

Discourses Behind Industrial Heritage

Exploring the Construction Process and Influence behind the Transformation of Industrial Heritage —By comparing 798 art zone in China and Zeche Zollverein in Germany

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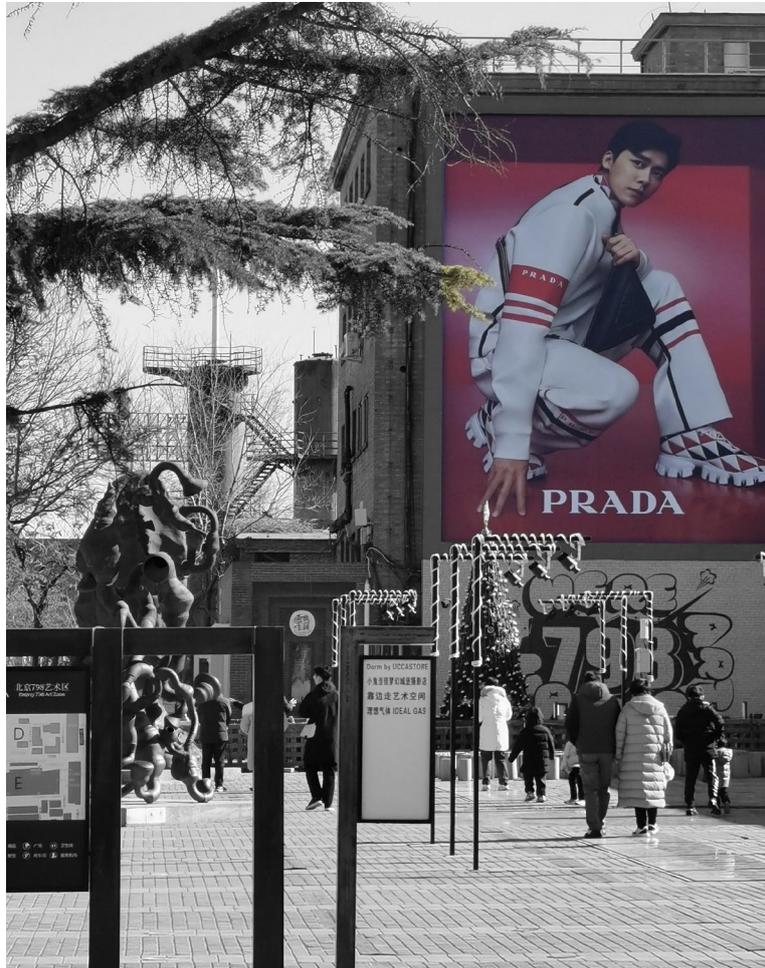


Photo by auditor

A Prada poster, an artistic sculpture, an industrial facility with a chimney... is this in the suburbs ? Why did the shopping mall open in the suburbs? I'm sure this must be the chain of questions you have when you see this picture. It's not a mall, it's an arts and cultural district, it's not in the suburbs either; it's located near Beijing's CBD.

You may wonder why an art district is linked to a luxury brand and what is going on behind these contradictions. Follow me to continue reading.

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Introduction

In the course of rapid global urbanization, many industrial monuments have become objects of adaptive re-use. These surviving relics tell the story of industrial history and social change in a different way. The 2022 Winter Olympics will undoubtedly make Shougang Park shine internationally, and the once socialist blast furnace has become a symbol of the Winter Olympics(Fig1). Some cheering voices began to appear in China, "Beijing will have a second 798!" It is conceivable that 798 occupies an unshakable position in all Chinese people and even internationally(Fig2). Cultural industrial parks transformed from industrial heritage have emerged one after another. The 798 Art Zone was once the most characteristic representative of Chinese art parks. But in recent years, many artists and critics have talked about it. Surrounded by a commercial atmosphere, the original artistic feelings and temperament are gradually weakening. I can be said to be a witness to the changes of 798. From the popularity of the art district to the moment when it has been questioned, what factors have led to the current state of 798? The prototype of 798 Art Zone is a German Bauhaus building, and Germany was one of the first countries to carry out industrial heritage renovation. Various types of industrial museums are important ways to preserve the original state of industrialization and focus on reflecting and passing on the achievements of industrial civilization. Since 2002, Germany's industrial heritage experience has been widely borrowed and has become a trendsetter for the preservation and reuse of industrial heritage in China. Why does it have a different atmosphere from Germany? These are a series of questions that can be further investigated in the context of the construction of industrial heritage.

Raphael Samuel, in his 'theatre of memory', argues that heritage is a process of remembering and making meaning and is a social construction that also constructs or reconstructs social and cultural values(Raphael,1996). Industrial heritage is therefore a product of social construction, which is subjective in nature. Different heritage subjects - 'who' - construct different heritage values, and there are differences in the processes and ways in which they are constructed.

In this thesis, the 798 Art Zone in China and the Zeche zollverein in Germany are selected as the case studies, and the reshaping of two industrial parks by the multiple discourse is analyzed from a construction perspective.This will help to understand the development and specificity of the different forces of heritage and to better understand the values of heritage transformation from two countries.

A number of scholars have already studied industrial heritage through the lens of heritage constructions. The research covers the mechanisms behind the formation of the Zeche zollverein and the analysis of the renovation strategies of individual buildings in the park, the development process of the resident groups in the 798 art zone, incorporating the current situation and interviews with people involved in the park, but lacks a discussion of the relationship between the construction of discourse in each stage. The paper will be supported by literature,including the social construction of heritage, the documentation of the 798 Art Park and the Zeche zollverein, as well as field research photos. After that, it will be illustrated by a cross-sectional comparison of the construction process.



Figure 1. Shougang Park in 2022 (N.F.Z, 2021)



Figure 2. 798 Art District Vision Planning (Sasaki,2012)

Chapter I—what is heritage construction and discourse?

In the 20th century, European countries first began to face the era of de-industrialization. The old industrial areas that once brought splendor and glory to cities were gradually abandoned due to the emergence of new technologies and resources, and the broken factories, abandoned machinery, and mottled rust became symbols of obsolescence. They marked the metabolism of cities in the course of history, and also became a landscape out of place in the process of rapid urbanization. This urban industrial heritage witnessed the history of the city and carried the memory of industrial civilization. Later, in the process of urbanization, facing the problem of industrial transformation, people gradually turned their attention to those dilapidated factories, because the industrial era "specimens" such as chimneys and old factories with rich historical heritage were preserved and became the carrier for the development of cultural and creative industries. The reshaping of the layout and function of urban space is the result of the struggle and confrontation among political, social, market and cultural parties.

In this context, the international academic community begins to discuss the theory of discourse to deconstruct the industrial heritage movement in the context of multiple subjects. Discourse is a practice of symbolizing the world, of constituting and constructing it in meaning (Fairclough, 1993). Thus, knowledge, values and symbolic meanings emerge from discourse. The concept of discourse emphasizes how social, personal meanings and knowledge are represented and produced within different histories and specific contexts, involving more relations of power. The construction of discourse is not necessarily continuous and can change in different historical and social contexts (Fairclough, 1993). Therefore, there are multiple discourses within the field of heritage, from dominant discourses such as the power of the state and government, to correspondingly marginalized discourses such as the normal people (Laurajane, 2006). Heritage can be understood as the exchange and negotiation of multiple identities in a process of reconfiguration, in which its meaning and value are involved in the ongoing subjective production and reflection of people. Heritage is therefore socially constructed. It is closely linked to nature, humanity, the economy and the environment, and evolves as practice develops.

Industrial heritage constantly undergoes a discursive change in the process of reinvention. When traditional industries exit the historical stage, a large number of industrial buildings lose their original use value and occupy the land resources of the central city. As a result, negative terms emerged within the discourse of different classes, for example, they regarded old factories as urban garbage and redundancy and encouraged their demolition. There are also groups with mainstream discourse, such as in the renovation of the 798 Art Zone in Beijing, where some groups ignore the heritage value and consider more benefit generated by the land.

Nowadays, more and more countries have not adopted the method of simply and rudely demolishing and rebuilding factories that have lost their original functions. Instead, they have combined modern functions through reactivation to become cultural and artistic industrial parks as well promote urban regeneration. There is no single force behind the transformation of sites, and the power of these discourses waxes and wanes as functions continue to integrate and change. In the cases analyzed in the next chapter, the 798 Art Zone in Beijing and the Zeche Zollverein in Germany reflect the game and coexistence of multiple voices in the transformation process. Since those who control the voice will seek more benefits, when the diverse voices have a conflict between values, it will affect the strategy of construction and interacted with each other.

Chapter II—The discourse of case studies

A.The Evolution and Game of Multiple Subjects in 798 Art Zone

Beijing 798 district is located in the Jiuxianqiao area of Chaoyang District, Beijing, also known as Dashanzi Art District. It is the Beijing 718 North China Radio Joint Equipment Factory built in 1957 which close to the central CBD, the Central Academy of Fine Arts(CFA) and covers an area of more than 600,000 square meters(Fig3), forming a multicultural space integrating galleries, art offices, cultural companies, bars and shops. Its original factory belonged to the central industry at that time and was one of the projects aided by the German government. From 1950, the plant began to be constructed and it was divided into six independent plant areas, including the 706 plant and the 707 plant in 1964. This was the most advanced and largest electronics industry in the country at that time, and the factory was also one of the most typical and mature Bauhaus buildings in the world(Fig4). Until the beginning of the 20th century, during the vigorous reform of state-owned enterprises, a large number of factories were reformed and reorganized. Six factories that were previously split were merged to form the Seven Star Group, and the five workshops were shut down due to the 718 joint factory debt-to-equity swap policy(Liu et al.,2013).

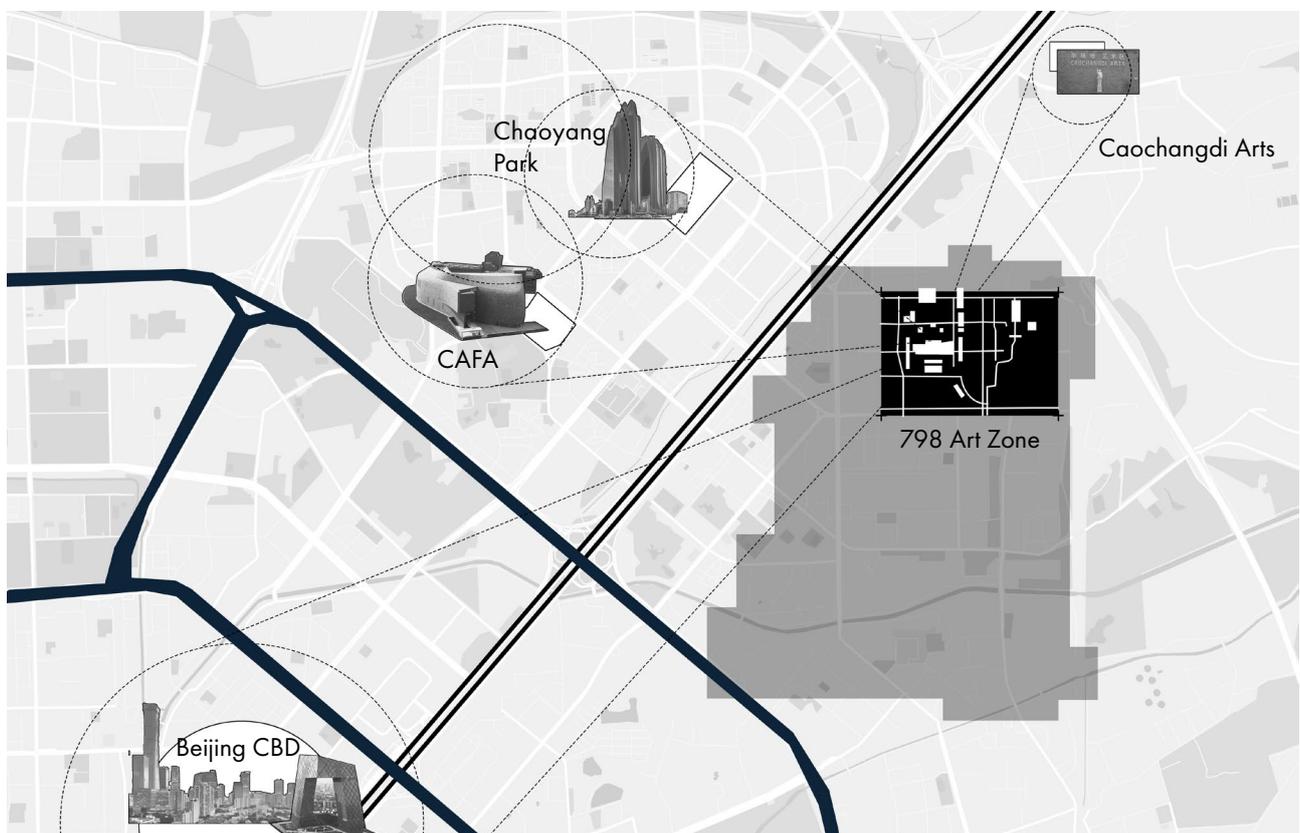


Figure 3.Surrounding of 798 art zone

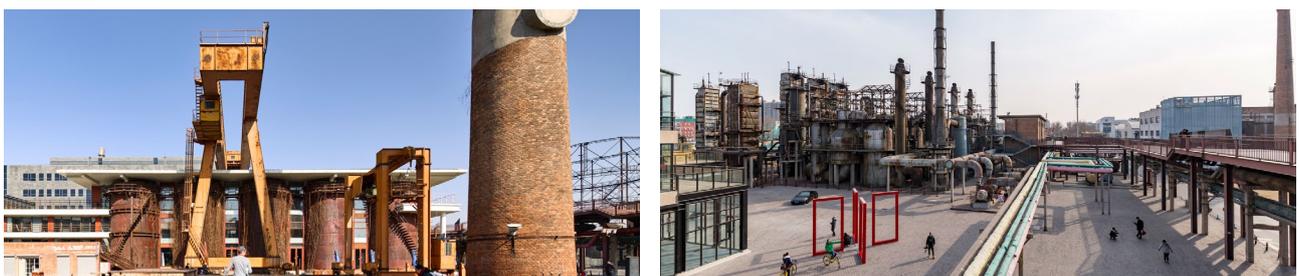


Figure 4.798 art zone(Sasaki,2012)

1. The game between civil forces and the government

In 1995, after the factory was closed, the Sculpture Department of the Central Academy of Fine Arts needed a large-space studio because it needed to complete the large-scale sculpture work. 798 district is close to the university, which is the best choice for the studio. Until 1999, teachers and students of the Academy of Fine Arts used the studio for artistic creation. In 2001, artist Huang Rui discovered 798 (718 Joint Factory) unintentionally and rented a factory as a personal studio. He introduced the Tokyo Gallery in Japan to 798 and it was the first time to open an exhibition. A large number of people in the art world were deeply attracted by the factory layout, which caused many artists to decide to settle in 798. The appearance of 798 allowed Chinese contemporary art which was once in a semi-underground state, to find a living space.

But it didn't take long for the rent of the factory to rise. Many artists were forced to leave because they could not afford the high rent which led to demolition. The unique Bauhaus architectural style, aesthetic value and historical value of the 798 Art District were not recognized by the government. Therefore, rebuilding 798 became the desire of the artists at that time and they craved the society to recognize its value and getting the support of the government. In 2004, when most people were planning to give up and move out after the rent was due, Huang Rui, Xu Yong and others launched the "Reconstruction 798" activity (Fig 5A) and held an open day with a number of studios and galleries. Although there was no publicity, it still attracted more than 3,400 people to participate. More artists and galleries came here, and the art held the discourse. The second Beijing Dashanzi International art festival also brought the district to life (Fig 5B). 'Beijing Afloat' the first exhibition of Beijing Tokyo Art Projects opened to public, created by Feng Boyi, which was the first art exhibition at 798 Factory (Fig 5C). Moreover, Li Xiangqun, a deputy to the National People's Congress of the Academy of Fine Arts of the University of Qinghua, submitted the "Agreement on the Protection of the Former 718 Factory" to the Beijing Municipal People's Congress, pointing that the rise in housing prices led directly to the exodus of artists. To protect China's new generation is to protect an old industrial building site and to protect a developing cultural industry (Yin et al., 2015).



A. Reconstruction 798 (Poster of "Rebuilding 798", 2003)
B. The Second Beijing Dashanzi International Art Festival (Qu, 2005)
C. Beijing Afloat (2004)

Figure 5. The art events in 798 zone from 2004

2. International power

Since 2004, leaders from various countries in Europe have come to visit the 798 Art Zone, pushing 798 to a climax. In 2006, 798 completely got rid of the fate of being demolished because Chaoyang District Committee and Seven Star Group combined together and set up the 798 Art Zone Construction Management Office. At the same time, more and more internationally renowned art centers have also chosen 798. In 2007, the Ullens Center for Contemporary Art, which has a high reputation in the world of contemporary art, was officially opened in 798. Dawei Fei, an art critic and curator, has been appointed as the art director of the art center. He said: "Beijing is becoming a world center in the field of art. During this development process, the 798 Art District in Dashanzi has become a unique and vibrant concentration of contemporary art and culture (Guangzhou Daily, 2008). This is an important reason why the Ullens Center for Contemporary Art is located here." Besides, the Olympic Games is undoubtedly an accelerator, pushing 798 to the world art stage (Fig 6). Editor-in-chief Yu Ke who is a contemporary artist said "Chinese contemporary art is still seeking international recognition (Guangzhou Daily, 2008). Because the Olympics is a global sports event, people still want to show contemporary art through this sports event. People from all over the world who care about culture and sports are paying attention at this time, and their coming to this place also reflects the importance of contemporary art (Fig 7).



Figure 6. 798 Olympic Theme Exhibition (Wang, 2008)



Figure 7. Foreign tourists visited Beijing's 798 Art Zone (Fan, 2008)

3. The power of foreign tenants

As rents rose, many artists gradually moved out of the park. The popularity of the 798 Art District will inevitably lead to more other non-art institutions to enter, thereby driving and aggravating the fashion and commercialization of this area. The fastest growing 798 art district was the shops which were different from the shops that were based on creativity and quality in the past few years. Many commodities under the name of 798 Art Zone were wholesaled from some small commodity markets, earning excess profits through the form of culture (Fig 8). The art discourse was gradually declining and the market is beginning to dominate the development of 798.



Figure 8. Other Businesses flocked to the 798

B.Synergy of Zeche Zollverein's Multiple Subjects

The Zeche Zollverein industrial area is located in the west of Essen, Germany. It officially started operation in 1847. Before the recession of the Ruhr area in the 1970s, the mining area contained the world's most productive mine and the largest coking plant in Europe. After World War II, energy demand shifted to denser oil, leading to a growing slump in the coal industry. It was successively managed by the coal and steel groups Vereinigte Stahlwerke AG and Ruhrkohle AG (now RAG Aktiengesellschaft, hereinafter referred to as RAG), and in 1993 ended the coal and steel era that lasted for nearly 150 years. In 2000, Zeche Zollverein was listed as a World Heritage Site by UNESCO and developed as an industrial heritage tourism (Zollverein, 2020). The transformation of the Zeche Zollverein covers many aspects, such as the protection and development of industrial culture, the renovation and reconstruction of buildings and environment, daily operation and management, and community life and space activation. There are not only the promotion of the government, but also the flexible participation of the society and company.

In 1986, The RAG Group had planned to demolish all the abandoned buildings and build a dump. But monument conservator Walter Gropius asked for the preservation of the XII shaft of the Customs Union, which was the first mention of the concept of a world-class monument. On the initiative of the public and public interest organizations and with the support of the North Rhine-Westphalia government (NRW), the mine was placed on the protection list as industrial heritage before it could be preserved. It's the important point that government and the public created an awareness of conservation, but the planning did not form a complete idea of the subsequent conservation strategy (UNESCO-Welterbe, 2021).

Since 1989 the renovation of Emscher park provided the opportunity for the Zeche Zollverein. By 1999 the Ruhr Regional Association planned the Route Industriekultur, a planning network of 25 points of interest, and the Nordrhein-Westfalen (NRW) established the International Building Exhibition (IBA) to address the industrial transformation of the Ruhr (Fig 9) (Kunzmann, 2004). The IBA project team organized an international competition in 2005 for proposals to transform the mine into an industrial and cultural park. All levels of government became aware of their responsibility to revive the industrial culture of Essen and to maintain the social stability of the city by implementing a top-down approach to the rehabilitation and development of the mine (Lihua & Libing, 2005). The project was managed and run by a joint team of about 30 people, independent of the state government, members of the regional association and local government, representatives of the community, experts and academics, etc. The IBA project provided an international testing platform for the bottom-up involvement of market and social forces in the planning of the transformation of the mine site. After the basic transformation of the mine site was completed, an interdisciplinary team of professionals in architecture, landscape, art, lighting and communications was selected; housing companies, construction companies and other market economies were contracted to

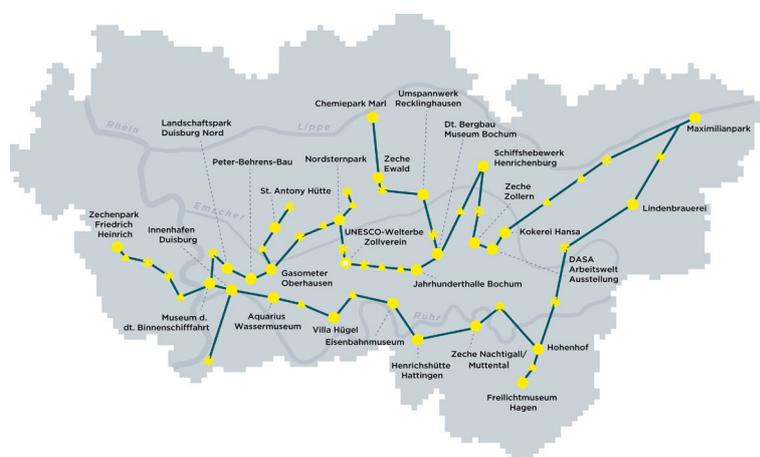


Figure 9. The Ruhr Industrial Heritage Trail (RVR, 2020)

carry out the construction and maintenance of the mine site's buildings and environment. At the same time, under the guidance of the IBA project team, some unemployed miners were hired and trained to participate in the rehabilitation of the mines, which to a certain extent alleviated social conflicts and unemployment in the region. Some community organizations held art exhibitions and trainings to interact and cooperate with the public in art(Chulin&Yungang,2020). Later, various workshops made profits through artistic output; restaurants, cafes and other individual households rented the space to open stores. Some artists recognize the industrial aesthetic value of Zeche Zollverein, the abandoned coal yard and the historic landscape as the perfect place to embody artworks and hold art exhibitions.

Chapter III—The strategy of construction and social influence in 798 art zone

A.Strategy of construction

Because of its innate geographical advantage,798 art zone has become a platform for outward expression, moving from an artists' studio to an art exchange area and becoming one of the must-see attractions for the visitors.When the artists first moved in, they redefined the original industrial buildings and gradually developed them into a collection of galleries(Fig10), art centers, artists' studios, design firms and some bars, forming one of the first soho-style art colonies in China with an international flavor(Chulin&Yungang,2020).



Figure 10. Artist in the industry space(Yan Z,2003)

The arrival of the Olympics later led 798 to begin a full-scale renovation project. Since 2007, the Chaoyang District government has repaved the driveways and pedestrian streets, built seven landscaped plazas, designed greenery for the roadside plazas, re-piped the lighting and fire systems, and expanded the parking lot by more than 100,001 square meters to ensure a smooth flow of traffic and a neat and beautiful environment. Most galleries saw the Olympics as an opportunity to showcase themselves and play a role in building a bridge between Eastern and Western art and culture. According to statistics, during the Olympic Games, 798 held various forms of activities, including 103 thematic exhibition activities by 27 art institutions such as UCCA, and received athletes and heads of state from various countries. With the publicity of the Olympic Games, 798 has become the business card of Beijing, attracting more related institutions and individuals to move in, and gradually diversifying the business forms. The millions of visitors each year have become an attraction for various service organizations to move in, and despite the high rents, they cannot stop the pace of food and restaurants. According to data in 2013(Fig11), the number of shops has grown from a few to hundreds, almost equal to the number of art galleries. Although more and more restaurants, cafes, experience stores, souvenir stores and other businesses are moving in to provide convenience to the art district while squeezing the space for art and cultural development.

development. Nowadays, many travel apps have classified 798 Art District as a must-see spot in Beijing, and whether it is worthy to visit has become the standard for judging the hot spots in the eyes of the public.

B. Buildings in 798 art zone

At present, there are many spaces in the park that are intentionally created in the name of "art" for the sake of tourists' photos, which have long lost their artistic essence. For example, this building is called JOYART Space, with red bricks on the outer wall and a texture with modern decorative patterns painted on the other side(Fig 12). From the outside, it fits the atmosphere of an art museum, but when people enter the interior, they need to buy a ticket of 100 RMB to go to the indoor light show, and the content

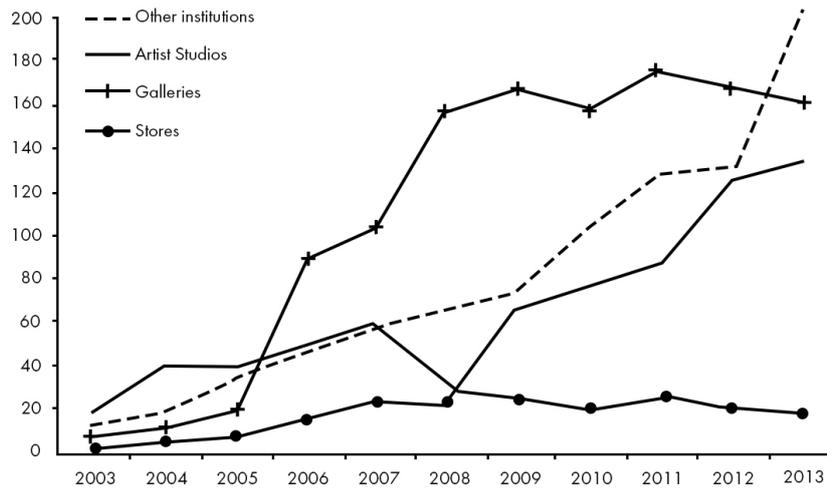


Figure 11. Change in institutions of 798 from 2003 to 2013
Note: data sources from Dai et al.(2015)



Figure 12. Exterior of JOYART



Figure 13. Interior of JOYART

of the exhibition is crude which just catch people's attention and does not match the temperament of the building itself(Fig 13).

M Woods

In 2016, the owner wanted to make additional changes to the exterior and entrance space of this home. To improve the visitor's experience of the exhibition and activities. Without altering the original building, a new layer of translucent material was placed to create an overlay of the old and the new. The translucent quality of the metal mesh also makes a significant difference to the north facade of the original building entrance(Fig 14). During the daytime it directs the sunlight and makes the north facade, which was originally covered in shadows, more vivid(Gao,2016). People can still experience the new while feeling the old behind it and read the historical information derived from the city step by

step .Inside the building, the exhibitions are somewhat academic. In the interior of the building, the old structure is preserved, the overall color is black and white gray, the walls are painted white, and the floor is made of cement self-leveling process, with a post-modern aesthetic texture(fig 15).The gallery space will present a diverse program of exhibitions, performances, music, education, live events and lectures Their clientele is towards a younger demographic, and have hosted the first institutional solo exhibitions in Beijing of artists, such as David Hockney,Nicholas Patti, Giorgio Morandi, Paul McCarthy, and Ryuichi Sakamoto.The content of these exhibitions is different from other galleries in 798(Fig 16).



Figure 14. Before restoration(Vector Architects,2016)

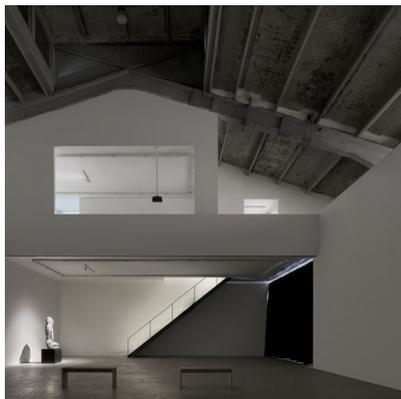


Figure 15. Color used in buildings (Vector Architects,2016)



Figure 16. Giorgio Morandi—A View from the Table. (2020)

PACE BEIJING

Pace Beijing, located in the heart of the 798 Art District, covers an area of nearly 3,000 square meters and is currently one of the largest spatial buildings in the park. The sense of volume, geometry and order highlighted by the building's architecture, which to some extent inherits the Bauhaus architectural design, is a large factory designed for the production of optical instrument manufacturing in the 1960s(Fig 17.). Richard Gluckman, a member of the American Institute of Architects, was in charge of the design, and modified the building while maintaining its overall style. The sail-shaped part of the building is a sawtooth cast-in-place shell structure with curved Y-shaped beams and columns, and a reinforced concrete roof with transverse sawtooth skylights and windows that slope outward about 1.5 degrees. The facade of the building is made of clear red brick walls, and the Pace Beijing logo was added on the facade(Fig 18),the space is preserved with huge vermilion slogans and abandoned facilities and instruments, so that history and art coalesce into a huge visual impact, creating a unique atmosphere for

art and cultural activities. The basic colors chosen for the interior design of most of the buildings in the 798 Art Zone are black, white, and gray, with other colors added in parts depending on the content of the exhibition. The black metal doors and windows, white walls, dark gray floors and concrete arched ceilings, and black, white and gray as the color palette for the interior renovation, can continue the original atmosphere and texture of the building light by the reflection and refraction of the concrete half arch, not only to provide moderate, soft natural light for the work, but also to highlight the contrast between different textures of materials and spaces such as brick, glass and white walls(Fig19).They managed to just open up the quality of the building and introduce some contemporary architectural elements that balance with the gallery's contemporary art program. Therefore, they tried to achieve a balance between the three elements. The three elements are the history, the new renovation and the planned use of the space(Gluckman, 2008).

After joining 798 in 2008 until 2019, Pace founder Arne Glimcher announced that he would close Pace Gallery's original showroom in Beijing's 798 Art zone, as the current galleries in 798 were gradually becoming homogenized. 798 was now actually more like a cultural tourism and creative park. A lot of things in it actually had nothing to do with art, and some spaces didn't focus on contemporary art. Artists had basically moved away from 798 now. Looking back on this history, Fang Lei felt that at one point in time, 798 'raised the aesthetic standards of many Chinese people, and at the same time provided a new aesthetic approach. But in the past few years, this kind of thing has been slowly dissipated by cafes and small vendors, which is quite a pity(Zhao,2017). So the necessity of this original huge exhibition hall was not so prominent anymore, and the gallery has shifted more to the function of serving and selling."

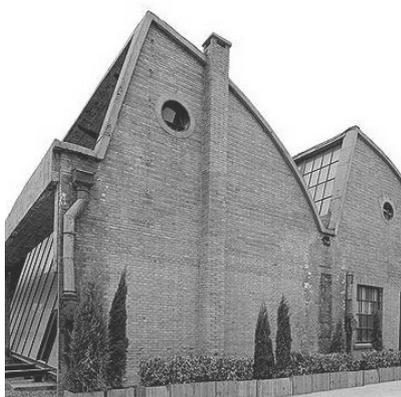


Figure 17. Before restoration(798 Pace Beijing Gallery, 2016)

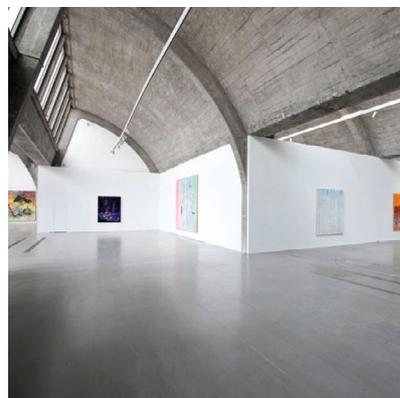


Figure 18. The exterior view (SHUTTERSTOCK, 2017)

Figure 19. The interior view (Pace Gallery, 2019)

Chapter IV - The strategy of construction and social influence in Zeche Zollverein

A.Strategy of construction

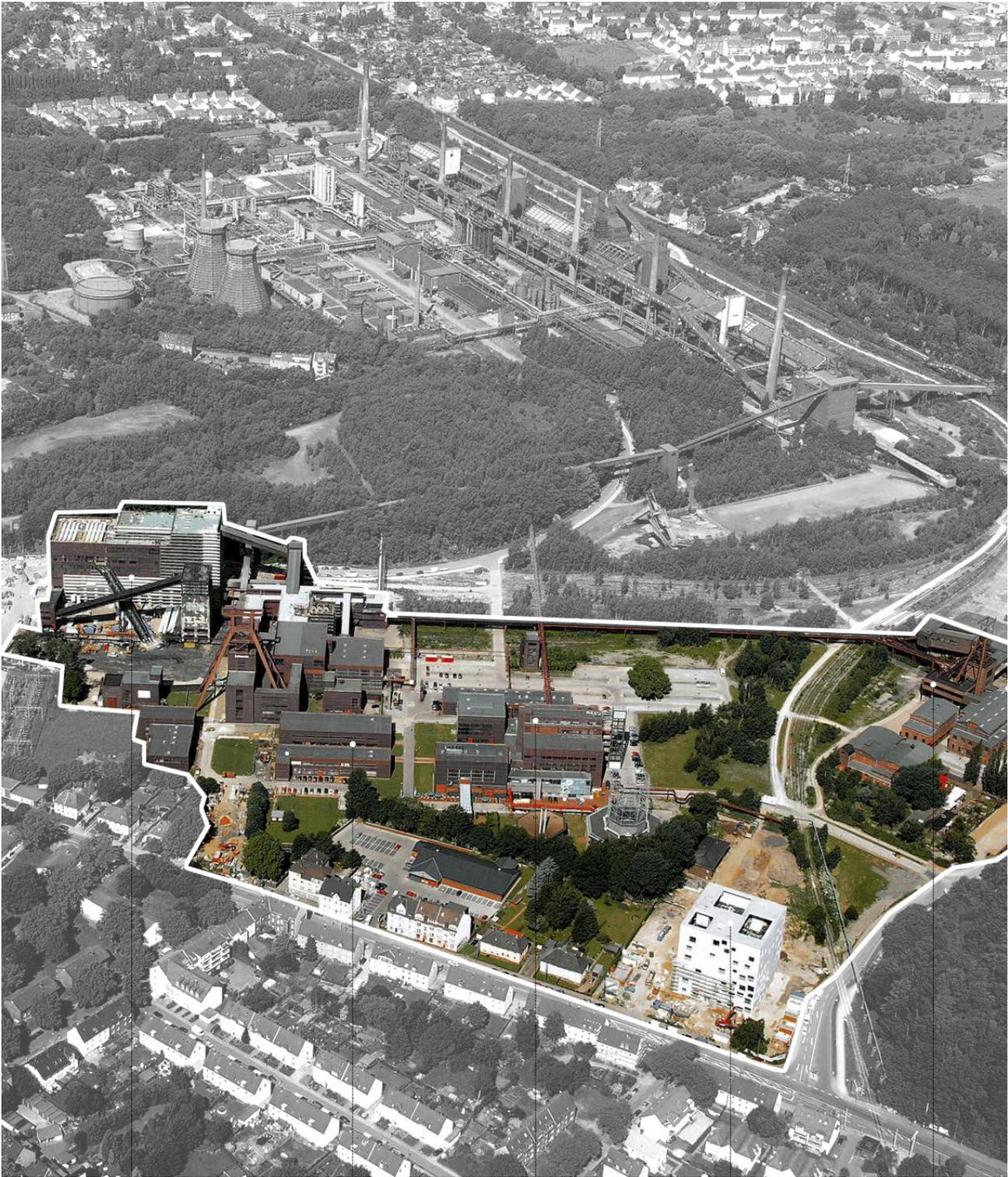
The IBA proposes regional tourism routes, including marketing campaigns and attraction planning. The famous "Route industriekultur" (RI for "industrial heritage tourism route"). The route includes 19 industrial heritage tourism nodes, 6 national museums of industrial technology and social history, 12 typical industrial settlements, and 9 watchtowers made from abandoned industrial facilities, and 3 of the 19 main sites have been selected to create visitor centers that provide information on industrial heritage tourism throughout the region.

Zeche Zollverein has been repositioned as a cultural and recreational center, offering re-employment opportunities for unemployed workers in the interest of sustainability and care for the community. They are trained as guides to lead visitors back through the mines and tell the story of the remembered mining life, and such vivid living history especially attracts all kinds of groups to participate in mining research activities. The design of these nodes can be divided into four categories according to the development model: complex design, museum design, landscape park design and lookout point design. Zeche Zollverein belongs to the transformation model for landscape parks and museums(Fig21).

The development of the whole park is divided into three phases: preparation, middle stage and post stage. The first stage mainly solves the problem of how to establish the link between the Zeche Zollverein and the design and creative industry. In the first phase, the problem of establishing a link between the factory, the design and creative industries. The Red Dot Design Museum was used to stimulate the enthusiasm of private design activities and exhibitions, mainly with 2,000 exhibits of industrial design, thus becoming the world's largest contemporary design exhibition. In the mid-term, the Ruhr Museum, which emphasizes the preservation of industrial heritage and the value of humanistic commemoration, was built and operated. The permanent exhibition of the Ruhr Museum is a vivid demonstration of coal mining and production technology through physical machinery combined with slide projections and sound effects, as well as pictures, archives and textual explanations to help visitors gain a comprehensive understanding and immersive experience of the Ruhr area. In order to preserve the industrial heritage, most of the buildings have been preserved in their original form and have not been significantly altered. An industrial-themed hotel and a number of auxiliary stores, offices companies and restaurants were established at a later stage of the renovation(Fig22). In addition, the Zeche Zollverein has reused the remaining areas of the industrial estate in a comprehensive manner: the landscape park was designed for recreation and leisure in combination with the railway tracks and the industrial forest. It has become an important venue for festivals and gatherings in Essen. The comprehensive reuse with the museum as the main body firstly solves the problem of industrial heritage culture and achieves a better effect of heritage interpretation and value explanation, and at the same time fully digests a large amount of land and resources of the heritage site through comprehensive reuse, and realizes the promotion of multi-dimensional development of environment, economy and social welfare through various modules such as park, commercial and festival. The resulting renewal of the mine site, with the improvement and expansion of public spaces, will become a huge cultural center.



Figure21. Overlook from platform on the top



Ruhr Museum

Hall

The red dot museum

SANAA school

Hotel

Figure22 .Zeche Zollverein(Paas, C,2007)

Note:Original figure from Museo de Ruhr y centro de visitantes and second editing from author

B. Buildings in Zeche Zollverein

Ruhr Museum

With this goal in mind, the Ruhr Museum was chosen to be placed in one of the most iconic buildings, Kohlenwäsche, a 90m long, 30m wide and 40m high washing plant for selecting, sorting, storing and stockpiling coal (Fig23). The coal is brought to the top of the building via huge inclined conveyors for sorting in a water bath. The renovation began with cleaning the exterior and retaining the original steel supports, bricks and old machinery and equipment, adding innovative designs while preserving the history. The entire browsing process can be seen as similar to a factory production process. One first enters the interior via a dramatic orange elevator inserted diagonally from the ground up into the coal washery block to reach the information center, café area, space exhibit, guided walkway, elevator, and exhibition hall (Fig24). Visitors feel as if they are experiencing the past, present, and articulated future of the Ruhr Metropolis (METALOCUS, 2021). The equipment and machines of the factory, the iron frames, and the surviving structures intertwine to form an industrial forest, giving visitors the most realistic view of the exhibition (Fig25). In the redesigned coal washery, the listed inventory forms are attractive and sometimes even contrasted with modern fixtures and fittings - for example through the new stairwell in the dark orange style one can see many collections of the natural and cultural history of the region and the color of the interior staircase echoes the orange elevator on the exterior of the building (Fig26), then up to the museum's overlook platform, where one can overlook the whole of Essen and see the heavy industry nodes marked on the handrail (Fig27).

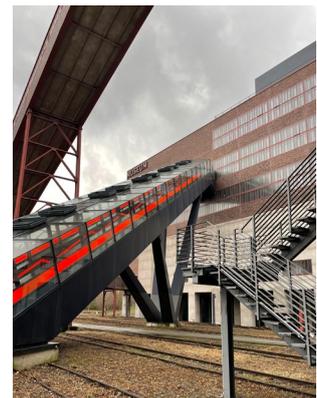


Figure23. The exterior view of Ruhr museum(left)&Demolition before transformation(right) (OMA, 2015)

Figure24. Orange elevator



Figure25. The facilities in the museum

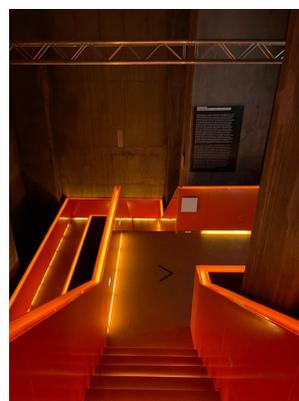


Figure26. Interior staircase



Figure27. The handrail

The red dot museum

The red dot museum was formerly a group of old boiler houses. The design by British architect Norman Foster preserves the red brick facade of the original building. The red brick walls of the original building have been preserved, while new elements of form have been added. The green belt was added on both sides of the road to make the whole building contrasting with the old and the new elements, reflecting the simple and clear structural logic of modern architecture(Fig28). The internal alterations are: Foster made a concrete cylinder structure as the core of the traffic, and he designed a mezzanine level to separate the former large space, making it into three levels(Fig29). The original through-height structure was partially preserved, utilizing the original tall factory space(Stefan, 1997). Foster retained one of the five original boilers as an example of 1930s technology. The remaining boilers were hollowed out to accommodate individually supported galleries designed as "boxes within boxes," their white, light partitions contrasting with the heaviness of the original structure. These movable partitions will in turn form meeting rooms and more flexible exhibition spaces that can be updated in response to the changing temporary and permanent collections(Fig30). The designers exploited the full potential of the original building space and structure, using the rusted original mineral facilities as exhibition shelves, platforms, a helicopter suspended in the air, dilapidated boiler equipment on one side, and exposed steel structures on the other(Fig31.).The five floors of the Red Dot Museum are filled with new products ranging from laptop, Audi cars, to robots. The fruits of the technological age are in stark contrast to the drab boiler room walls of ancient periods(Fig32).



Figure28. The exterior view of the red dot museum



Figure29. Interior space



Figure30. Boxes in exhibition



Figure31. The helicopter

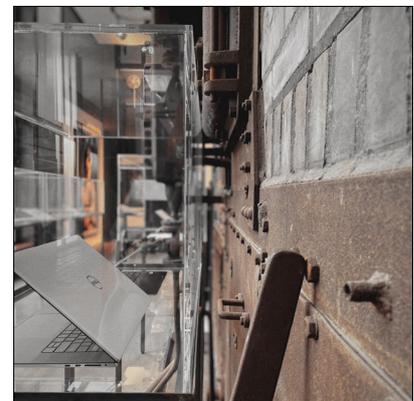


Figure32. Contrast between technology and industry

C.Social influence

Many communities in the municipality of Essen have benefited from the development of tourism, particularly in terms of increased employment opportunities, which is important in an area that has had serious problems with industrial decline and growth. The government set up a vocational center and partnered with the RAG Group to provide skills training for unemployed miners to help them get back into the workforce. Unemployed miners and local residents can also receive skills training as tour guides at the Ruhr Museum, and those who pass can be employed locally or at other tourist sites in the Ruhr area, which will not only solve the employment problem for some residents, but also promote the collective memory of the mining area. At the same time, the government will provide financial support to assist communities and individuals in organizing exhibitions and training to activate the atmosphere of the mine and bring art into the lives of the people. Zollverein's transformation brings value to the local community by allowing people to recognize and celebrate the past, pass on heritage values, and increase local pride and identity.

Chapter V--Compare two case studies

From the change in the dominant discourse in the development of 798, we can see that the space where 798 is located was originally owned by the government, but the Seven Stars Group later became the stakeholder, who gave part of the space to artists and coincidentally formed an art zone. Later, international events intervened to promote the development of the art district. The Seven Stars Group had the economic power, the art groups had the artistic power, and the government had the political power. The government acted as an arbiter and more of a balancing act in the game between the three parties. In order to preserve the cultural and artistic value of 798, artists held a series of art events and exhibitions, and with the upcoming Olympic Games in Beijing, the government urgently needed an art district like 798 to convey Beijing's "cultural card" to the world, so the government slightly favored the art side in the early game. The 798 Art Zone was preserved because of the government's legalization. The Seven Stars Group also recognized the industrial aesthetic value of the factory and began to support the development of the art district. However, the Seven Stars Group still held the lifeline of 798, and as a business, it was always profit-oriented, so high rents rose, forcing artists to flee 798, and instead tenants from other businesses began to flood in, becoming more and more commercialized. Therefore, the once popular art museum is gradually declining, driven by economic interests, there are good and bad exhibitions, and art is no longer the highlight of 798.

The transformation of Zeche Zollverein's heritage is a process of integration oriented towards tourism. In the beginning, the pace of development of the Zollverein has been in the hands of large market economies such as the RAG mining group, with little involvement from all levels of government, trade union organizations defending only the most basic rights of the miners, and workers having no discourse. The RAG group wanted to eradicate the factory at the beginning and was met with public opposition. The IBA international architecture exhibition as an international event took hold of the discourse and provided a regional influence on the industrial heritage of the Ruhr. All levels of government allocated funds and gave assistance to the project. At the same time the characteristic attributes of organizational, social and voluntary nature allow social groups to play the role of mediator between the government and the public in the practice of mine transformation. For example, the IBA project team held an international competition for mine transformation proposals as a process of actively seeking resources. In addition to this, residents and workers in the community also have a discourse, and they actively participate in the life of the community as workers and experiencers, creating and perpetuating a sense of culture in the mine. As participants, they are also able to solve their own employment problems and strengthen their sense of identity.

Conclusion

The control of discourse is the control of power. Although other businesses can be seen moving into the zollverein, the cultural and artistic values brought by industrial civilization are not diluted. The transformation of the Essen industrial zone is a multi-faceted renewal process from planning and coordination to daily practice, from financing to construction on the ground, from physical space to community life. The government, the group, and the social groups are planning towards the same target area- to show the real value of industrial heritage. The NRW government has taken the initiative to seek institutional innovation by setting up special functional committees to devolve power to the community and mobilize public energy. The government avoids the confinement of ideas in the conflict of different discourses. Social groups share the public affairs, the public enjoys the public life, and together they revitalize the social space. All kinds of market players come to the mining area for its charm, and in the process of pursuing their own development, they feed back and optimize the economic and social development of the mining area, forming a virtuous circle. In terms of strategy, they also give full play to the industrial character of the factory, using revitalized machines, structures and other forms to protect and promote the industrial history, and to connect with future technology, which is a good explanation of the value of industry in the past, present and future.

In the nearly 30 years of development of the 798 Art Zone, from the heyday of artists to becoming Beijing's city card, to the gradual deterioration of the art scene, different voices have had diverse interests in the market and therefore lead diversification on the art zone. Firstly, the artists as the core force in the beginning have grasped the industrial aesthetic of the 798 and when the largest art museums in the Park have gradually moved out of 798, art has gradually weakened. The 798 zone has gradually lost its original function in the process of development, with the government and corporations as the two strongest parties controlling the cultural capital of the art district and constantly capturing the value of the art field, while the economic benefits have not been effectively fed back into the art district, and the arrival of other stores has also affects the development direction of 798, squeezing the value of the art zone. In the discourse contest of 798, art becomes a tool for land appreciation, and can also become a window to show urban civilization. The existence of multiple discourses can certainly enrich the experience of a park, but how to achieve a balance becomes a more difficult issue at the moment(Fig33). If people fail to balance the discourse, It will be more serious than the current situation, the industrial heritage of 798 will be completely occupied by business, people can hardly immerse in the quiet atmosphere of the gallery, and the brilliance that once had about art will fade out of the stage. Therefore, it will affect the survival of the 798 Art Zone, as different positions will continue to break the so-called equilibrium and even account for its demise.

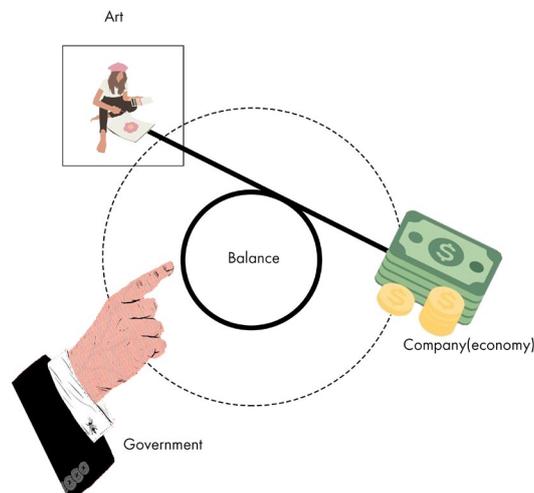


Figure33. Relationship between diverse discourses

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