ABSTRACT: This study is focused on the evolution of massive retail architecture as polyvalent container and consistent public space no longer located in the periphery, but as generic spaces within inner cities. Its aim is also to reflect on the adaptation of these large commercial complexes as they are affected by the new digital market and their impact on the urban design concerning public interiors in European cities. Some exemplary types of shopping malls: L’Illa in Barcelona, Spain; Almere Stad shopping centre in Almere, Holland and St David’s in Cardiff, UK, have been critically compared by analysing their urban, formal and functional transformations.

KEYWORDS: Urban Design, Public Spaces, Retail Shopping, Malls, Web-shopping
“History of a Building Type” exhaustively studied the arcades and indeed established a typology of arcades (figure 1) and hence an understanding of their formation and evolution. He defines the arcade as “...a glass-covered passageway which connects two busy streets and is lined on both sides with shops. Stores, offices, workshops or dwellings may be located in the upper stories. The arcade is the organizing force of retail trade. It offers public space on private property as well as an easing of traffic congestion, a short cut, protection from the weather, and an area accessible only to pedestrians...The arcade is, therefore, an object of building speculation. Its prosperity depends to a considerable extent on the urban context in which it is located.” (Geist, 1936, p4)

It is the first time in Europe where public space is created in private property, creating an exclusive environment protected from the weather for trading. Arcades are described as mixed use developments that relate to some extent how the guilds were organised in its section providing shops, accommodation and storage.

![Figure 1](image1.png)

**Figure 1** Selection of different qualities of arcades in Europe. Left side image: Galerie Colbert Rotunda, litograph by Billaurd (1828); Mid-image: arcade façade, Korte Hoogstraat in Rotterdam and right side image, cross section of arcade. Source: Geist, J. F., “Arcades. The History of a Building Type”, The MIT Press, 1936, pp342, 501, 551

On one hand the arcade is a public space due to how it shares the physical characteristics with the street. What differentiates it is the glass roof. On the other hand the arcade –the space between the buildings- is set up such that the considerable freedoms allowed on the street are removed. Nowadays most arcades have physical control devices of some kind at each end, managing public access and also people’s behavior. Therefore the arcade is a public space in private property with attributes from both; called by some *pseudo-public* space².

In 1852 the first department store, Bon Marché, was opened in Paris. A new retail model was introduced containing a series of shops in the same building stacked vertically³. This model was adopted in Europe and also in America and later on was displaced to the periphery of cities instigating the phenomenon of shopping centres.

Shopping centres after World War II appeared in the United States and occurred thanks to two significant reasons: Firstly, it was a response to the new production systems and secondly because the United States’ government, industry, business community and financial system encouraged the populace to consume in great amounts. In 1947 the Marshall Plan was implemented in Germany, which also favoured the construction of shopping centres⁴.

Initially shopping centres in the United States were built outside city centres with easy accessibility by private transport. They consisted of a big box sitting on a large piece of land allowing for vast amounts of car

² Davis, M., City of Quartz. Excavating the future in Las Angeles, Vintage, 1990, p 226
⁴ Pimlott, M., Boutiques and Other Retail Spaces. Edited by Vernet, D., Wit, L de, Routledge, 2007, pp 03, 04
parking (figure 2). People visited these places to shop, socialise and get information in this order. The box contained two main types of spaces: Storage plus servicing and retail plus mall. Visitors only had access to the second type of spaces: Retail and mall, which was just above 50% of the total space.

Figure 2 American shopping mall in postcards. Source: Boring Postcards USA, Phaidon 2004

Generally 40% of the shopping centre retail space was dedicated to large units for department stores or large shops and 60% to small units. All the shopping centres contained an anchor store as attractor. The centre area and mall occupied about 10% of the total shopping centre space.

Shopping malls were mass oriented encouraging people to shop. Shops were generous in ensuring that there was sufficient space to keep several items of the same model meaning that there were significant levels of stock on display. Consumers visited the centre with two objectives: to shop and to have a collective experience. They would be very disappointed if they left the centre without purchases or not having felt part of a collective.

The success of the shopping mall was measured by sales in the shops. The shopping mall needed to be attractive enough for consumers to spend a substantial amount of time there, thereby guaranteeing expenditure of money.

In Europe in the middle of the 60s, shopping malls were introduced into city centres and due to this new location, their modus operandi changed slightly. Car parking was provided but in multi-story car parking buildings placed less than 200m from the shopping centre itself. The footprint of the shopping centres became smaller due to the higher land values and restrictions on available space. Instead the same programme was accommodated by increased height. The consumers still wanted to experience the collective space, shop and take the shopping home preferably by car even if public transport, in this case, was an option.

Until this point the trips to the shopping centre were necessary to shop, experience the sense of belonging to a society, socialise and keep updated with information about new products and fashions. Things stated changing with the introduction of TV in the 70s into most households. Hence the masses had the need to visit the shopping centre for similar reasons as before; to shop, have the collective experience, socialise and also to satisfy their curiosity about new products and fashions announced on TV.

In the 90s with the introduction of computers not just in the work environment but also in the household, the digital era started bringing fast and radical changes affecting the way we socialise, work, receive information and shop. Everything now goes much quicker than before; news, gossip, fashion and so on is received by society the moment it is created with no delay. The effect of bringing the computer into the

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7 Ibid p29
private domain has materially affected the way we shop.

3. NEW SHOPPING CONDITIONS TAILORED BY ONLINE SHOPPING

In the last fifteen years sociologists, philosophers, anthropologists and others like W. Mitchell, 1999, M. Castells, 1996, T. Horan, 2000 have questioned the influence of the digital age. Back in the 90s it was difficult to understand to what extend our cities, even more our everyday life, would mutate due to the introduction of the computer in the working environment and domestic domain.

Since the end of the 90s, with the introduction of search engines like Google, people have been able to find information about everything from everywhere. We have all become familiar users of the internet to the extent that most businesses and individuals can no longer operate without it.

The term Webshop refers to a place of business where web development, web hosting and other types of web related activities take place. Buying online has introduced new ways of reducing costs by reducing the number of staff needed and also the space required. It is a more effective way of getting products to people and spreading into different demographics.

From a sociological perspective, online shopping is arguably the most predictable way to shop\(^8\). Shoppers know exactly what website to visit, how much the product will cost, and how long it will take for the product to be shipped and delivered. Online shopping has become particularly routine and predictable, which is one of its great advantages to the consumer.

![Figure 3](image)

**Figure 3** Diagram shows the fast growth of online sales (left hand side) and the progressive mutation of the mall, from suburban to urban display. Source: authors.

Why does electronic shopping exist? For customers it is not only because of the high level of convenience, but also because of the wider selection; competitive pricing and greater access to information\(^9\). For organisations it increases their customer value and the building of sustainable capabilities, in addition to the increased profits.

If we compare this with the traditional way of shopping, the main benefits of online shopping are as follows:
- Online stores are usually available 24 hours a day, and many consumers have Internet access both at work and at home.
- Searching or browsing an online catalogue can be faster than browsing the boutiques of a physical store.
- Compared with conventional retail shopping, computer shopping enriches the information environment of virtual shopping by providing additional product information, such as comparative products and services, as

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well as various alternatives, attributes and user generated reviews.
- Good dealing power of consumers. E-buyers can enjoy a broader choice.
- Internet increases commoditisation\(^\text{10}\).
- Increasing numbers of new competitors. Online shopping means that it is easier to introduce new services with lower overheads
- Variety among competitors. It is easier to introduce products and services to different markets

It is habitual nowadays that people do their research before going shopping, reading instructions and reviews or even doing their shopping on-line. This is influencing the shopping trends and defining what we want when we go shopping. The consumer has become a potential customer who uses the shopping centre as an exhibition centre displaying goods.

The success of shopping malls is no longer measured by store-sales. Instead it is measured by foot fall. It is still crucial that the shopping centre attracts lots of customers to visit the shops because they are potential on-line shoppers, but the sales may occur elsewhere (on-line).

We do not go shopping any longer, in the traditional sense. We go browsing. We want a personal and unique experience that takes little time but lasts long in our memories. We want entertainment. We want to see, touch and smell a product that we plan to purchase. We are open to customised, tailored and individualised products.

Nevertheless some consumers prefer interacting with people rather than computers, perhaps they find computers hard to use. Even now, not all online retailers have succeeded in making their ‘webshops’ easy to be used or reliable. In addition, online stores must describe products for sale with text, photos, and so on, whereas in a physical retail store, the actual product and the manufacturer’s packaging will be available for direct inspection. In a conventional retail store, assistants are generally available to answer questions. Most of the online stores rely on e-mail or phone calls to handle customer queries.

The new retail shopping has learnt from the effect of the information load. There are two factors that rule shopping: Complexity and Novelty. Complexity refers to the number of different elements or features of a site, which can be the result of increased information diversity. Novelty involves the unexpected, surprising, odd, or unfamiliar aspects of the act of shopping. In the structure of new shopping malls the novelty dimension keeps customers exploring the stores, while the complexity dimension has the potential to induce impulse purchases through events or the like.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure4.jpg}
\caption{Comparative study of programmes in the following chosen case studies. Source: authors.}
\end{figure}

All these pro and cons are rapidly shaping the definitions of contemporary physical stores\(^\text{11}\). The new

\(^{10}\) Comoditization (coined by Business Theory, early 1990s) is the process by which goods and services that has economic value and is distinguishable in terms of attributes (uniqueness or brand) end up becoming simple commodities in the eyes of the market or consumers. It is the movement of a market from differentiated to undifferentiated price competition and from monopolistic to perfect competition.

\(^{11}\) Vernet, D., Wit, L de, Boutiques and Other Retail Spaces. Routledge, 2007
shopping malls are being conceived as places for the customer rather than places for the consumer. They are being re-branded as exhibition spaces or showrooms rather than mere stores. It implies that these large stores must provide high spatial adaptability being, as they are, located in congested urban sites. They are no longer mono-functional entities but polyvalent containers of mixed uses, ensuring quick adaptation over time.

4. CASE STUDIES

The analysis of the following case studies aims to highlight the similarities and differences between them and what makes them more adaptable to overcome the continuously changeable market. The three case studies are from different European countries and contrasting cultures. The three shopping centres have emerged for different reasons and under different circumstances.

![Comparative scale study of the chosen case studies in cities according to FAR. Source: authors.](image)

4.1. L’Ilia shopping centre, Diagonal, Barcelona, Spain

This shopping centre was opened to the public in 1993. It gives a response to its context by recomposing the urban area. It acts as a parasite in the sense that it absorbs from its surroundings. It has a strategic location in relation to public transport and infrastructure. It is a centraliser and sits within a relatively high density urban area. The building does not have the vocation to become an icon; it does not want to be different.

The building deals with different scales: the large scale to the North and the medium to small scales to the South. This opens the opportunity for the building to be read from the skyline, as postcard. The project started with an open programme by creating a generic frame and ensuring that the interior spaces are adaptable. The programme has been compressed if it is compared with a traditional shopping centre and a large part of the programme takes place underground.

The façade of the building is neutral enabling the building to support varied uses. This can be understood by the size and detail of the openings.

The building is designed to create an experience of surprise and enchantment for the visitor when they pass through the façade and arrive in the shopping centre. It is unpredictable. This pseudo-public space is used mainly for circulation and some areas strategically placed in relation to accesses have been designed as generic inner spaces for novelty to be presented to the customer; promotions, exhibitions, informal concerts and so on. These are places within the shopping centre where have great degree of surprise and a place for socialising.

The shopping areas can be accessed from different points and levels which are all located in relation to
the urban context and link with the generic inner spaces mentioned previously. A series of spaces have been designed establishing a game of scales to link the street with the generic spaces inviting the customer in ensuring they won’t miss the spectacle. Accesses to less public uses have been solved by creating a clear distinction between inside and outside, public and private.

By studying this case we discover that this building can be interpreted as an “urban chameleon” capable of adapting to new situations by obeying economic changes, fashion trends, new technologies and so on.

Figure 6  L’Illa shopping centre. Left side: Inner and street views of the complex. Right side: commercial floors with main services. Sources: authors and official website L’Illa: http://www.lilla.com

4.2. Almere Shopping Centre, Almere, The Netherlands

This shopping centre is situated in Almere, a suburban city of 180,000 inhabitants, 35 km east of Amsterdam. The shopping centre is the core of the new master plan. The Office for Metropolitan Architecture (OMA) won an entry competition (1994) and was commissioned to develop a master plan with a strong urbanity by creating density and identity. The main idea as Floris Alkermade, ex-partner OMA, states was to “(…) take the entire program we needed and concentrated everything in two zones, one at the station and one at the lake to create a much denser city. Of course, we could have kept on copying whatever we found anywhere but in order to get a recognizable identity we created density first of all. The zone at the lake was a kind of programmatic sandwich of housing, shops and parking on top of each other, with a size of 300m x 300m”\(^{12}\).

The initial idea was for central shopping was a massive volume. It was conceived as an ‘artificial hill’ in order to bridge the cross road. Afterwards it was fragmented into pieces. The additional advantage of OMA’s scheme was that their proposal did not devour all the empty spaces allowing future programmatic infills.

Thus this shopping centre emerged as a formation generated by the juxtaposition of uses assuring front façades to every commercial plot. Its fold creates continuity between two suburban parts of a city reconstituting the flows of movements. It has a strategic location.

In consequence, the resultant urban sequence is: street, shop, loading area, parking and the back street where trucks can drive. It is clear here as urban design strategy that the animation of streets is given by not having service fronts. In this shopping centre 100% of the loading is done from beneath, so Alkermade affirms “the density is not only a density of masses, but more important also a density of functions”\(^{13}\), and “for


\(^{13}\) Ibid
instance, the cinema block and mega-stores were only possible because of the huge amount of parking area, which we integrated in the basement. The cinema has 2,500 seats, which means that twice a day 2,500 people are not driving to the periphery, but 2,500 people enter the centre. So we are creating conditions in the centre that you would normally only find in the periphery.\textsuperscript{14}

The shopping mall’s programme has been compressed if compared with a traditional shopping centre. It is a ‘Big Mac’. Considerable amount of servant uses occurs underground. The underground has a generic frame and the upper ground hold variable volumes.

The Almere Stad effect follows this logic: If a city becomes bigger, it requires a gravity point. Alkermade says that “when a city becomes bigger and bigger, it is like when a star is born. From a certain moment on an own gravity field is being constructed. It happened that although Almere-Stad had the same shops and prices like Almere-Haven, people from Almere-Haven preferred to go to Almere-Stad to do their shopping or entertainment.”\textsuperscript{15}

By studying this case we find out that the branding was from the beginning an essential factor of this shopping centre by creating a new polarity. This mega container of mixed-use was treated as a sort of scenic postcard visible from the highway and the lake.

\textbf{Figure 7} Original master plan (1994): Mixed-use model of housing, shops and parking; cross section and layout size of 300m x 300m. Sources: Monu magazine issue 7 & OMA online publications.

4.3. St David’s 2 shopping centre, city centre, Cardiff, UK

This shopping centre is due to open in October 2009. It creates centrality due to its size and strategic location in relation to the city centre and the train station. It is the prolongation of an existing shopping centre built in the 80s with around 60 stores and with the new addition it becomes one of the biggest shopping centres in the UK.\textsuperscript{16} It wants to evoke the old arcades that are present in the surroundings built during the XIX century. It is a monolithic building, an exploded mall.

Most of the programme is developed above ground with just some car parking and part of the servicing allocated underground. The different parts of the building and the facades announce the programme. A podium contains the shopping centre which is the base to the residential above. On one hand the pseudo-public space belonging to the shopping centre contains generic space for a wide variety of activities to take place. The entrances to it are conventional and clearly defined. On the other hand the residential above contains specific space in accordance to conventional housing scale, structure and layout. This building has been design with a closed programme for a permanent programme.

This development is responsible for the renovation of a large part of the city centre of Cardiff, including

\textsuperscript{14} Ibid
\textsuperscript{15} Ibid
\textsuperscript{16} http://www.stdavids2.com, accessed on 13/09/09
the construction of the city’s central library. This is a stand-alone container with generic space separated from the shopping centre. This shopping centre shows the effect of the British development systems and perhaps the heritage to some extent of the zoning planning techniques used in the 70s and 80s.

By studying this case it becomes evident that the building is prescriptive, evident, predictable and explicit.

Figure 8  Inner/outer views of St David II. Source: http://www.stdavids2.com.

5. FINALE

Nowadays, shopping centres are especially affected by the internet and the widespread availability of on-line shopping. The shopping centre has become a place where different brands must advertise themselves. The shop in the shopping centre is an extension of and complementary to the on-line portal. Consequently the shopping centre is the exhibition space where brands present their products and where customers expect an intense sensory experience where they can browse, touch and smell the products.

The consumers have been replaced by demanding customers. The shopping centre is no longer a place for the masses. On the contrary, it is a place for the individual; customised and tailored. The customer continually browses in the shopping centre and on-line for new things, ideas, experiences, for surprises, for the rare. The customer who visits the shopping centre does not feel the need to buy anything. Therefore the success of shopping centres is measured by footfall rather than sales.

The shopping centre must be generic and flexible to enable mobility and adaptability of spaces available for different brands. A brand one month may need 300 sqm to present a new product but the following month just 3 linear meters plus some complementary space. These demands will be placed on the managerial team of the shopping centre and the shopping mall must be able to accommodate them. The versatility of spaces provided will be a parameter measured to assess the success of the shopping centre.

This new trend affects the compactness of the programme, aiming to save space but also to intensify the sensorial experiences. Whether this trend continues to change the morphology of the shopping centre remains to be seen, but future developments could result in retail shopping starting to resemble exhibition spaces or theatre stages.

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