Transformation of Shopping Mall Planning from 'The True Character of Things'

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Abstract
The mall, the commercial space that has existed since the mid-20th century, revealed an axis of transformation with the flow of time, and was a process of transformation from the centripetal to the centrifugal, parallel, and complex types. In other words, there was the initial phase from the enclosed centripetal malls planned by Gruen, to the open centrifugal malls with a shallow depth of space, followed by the process of transformation into juxtaposition and complex types with deeper space than open malls, and the characters of both open and enclosed malls in one space. This series of transformations shares similarities with the Roman forum, a historical commercial space, and this study discusses the process of transformation commonly found in the malls and in the Roman forums based on the concept of the true character of things of Karl Popper. Furthermore, the two-step concept of setting-into-work of Christian Norberg-Schulz was applied to clarify the meaning of transformation of malls.

Keywords: mall; shopping mall; commercial architecture; forum; the true character of things; setting into work; Karl Popper

1. Introduction
1.1 Background of the Study
Karl Popper points out the following, by relating the transformation of things to history [Popper 1961: 21–27]:

...The premise of the true character of things is change. This is because change clearly unravels the true character of things, as well as their various positions. Therefore, true character can be understood as the sum of inherent possibilities of things. For this reason, the true character of things is only understood through their change. Therefore, we come to the conclusion that the understanding of things for their description has to be historical...

If the process of transformation of malls can be verified in the historical commercial space, it can be pointed out that the transformation of malls is closely related to the general transformation of commercial space, and was the origin of the true character of things, and the change.

1.2 Purpose of the Study
The philosophical studies of the mall had two major flows:
1. The studies explaining the transformation of space in relation to the location of the malls, the urban center or the suburbs; and,

2. The studies explaining the process of transformation, by identifying the inherent character of mall spaces.

However, Youngwon Baek points out that the flow of previous studies could not accurately explain the transformation of malls, and does not provide sufficient reason for the transformation. Therefore, he points out that the transformation of malls was from spaces that isolated encounters, and the awareness of walking, such as the enclosed malls of Gruen planned after the mid-1950s, to the open malls that generated encounters with different social members, and granted the choice of conciliation and walking, after the 70s. Furthermore, he also points out that the transformation after the open malls of the 70s that generated conciliation, and granted various movements into somewhat closed malls, with the awareness of some movement in between the enclosed and open malls, was the act of creating exploratory spaces, and creating exploratory spaces is creating spaces that allow the experience of amenity that can be interesting for people [Baek 2004].

Also, Baek classified the malls into centripetal, centrifugal, juxtaposition, and complex types, and pointed out that the process of transformation was from the enclosed centripetal malls planned by Gruen, to the open centrifugal malls with shallow spaces, to the juxtaposition and complex malls that are deeper than the open malls, and combine the characters of enclosed + open malls in a single space. Therefore, this study discusses the study of Baek, along with other preceding studies that mentioned the transformation of malls.

Also, as mentioned under the Background of Study, the historical description of commercial spaces that was used to illustrate the true character of commercial
spaces was discussed. Das Buch Vom Market of Gerd Hardach describes the transformation of commercial spaces similar to the transformation of malls. Also, Jean Christophe Agnew's *The Market and Theater* describes the transformation of commercial spaces that offers the criteria for comparing and locating the preceding studies. Therefore, the current study partially quotes the two publications.

In other words, the principle pointed out by Christian Norberg-Schulz of *setting-into-work*, that a new uniform body (juxtaposition, complex) is born by integrating the centripetal, centrifugal, or other shapes, also applies to the transformation of historical commercial spaces; and the current study points out that the transformation of malls is a phenomenon that relates to the true character of things of commercial spaces and their changes. Also, this is to clarify that the process of transformation is not related to the location of malls, the urban center, or the suburbs.

2. Preceding Studies and Subjects of Study

2.1 Preceding Studies

The philosophical studies of the mall had two major flows:

1. The studies explaining the transformation of space in relation to the location of the malls, the urban center or the suburbs; and,
2. The studies explaining the process of transformation, by identifying the inherent character of mall spaces.

To briefly mention the two aforementioned perspectives:

Studies showing that space architecture has been transformed in relation to the location of malls, in *How America Rebuilds Cities* co-authored by Bernard J. Frieden and Lynne B. Sagalyn, include the argument that malls different from the previous prototype were planned in response to the urban context, as the enclosed suburban malls spread to the urban center, the point at which a surgical procedure was conducted for the transformation of malls in Barry Maitland's *Shopping Mall*, to make the closed and aseptic malls of the suburbs adjust to the septic environment of the urban center, and the discussion in Michael J. Bednar's *Interior Pedestrian Places*.

Koolhaas classifies the basic types of malls into the Dumbbell type and the Cluster type, and describes the process of transformation as the process of integrating the two basic types, to create a new body.  

Also, Maitland's *Shopping Malls: Planning and Design* explains that the insides of malls consist of nodes and routes to create various combinations, according to the given circumstances; and points out that the similarities in the space-planning of malls are found in the medieval cities that used random and picturesque techniques (Fig.1.). Baek, in his *Study on the transformation process of rambling activity in the shopping mall*, pointed out that the transformation of malls is not related to the location of the urban center or suburbs, and applies the theories of Hillier and Dovey, to clarify the cause of the transformation of malls. In other words, he points out that the transformation of malls was from the spaces that isolated the encounters and awareness of walking, such as the enclosed malls of Gruen, planned after the mid-1950s, to the open malls that generated encounters with different social members, and granted the choice of conciliation and walking, after the 70s [Baek 2004: 75–81] (Fig.2.).

He also mentions the following about the transformation, after the open malls of the 70s that generated conciliation, and granted various movements into somewhat closed malls, with the awareness of some movement in between the enclosed and open malls (Fig.3):
...Considering the transformation of malls, an axis of transformation is unraveled with the flow of time. It was the process of transformation from the centripetal to the centrifugal, juxtaposition, and complex types. Approaching the series of transformations from the centripetal to the complex type from the three knowledges of replacement of commercial spaces pointed out by Passini, it is possible to point out that the process from the centripetal to the centrifugal, juxtaposition, and complex types, was the process of transformation, pursuing higher inferred information (complex), through the memory information, sensory information, and lower inferred information (juxtaposition) (Fig.4.) (Fig.5.).

Also, Passini points out that creating the space that allows such intellectual manipulation is the act of creating exploratory spaces, and creating exploratory spaces is creating spaces that allow the experience of amenity that can be interesting for people. The series of transformations from the centripetal to the complex type of malls shows how to plan the space; to give interesting experiences that are full of amenity to people.

Also, this transformation is the indicator of creating a new space. It is because creating exploratory spaces to give interesting experiences full of amenity to people demands the intellectual manipulation of inferred information, and has to give the satisfaction of problem-solving to people to arrive at the destination, without any hurry, or setting efficiency as the priority.

Considering Schulz's definition of the series of transformations from the centripetal to the complex type as setting-into-work in relation to the act of planning a building, the transformation of malls can be interpreted as the process of transformation that creates a new uniform body, by integrating the two types of space - centripetal and centrifugal - expressed as the shapes of space architecture pointed out by Schulz. Or such transformation could be described as the process of identifying the juxtaposition and the complex types, as the specific transformed or new uniform body, not suggested by Schulz...

The early phase of transformation from the enclosed centripetal malls planned by Gruen after the mid-1950s, to the open centrifugal malls with shallow depth of space, was the process that encouraged the rambling of people and social encounters; whereas, the next phase of transformation to the juxtaposition type, and the complex type with deeper depth of space than the open mall, was the process of demanding various intellectual manipulations of people, and creating an abundant environment and a new space. Also, Baek explains that the series of transformations of malls can be interpreted in relation to Schulz's concept of setting-into-work [Baek 2004: 94–113].

2.2 Subjects Studies
The subjects of study are the malls listed in the Directory of Major Malls, published annually by the Directory of Major Malls for the malls located in the U.S. and Canada; but the malls considered for the current study are basically listed in the five books, due to the broad range of numbers, and the use of preceding studies [Frieden 1991] [Koolhaas 2002]
About 70 malls were also selected, to support the discussion of the current study. And to clearly reveal the true character of the commercial space, the Greek agora and the Roman forum, with the transformation and similarity of malls, were selected from the books of Hardach & Schilling and Agnew, which mentioned various historical commercial facilities [Hardach & Schilling 1988] [Agnew 1995].

3. Historical Commercial Facilities: The Agora and Forum

Hardach’s Das Buch Vom Market describes the transformation of the Greek agora and Roman forum as follows [Hardach & Schilling 1988: 36-47]:

…In the ancient economy, the most important foundation that led to commercialization was the supply to the city, the center of consumption. Urban markets were mostly set up in the most important locations, such as the public squares called the agora in the Greek and Hellenist periods and the forum in the Roman Empire, and the agora and forum were the political, religious, and economic center of the city. The agora and forum were the factors that determined the urban landscape, along with the public architecture.

The market square of early Greece was located in the heart of the city, and randomly built, similar to the city itself. The streets were narrow and meandering. The streets that led to the agora had no particular boundaries against the city from various directions. The major buildings of the government and the colonnades randomly surrounded the square, and new buildings were added inside the agora, one after another.

Fig.6. Greek Agora (5C BC)

The agora in Athens was the stereotype of the early type, known as the open agora (Fig.6.). However, the shape of the agora began to change in the Hellenist period. The orderless and random agora began to develop rules, based on planning. The square was clearly rectangular in shape, and had public buildings and colonnades at the four corners. Due to this layout and planning, the square became enclosed against the surrounding cities. Doors were created, to make correspondence and contact between cities and distance (difference) from the outside. In other words, the agora from the Hellenist period was the commercial facility that responded to the principle of new urban planning.

The principle underlying the architectural plan of the market square, or the forum from early Ancient Rome, was open, as with the Greek agora, and the shape was indeterminate. Forum Romanum, the old Roman forum from the republic period, was an irregular rectangle that was 250m x 60m, and the holiest temple was located along the shorter side of the forum. The longer side had a long line of selling booths of street vendors that were the opposite of the holy temple.

Fig.7. Roman Forum (Top: Aemilia to the Top, and Caesar’s Temple to the Right of Basilica, Iulia to the Bottom) and the Forum (Bottom)

Entering the reign of Caesar (49-44 BC), the street vendors’ plank booths were banished, and replaced with two Basilicas called Iulia and Aemilia, to plan the forum whose excellence was unprecedented in the history of architecture. Also, such an enclosed type of forum was influenced by Hellenism (Fig.7.).

After that, under the reign of Trajanus (98-117 AD), the forum was planned as a comprehensive body that integrates various elements, and the body that links the contradictory functions of the religious and mundane world, and politics and commerce. One of the special market facilities was Macellum Traiani.

This building was a well-organized commercial facility, with about 150 stores (Tabernae). The stores had intersecting openings along the inner portico, and the outer corridor. With the intersecting openings, each store (Tabernae) could have larger openings. Also, the Roman public squares and markets settled as the important elements of the new city (Fig.8.)…
However, Agnew’s *The Market and Theater* explains how the Roman forum was moved from the suburbs to the urban center. Agnew describes that this process was the transition from the open commercial space, to the enclosed commercial space. He states the following, to manifest that the Roman people could feel a certain type of *Theatricite* from the enclosed commercial space, as a consequence [Agnew 1995: 46–47]:

...The form of exchange (market) considered that the extraneous type outside the center was the most general consideration to prevent taking away the position of other forms of exchange that were considered the center (political, religious, and social form of exchange). This consideration manifests that cognitive desire to limit the virtuality or symbol that makes the exchange to the inside of each person’s purpose and boundary is inherent in the ancient market.

The difficulty engendered by the act of exchange for the creation of markets was that the exchange was inevitably accompanied by the intersection of boundaries. The boundaries of early markets tried to derive the characteristics from the people who work at the market, as the functions of the markets moved from the suburbs of the city-state to the urban center. In other words, the commerce of that time was limited to a group of foreigners, whose possession and citizenship were consistently denied. This limitation was maximized, by separating the abstract liquidity of market exchange, from the social and cultural phenomena.

Such an ambiguous social status of vendors precisely responded to the enclosed commercial space that became inherent, and was formed socially, as the market moved to the city center. Therefore, the unique emotional and cognitive meaning of the national boundaries became inherited in the boundary of such market space, and the users could feel the sense of *Theatricite*...

The book of Hardach introduced *Macellum Traiani* (or *Macellum Pozzuoli*) (Fig.9.) (Fig.10.), where the two types of commercial facilities, the open type and the enclosed types, exist in the same space. In the book of Agnew, the Roman forum acquired its boundary as a commercial facility, based on the abstract liquidity of commercial exchange and the uncertainties of foreign workers, and limited the characteristics to the inside, as it was transferred from the suburbs to the urban center. Also, it is pointed out that the user inside the commercial facility felt the sense of *Theatricite* outside the national boundary.

### 4. Discussion

Frieden, Koolhaas, and Maitland pointed out in the preceding studies that the enclosed malls of the suburbs transformed into open malls, to fit the context of the urban center\(^7\), as they were moved to the urban center, and this is very similar to the method of explaining the characteristics of buildings separately for the city and the suburbs, from the time of Leon Battista Alberti\(^8\). Considering the houses, schools, hospitals, religious architecture, offices, public buildings, warehouses, and the buildings closely related to the various social systems, based on the premise of topology of space,
however, the location of suburbs and urban center does not make much difference in space architecture. Above all, the fact that both the open and the enclosed topology of commercial architecture were generated in the city center is not discussed. For example, as Emile Zola points out, the department store, which is the successful form of architecture generated in the 19th-Century urban center that popularized the extravagance, is sometimes compared to the mall; and the arcade, which is called the transverse department store [Tsujihara 2004: 51–58], is an enclosed space, generated in the urban center. The urban market with an open character, which is an opposite example, is still favored by urban people (Fig.11.).

As mentioned above, Agnew's The Market and Theater pointed out that the open commercial spaces of the suburbs in the Roman Period, transformed into enclosed spaces as they moved to the urban center, and argued that the urban people could read Theatricite in the enclosed commercial space. In other words, the process of transformation was found to be directly opposite to the transformation from the enclosed malls of the suburbs to the open malls of the urban center, which, as Frieden, Koolhaas, and Maitland pointed out, existed in the history of commercial space.

There is also the example of open and enclosed forms of commercial facilities appearing in the process of transformation, regardless of the location of suburbs, or urban center. Therefore, the preceding studies of malls that point out that the enclosed malls of the suburbs transformed into the open malls of the urban center lose the logical evidence of their arguments, because there are the examples of transformation of commercial spaces opposite to that process of transformation, or unrelated to location, found in the current market, or in history.

Schulz, who defined setting-into-work as the tool for explaining the transformation of malls, explains the two steps of setting-into-work, as follows [Schulz 1988:30, 45–50]:

...The space related to orientation is the first step (general) that shows the form and interacts with the flow of time while transforming without losing the identity. The local and temporary second step is the transformation that responds to [here], which is usually where the building is located...

Considering the logical contradiction of the argument of Frieden, Koolhaas, and Maitland, that the mall space transformed into the open malls according to the context of urban center, it may be the consequence of the interpretation of local and temporary (here: urban center, suburbs) on top of topology, the general architectural language (orientation: creation of space of rambling and exploration) defining the sociality and the space architecture, among the two steps of setting-into-work pointed out by Schulz. The essential problem of interpretation is the difficulty engendered when temporary elements are interpreted in relation to general elements. Also, the preceding studies handled the process of transformation as the temporary factor, rather than the general process of transformation of commercial architecture as a system of sociality.

5. Conclusion

Popper said that the true character of things is only identified by their change. Therefore, he points out that he arrives at the conclusion that for their description, the understanding of things has to be historical. The process of transformation of malls in the early stage was the transformation from the enclosed centripetal malls planned by Gruen, to the open centrifugal malls with shallow depth of space. Also, this form of transformation was the process of encouraging people's rambling and social encounter. The next stage is the transformation into the juxtaposition and complex types, where the characters of enclosed + open malls that are deeper than the depth of open malls exist in the same space. This process demands various intellectual manipulations from people, and was the process of the creation of abundant environment, and new exploratory space.

This series of transformations also shares a similarity with the Roman forum. The example of this process of transformation would be the transformation from the open and irregular forum of Ancient Rome, to the enclosed forum in the form of a regular rectangle, to the commercial space of Macellum Traiani (or Macellum Pozzuoli), planned to be open, yet enclosed.

As the transformation of mall space can be found in the historical commercial space of the Roman forum, it can be pointed out that the transformation of malls after Gruen was actually closely related to the general transformation of commercial space, and the origin of the true character of things, and their change. As the general principle of transformation of Schulz's setting-into-work, that the centripetal, centrifugal, and other forms are integrated to create a new body, is found in the process of transformation of historical commercial spaces, it can be pointed out that the transformation of malls is a phenomenon that relates to The true character of things of commercial spaces, and their change. Also, this process of transformation is not much related to the local (here: urban center, suburbs).

And this thesis is one installment of a series of papers. Of the series, this particular study aims to examine
the flow and causes of transformation in shopping malls and Roman forums following the foregoing discussions, applying the concept of ‘The true character of things’ put forward by Karl Popper. Based on these series of discussions, the next study will examine the symbolic value of commercial buildings along with postmodernism from a completely different perspective.

Notes
1 Setting-into-work includes the transformation of forms. Even if it is exposed to the force of realistic situations, the identity of forms transforms without damage. Such transformation includes combination and interaction. The architectural work with the power to coagulate combines several forms to create a new body. Rather simple or complex, the work always includes the quality of image or shape. The shape has a specific existence, and participates in the creation of environment. The shape includes the process of returning the damaged form, and brings eternity in movement and change. Therefore, the meaning of an architectural work is specified as a universal type, as a local and special meaning, as a temporary and historical meaning, and as something specific in the end. [Schulz 1968: 29–30]

2 The early malls planned in the urban centers of the U.S. have the characters of suburban malls. These malls were isolated from their surroundings, causing them to be concentrated in the internal space. The outside of malls did not fit the urban context, and stole away the activities of the surroundings. However, this tendency gradually changed. The realization of the importance of exterior planning of malls provides the technique to plan malls that fit the urban context, when planning a mall for an old town. The exterior of malls recently planned for the urban center tends to be integrated with the surrounding system of pedestrian roads, and supports the activities of the surroundings. [Bednar 1989: 152]

3 The dumbbell type separates the mall into lumps of architectural structures, and generates the linear route of customer traffic inside the mall. The cluster type clusters the lumps of architectural structures, and customer traffic inside the mall is generated in between the lumps, to create the network of routes inside. [Koolhaas 2002: 462]

4 Hillier defined the space consideration (approach) of the outside of a building and the connectivity (movement) of the internal space as each type, and pointed out that the buildings planned by the combination of internal and external types show social characteristics. It is defined that the buildings show the social characteristics of depth and approach by the combination of four genes, the symmetric and asymmetric genes, considering the approach to the outside of building, and the distributed and non-distributed genes, for the connectivity of internal space. In other words, the depth of space – deep or shallow – is related to the hierarchy of a building.

Deep: Relates to the space dominated by cognition and rule, and creates accurate space relations. Such space relations appear one-by-one, with the flow of time.

Shallow: The space on the routes that make up the building is used as little as possible, to increase the density of encounter of people for the evolution of space. Corresponding or non-corresponding is related to the approach of people.

Corresponding: Encounter is limited, and the architectural boundary is set as the powerful range to decide the style of social encounter. This space isolates coincidental encounters, and generates the distance and difference between the buildings and the outside.

Non-corresponding: Generates as much encounter as possible, and the encounter of social members with different characters. In other words, active encounter with different classes of social members is generated. [Hillier & Hanson 1989: 198–267]

5, 3,576 listed, as of 2010. [Shor 2010]

6 A mall is currently used for various meanings, but this study defines a mall as a commercial building that consists of key tenant and specialty stores, focusing on the fact that Gruen’s malls, planned to even out the spreading circulation, consist of key tenant and specialty stores – i.e., key tenant + Specialty Stores = Mall. And if you read the research papers of the author related to the shopping mall you should be able to understand the reason for the subject selection and the spreading circulation more clearly. [Baek 2004], [Baek 2014]

7 Kenneth Frampton criticizes this theory of context as follows... It is needless to deny the fact that the unconditional reductionism of the modern movement greatly contributed to the nondifferential destruction of urban culture; for this reason, the criticism of the modern movement that post-modernism should respect the existing urban context did not have to be blamed. The criticism of post-modernism’s anti-Utopian [contextualism] that considers the surrounding environment when planning the building, however, has already existed for more than 10 years. The start of such anti-Utopian contextualism was Colin Rowe’s (Mar 1920-Nov 1999) approach to Neo Sitte (Camillo Sitte, Apr 1843-Nov 1903) of urban shape. Also, Robert Venturi’s 1966 publication called Complexity and Contradiction in Architecture was an approach from the perspective of contextualism. [Frampton 2003: 502]

This idea was also stated by Graham Shane. By definition, the design must fit with, respond to, mediate its surroundings, perhaps completing a pattern implicit in the street layout, or introducing a new one. Every site possesses its own shape and measure; every foot fits into a certain size shoe. [Shane 1976: 676] Shogo Kishida suggested Wright’s Guggenheim Museum as an example of architectural planning unrelated to contextualism as it is heterogenously planned amongst the box-type buildings of Manhattan dominated by a non-space-specific grid. Also, the Guggenheim Museum applied the double circle that was used as the schema of architectural spaces since ancient times, to give centrality and verticality to the land, and to create a special space (Utopia). [Kishida 2012: 94–134]

In the city, it is obliged to adjust the privileges of neighbors in several aspects... but the bucolic regions in the suburbs give more freedom... The decorations for the houses in the urban center have to be more moderate compared to those of the suburbs. However, the suburbs can tolerate decorations that are bright, lively, and even prodigal... [Alberi 1998: 113]

The department stores that were the center of commerce before the emergence of retail stores, especially modern shopping malls, were the magnets that lured the people to the urban center, and the glue that tied the city together. When the department stores flourished in the late 19th Century, the population in the cities increased, large manufacturers emerged, and personal income kept increasing. It was sufficient that someone came up with the idea to gather the products into one space. The department stores offering a variety of goods for less promoted mass-sale. They began as general apparel stores selling manufactured wardrobes, and spread out to the major cities of West Europe and the U.S. for 10 years, since the late 19th Century. These large stores were both commercial facilities and community facilities... The department stores that carried all of these products in one space, and isolated them from the surrounding streets were usually furnished with roofed courtyards, colonnades, chandeliers, thick carpets, and well-wiped mahogany wood counters, and planned as a palace. The big ceiling brightly shined on the stores, and extravagantly well-wiped mahogany wood counters, and planned as a palace.
The vendors of the 19th Century created a new type of store, to gather people to the center of the city. The urban streets of Paris around the 1800s were narrow, congested with the traffic of wagons, and slippery with the grease from the wheels of cargo trucks, with no clean pedestrian roads, because of the splatter of mud. For this reason, the urban center could not provide any space for a pleasant walk or window-shopping. Some vendors with the talent for invention planned walkways that penetrated through big buildings, and installed displays or stores on both sides, to replace the dangerous and unpleasant streets. These walkways were the early form of arcade. These pedestrian walkways were isolated from the surrounding streets, and the wagons. The glamorous arcades had ceilings overhead, and were completely isolated from the outside, to create spaces enclosed inside the buildings... From the 1820s to the 30s, the arcades spread to London, Glasgow, Brussels, Milan, and Philadelphia. [Mackeith 1986: 2~3]

As shown in the example of Nagoya Oasis 21 (opened in Oct 2002 as a complex of ground park, underground commercial facilities, and a bus terminal) and Odaiba Venus Fort, enclosed commercial facilities are still planned for urban centers. Yuseong Kim points out that the transformation of commercial facilities, unrelated to location, can be described by the gradual transformation of urban markets in China and Korea, that used to be enclosed concentrated markets in ancient times, into the permanent street-side markets with open character in modern times, as the urban people street-side markets increased due to the concentration of population, and the development of a commercial economy. [Kim 1987: 63~68] The opposite flow of transformation unrelated to location can also be described by the example of open-type hawkers in the urban center being placed in the closed shops in the hawker center with sanitary facilities, such as gas, water supply, and sewer, by the NEA (National Environment Agency), affiliated to the Ministry of the Environment of Singapore, after the mid-60s. [Ohtsuka 2008: 1029~1036]

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