The Architecture of Consumption: A New Transient Shopping Space

Ensam Lee
THE ARCHITECTURE OF CONSUMPTION:
A NEW TRANSIENT SHOPPING SPACE

ENSAM LEE
Shopping:

a form of activity in which an individual visits places where goods are sold in order to look at and buy things

"recreational outing or a social occasion" (Feinberg et al., 1989)

"one of the last remaining form of public activity" (Chung et al., 2001)

Mall:

a large building or group of buildings containing stores of many different kinds and sizes

"worlds in themselves" (Crawford, 1992)

"circuses for the masses" (Goss, 1993)

"indoor cities" (Uzzell, 1995)
At this point in history shopping spaces are drastically different per culture. They are truly public places and are centers of commerce, politics, and culture.

**1700s**

**CONSUMERISM**

**SHOPPING ARCADES**

During the 18th and 19th centuries shopping spaces started to converge to similar forms. Although there were other types of spaces that existed and those vastly different for various cultures a dominating type of organization were the arcades.

**RISE OF THE AUTOMOBILE**

With the invention of the automobile shopping spaces had to make a drastic change in order to accommodate this new mode of transportation. Shopping centers had to incorporate parking spaces.

Country Club Plaza was the first to officially incorporate parking spaces.

**1900s**

**RISE OF SUBURBIA**

**DUMBBELL PLANS & ANCHORS**

Malls started to adopt dumbbell plans. This was a way to house shops in a way that organization of the increasing number of shops that were being put into malls and in order to encourage circulation anchor stores were added to ends of these linear spaces.

**SPECTACLE MALLS**

As malls became destination points and consumer society only grew, malls became destination spots. They started to compete by becoming the biggest, the first, the only, in other words, spectacles.

**2015**

**DIGITAL RETAIL GROWS X5 FASTER**

**TRANSIENT SPACE:**

responds to the ‘most subtle changes in society’ (Chung) “life-cycle’ through which they grow in appropriateness “ (Berger and Bray 2008)
How are the ways people shop changing right now due to the effects of technology?
What kind of effects will the rise of various technologies such as online shopping have on the way this generation will shop?

How can architecture make use of these technologies in designing a shopping space that provides a flexible and unique shopping experience for consumers?

How can architecture take advantage of these changes to provide a type of public space that will not only keep ‘shopping malls’ as we know it relevant not but be able to adjust to future cycles of change?
Areas of Focus

State of the Mall

Digital

Online Shopping

Mobile Device

Technology

Digital

Multichannel Hybrid Process

Convenience

Payment Methods

Virtual Shopping

Virtual Groceries

Virtual Fitting Room

NFC

Pay by Selfie

Apps

Beacon Tech

Multi-Channel Hybrid Process

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State of the Mall
Effects of Online Shopping:

The effects of online shopping on the traditional brick-and-mortar retail can’t be denied. The percentage of online retail sales in the total retail sales continues to grow and will account for an increasing amount of sales in value as well. Studies also show that digital transactions have penetrated all age groups.

Data from analysis and forecast Forrester Research and studies by eMarketer based on US Department of Commerce.

Online vs. Total Retail Sales Growth

Study by eMarketer based on US Department of Commerce.

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THE STATE OF THE MALL...
“Within ten to fifteen years, the typical U.S. mall, unless it is completely reinvented, will be a historical anachronism—a sixty-year aberration that no longer meets the public’s needs, the retailers’ needs, or the community’s needs.”

—Rick Caruso, C.E.O. of Caruso Affiliated, at the annual National Retail Federation’s convention in January of 2014.
OBSERVATIONS:

1. Our smartphones are leading to certain changes in the way people shop.
   a. Beacon technology allows businesses to target, connect, and advertise to shoppers in proximity to not only the store but specific items within the store. According to BI Intelligence, this technology will account for $44 billion in sales in the coming year of 2016.
   b. Virtual shopping starts to question the definition of a shopping space since instances like Tesco's subway grocery store shows the potential fluidity of shopping spaces.

2. Retailers have started to shift their focus to experience oriented shopping (Debek 2015).

3. Malls aren't actually dying off like many think. Only 3.4% are dying, which means 96.6% is doing fine (Hurley 2015).

4. Malls are still popular, mall occupancy is at its highest since 1987 (Hurley 2015).

5. Shoppers choose online shopping due to convenience factors; being able to shop whenever, low prices, quicker process, easier than going to stores, etc. (McPartlin and Dugal 2012).

6. Shoppers find the lack of pre-sale advice and sense of community to be the cons of online shopping.

7. The way people shop has already started to change into ‘multichannel’ or ‘hybrid’ methods (Fantoni et al. 2014).

8. Malls have started to focus on becoming entertainment destinations or lifestyle centers.

9. Older mall plans have relied on the dumbbell plan.

10. Anchors have primarily been used in the past as a method to get shoppers to move throughout the mall.

11. Malls go through cycles of growth (Duncan et al.)

12. The growth of digital commerce is 5x that of physical retail (BI Intelligence).

13. Studies show that people seek that mall because of its social aspect (Feinberg et al. 1989).

14. The biggest and newest malls, which make up about a third of malls in the U.S., are thriving.

15. Malls have consistently made renovations and revamped their look to keep with changing consumer expectations and trends.

16. There is a focus to ‘brand’ new malls or their renovations.

17. Younger generations still prefer to have both options of shopping online and a store they can visit.

18. Malls for luxury goods and outlet malls showed biggest growths according to analysis by Green Street Advisors.

THE STATE OF THE MALL . . .
Summary:
1. Studies show online retail continues to grow and will take on a growing percentage of total retail sales causing malls to turn to various options to keep up with the competition.
2. Research suggests malls (in the sense of a physical shopping space) as a whole won’t go away but less competitive classes of malls will die out. However, the majority of U.S. malls are alive and healthy for the most part.

Changing Identity:
The ‘mall’ used to be a place shoppers visited to purchase products such as clothes. Now shopping is merely one of the options the mall has to offer. It is just as much an entertainment destination as it is a shopping space and for some it may even be the office of where their lodging is for their trip. Even schools have popped up in what we used to identify as the mall.
Dubai Mall
5.41 million sqft

Successes:
Established itself as an entertainment destination that people actively seek not necessarily for the shopping. A spectacle in its sheer size (13 million sqft or 50 football fields) and the combination of programs the mall contains. The number of visitors increase each year (2014: 80 million).

Failures:
While innovations had to be incorporated into the mall due to the kinds of programs it contains and its massive size, it lacks innovations that take into account changing shopping patterns. There isn’t an effort being made to close the divide between online and physical shopping besides establishing itself as a tourist destination.

Santana Row
San Jose, CA

“multi-purpose leisure-time destination, including restaurants, entertainment, and design ambiance and amenities such as fountains and street furniture that are conducive to casual browsing.”
--ICSC definition

Successes:
Becomes a kind of ‘destination’ as well catering to a specific kind of population. Contains alternative programming to shopping that is different from what the entertainment destinations have to offer.

Failures:
Limited to certain kind of climates or seasons as lifestyle centers tend to be open air malls. This kind of approach still relies on shopping as the main function and doesn’t consider factors that make online shopping a more convenient option.

Beaugrenelle Mall
Agence Search

Successes:
A competition design where the architects deliberately addressed current issues regarding the mall. Responds to the new focus on ‘branding’ a mall to make it a unique experience. Aims to raise the mall’s competitiveness.

Failures:
Responds to the issues in a singular way where the solution is based on a memorable visual experience revolving around the wooden lattice atrium. Doesn’t incorporate available technologies or questions new kinds of spatial layout in response to changing shopping processes.
**Wooden Orchids**  
Vincent Callebaut

**Successes:**
A competition design where the architects address the issues of typical malls by creating an alternate function for the mall. It is a farmer’s market and garden first, shopping is the alternate activity that can be done. Unique strategy in spatial layout which leads to unique experiences and brand. Balances public and private spaces through same spatial system.

**Failures:**
The kind of shopping that is offered is still traditional as no technologies have been incorporated into the design.

**Exhibition Hall**  
OMA

**Successes:**
Has alternative programs but also a function, which is the cultural programs where the mall also becomes a space that cultivates new leaders in the design industry. A new strategy to organize the shopping and the cultural programs.

**Failures:**
Issues that revolve around the shopping aspect of the design haven’t been resolved. Convenience factor is still lacking.

**Abu Dhabi Central Market**  
Foster + Partners

**Successes:**
A design that reacts to the vernacular. Reverts back to the souk as the strategy behind the spatial layout. A series of courtyards exist in the mall. There is a rhythm to the circulation. Unique experience.

**Failures:**
The same strategy to apply the souk’s spatiality causes there to be a lack in clarity in the circulation. Lacks a variety in programming and even the kinds of stores (only luxury stores) that caused it to be an unpopular destination.
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<th>Successful Elements</th>
<th>Unsuccessful Elements</th>
<th>Methods</th>
<th>Examples</th>
<th>Application</th>
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<tr>
<td>Alternative Programming</td>
<td>Entertainment dest. - focus on alternative activities (about the options) Lifestyle centers - alternative social gathering spaces (about the atmosphere)</td>
<td>West Edmonton Mall Dubai Mall</td>
<td>1. Study new activities the ‘new mall’ might have. 2. Most have been applied already...but what else? 3. Could malls become more significant players in their communities?</td>
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<tr>
<td>Alternative Function / Identity</td>
<td>1. Having a second program that takes equal if not bigger precedence. 2. Shopping as part of the alternative activity.</td>
<td>Wooden Orchids Mall</td>
<td>1. The mall shouldn’t be the mall anymore? 2. What can the main function of the ‘new mall’ be? 3. What will it be called? 4. What kind of functions could hold the same amount of importance? i.e. Wooden Orchids</td>
<td></td>
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<td>Branding</td>
<td>1. Cohesive / unique aesthetic 2. Memorable space 3. Unique experience 4. Specific application of technology 5. Spatial layout</td>
<td>Beaugrenelle Mall Beaugrenelle Mall</td>
<td>1. What architecture strategies can make the mall recognizable? Plan, section, elevation? 2. Is the space itself or what it looks like that govern this? 3. What unique experiences can be offered in a physical space that online shopping can’t?</td>
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<td>Becoming a destination</td>
<td>1. A recognizable identity. 2. A reason to revisit besides shopping. 3. Becoming a ‘spectacle’?</td>
<td>Dubai Mall New Century Global Center</td>
<td>1. How can a mall become a ‘destination’ without becoming a temporary title holder?</td>
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<td>Lack of convenience</td>
<td>1. Understand what makes online shopping more convenient to compete with those factors. 2. Size - people like big malls yet their size also makes them inconvenient. 3. Easier circulation. 4. Smoother shopping process.</td>
<td>Abu Dhabi Market West Edmonton Mall</td>
<td>1. List the factors that shoppers find convenient about online shopping. How can physical malls combat those factors? 2. How can malls stay big without seeming so big? 3. Alternative circulation methods?</td>
<td></td>
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<tr>
<td>No response to online retail / Technology</td>
<td>1. Use beacon techn to personalize experience. 2. Allow shoppers to use their mobile device for smoother shopping experience. 3. Implement new technology. 4. Incorporate the option for shoppers to browse online selections in the store.</td>
<td>Abu Dhabi Market Beaugrenelle Mall</td>
<td>1. Study available retail technologies. 2. Study ways to apply existing mobile technology into the shopping experience. 3. Study possibility of malls become spaces shoppers can do the ‘online browsing’ in a social setting.</td>
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Beacon Technology

**What is it:**
Technology that uses Bluetooth low-energy (BLE) to pinpoint location of shopper and deliver messages appropriate to the time and place. Different from RFID because BLE is more private.

**Effects & Potentials:**
$4 billion in retail sales were due to beacon advertising in 2015. Projected to account for $44 billion in 2016. *According to BI Intelligence analysis.*

Mobile Payment

**What is it:**
There are various ways to make payment with mobile devices right now.
1. NFC technology in the form of a digital wallet.
2. WAP payments are when users connect to the internet to access accounts.
3. SMS payments are when transactions are made via text messages.
4. Pay-by-selfie will be available to MasterCard users as early as the middle of 2016.

**Effects & Potentials:**
Combats the convenience factor of online shopping. Makes shopping process smoother and faster. These forms of payments are expected to account for $210 billion in transaction value by 2019. *According to analysis by eMarketer.*

Amazon Echo and Dash

**What is it:**
Amazon Echo (Alexa) is a voice-controlled machine that is always listening to answer questions, control smart devices, or order products online. Amazon Dash are a series of buttons for certain products (Tide) that you can press to automatically order for delivery. There is also a new scanning device that can be used to take pictures of or scan products for reordering.

**Effects & Potentials:**
Shopping in a physical space doesn’t have to mean the shopper ends with products they have to carry home. They can browse, test, then scan products they choose to be delivered.
3D Shoe Designer

What is it:
A project between Nordstrom and “Shoes of Prey” (Australian online shoe designer). Customers see, feel, try on samples at the booth then go to iPad stations to design a combination of their choosing. The personalized shoes are then delivered.

Effects & Potentials:
An example of the divide between physical and online shopping has been minimized. Customers can see product with their own eyes, try it, test it, and more but don’t lose the personalized experience online shopping tends to provide.

Virtual Fitting Rooms

What is it:
The technology is called Wearable Clothing and was developed by Urban Research to allow customers to try on clothing and even see the materiality of the clothing in action. Other forms of this technology like Intel’s Digital Memory Mirror allows customers to see their reflection with different outfits as well.

Effects & Potentials:
A way to increase the convenience factor of shopping in a physical space. Brings a unique experience to the shopper.

Virtual Shopping

What is it:
Tesco Homeplus launched this virtual subway store in South Korea that allows shoppers to scan grocery items they need to be delivered to their homes within the day.

Effects & Potentials:
This technology starts to question the need for the typical kind of shopping space people imagine. Displays can now technically be minimized to panels such as this example.
Elements of the store:
The typical store that we are familiar with has certain elements within that we expect to see. With the new retail and mobile technologies most if not all can be replaced by screens. The products themselves can be minimized to samples customers can test out.

Summary:
New display and virtual technology is allowing the potential for flexible spaces and shoppers might not need a formal store setting in order to shop. Where mobile technology is headed suggests that our phones will play an important role in how we shop. Shopping will be able to be more personalized and efficient as a result. The divide between the digital and physical shopping space might disappear as both modes converge in a new type of shopping space.
Research shows that while most malls aren’t actually dying off, the 3.4% that are failing are older malls relying on singular programming and older dumbbell plans with retail anchors referred to as Class C and D malls (Hurley 2015). Studies show that, as a result, more competitive malls in Class A and even some Class B malls are shifting their focus to branding a memorable experience for shoppers in the mall. And due to the volume of programs and activities that take place in Class A malls they are almost always very large.

If a new type of shopping space were to incorporate a variety of alternative programs and organized it in a new plan strategy that wasn’t the dumbbell type plan, where retail anchors are used, a new kind of shopping space could emerge where alternative activities and shopping could mesh fluidly so that they aren’t separate nodes of programs. If these shopping spaces then were to implement existing technologies into the design of the space and experience, not only would there be a unique experience for the shoppers but the spatial organization might start to shift from existing ones. And, as a result, there could be potential solutions to the issue of the ‘gray box’ malls that retains the size factor that brings in the revenue but provide a spatial experience that breaks up the ‘gray box’.
Abu Dhabi Central Market
Foster + Partners

Organization resembles layout of souk with rhythms of narrowness and openness.

Exhibition Hall
OMA

Commercial and cultural program interchange.

Wooden Orchids
Vincent Callebaut

Fluid circulation between islands of commercial and green farms.
1. Study possible strategies in plan that are non-dumbbell plans

**Grid:**

**Centered:**

**Shifting:**

**Subtraction:**

**Additive:**
2. PROGRAM CONNECTIVITY STUDY IN PLANS AND SECTIONS:

- **Grid:**
- **Centered:**
- **Shifting:**
- **Subtraction:**
- **Additive:**
3. HOW DOES IMPLEMENTING TECHNOLOGY CHANGE THE APPROACH?

CASE STUDY 1: A strictly virtual shopping mall.

**Technology to implement:**

- Study the potentials of how virtual displays and stations would change the space in plan and in section. Collages to test the ‘experience’ will be important.

**Strategy being tested:**

- Continuous circulation over central area. What is the artwork in the Guggenheim could be the displays.

**Precedents:**

- Guggenheim Museum
- http://www.guggenheim.org/new-york/education/school-educator-programs/teacher-resources/arts-curriculum-online/?view=item&
- 1111 Loncoln Road
- The virtual shopping mall can implement a strategy where a single space can achieve two different kinds of activities by assigning pockets of a certain program within the larger the space.

http://www.b2.mk/news/have-you-used-a-virtual-dressing-room-yeah-japan-has-them/newsid=29
http://jp.b2.mk/news/have-you-used-a-virtual-dressing-room-yay-h-japan-has-them/newsid=29
Sane Architecture designed a series of cross bridges that intersected and creates space within a larger encompassing structure. When the idea of using scanning devices and merging aspects of online and physical shopping come together a space that uses the system used by Sane Architecture can provide a continuous, smooth circulation system on which shoppers can browse and test products and simply scan ones they are interested in buying. In other words, everything shoppers see in this new mall would be for sale.

**CASE STUDY 2:** Experience, personalization, anything-for-purchase

**Technology to implement:**

**Strategy being tested:**

**Precedents:**

http://fortune.com/2015/06/23/amazon-echo-review/
https://fresh.amazon.com/dash/

http://sanearchitecture.com/urge/taichung-city-cultural-center/
**Organization Strategy Study:**

Study of the various strategies and test out different ways to break up the enclosing shell.

This example shows just one method of breaking up the single volume into multiple smaller volumes. This approach works in this particular study because the system is a set up crossing bridges so these same bridges can connect to the different volumes of space.

**Evaluation Method:**

1. Catalogue instances of each step that is mentioned.
   Study precedents that share similarities to the strategy that is being studied. Competitions become good gauges.
   List out aspects that made it successful to weigh against the studies.

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<td>West Edmonton Mall, Woodbine Mall</td>
<td>1. Study how activities the town itself might have 2. Retail functions supplied already. Fun what else? 3. Could really become more significant players in their communities?</td>
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<td>Woodbine Orchard Mall</td>
<td>1. The mall should be the mall anymore? 2. What are the roles of the mall now? 3. What will it be called?</td>
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<td>Clear Organization / Strategy</td>
<td>Noting context, balancing private vs. public</td>
<td>Exhibit Hall, Abu Dhabi Market</td>
<td>1. Was a mall become a destination without becoming emergency plan fail?</td>
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<td>Becoming a destination</td>
<td>A recognizable identity, A reason to revisit besides shopping</td>
<td>Melbourne Mall</td>
<td>1. List the factors that shoppers find convenient about online shopping. How can physical malls control these factors? 2. How can really stop big without seeming so big?</td>
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<td>Applications that personalize experience</td>
<td>West Edmonton Mall, Woodbine Mall</td>
<td>1. Study available retail technologies. 2. Study ways to apply evergreen mobile technology into the shopping experience.</td>
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2. Eliminate failed studies, combine successful instances.
   Catalogue the studies so that there is a list to choose from in the end. Design the new mall using these kit of parts and test against original goals to see if criteria is met.

   1. New plan type that moves away from using retail anchors and outdated dumbbell plans.
   2. Includes alternative programs in terms of activities but as well as technologies.
   3. Doesn’t sacrifice size but organization strategy breaks up space for easier navigation.
Outlet Shopping Mall (Pottsdam, PA)
Google Earth

New Century Global Center Artificial Beach
Christopher Beam

5 Elements of a City
http://contemporarycity.org/2014/03/kevin-lynch/

Virtual Fitting Room
http://jp.b2.mk/news/have-you-used-a-virtual-dressing-room-yeah-japan-has-them?newsid=r728

3D Shoe Designer

Beacon Tech

Alibaba

Amazon
http://fortune.com/2015/06/23/amazon-echo-review/
https://fresh.amazon.com/dash/

West Edmontan
http://www.wem.ca/about-wem/facts

Dubai Mall

New South China Mall

New Century Global Center
http://www.dezeen.com/2013/07/10/worlds-largest-building-opens-chengdu-china/

Vandamme Nord

Volt Berlin

Abu Dhabi

Exhibition Hall

Beaugrenelle Mall
http://www.dezeen.com/2012/02/13/beaugrenelle-shopping-mall-by-agence-search/

Wooden Orchids