzed using space syntax techniques that can provide quantitative descriptions on the built space.

1. Introduction
Balikesir is one of the small Anatolian cities located on the western part of Turkey on the axis between Istanbul and Izmir, two of the biggest cities in the country (Fig. 1). Similar to smaller cities in Turkey, Balikesir has a different developmental history as compared to big cities that have been acting as the locomotives of the country. While the fast industrialization, population increase due to migration from rural to urban areas and the restructuring of the socio-cultural values after the 1950s had affected the bigger cities, their effects on cities such as Balikesir has been smaller in scale.
Especially during the last two decades, smaller cities have been drastically changing with an ever increasing speed as the effects of globalization felt in the form of new local developmental opportunities in different sectors including industry, international trade, tourism and real estate. The cities now have a new dream, a dream of becoming a “world-city”: a city offering the quality of life that one can find at any major city in the world complete with its big malls presenting “world class consumption environments”. Accordingly, the cities are evolving and changing their faces with major developmental and urban renewal projects. The reactions to these changes range from impressions of “positive physical improvement” to “loosing the city's identity”. No matter how these changes are perceived it is clear that they will also result in extending the network of urban infrastructure, in promoting population growth and in facilitating urban expansion.

Following the drastic changes introduced in the last couple of years, smaller cities have been started to be examined to see the effects of these changes on these cities. In this paper, the case of Balikesir city is examined using space syntax methodology that can produce a formal approach to understand these recent changes and what they do to the urban macroform of the city of Balikesir. The following section first provides the historical development of the city center and then briefs about the recent urban regeneration projects in Balikesir CBD. It will be followed by results of the analysis and conclusion sections.

2. Historical Development of the City Center

In Balikesir, the location of the city center today, usually referred to as ‘arsi’, is not much different from where it was at the 14th century while the city was under the rule of Karesi Beylik. The historic core is located around the Zagnos Pasha Mosque and Bath Complex and spreads from Ali Hikmet Pasha Square (Ticaret Meydani) towards Yildirim Mosque to the north and Anafartalar and Milli Kuvvetler Street to the south and east respectively (Fig. 2).
Balikesir became the house of different civilizations within its long history and has been first under the Muslim influence during the 7th century when Arabs occupied the town (Mutaf, 2003; nlÜyol, 1995). It is believed that during this time, a city wall surrounded the settlement though its exact location is not known as nothing is left of it. Later, the town has been under the rule of Byzantine Empire until Turkish occupation during the thirteenth century. In 1330, the town became the center of Karessi Beylik living its most prosperous period. The city boundaries at that time included the neighborhoods of Hisariçi, Yildirim, Karaoglan, Karabay, Oruçgazi and the west side of Eski Kuyumcular neighborhood (Tolun, 1970; nlÜyol, 1995), which together constitutes a section of today's historic city center. Becoming part of the Ottoman territory for the first time in 1359, different ethnic groups have lived in Balikesir side by side in spatial proximity with each other, either in mixed or in nearby neighborhoods, as in other cities of the Ottoman Empire.

Figure 2
Balikesir CBD

The oldest residential quarters in Balikesir surround Yildirim Mosque, the oldest architectural artifact that survives today from the 14th century. It is known that the town had an active trade life by the 16th century as reflected in the textile factory opening in the 17th century to supply for the Ottoman Military in Istanbul (Egli, 1939; Eren, 1993; Su, 1937). During this time, it is known that there were five caravanserais added to the existing two reflecting the growing importance of the city. Most of the historically significant architectural artifacts that give the city its identity have also been constructed
during this time, such as the Zaganos Pasha Mosque constructed by one of the viziers of Yavuz Sultan Selim. It is also known that at the time there were 20 neighborhoods in the town (nlÜyol, 1995).

Until the end of the 19th century, the city kept growing alongside the Anafartalar Street, earlier known as Hukurnet (Government) Street. The Municipality Building of the town was located to the northern while the Government Office together with its prison is located to the southern end of Anafartalar Street. Across the Government Office on the southern end is located the symbol building of Balikesir, Hamidiye Clock Tower.

Towards the end of the nineteenth century, the train reached the town. Another major event during this time was the 1897 earthquake that caused a major damage to the town demolishing half of the building stock. After the earthquake the town had to be rebuilt and it is during this time that Milli Kuvvetleri Street, known at the time as New Street or Station Street, have been established connecting the Train Station to the Municipality Building. At the crossroad of the Anafartalar and Milli Kuvvetleri became the core of the city known today as Ali Hikmet Pasha Square (known earlier as Ticaret Meydani), connected via Milli Kuvvetleri Street to the square in front of the Train Station known as Cumhuriyet Square. It is also known that Kizilay Street connecting the square around the Government Office to Vasfi Cinar Street also established after this earthquake.

Although, having the train station in Balikesir around late 19th century affected the town's development positively, due to the wars going on during the late Ottoman period, Balikesir looked like a small undeveloped Anatolian town at the time when the Republic was established in 1923. Furthermore, after the population exchange agreement between Greece and Turkey as part of the Lausanne Agreement in 1923, the non-Muslim population left the town and the cosmopolitan structure of the town has come to a halt. However, the city population that was then around 20 thousand reached to 70 thousand within a short period of time after the town became a military center after the Republic.

Around 1938, a new government building was constructed on Vasfi Cinar Street which runs in front of the Train Station. In addition, Union Building (Halkevi), City Club, Mayor's House and Military Buildings were also constructed on this street helping it to gain importance. The construction of the Parenting Hospital marked the end of this road at that time. The west side of this street, which had been a graveyard was turned into a cultural park between the years 1936-1938 suggesting the growth of the city on the other side of the railroad.

The Austrian architect Ernst Egli, who was commissioned in 1939 for the town's first master plan, mentioned in his 1941 report that the location of this administration building though was incorrect would lead the city to develop in this direction. Based on the air photos of the period, it is seen that the area behind the admin building is empty at the time to be developed as the extension of the central business district in the following years. The buildings constructed here were used as shops on the ground floor and the houses of the owners were located on top. This tradition even continues today when the buildings have already reached 7-8 storeys with shops on the ground floors and residents on upper ones.

In the report that Egli prepared for the Municipality, he proposed that the city needs to develop to the north, south and east. According to Egli, the AtatÜrk Park located to the north of railroad indicates that the city might spread towards this area and suggests possible industrial and recreational land uses to develop on this side of the railroad. Egli also provides a schematic analysis of the town's major roads and squares from where it is clear that his proposal for the city development is rather protective of the old structure.

Egli's proposal could also have played a major role for the town to keep its single center unlike most of the bigger cities that had a newly constructed modern city center in addition to the existing traditional one during the period till the 1950s when the industrialization and urbanization started to gain speed. As mentioned in a study conducted by Tolun (1968), by the end of the 1960s the city center still consists of the area within the boundaries of the major roads given in Egli's schematic drawing. The streets such as Vasfi Cinar connecting Istanbul and Izmir roads and Gazi Boulevard
that connects the city to Edremit coast started to gain impetus as the vehicle traffic increased after
1950s with the increase in cars.

Gazi Boulevard is another major axis that was further developed after the Republic. The boulevard
that run from the Train Station to the Yildirim Mosque did not existed until the establishment of the
train station but only the old Edremit Street, the western end of the Boulevard after Yildirim
Mosque. After the train station and first electrical generator building, today renovated and used as
Salih Tozan Cultural Center, Gazi Boulevard established and become part of the new road
connecting Edremit coast to Balikesir. It is known that a bazaar was operating on Sundays on this
road and was moved to a one storey shopping complex built in 1963 to the north of the Boulevard.
To the south of the Boulevard existed Military Building and next to it a small stadium called Ali
Hikmet Pasha Stad. Later this area has been used as an intercity terminal until 2004.

A major change of building stock in the city center has been initiated after a fire destroyed most of
the traditional caravanserais in 1950. Most of the buildings had been totally demolished during the
fire and thus the center needed to be reconstructed. The new shopping complex, called Yeni
Carsi, consisting of two storey buildings with arcades replaced the old caravanserais and the
Municipality building and helped keep the center in its place. The redesigned Ali Hikmet Pasha
Square was surrounded with new buildings such as Ziraat and Sumer Bank Buildings, reflecting
the architectural milieu of the period.

3. Recent Urban Regeneration Projects around Balikesir CBD

Especially after the year 2000, Balikesir entered a period of rapid change. Due to restructuring of the
transportation network in recent years, one can feel that the central business district started to shift
and a new, multi-centered organization just started to emerge. One of the main influences of the new
transportation network has been to carry the intercity bus terminal from a location that was very close
to CBD of Balikesir to the outskirts of the city. The old intercity bus terminal, which was not up to day
modern standards, was located on the northwestern corner of the two main streets Vasfi Cinar Street
and Gazi Boulevard, which was already deteriorated by the year 2004. After the intercity terminal has
moved to east of the city located on the road to Bursa, the area emptied has been turned into city
transport center (Fig. 3). Before this, the city transport system was spread throughout the CBD of the
city with only two small centers close by to each other for buses and for minibuses making use of the
existing lanes as much as possible. This arrangement was putting extra pressure on the city center
especially during the rush hours. Today, there is also another project that aim to provide a major
square in the historic city center by demolishing the Farmer's Market Building that was constructed
during the 1950s. The aim also includes opening up and putting more emphasis on the historical
building, Karesi Turbesi, located next to the Market building.

The area where the old intercity bus terminal was located has been redesigned bringing a totally
new spatial organization and also eliminating some existing buildings some as unimportant as
depots but some as significant as the historic Kervansaray Hotel and adding in its place a small
circular Kervansaray Café. The demolishing of historic Kervansaray Hotel not only is critical for its
destruction of city memory but also the resulting urban fabric needs to be analyzed to see what are the changes on the local and global contexts that this change has brought with it.

Another major urban regeneration project that is on its way to be executed is Akincilar Neighborhood Urban Renewal and Regeneration Project. Covering an area of sixty hectares, Akincilar is one of the oldest industrial neighborhoods of Balikesir and is currently the most deteriorated area of the city. Earlier renewal projects for the site were prepared at different times, in 1990 and in 1999, but neither were to be applied. For the last two years an extensive research has been conducted by the Municipality, which involved not only the urban analysis of the area but also determining the ownership rights of the parcels and buildings on the site. The project advertisement states that the target audience for the project is the local people from the neighborhood and each person who has a right on the matter would be given the opportunity to voice their concerns and to choose, first if they agree for the project or not, and then to see if they want a house or an office or some other arrangement. In Municipality's publications, the project has been advocated as a non-profit project aimed to create a "social capital" for the city.

Turkish Mass Housing Administration Office, TOKI, prepared a preliminary project for Akincilar neighborhood including upper class housing, offices and retail spaces (Fig. 4). The project has been heavily criticized by professionals as a standard TOKI project applied everywhere, thus which does not consider the importance of the local conditions and realities. Another major issue the professionals mention has been the density of the project and how it would be inappropriate for this area so close to CBD to have this much density. However, most of these criticisms remain elusive as they cannot more forward from being merely personal professional views. It would be interesting to see if the urban fabric created with this project does indeed fit to its place or what kind of effect it has on this locale.

The Municipality also would like to change the interface between the train station and the city center and thus another major regeneration project has been prepared to do so. The site for this project is the train station and its surrounding area that is currently used by the Turkish Railroad Company, area where the train station and its auxillaries currently located is in a derelict condition. The Municipality has made agreements with the Railroad Company to carry most of the auxillary funcitons to outskirts of the city while only keeping the passenger station active in the city center. All the certified historic buildings will be restored and protected and all the other buildings will be demolished. The work has already started with restoring the main train station and demolishing extra buildings. The area where the train station is located together with its auxillary buildings literally cause the city to be divided into two separate zones. Any regeneration project that is considered there should be very carefully thought out, their approach should not be destroy and conquer but to adopt to the existing locale. It has been a real problem for the city to have both two sides of the train station to be so separated and different from each other. This problem needs to be recognized and resolved as part of the Train Station Urban Regeneration Project before the city
can grow into its full potential. However, the project currently has started to be applied does not consider any of the problems mentioned let alone propose solutions for them. It is hoped that using space syntax techniques, which could provide quantitative descriptions of urban space, could help put forward the main problems and critique the proposed solutions.

4. Syntactic Analysis

There are five different maps that have been prepared to be analyzed using space syntax techniques. The first one, the city in the year 2000 (Fig. 5), belongs to the city before any drastic changes introduced and when its macroform had been similar to what it was for years. The second map examined the changes completed after the intercity bus terminal has been relocated in 2004 and in its place came the inner-city bus terminal project. The third map singles out and examines the CBD after Akincilar Urban Regeneration Project would have been completed, while the fourth examines the CBD when both of these changes, inner-city transportation center established and Akincilar Neighborhood Project have been completed (Fig. 6). The last analysis considers the CBD after Akincilar Urban Regeneration Project has been completed together with inner-city transportation center and demolishing the Farmer's market to open up a square in the historic city center.

![Figure 5](image)

*Figure 5*

*Balikesir CBD axial line analysis, rN*

As can be seen from the first map in Figure 5, the most integrated lines are those that belong to main axes, Milli Kuvvetler Street and Gazi Boulevard. The most integrated area thus follows these lines and located within the boundaries of CBD of Balikesir. It is striking to notice how the train station and its field on its back divide the city into two distinct areas. While the area in front of the train station is the CBD that is highly integrated, on the back of the train station is Gündogan.
Neighborhood that is segregated. Although physically very close to the downtown area, Gündogan neighborhood has been a problematic area for the city due to its high crime rates, which could be suggested to be linked to its being segregated from the rest of the town. It can also be seen that the small river to the north of the city creates another edge, which is highlighted by its being segregated as well. The area where the intercity terminal is located next to Akincilar neighborhood seem to be an integrated area as they are closer to the most integrated lines.

The results of the syntactic analysis of the CBD after the intercity terminal has been relocated and inner-city bus terminal is designed in its place, indicates that there is no major change that will cause a shift in the overall urban macroform of the city. However, when the integration values examined it can be seen that the emphasis put on the two major axes, Milli Kuvvetler Street and Gazi Boulevard, has been diminished. Even the part of the Vasfi Cinar Street next to the terminal area has become less integrated within this scheme. Thus it could be suggested that the new situation in the terminal area has already initiated a shift in the integration core of the CBD towards a more dispersed core. A similar effect could be observed when Akincilar Neighborhood Urban Renewal and Regeneration Project have been analyzed by itself though the dispersion is not as widespread as with the change in the terminal area. In both of the cases, there are no differences in the integration of the section of the city behind the train station apart from being a bit more integrated most probably due to the dispersion of the integration core.

It is interesting to notice that when both of the projects, terminal area redevelopment and Akincilar Neighborhood Urban Renewal Project, are both taken into consideration (Figure 6) the result is not much different from when the terminal area redevelopment is considered by itself. This result might suggest that Akincilar Neighborhood Project does in fact do not have as strong influence on the urban macroform of the city as does the terminal area redevelopment. Furthermore, when the Market Building gets demolished, by itself it does not have much impact as well. However, it is necessary to analyze more in detail the surrounding area where the Market was located in order to see more clearly the effects after its being demolished. Another major point to be recognized is that the changes in the area where the train station and its auxiliary services are located are merely at the surface level and they have no effect at all to the structure of the city. However, this is a major problem for the city as it eliminates the possible use of this prime developable land and the dense unplanned settlement next to it to enhance the life in the city center.

Figure 6
Balikesir CBD Axial Line Analysis after Public Transport Center and Akincilar Projects, rN
5. Discussion and Conclusion

Especially within the last decade, the smaller cities in Turkey, such as Balikesir, are showing signs of major changes that affect their urban macro-form. The city of Balikesir has a unique structure that was able to keep its main center over the years even though the city boundaries kept growing, which caused major pressures to the center pushing its physical limits. Balikesir Municipality identifies the city’s structure that kept its single center as a major problem and they are conscious that in order to change the image of the city from a small Anatolian town into a world-city this structure has to change as well. Major developmental projects coupled with urban renewal/regeneration projects are on their way aiming to shift the city of Balikesir from its single centered organization to a multi centered one.

The cities rebuilt and keep their identities with their characteristics that remain constant while continuously changing on the one hand. However, even though the change is inevitable its effects need to be foreseen beforehand. It is clear that Balikesir historic city centre has been on the decline for some time now due to the pressures caused by increasing demands. The recent changes aim to create a multi-centered structure, which will hoped ease the demand from the historic center. However, one major road block that needs to be expressed is that the historic center has been decaying for some time now and with the recent changes the decay will probably grow more unless precautions are taken. The officials and public should recognize the deep connection between the historic city center and its larger context that even might spread to the structure of the whole city. Thus more comprehensive approach is needed to protect the urban structure and pattern as much as civil architectural artifacts in the historic center. Space syntax techniques could help identify and solve the spatial connection problems that contribute to the current decline of Balikesir historic centre and thus help achieve urban planning that is balanced between solving the future needs and social problems while at the same time being sensitive to city history.

References

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