

REUSE STRATEGIES OF DEAD SHOPPING MALLS

Ali Buğra Sariaçalı^{1*}, Kunter Manisa²

¹M.Sc. Student at Yildiz Technical University Faculty of Architecture, Turkey,
bugra801@gmail.com

²Assoc. Prof at Yildiz Technical University Faculty of Architecture, Turkey
*Corresponding author

Abstract

Shopping is one of the most fundamental and general activities of mankind. The need for shopping areas took place in the urban squares of medieval cities and antiquity. As time progresses, it began to shift out of the city center with the great passages and stores that emerge in the 19th century. Victor Gruen's invention Southdale Center, separated the urban fabric and shopping activity from each other and became the first completely enclosed and air conditioned mall in the history. After Southdale Center, shopping centers differentiated in scale, quality, in terms of space and organization and their numbers rapidly increased. Nowadays, today's shopping mall is more than providing community's demands; they turn into the urban focal points that reflect the socio-cultural characteristics of the society with the sporting practices, cultural activities, entertainment and recreation areas, restaurants, cafes in them.

Since 1990's, changes in socio economic, over-retailing, tough competition, widening e-commerce due to the development of technology, mistaken architectural, locational and urban planning decisions influenced to the shopping malls and they began to lose their functions and economic vitality in developed countries. Older shopping malls fails as newer shopping venues are built with better qualities, easier accessibility and transportation and latest design trends. Declined shopping malls begins to become non-functional areas and brings physical and economic depression not for just themselves; they also sinks nearby of the their built environment and creates dead spaces. The shopping malls sites that completed their functional lifetime ensure available options for revitalize and redevelopment opportunities. Therefore, various redevelopment and adaptive reuse projects have begun to implement for the dead malls. Within the scope of this study, reused shopping malls examples in USA and Turkey reviewed and findings from the projects, schematized by diagrams.

Keywords: Shopping Malls, Adaptive Reuse, Sustainability, Turkey, USA

Özet

Alışveriş, her zaman insanoğlunun en temel ve yaygın aktivitelerinden biri olmuştur. Alışveriş için ihtiyaç duyulan mekân gereksinimleri, antik dönemlerde ve orta çağ zamanında kent meydanında giderilmiştir. Zaman ilerledikçe, 19.YY'da ortaya çıkmaya başlayan büyük pasajlar ve katlı mağazalar, geçmişte kent meydanlarında yapılan alışveriş faaliyetlerini kent merkezinden yalıtmaya başlamıştır. Nihayet 20.YY ortasında, Victor Gruen tarafından tasarlanan ve tamamen kapalı ve iklim kontrollü ilk alışveriş merkezi olan Southdale ile birlikte, alışveriş tamamen kent dokusundan ayrılmıştır. Southdale'den sonra modern alışveriş merkezleri ölçek, nitelik, mekân organizasyonu ve mimari özellikler bakımından farklılaşmış ve hemen hemen tüm dünya şehirlerinde inşa edilmeye başlamıştır. Artık günümüz alışveriş merkezleri insanların gereksinimlerini karşılamaktan çok, eğlence, rekreasyon ve yeme-içme alanlarıyla toplumların sosyo-kültürel niteliklerini yansıtan kentsel odak noktaları haline gelmiş durumdadır.

1990'larla birlikte, sosyo-ekonomik deęişmeler, arz fazlalığı, yoğun rekabet, teknolojik gelişmelere baęlı olarak e-ticaretin yaygınlaşması, hatalı konum seçimi, mimari ve kentsel planlama hataları gibi nedenler sonucu alışveriş merkezleri, özellikle gelişmiş ülkelerde işlevini kaybetmeye başlamıştır. Eski ve yaşlı alışveriş merkezleri yeni açılan ve daha heyecan verici faaliyetler sunan, en son tasarım trendlerine sahip yeni alışveriş merkezleri nedeniyle popülerliklerini kaybetmektedir. İşlevini kaybetmeye başlayan alışveriş merkezleri sadece kendileri için deęil, buldukları yakın çevrenin ekonomik canlılığını da kötü anlamda etkilemektedir. Bu nedenle, metruk yapılar haline gelen alışveriş yapıları için çeşitli yeniden işlevlendirme ve canlandırma projeleri geliştirilmeye başlanmıştır. Bu çalışma kapsamında, Amerika ve Türkiye'de yeniden işlevlendirilen alışveriş merkezleri örnekleri incelenerek, elde edilen bulgular ve binalara yapılan müdahaleler diyagramlarla şematize edilmiştir.

Anahtar Kelimeler: Alışveriş Merkezleri, Yeniden İşlevlendirme, Sürdürülebilirlik, Türkiye, ABD

1. INTRODUCTION

Rapid industrialization at the end of the 20th century, caused changes in urban spaces and the shopping malls have become venues of the new economic system, by taking the place of antiquity period trade buildings like agora, forum and medieval old market halls (Arslan, 2015). In this development process, shopping malls have shown tremendous improvement in point of architecture. Emerged in the middle of the 20th century, modern shopping malls occupies one of the widest footprints in the cities with their open parking areas and contains leisure and entertainment areas beside their retail missions (Coleman, 2007). However, considering the fact that the only thing that is constant is change, shopping mall industry have troubles in some countries. Continuous development process of technological, social and cultural developments generates new forms and functions, therefore building are also affected. Functions and buildings that cannot adopt the fresh development of social structures, face the danger of extinction.

It seems that shopping malls influenced from this kind of developments. In accordance with explained reports, there are numerous numbers of dead shopping malls especially in developed countries. According to terminology, a shopping mall that has a 40% or more vacancy rate is described dead or dying. Due to macro factors like over-retailing, widespread e-commerce, economic crisis, changed demographics and consumer behaviors, and micro factors like incorrect location choice, complex plans, mistaken retail store mix and administrative faults causes to shopping malls lost their functions. The shopping malls that outdated and do not offer exciting activities and specialities to customers, will not continue to be preferred. Older shopping malls fails as newer shopping venues are built with better qualities, easier accessibility and transportation and latest design trends. On the other hand to explain the retail competitions brutality, for example, there are 22 competitor retail shops eight kilometers vicinity of a dead mall in the USA. Except this, the hypermarket chains like Walmart usually builds bigger facilities for expanding and abandons existing buildings (Dallessandro, 2015).



Figure 1,2: Dead shopping malls (URL-1)

The death of a shopping mall is an unwell situation for immediate surroundings and city. Derelict buildings become uncontrollable spaces and occur deterioration in the social structure by increasing crime rates at abandoned structures. Under these circumstances, economic investments retreat from the district and the city is generally affected such this condition (Christensen, 2008). But still, the death of shopping mall does not mean that the building should demolish. Though that shopping malls function is becoming old, their

structure can serve again for another effective objective. The concept of adaptive reuse is defined as the adjustment of an ineffective existing structure by rejoin to the urban fabric. The reuse process is in socio-economic and cultural terms with the aim of preserving and contributing the efficiency by bringing together of today's modern living conditions. In this sense, due to the depletion of environmental resources and the increasing public awareness about sustainable life, adaptive reuse method come up for an alternative of creating new spaces and functions. Adaptive reuse projects are especially popular for investors recent years, due to expensive land prices and construction of a new building costs. Thus situated, it is important that allocated functions to existing building should consider the sustainability, flexibility and longevity issues for living a long life. Reusing a unused building mitigates the negative effects of overbuilding and construction to society and urban areas.

The shopping malls sites that completed their functional lifetime ensure available options for revitalize and redevelopment opportunities. With proper planning and design decisions, dead and abandoned shopping malls offer positive and constructive approaches and there are many examples of successful conversion projects about dead malls (Dallessandro, 2015). Adaptive reuse process comprise several different intervention and strategies to the buildings. In the next parts of the study, the some of these strategies will be shown.

2. AIM

By the end of the 2013 year, there are nearly 1,511 enclosed type shopping mall in the USA (ICSC, 2014). According to authorities, one of third of shopping malls in the USA is dead or dying. Reuse of dead shopping malls is not a recent event for the USA country. Due to early detection of the problem in USA, there are various redevelopment and adaptive reuse projects has been implemented to the dead mall properties for long years (Moccia, 2012). However, the problem is still persist. It is estimated that nearly half of the shopping malls in USA will be transformed into non-retail functions within next 15 years (Scharoun, 2012). Therefore, reusing the dead mall issue probably will be one of the most used architectural method in future periods.



Figure 3: North American Dead Mall Locations

The EVA Gayrimenkul, which is a comprehensive real estate research company in Turkey stated that by the end of 2016, there are 1,668.740 m2 non-functional retail space in Turkish shopping malls (URL-2). Published report specifies, general outlook of mall occupancy rate is not so bad at the small cities in country for now. Even so, metropolitan cities like İstanbul and Ankara saturated in terms of shopping mall inflation. Because of that, couple of reuse projects for dead shopping malls applied at İstanbul and Ankara in recent years. As a result, the main purpose of the this study is, examining of the interventions that applied to mall structures and exploring the strategies how architects reused that dead spaces.

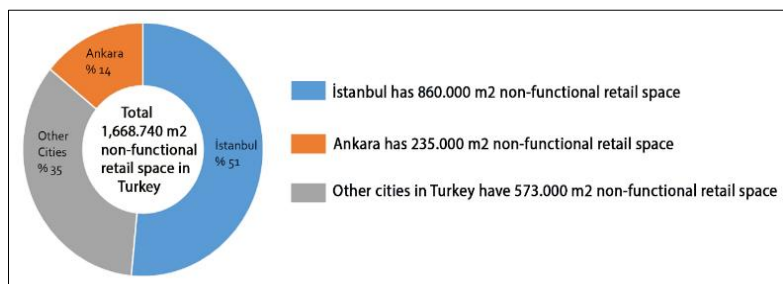


Figure 4: Non-functional retail space chart in Turkey

3. METHOD

This paper analyzes results of extensive literature review about dead shopping malls adaptive reuse projects in USA and Turkey countries. Obtained findings from projects review, observations of the interventions and implements to the mall structures expressed with written and schematic diagrams.

Project Examples in USA

1. Project-Name: Lexington Mall **Location:** Kentucky, USA **First Built Date:**1975



Old Photo



New Photo

New Function: Church **Reusing Date:** 2013 **New Name:** Southland Church

2. Project-Name: Westminster Arcade **Location:** Rhode Island, USA **First Built Date:**1828



Old Photo



New Photo

New Function: Micro Loft (Accommodation) **Reusing Date:** 2013 **New Name:** The Arcade Providence

3. Project-Name: 100 Oaks Mall **Location:** Tennessee, USA **First Built Date:**1968



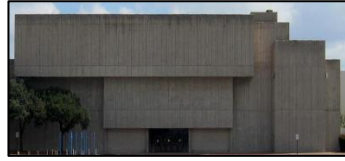
Old Photo



New Photo

New Function: Hospital **Reusing Date:** 2007 **New Name:** Vanderbilt University medical center

4. Project-Name: Highland Mall **Location:** Texas, USA **First Built Date:**1971



Old Photo



New Photo

New Function: College Campus **Reusing Date:** 2014 **New Name:** ACC Highland campus

5. Project-Name: Allegheny Center **Location:** Pennsylvania, USA **First Built Date:**1966



Old Photo



New Photo

New Function: Mixed Use **Reusing Date:** 2016 **New Name:** Nova Place

Project Examples in Turkey

1. Project-Name: Outlet Park AVM **Location:** İstanbul, Beylikdüzü **First Built Date:** 2006



Old Photo



New Photo

New Function: Apart Rooms (Accommodation) **Reusing Date:** 2012 **New Name:** Expoist Hotel

2. Project-Name: Optimus AVM **Location:** İstanbul, Esenyurt **First Built Date:** 2006



Old Photo



New Photo

New Function: College Campus **Reusing Date:** 2011 **New Name:** Çınar College Campus

3. Project-Name: Fox City AVM **Location:** İstanbul, Büyükçekmece **First Built Date:**2006




Old Photo



New Photo

New Function: Mixed Use **Reusing Date:** Half finished **New Name:** Arluxia

4. Project-Name: Minasera AVM Location: Ankara, Çayyolu First Built Date: 2008	
	
Old Photo	New Photo
New Function: Hospital	Reusing Date: 2016 New Name: Minasera Aldan Medical Center
5. Project-Name: Colony AVM Location: İstanbul, Küçükçekmece First Built Date: 2005	
	
Old Photo	New Photo
New Function: University Dormitory Facility	Reusing Date: 2014 New Name: IAU Female Dormitory

4. RESULTS AND FINDINGS

The architectural design of the shopping malls shows so many diversities in every part of the world. International Council Of Shopping Centers (ICSC) classifies shopping malls in 8 groups according to their sizes, locations, store mixes. Therefore, the scope of reuse and intervention to building is variable, due to malls physical characteristics. Adaptive reuse is a complex strategy that involves comprehensive processes such as alterations, expansion or downsizing of the repurposing building or articulation of different functions. In order to repurpose/reuse a dead shopping mall, the new suggestions must consider the buildings location, floor plans, structural systems, facades, infrastructure and other design criterias. There are subsections that explain some types of interventions made to a shopping mall to reuse it, below.

4.1 Renewing Façade

For the purpose of provide comfortable and cosy interior spaces for customers, shopping malls are fully equipped with mechanical air conditioning systems and constructed with non-transparent, windowless and blind façades. However, today the most of the building functions requires daylight. So, if a dead mall has a blind façade, new windows should be open and admit to daylight for adopt new functions. Most of the mall façades are constructed with detachable and modular systems like aluminum composite panels or precast concrete claddings, thereof it is not a laborious process that disassembling and renewing façade. However, the whole facade does not have to be removed in some cases, it may be adequate to open new windows. Beside this, reduce mechanical systems in building and provide natural ventilation and lighting is utilitarian procedure in terms of sustainability.

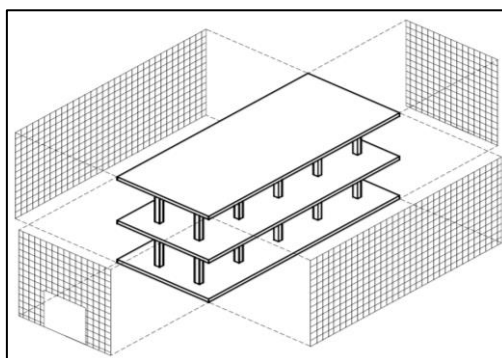


Figure 5: Disassembling blind façade

4.2 Cutting of the Roof

Big box type shopping malls sell discounted products and they are commonly built at the suburbs of American cities due to their cost effective and easy construction methods. Architectural design of big boxes mostly consists open and flexible floor layout but without skylights on their roofs. These type of malls can be reused by adding skylights to the roofs and creating courtyards in their midst. Also, new spaces can be generated by dividing floor heights. Reusing big box malls requires less efforts compared to other type of shopping venues; their open floor layouts, formations on single floor, being small scale and use of steel materials on constructions facilitates repurpose possibilities (URL-3).

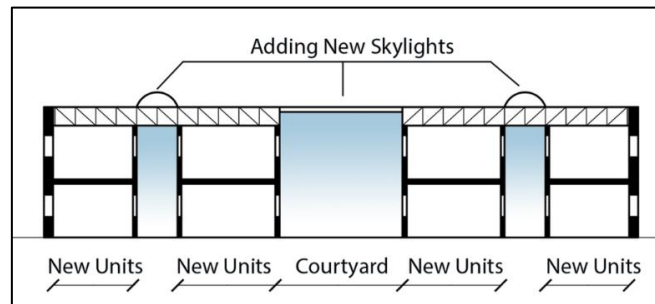


Figure 6: Creating new units at big box store

4.3 Addition or Subtraction of Building Mass

Within the scope of the reuse project, existing plan layout and structural system of a dead shopping mall, may not be suitable for an adapting a new function. In this case, different methods may be required due to physical condition and footprint of the building. Generally the structural carcass of modern buildings has a longer life span than its functions. Though that shopping malls are defined as modern buildings, their structural systems could be intervened especially for newly added uses. Modular and flexible structural system components used at shopping mall constructions makes easier to expand existing buildings. Other than this, the building may be unnecessarily large for another purpose. Owners of the new functions may wish to downsize the existing structure. Hence, a new annex building to the existing mall structure can be constructed, or a part of building mass can be subtracted, according to new functions requires (Stout,2015).

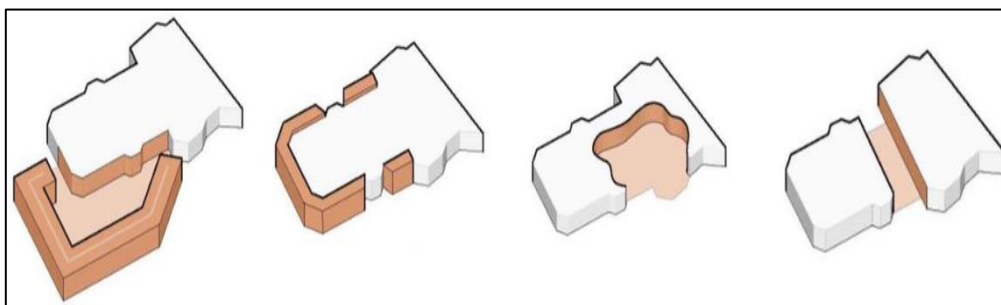


Figure 7: Addition and Subtraction diagrams

4.4 Combining with Mixed Functions

In modern shopping mall designs, there are also elements that make it difficult to repurpose. For example, even a medium sized shopping mall is large scale and has wide dimensions to transform into a single use function. Because of that, a shopping mall that has lost its function can also be used to meet the multiple needs of the community. For the purpose solve transforming to single use problem, one of the successful reuse strategies of a dead mall is, configuring a balanced function mix between the uses. A synergic and dynamic function mix contains residential, retail, office, food areas and other notable usages together. On such a function schematic, all usages will interact and supports each other like cycle. The synergy is quite efficient when the functions are close together and it is easy that moving from one to the other. Also, repurpose a dead mall with mixed functions will revitalize the immediate surroundings in manner of

economic. This strategy is especially effective for high rise shopping mall structures in the downtown areas of the cities and different activities will be operated in the same building (Dunham-Jones,2011).

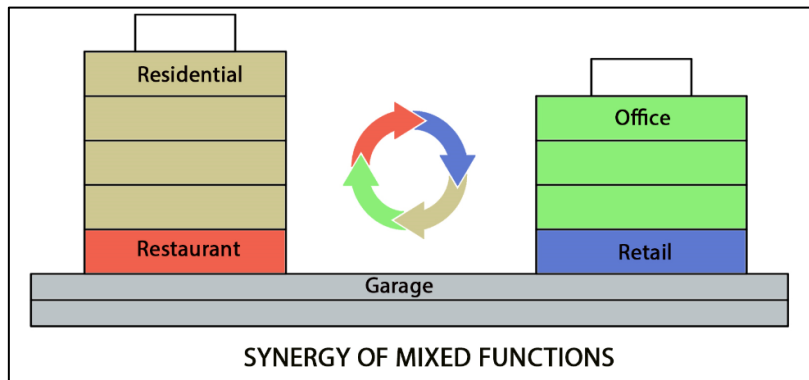


Figure 8: Mixed function diagram

4.5 Finding a Coincide Architectural Function That Requires Similar Spaces

Shopping mall plans mostly formed by repetitive units like stores, wide circulation corridors, car garages, food courts and common used toilets (Birol, 2005). In terms of reusing a dead shopping mall, it is important that finding a new function nearly similar zoning scenarios of existent plans. That way, there will be less interventions to the building and the costs associated with it will be reduced. For example, educational campuses (University, college), hospitals, accommodation facilities requires nearly analogous spaces like the shopping malls. Shopping malls repetitive units (stores) with as little modification as possible can adopt to classrooms, clinic and surgery rooms, hotel or dormitory rooms easily. Corridors, food areas, car garages and toilets are used in common at these functions already, therefore there is no need to make much renovations about that spaces. This strategy is useful for low rise shopping mall types in particular.

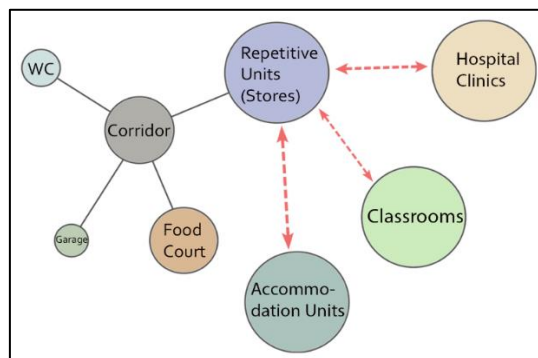


Figure 9: Bubble diagram of shopping malls

4.6 Increasing the Number of Entry Gates

Due to security issue and some other architectural decisions like maintaining customers remain inside the building; shopping malls have only a few numbers of entry gates. Because of that, it is not easy to come in and exit of a mega mall(Underhill, 2004). Within the reuse process, adding extra entry gates facilitate the accessibility of the building. Also, new added entrance doors will enhance the penetration of building inside and assist the success of the new functions that generated by dividing units on ground floor.

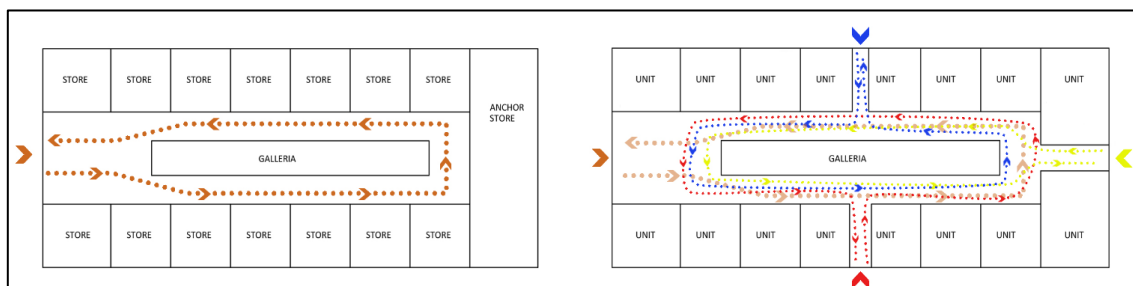


Figure 10: Circulation diagrams

5. CONCLUSION

Shopping malls are behemoth structures and built with great investment costs. In this sense, they require tough efforts and creativity to reuse process in different functions due to their physical and architectural characteristics, such as large building masses, being built as multi-storey and single function. Nevertheless, it is certain that a dead shopping mall will not be able to make any economic or social contribution of its urban areas and nearby society. Despite their unfavorable features, shopping malls also have positive opportunities in terms of reuse for another purpose either. Such qualities as modern and modular structural systems, existing adequate infrastructure, proximity to highways of urban areas, availability of car parking, provide suitable conditions for reuse. For effective use of limited resources, reusing a dead mall according to urban needs, is much sustainable and low cost solution compared to demolish it. The reuse strategies explained above, are generalized and derived from reused dead shopping mall examples. However, more specific methods can be applicable due to existing shopping malls different architectural components. Also there are examples that renovated with little modifications and not intervened structurally. But at the same time, one of the most important result from the examples is, as the scale of building grows, interventions to structure and costs are increasing.

As new types of shopping venues and technologies emerge, it's getting harder to repurpose a dead mall without major interventions. According to published reports, it is forecasting that the numbers of dead malls will increase in next years. Reuse of dead shopping malls should be supported and encouraged for communities useful functions. The results that schematized in this study, are designed to formulate solution proposals for future dead spaces and utilizable to create better urban areas.

ACKNOWLEDGEMENT

This study is part of an ongoing master's degree thesis Adaptive Reuse of Dead Shopping Malls, written by Ali Buğra Sarıakçalı under the supervision of Assoc.Prof Kunter Manisa at Yıldız Technical University Faculty Of Architecture Building Research and Planning master programme.

REFERENCE LIST

- Arslan, Hakan. (2015). Kente Karşı Bir Suç Olarak Alışveriş Merkezleri, Bilimsel ve Popüler Eserler Dizisi, Hegem V Yayınları, Ankara
- Biröl, G. (2005). Çağdaş Alışveriş Merkezlerinde Kent Dokusunun Yeniden Yorumlanması, Gazi Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, 20 (4), s. 421-427
- Christensen, Julia. (2008). Big Box Reuse, Massachusetts Institute of Technology, MIT Press, Cambridge
- Coleman, P. (2007). Shopping Environments: Evolution, Planning and Design, Architectural Press, Oxford, USA
- Çakır, Özge. (2015). Alışveriş Merkezlerinin Varoluş ve Değişim Süreci: Beylikdüzü Örnek Alan İncelemesi, Master Thesis, Istanbul Technical University, Istanbul
- Dunham-Jones, Ellen and Williamson. (2011). Retrofitting Suburbia: Urban Design Solutions for Redesigning Suburbs
- Dallessandro, Anthony R. (2015). The Life and Death of an American Archetype: The Shopping Mall and the Suburbs, Master Thesis, The Pennsylvania State University
- ICSC, (2014). Economic Impact Of Shopping Centers, Published Report
- Moccia, Francesco Domenico. (2012). Shopping mall crisis and a new perspective in the framework of the polycentric multiuse metropolitan model, The Sustainable City VII, Vol. 1, WIT Press
- Scharoun, Lisa. (2012). America at the Mall: The Cultural Role of a Retail Utopia, USA
- Stout, Taylor Lane. (2015). Left For Dead: Reurbanizing and Adapting Failing American Malls, Master Thesis, University of Maryland

Underhill, Paco. (2004). Alışveriş Merkezleri Nereye Kadar? (Call of the Mall), New York, USA

URL-1[<http://sephlawless.com/black-friday-2014/>, Access Date: 29.12.2017]

URL-2[<http://www.evagyd.com/haberler/eva-gayrimenkul-ve-akademetre-2017-2019-avm-arastirmasinin-sonuclarini-acikladi/460/>, Access Date: 29.12.2017]

URL-3[<https://99percentinvisible.org/article/ghost-boxes-reusing-abandoned-big-box-superstores-across-america/>, Access Date: 29.12.2017]