

Titel/Title:	
Autor*innen/Author(s):	
Veröffentlichungsversion/Published version: Zeitschriftenartikel/Journal article	
Empfohlene Zitierung/Recommended citation:	
Verfügbar unter/Available at: (wenn vorhanden, bitte den DOI angeben/please provide the DOI if available)	
Zusätzliche Informationen/Additional information:	

Co-evolution of institution, culture and industrial organization in the film

industry: The case of Shanghai in China

XIN Xiaorui^{1, 2}, Ivo Mossig²

The Center of Modern Chinese City Studies, East China Normal University, Shanghai, 200062, China;

Institute of Geography, University of Bremen, 28359 Bremen, Germany

Corresponding Author: Ivo Mossig (mossig@uni-bremen.de)

Foundation item: Under the auspices of National High-level University Overseas PhD

Program by China Scholarship Council (CSC), Ministry of Education of China (No.

201406140036)

Abstract: Research about the Chinese film industry is far behind the actual development of

practice, especially considering its evolution and main influential factors. Furthermore, existing

research on the film industry in economic geography is mostly conducted from the perspective

of cluster theory with lesser attention to institutions or culture. In this paper the theory of co-

evolution is used to tackle these two gaps. The role of institutions, culture and industrial

organization as three fundamental elements of co-evolution is pointed out and discussed in the

theoretical section. The phenomena of co-evolution in the Shanghai film industry as important

examples of the Chinese film industry are analyzed in the empirical part. We phase the

development process in four periods and differentiate identified effects of co-evolution between

institution, culture and industrial organization based on the specific setting in each particular

period.

Keywords: co-evolution, film industry, Shanghai, China

1

1 Introduction and aims

For many reasons such as the incremental contribution to jobs and economic turnovers, low resource consumption and environmental pollution, cultural and creative industries are supported by governments. The film industry, as an influential part of cultural and creative industries, also receives great attention in public discourses and academic research. The US film industry leads the global market by far. China has become the second largest film market worldwide since 2012. In 2014 the box office revenues in China grew to 29.64 billion Yuan (ca. 4.8 billion US-\$) and accounted for 13% of the global box office intake, while the share of the United States is 27% (MPAA, 2015). Unlike in European markets, imported movies from the United States are less important in China (Scott 2000, Mossig 2008). Domestic films have become competitive, reaching a market share of more than 50% of the total box office revenues in the last ten years except 2012 (Figure 1). However, studies on the Chinese film industry from the perspective of economic geography are rare.

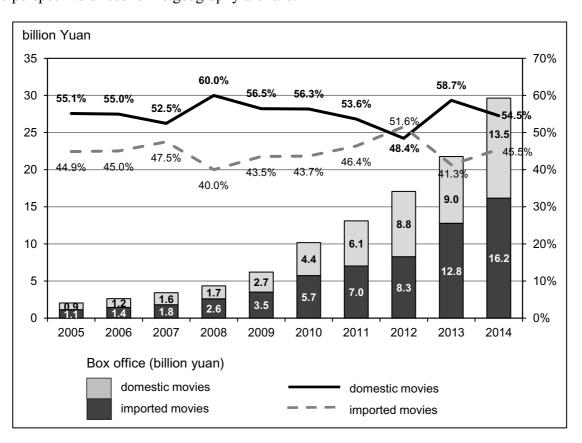


Figure 1: Development of Chinese box office revenues between 2005-2014 Source: China Entertainment Industry Report 2011-2012, China Film Industry Report 2014-2015.

(← Figure 1 p. 924)

Currently, the perspective of economic geography scholars on the film industry and its dynamics mainly use cluster concepts to analyze its organization and spatial changes. Typical examples are studies of the Hollywood film industry by Christopherson and (p. 923) Storper (1986; Storper and Christopherson 1987) or Scott (2002; 2005; Scott and Pope 2007). They focus on the evolution of the Hollywood film industry and observe that the organization of the Hollywood film industry has experienced different periods from emergence to vertical integration, then vertical disintegration to today's "New Hollywood". Öz and Özkaracalar (2010) compare film clusters in Istanbul and Hollywood and conclude that the socio-economic context on the macroscale is an important factor determining the resilience and vulnerability of a film cluster. Coe (2000, 2001) refers to the Vancouver film industry as a Satellite-Marshallian industrial district. The emergence of this hybrid agglomeration started with the runaway production from Hollywood, but the success depends on the interpersonal networks between these locations. In a similar vein Foster et al. (2015) recently stressed the role of regional film offices as important intermediaries linking the traditional cluster in Hollywood with the growing film industry in Massachusetts by connecting mobile creative professionals and project entrepreneurs from Hollywood with local labor pools, service providers and production locations in Massachusetts. However, the development of the Shanghai film industry is far less affected by Hollywood because of institutional regulations in China.

Some scholars pointed out that research on film industry clusters often underestimates the role of institutions. Karlsson and Picard (2011) argued that existing media cluster analysis does not express the role of government as an important player in the media industry. In fact involvement of governments in the media sector starts earlier and is far more comprehensive than supporting the emergence and creation of clusters (Dorenkamp and Mossig 2010). Bathelt (2002) also adds the institutional dimension to the analysis (\leftarrow p. 924) of a media cluster in Leipzig, Germany. Even though a few researchers have realized the role of institutions in the

evolution of the film industry, they have still chosen the cluster as an object of studies and paid more attention on how the institution influences the formation as well as the vertical and horizontal dimensions of the cluster. More details on how institutions influence the film industry itself yet need to be studied.

Nelson (1995) examined the relationship between industry and institution. On one hand, he describes the structure-conduct-performance model developed by Harvard School scientists. They pointed out that the industrial structure is the core of this model. In order to obtain a good performance, the most important thing is to adjust and improve the industrial structure by public policy incentives. On the other hand, Cohen and Noll (1994) indicate that the industry itself would limit and shape industrial policy. Thus, the relationship between industrial structure and policy is bi-directional.

The film industry is not only linked to the economy and to industrial policy, but also to society and culture. The relationship between the film industry and culture is a popular topic in multiple disciplines. Scholars from various countries agree about the profound impact of the film industry on culture (eg. beliefs, fashion, ideologies or aesthetic feelings) (Onuzulike, 2007, Öz and Özkaracalar 2011). The main founders of the Hollywood film industry knew that the movies had the ability to influence culture in tremendous ways and established their ethic perceptions through Hollywood rather than simply absorbing existing US perceptions (Gabler, 1989). On the other hand, culture also affects the production process, the form and content of the film industry. Craig et al. (2003) examines the development of the American film industry in foreign markets by using a quantitative model. He draws the conclusion that US films are more successful in countries that are closer to the US main culture and have a higher degree of Americanization compared to countries that have a certain distance to American culture. For instance, Bollywood film production networks are influenced by Indian family and socioculture (Taeube, Lorenzen, 2007). Therefore, the relation between film industry and culture can be seen as a mutual causality. In the dynamic process, the relationship is considered as co-

evolving.

However, the cluster literature on the film industry often does not mention the effect of culture. According to this shortcoming there is a need to analyze the dynamics of the film industry with regard to the importance of institution and culture. The bi-directional relationship of the film industry, institution and culture naturally make us think about the concept of coevolution. Evolutionary economic geography provides the frame to explain the emergence, growth, maturation, recession or renewal of industries through time (Boschma and Frenken, 2006; Boschma and Martin, 2010). It pays more attention to the history of the industry itself, especially by using some notions like lock-in, path-dependence and co-evolution. In this article, the concept of co-evolution will be used to analyze the Chinese film industry. Berg and Hassink (2014) point out the significance of co-evolution for the analysis and explanation of creative industries, because it copes with the interaction between creative industry and its institutional settings.

The existing studies mainly focus on the film industry in North America and Europe. However, the economic system in China in not comparable to Western models of capitalism. Thus, existing studies pay less attention to the macro-level institutional context. The goal of this paper is to fill this gap by adding the empirical case of the Chinese film industry. We use the concept of co-evolution as a framework to analyze how interactions of (\leftarrow p. 925) institution, culture and industrial organization effect the evolution of the Chinese film industry.

This paper proceeds as follows: The next section begins with the theory of co-evolution by outlining its conception, characteristics, content and mechanism and giving a brief focus on the meaning of institution, culture and organization in the film industry and how these elements co-evolve and interact. The third section takes the Shanghai film industry as an example to analyze its co-evolution in different periods. Finally the findings will show that (1) the co-evolution of institution, culture and organization can be used to analyze the dynamics of film industry; (2) the evolution of Shanghai film industry has passed four periods which can be

differentiated by their specific set of interrelations between institutions, culture and organization; (3) the outcome of those co-evolutions is not constant. We consider stages with a stronger impact of co-evolution compared to periods with a distinct weaker effect.

2. Theory of co-evolution

Initially, co-evolution is a natural phenomenon that is observed in biology and refers to a situation in which "an evolutionary change in trait of the individuals in one population in response to a trait of the individuals of a second population, followed by an evolutionary response by the second population to the change in the first" (Janzen, 1980, p. 611). In general the objects of co-evolution are two physical entities, but lately it has increasingly been used in organization, management, economics and other social sciences (Lewin and Volberda, 1999; Cantwell et al., 2010; Ter Wal and Boschma, 2011; Guo et al., 2007). Thus, co-evolution is more and more used to theorize and study the development of industries empirically. It refers to a situation in which "two evolving populations co-evolve if and only if they both have a significant causal impact on each other's ability to persist" (Murmann 2003b, p. 22). In the meantime, Malerba (2006) strictly points out that the analysis needs to find out what exactly is co-evolving, how intense the process is and whether there is indeed a bi-direction of causality. The description that everything is co-evolving with everything is not sufficient. According to this concept, we need to take a closer look on these characteristics: (1) the meaning of "co-" does not simply indicate that only two elements interact, in fact many scholars have shown that several elements co-evolve; (2) the populations do not only refer to the firms on the microlevel, it also includes clusters, networks and industries in the meso-levels, and the macro-level of spatial systems, like regions; (3) the technology, knowledge, cultural, institutional and political environment can also be considered as a population; (4) in this process there are reciprocal/bidirectional causalities; (5) the populations co-evolve more or less simultaneously (Schamp, 2010; Martin and Sunley, 2006).

Several studies about the mechanism of co-evolution are based on the perspective of the Variation-Selection-Retention-model (VSR) and the struggle over scarce resources (Volberda and Lewin, 2003; Murmann, 2003a; Sotarauta and Srinivas, 2005), which was first drafted by Campbell (1965). Hodgson and Knudsen (2006) point out that every evolution, including the economic field can be analyzed by using a VSR model perspective. When discussing coevolution, scholars observe that each partner, like industries, institutions and economies all experience VSR processes and change together (\leftarrow p. 926) (Baum, 1999; Eisenhardt and Galunic, 2000). About the question how we differentiate co-evolution and standard evolution, Murmann (2002, 2003b) uses biological notions as an explanation. Competition, mutualism and parasitism in all six relationships between two populations (others are neutralism, commensalism and amensalism) are co-evolutionary interaction: "A co-evolutionary relationship between entities can increase the average fitness of both populations (mutualism favor both), decrease the average fitness of both (competition—inhibit both), or have a negative or positive impact on the average fitness of one but not the other (predation & parasitism-kills or exploits)" (Murmann, 2002, p. 25). The common point of these relationships is a bidirectional causality to each part and these causalities have a significant impact to change the fitness of interactions.

Co-evolving elements are not only firms and industries (the cluster/network of firms and structure of industries), but also part of more arenas, like technology, knowledge, institution and the socio-cultural background (Ter Wal and Boschma, 2011; Nelson, 1994; Murmann, 2003a). In previous studies, the number of research on empirical cases is more seldom than theoretical analyses (Eisenhardt and Galunic, 2000). It is not easy to follow a large time span, take evolution of multi-level into account, analyze embeddedness, and notice nonlinear bidirectional or multi-directional causalities when studying cases. Existing cases are concentrated in semiconductors, biotech, software or chemical sectors (Nelson, 1995; Murmann, 2003a). Therefore, we study the co-evolution of the film industry in Shanghai and associated elements

in order to provide another perspective for analyzing the film industry itself rather than clusters and provide a further example of an evolutionary economic geography perspective.

This paper chooses institution, culture and industrial organization as factors of the coevolutional analysis. Institutions can be defined as "formal regulations, legislation and economic systems as well as informal social norms that regulate the behavior of economic actors: firms, managers, investors, workers" (Gertler, 2004, p. 7). From this definition, we can derive public as well as private subjects. Public institutions may reach from local to national governments and even to supranational committees. Private subjects may be firms, networks, clusters, industry associations and so on. Over the past decade, institutional economic and evolutionary approaches both attempted to find their way to economic geography and explain the institutional effects on economic activities. Boschma and Frenken (2006, 2009) observe that the main difference is that the institutional approach often addresses territorial institutions while an evolutionary approach advocates the organizational routines. In the film industry the formal institution mainly involves laws and regulations, like censorship and film-rating systems, the targeted restrictions and incentives policies on film industry, as well as the role of the government in different economic systems. Informal institutions are mainly conventions and constraints among participants in the film industry. In addition, institutions are not fixed, but specific in time and space.

Culture is a broad and complex body and has diverse definitions in different disciplines. About its definition in economic geography, Crang (1997, p. 5) considers that there are two main types: "First, as a generic facet of human life, bound up with human competencies to make the world meaningful and significant. [...] Second, there are those who stress culture as a 'differential' quality, marking out and helping to constitute distinctive social groups each with their own meanings and value systems." (p. 927) In fact, we consider these two as not contrary and see the second type as more suitable for our purpose. The ideas, opinions and preferences of cultural contexts impact on the contents of the movies, its forms of expression,

target audience and the spatial distribution. To some extent, movies themselves are considered as the outcome of a specific culture. For example, Hollywood movies are seen as the symbol of American culture. In this paper, we pay more attention to cultural differences and exchanges and their impact on the development of the film industry. The subjects include the interrelations and differences among multiple cultures and the relationship of culture, economy, regulation and society, groups etc.

The third part is industrial organization, which does not refer to a particular group, industry association or government organization, but is rather similar to Nelson's (1995) industrial structure variables. This includes the way firms are organized and governed, how co-operations between firms and their competitors are set up, the relationship between upstream and downstream as well as interaction of industry and university. Cabral (2000, p. 3) also summarizes that "industrial organization is concerned with the workings of markets and industries, in particular, the way firms compete with each other." In this paper, the industrial organization mainly involves the relationship of firms to the process of film production and distribution. Some studies about the organization of production and distribution in the film industry researches on the personnel change according to a diverse context and the function and hierarchy of different types of firms in different times. Karlsson and Picard (2011) noted that an important pattern in the media sectors is the division of labor and the organization in intraand inter- firm projects, within a limited time span that can be seen as project-based temporary production networks which is very common in the media industry (Sydow and Staber, 2002; Mossig, 2004). Indeed, in the film industry, this network mode will lead to the establishment of informal institutions, like tacit knowledge, rules, norms and trust through path-dependence. For example, this mode makes it unnecessary for leading film firms to hire or train their own professional writers, scriptwriters and technical staff because they can find suitable freelancers or small firms in the market. These short-term contracts with multiple partners reduce some risks and increase their flexibility.

When we consider the co-evolution of these three elements, we need to pay attention to the following aspects: First, the relationship of three elements is a triangle (Figure 2), which means that the evolution of institution, culture and organization is simultaneously interacting, although we investigate these three combinations of interaction between two of three elements in each case. Second, the effects of each element on others are unequally changing and hard to evaluate quantitatively. Third, the contents of their interactions are diverse in different contexts in time and space. Furthermore, whether the outcome of a co-evolutionary process will be beneficial or harmful to the elements depends on the specific causal process in the empirical case (Murmann, 2002).

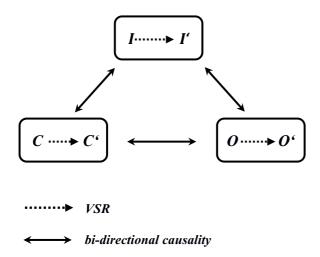


Figure 2: The co-evolution of institution (I), culture (C) and industrial organization (O) in the film industry Source: Own draft. (← Figure 2 p. 929)

The co-evolution in film industry is based on the respective evolution in each of these three elements. The evolution of institutions includes the mastery of informal institutions (e.g. industry rules, tacit knowledge, restrictions and practices) and the establishment of formal institution (e.g. all kind of policies, laws and rules). The evolution of culture is the variation in the degree of cultural exchanges and the scale of the cultural differences over time. The evolution of organization is the degree of cooperation and competition between enterprises in

the film industry, the extent of industrial specialization, the ownership and hierarchy of film enterprises. ($\leftarrow p.928$)

According to this section, the question arises what exactly the mechanism in this coevolving process is. Thus, a concrete empirical case study is needed. Methodically this study
follows to Bennet and Elman's (2006) achievement of applying qualitative methods in
analyzing causal complexity. This entails a detailed tracing of processes and the sequences of
historical phenomena, using cases citation and comparison to explain complex content. The
data and information about the development of the Shanghai film industry, which was
investigated for this study, mainly comes from statistical yearbooks, documentaries, online
archives and museums on the Chinese and Shanghai film industries as well as scientific papers
and books written by historians, sociologists and experts in media or communication studies
and some public interviews to famous filmmakers.

3. The co-evolution of Shanghai film industry in different periods

Shanghai is the birthplace of the Chinese film industry and was even named "the Eastern Hollywood" in its golden times, but lost its supremacy on the domestic market in the recent decades. From the first movie in 1896, the Shanghai film industry has a long past (Wang, 2003). According to different turning points, the Shanghai film industry's history can be divided into four periods: the emergence, development and maturation form 1896-1937 (3.1), the Shanghai film industry during the wartime 1937-1949 (3.2), the film industry in the People's Republic of China und Mao Zedong 1949-1977 (3.3), and the period of reform and transformation since 1977 (3.4).

3.1 The emergence, development and maturation of the Shanghai film industry

The first period went from 1896, when the first movie was on show in Shanghai, to 1937. During this period, the film industry emerged, developed and gradually matured in (← p. 929)

Shanghai. By this time, the history of Shanghai entirely represented the development of the Chinese film as a whole and in the end of this period, Shanghai was known as the "Eastern Hollywood" (Wang, 2003, He, 2011).

During this period, there were three basic economic systems. Feudal economy gradually weakened in the early time, and then foreign capitalist economy in China experienced a decline from strong to weak, Chinese national capitalist economy grew stronger and became dominant. This process showed the role of changing market forces. The main purpose of the Shanghai film industry was financially motivated and not the approach of political propaganda. The relations between the firms were characterized by competition rather than steered or controlled by the government. In consequence types of film enterprises became abundant. In this period, there were sole proprietorships, partnerships, joint-stock companies, limited companies, foreign-owned enterprises and Sino-foreign joint ventures (Long, 2004). With the expansion of a domestic capitalist economy, the power of foreign film firms became weak. In the first half of this period, the foreign firms were on top of the hierarchy, because all movies within the market were introduced from outside. Foreign investors also occupied more than 90% of the cinemas. From 156 movie theatres in Shanghai in the early 1920s, only 11 were Chinese (Wang, 2005). In the second half, domestic film companies slowly gained advantages in production and distribution. Shanghai had own production firms that gradually displaced the foreign ones due to cultural differences. Audiences preferred the domestic movies because of the more familiar language, stories, social conventions, and expression compared to foreign movies. The share of movies produced by the three largest production firms, Star Company, Tianyi Company and Lianhua Company was 73.6% of the total output of Shanghai firms (Lou, 2012). Since 1925, cinemas were gradually built by Chinese businessmen, mainly because of two reasons: First, more and more merchants realized the potential and wanted to participate from the profits of the film industry. Second, the foreign firms asked for more strict contracts and higher prices for the exhibition of domestic movies in their cinemas. This motivated the filmmakers to establish

a domestic cinema network. Thus, Star Company and Tianyi Company formed a joint monopoly theatre chain and integrated the whole film industry chain from production to distribution. From 1930s, the Chinese firms became the major investors and operators of cinemas and the market share of foreign firms declined to less than 30% (Yang, 2006).

The development of a capitalist economic system also influenced the workforce structure of the Shanghai film industry. Businessmen, actors, writers, filmmakers, freelancers etc. were all a result of competition and market selection. At first, the investors of film firms were businessmen, but also professionals began to invest into and operate their own film firms.

The main characteristics of industrial organization involved three aspects. First, state-owned enterprises did not exist. Second, the number of firms increased and the production and distribution usually belonged to numerous smaller enterprises. At the same time, every company was solely responsible for nearly all details of a movie. The production of the films has not being subdivided into different parts among different companies. Thirdly, foreign firms played an important role in the Chinese film market. This was the only stage in which foreign enterprises participated in the whole film industry chain and competed freely with domestic enterprises. (\leftarrow p. 930)

The organizational variation facilitated the formation of competition and the development of institutions. Firstly, competition among all kinds of private firms was based on resources like capital, the product and new technologies. The co-operation among them was driven by interest. These two principles generated the common standard of market and industry. Secondly, co-operation and competition contributed to the existence of informal institutions that regulate the behavior of economic actors in the film production and distribution.

There was also a bi-directional causality between culture and institutions: During this period, the most significant cultural characteristic was that Western culture fluctuated into China. With the import of foreign movies, exchange between Eastern and Western cultures increased. As the frequency of cultural exchanges increased, confrontations between different

groups naturally emerged and institutions were needed to alleviate these situations. In this period, cultural collision was mainly caused by negative images of China in foreign movies that made more and more Chinese oppose them. The movie incident related to "Welcome Danger" was the peak of this cultural collision. It was produced by Paramount Pictures Corporation in 1930 and obviously humiliating to China. It caused a rapid outbreak and great repercussions of nationalist sentiment within society. After a struggle, the Chinese government got the right to censor foreign films (Ren, 2011), a key point of the censorship in the Chinese film industry. It examined and banned shoddy, vulgar, brutal and obscene contents which potentially influence the industrial development environment, public security or social atmosphere and attempted to eliminate derogative contents about China in foreign movies. Therefore, the cultural influence on institutions was a cumulative process. When the cultural differences accumulated to a certain extent, the institution changed in order to accelerate harmony.

A cultural fusion resulted from frequent cultural exchange through movies, concession and mass immigration, which made the Shanghai culture very diverse. The inclusiveness and acceptability for movies attracted many businessmen and firms from France, Russia, Germany and the USA to invest into the whole industry chain in Shanghai. Foreign-owned enterprises became an important part in the organization of Shanghai film industry. In addition, Shanghai-style culture was formed and embedded into the contents of domestic movies (Yi, 2009). The mix of traditional Eastern and the more commercialized, open and personalized Western culture was a decisive advantage exporting Shanghai movies to Southeast Asia compared to competing movies from the West, e.g. Hollywood, not least due to colonial history. This advantage stimulated not only domestic firms to go through further efforts, but also more and more businessmen to invest into the film industry.

During the first period from 1896 to 1937, the evolution of institution, culture and industrial organization was causally linked (Figure 3). It was the most glorious and interference-free phase in the history of the Shanghai film industry. Shanghai had the complete production

chain, free import and export trades and produced some excellent masterpieces which were internationally recognized. We associate this success closely with the co-evolution of the three elements.

3.2 Shanghai film industry during the wartime

The end of the previous period suddenly occurred in 1937 with Japanese occupation of Shanghai. The following second period from 1937 to 1949 can be subdivided into three (← p. 931) courses: Isolated Island Period (1937-1941), Occupied Period (1941-1945) and War of Liberation (1945-1949).

The outbreak of the war led to the breakup of free competition in the market. The different situation of wartime led to inconsistent institutional subjects, content and intensity. Thus the influence of institutions on culture and industrial organization changed.

During the Isolated Island Period Shanghai was controlled or occupied by Japan, with the exception of the French Concession and the International Settlement in 1937. Concession areas in China were ceded territories within China, governed and occupied by foreign powers. Great Britain and the United States owned the International Settlement, while France retained the French Concession area. Those two areas located in the city centre surrounded by the Japanese occupied area built the so-called "Isolated Island". A relative vacuum occurred in these two areas. For security reasons, almost every film company which survived started to cooperate with French and American companies. In the meantime, a great number of affluent people entered the concession areas. This ensured a certain number of audiences and led to extraordinary prosperity of the film industry (Yi, 2009). In the concession areas, a relatively loose institutional influence on culture mainly encouraged left-wing writers and filmmakers to actively shoot anti-Japanese and patriotic movies. (\leftarrow p. 932)

In the course of the occupied period, the Japanese aggressors, the occupying power and their Chinese collaborators completely seized Shanghai. They immediately started to control

the film production and distribution. The puppet government pronounced the "measures to raise the film industry" by combining production, distribution and exhibition into one single company named "Hua Ying Company" (Gong and Ding, 2011). This structural break in the organization of Shanghai's film industry was characterized by a tremendous intensity of control by political forces. Film production and distribution has been forced to serve the wartime propaganda. The only movies shown in cinemas were Japanese films that replaced the Western and domestic films. In this period, the Japanese aggressors strictly controlled the ideology and culture through regulations, laws or rules. On the one hand, they prohibited all progressive and anti-Japanese texts, like newspapers, books or movies and arrested publishers of such censored cultural products. On the other hand, they founded the "Greater East Asia propaganda and cultural policy committee" to promote Japanese culture, custom and education (Chen, 2008). For instance, this committee forced every school and university to teach the Japanese language.

After Chinas victory against the Japanese occupation in the War of Liberation, the civil war between the Chinese Nationalist Party and the Chinese Communist Party broke out. At the beginning, the Chinese Nationalist Party made stringent terms and harsh rules to control directors, actors or producers in the film industry. Subject of oppression were especially progressive filmmakers and persons who had different political inclinations, like left-wing communists. Later, after the Chinese Communist Party won, some people who worked in the film industry went to Hong Kong and Taiwan, because of differences in the political ideology. This migration was partly made up of famous filmmakers and capitalists who had stayed in Shanghai during the Occupied Period. These filmmakers worked in "Hua Ying Company" or other agencies of the former puppet government and lacked confidence in the new government (Liu, 2007).

During the whole wartime, the struggle between different ideologies had a deep impact on the culture and the content of movies. But influence of culture on institutions and organizational structures was very limited. On one hand, the impact of culture on the other two elements is a slow and cumulative process. Whereas the cultural mainstream based on political morphology changed very quickly in this period, the impact of culture was difficult to accumulate. On the other hand, institutions and the organization of the film industry were held by those in power, because of the constant military conflict.

The organization of the film industry were always interrupted and disintegrated by changing institutional settings rather than the evolution of the industry. Its main characteristic during this period was instability and ephemerality. During the Isolated Island Period, some film companies cooperated with French and American companies to ensure their existence. The Occupied Period was characterized by an "integrated management" of the production and distribution of the film industry. At the same time, the Japanese occupation also prevented the import and export to Southeast Asia. During the War of Liberation, some new companies of the Chinese Nationalist Party and private companies were established. Overall, authorities tried their best to control the institutions and culture of the film industry at most times of this phase and their influences were pervasive.

Thus, the evolution of Shanghai film industry is strongly influenced by political events in this wartime period. Different political forces lead to different institutions, which were almost mandatory rules and the compulsive role of government. In this (p. 933) whole period, the control of rules and policies on film industries changed from relative loose to very strict. On the one hand, institutional variation weakened the competition and cooperation of film firms and the number of professionals became less over time. On the other hand, institutional variation lessened the opportunity of unfettered cultural exchange. However, the change of culture and industrial organization did not cause the variation of institutions significantly. Therefore, the institution, culture and organization of Shanghai film industry only co-evolved to a small degree during this period (Figure 3). As a result, the Shanghai film industry had experienced a huge loss, not only the infrastructure of film studios, cinemas and professionals, but also the domestic and abroad markets.

3.3 Shanghai film industry in the People's Republic of China under Mao Zedong

The third period dated from 1949 to 1977 and opened up a new pattern to the Shanghai film industry. The turning point was the establishment of the People's Republic of China under the leadership of Mao Zedong. In this period, the Shanghai film industry lost its monopoly being the dominant film centre in China and entered in competition with Beijing and Changchun.

Due to the socialist system of a planned economy the film industry became centralized and completely controlled by the central government. The newly established state-owned Shanghai Film Studio was responsible for all processes of film production in Shanghai. The main intention of the film industry was political propaganda instead of financial incentive. The production and distribution of movies in the Shanghai Film Studios totally obeyed the arrangement of the central government instead of market demands or the pursuit of interests.

The socialist planned economy brought along a new workforce structure to the Shanghai film industry. New staff was mainly selected members of the People's Liberation Army, from the new established Beijing Film Studio, the Northeast Film Studio or other relevant departments (Liu, 2014). Part of them were not professionals, but responsible for supervising the content of movies and political attitudes of the professionals.

The other important event in this period was the Cultural Revolution that was initiated and led by Mao Zedong from 1966 to 1976. From a cultural perspective, this event completely negated the Shanghai-style culture, and considered that art was subordinate to politics and anything about the capitalism was backward. This cultural change, as a complementary tool of the institutions, mainly affected the content of the movies rather than the production and distribution. In fact, the content, purpose or audiences of movies were actually chosen by the national government.

The Shanghai Film Studio was the core operator of the production within the Shanghai

film industry. Every year the leader of Shanghai Film Studio received an annual production plan. When movies were shot, the only state-owned company, China Film Group Corporation, bought them at a fixed price and distributed them to every province (Zhao, 1993). This organization was essentially unchanged and constant through the entire time during this period. This pattern of production and distribution responded to the features of institutions and a new workforce structure also intensified the cultural expression of the movie. (\leftarrow p. 934)

As in the last period, the influence of institutions on culture and industrial organization, especially the role of the government is supreme while a bi-directional causality did not appear. The culture and organization did not observably change the institutions during this time (Figure 3).

The outcome of Shanghai film industry in a planned economy management system was to ensure the input, output and consumption of movies, and the creation of some good works. However, it suppressed the enthusiasm of the artists, affected the film style and led to a low productivity of movies and decreased the diversity of the Shanghai film industry.

3.4 Reform and transformation of the Shanghai film industry

The fourth period is from 1978 to present. The turning point is the implementation of reform and opening-up policies starting in 1978. From that time on, Chinese began to carry out the socialist market economy system that emphasized the role of the market under national macro-control and the whole chain of the film industry gradually opened up to the market. In 1993, non-state firms obtained the right to release and show movies and in 2002 they eventually gained the right to produce movies. Until recent years, foreign companies have been prohibited to produce or distribute movies and open cinema theatres independently.

However, the Shanghai film industry lost its top position in this competition round against other cities, like Beijing. More than 50% of national movies are produced by firms in Beijing since 2009. In 2012, there were only two movies with more than 10 million Yuan box office

revenues produced by Shanghai firms, while eight were from Beijing. There is no film distribution corporation from Shanghai in the top ten of nationwide competitors, while seven companies are located in Beijing. Furthermore, Beijing had four cinema groups and Shanghai only one in the top ten of Chinese theatre chains in 2012 (Entgroup, 2014).

Two main reasons can be used to explain the spatial shift between Shanghai and Beijing. Firstly, the censorship of Chinese film industry is controlling the content much more than a classification system. State administration of radio, film and television which is located in Beijing is responsible for the review of all movies until 2014. If the film companies build head offices in Beijing, they can save time, economic costs and more importantly establish better relationships and networks with this department. Secondly, the support policies surrounding the film industry of Shanghai started later. There was a strong functional orientation of Shanghai on international economics, finance, trade or shipping rather than cultural industries.

On the other hand Shanghai is well-known for its highly inclusive and multi-cultural atmosphere. The frequency and depth of cultural exchanges in Shanghai were more than in other Chinese cities at the beginning. Decades later, this advantage has been narrowed, because some cities have committed themselves to enrich the cultural exchanges realizing the importance of culture for promoting the cultural and creative industries and attracting investments as well as members of the so-called "Creative Class". However, Shanghai paid more attention to the high-tech industry than to the culture industry before 2010. Since 2010, the Shanghai film industry actively has communicated with external sources through cooperating with foreign companies. For example, (\leftarrow p. 935) with the popularity of South Korean culture and the rise of its media products in China, the Shanghai Film College signed some cooperation agreements with the Korean cultural center in 2014. In the same year, Shanghai University and the Vancouver Film School jointly established the Shanghai Vancouver Film School. However, a powerful influence of culture to institution and industrial organization has just been started.

With regard to the role of industrial organization, Shanghai Film Group Co., Ltd., as the backbone of Shanghai film industry, is the main state-owned film enterprise in Shanghai and involves the whole industry chain. However, it is rare to find famous private film companies in Shanghai now. The influence of private enterprises is weak compared to Beijing. In fact, the slow privatization process mismatches the multi-culture which could be an important advantage of Shanghai. Beijing concentrates more than 60% of the famous directors from Mainland China, Taiwan and Hong Kong as well as some Shanghai directors having moved to Beijing (Fang 2013). The decrease in number of private companies and professionals limits the growth of the Shanghai film industry which consequently asked for the improvement of institutions. Overall, this organizational phenomenon leads to the formation of informal norms and the communication of culture is infrequent and short-termed.

The variation of institutions affected the evolution of culture and industrial organization in this period. The deficiency of policies on cultural and creative industries became more and more obvious. This makes private firms and professionals move to other cities. Reversely, the number of firms in the film industry shrank and types of personnel became uniform. This leads to slower growth rates compared to other high-tech industries and reinforces low attention from the government as compared to technology the political relevance of cultural exchange decreased. Similarly, cultural variation also promotes the evolution of institution and industrial organization. During this period the co-evolution of three parts is obvious (Figure 3), but the dominating function was negative because of insufficient institutional support. One root of the problem is that the institutional setting surrounding the Shanghai film industry lagged behind Beijing in this period.

In the long evolution of Shanghai film industry, there are many changes of co-evolution processes. During the second and third period, the co-evolution was indirect and weaker, because the institution, especially the political forces of those periods controlled the rules, culture and industrial organization. The first and last period illustrate that co-evolution between

institution, culture and industrial organization in process has both positive and negative results.

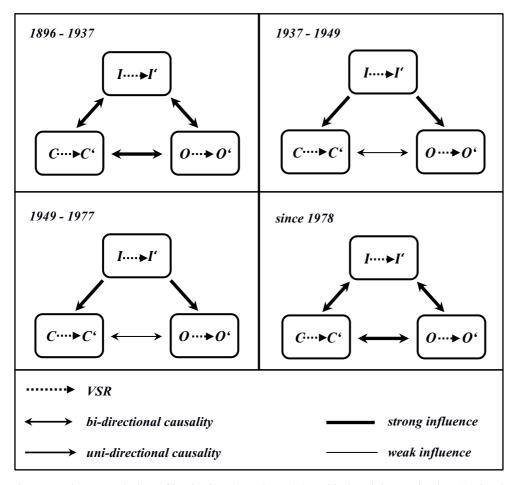


Figure 3: The co-evolution of institution (I), culture (C) and industrial organization (O) in Shanghai film industry Source: Own draft (← Figure 3 p. 932)

4. Conclusion

Due to shortcomings of existing research we chose institution, culture and industrial organization as objects of interests and studied their co-evolution in the Shanghai film industry, and briefly summarized the specific mechanisms and ways in which co-evolution may occur. On the theoretical progress, it contributes to the needed incorporation of institutions in co-evolution, which has been partly stressed by Ter Wal and Boschma (2011). Meanwhile, we emphasize the importance of the culture in cultural and creative industries. The case of the Shanghai film industry showed the effect of cultural exchange and conflicts (\leftarrow p. 936) caused by culture differences, i.e. institutional and organizational variation, especially in the early

periods.

Through analyzing the case of the Shanghai film industry empirically, it was shown that a positive or negative outcome of co-evolution depends on the specific context of certain time periods. Thus, the effects of co-evolution are not constant. We also found evidence to Berg's (2015) opinion that co-evolution in economic geography can be used to explain dynamics of creative and cultural industries. The evolution of the Shanghai film industry has been transformed through four main periods. The separation of periods is based on key political events. In the second and third period, co-evolution hardly existed. This is mainly due to the fact that strong formal institutions were controlled by power-holders. These institutions changed the evolution of culture and industrial organization, but reversely culture and industrial organization did not impact on the institutional variation significantly. The compulsive institution made bi-directional causalities impossible. In the first period, co-evolution played a positive role in the emergence, development and maturity of the film industry. However, in the fourth period, it has a negative influence on the competition between Shanghai and other cities especially Beijing. Therefore, we state that processes of co-evolution are connected with the performance of the Shanghai film industry. But we cannot blindly say whether co-evolution of institution, culture and industrial organization is positive or negative for the industry all the time, even for the same place and same industry. In the case of the Chinese Film industry the role of formal institution is much stronger than culture or industrial organization. Institutions often affected culture and industrial organization through public rules, policies or regulations.

(**←** p. 937)

References

Bathelt, H. (2002). The re-emergence of a media industry cluster in Leipzig. *European Planning Studies*, 10(5), 583-611.

- Baum, J. A. C. (1999). Whole-part coevolutionary competition in organizations. In: Baum, J.
 A. C & McKelvey B. (eds.). *Variations in Organization Science: In Honor of Donald T. Campbell*. Thousand Oaks, CA: SAGE Publications, 113-136.
- Bennett, A., & Elman, C. (2006). Complex causal relations and case study methods: The example of path dependence. *Political analysis*, 14 (3), 250-267.
- Berg, S. H. (2015). Creative Cluster Evolution: The Case of the Film and TV Industries in Seoul, South Korea. *European Planning Studies*, 23(10), 1993-2008.
- Berg, S. H. & Hassink, R. (2014). Creative industries from an evolutionary perspective: A critical literature review. *Geography Compass*, 8(9), 653-664.
- Boschma, R. & Frenken. K. (2006). Why is economic geography not an evolutionary science? Towards an evolutionary economic geography. *Journal of economic geography*, 6(3), 273-302.
- Boschma, R. & Frenken, K. (2009). Some notes on institutions in evolutionary economic geography. *Economic Geography*, 85(2), 151-158.
- Boschma, R. & Martin, R. (Eds.) (2010). *The handbook of evolutionary economic geography*. Cheltenham, UK; Northhampton, MA: Edward Elgar.
- Cabral, L. M. (Ed.) (2000). *Introduction to industrial organization*. Cambridge, MA; London: MIT press.
- Campbell, D. T. (1965). Variation and selective retention in socio-cultural evolution. *Social Change in Developing Areas: A Reinterpretation of Evolutionary Theory*, 19, 26-27.
- Cantwell, J., Dunning, J. H. & Lundan, S. M. (2010). An evolutionary approach to understanding international business activity: The co-evolution of MNEs and the institutional environment. *Journal of International Business Studies*, 41(4), 567-586.
- Chen Xingxing (2008). Research on Shanghai film in Anti-Japanese War (1937-1945).

 Beijing: Capital Normal University. (In Chinese)

- Christopherson, S. & Storper, M. (1986). The city as studio; the world as back lot: The impact of vertical disintegration on the location of the motion picture industry. *Environment and Planning D*, 4(3), 305-320.
- Coe, N. M. (2000). The view from out west: embeddedness, inter-personal relations and the development of an indigenous film industry in Vancouver. *Geoforum*, 31(4), 391-407.
- Coe, N. M. (2001). A hybrid agglomeration? The development of a satellite-Marshallian industrial district in Vancouver's film industry. *Urban studies*, 38(10), 1753-1775.
- Cohen, L. & Noll, R. (1994). Privatizing Public Research. Scientific American 271(3), 72-79.
- Craig, C. S., Greene, W. H. & Douglas, S. P. (2003). Culture Matters: A Hierarchical Linear Random Parameters Model for Predicting Success of US Films in Foreign Markets.

 Manuscript, Department of Marketing, Stern School of Business, NYU.
- Crang, P. (1997). Cultural turns and the (re)constitution of economic geography. In: Lee, R. & Wills, J. (Eds.) *Geographies of Economies*. London: Arnold, 3-15.
- Dorenkamp, A.& Mossig, I. (2010). Economic policy and its impact on the evolution of clusters and spatial systems exemplified by German TV programme production. In: Fornahl, D., Henn, S. & Menzel, M.-P. (eds.) *Emerging Clusters*. Cheltenham, Northampton: Edward Elgar Publishing, 43-73.
- Eisenhardt, K. M. & Galunic, D. C. (2000). Coevolving: At last, a way to make synergies work. *Harvard Business Review*, 78(1): 91-101.
- Entgroup (2014). China Film Industry Report 2013-14. Beijing: Entgroup.
- Fang Sheng (2013). The development of Beijing film and television industry. Hunan: University of South China. (In Chinese)
- Foster, P., Manning, S. & Terkla, D. (2015). The rise of hollywood east: regional film offices as intermediaries in film and television production clusters. *Regional Studies*, 49(3), 433-450.

- Gabler, N. (1989). An empire of their own: How the Jews invented Hollywood. New York, NY: Anchor.
- Gertler, M. S. (2004). *Manufacturing culture: The institutional geography of industrial* practice. Oxford: Oxford University Press.
- Gong Haoyu & Ding Shanshan (2011). The film policies of puppet government in the occupied period. *The Journal of Jiangsu Social Sciences*, 06, 161-165. (In Chinese)
- Guo Rongchao, Miao Changhong, Li Xuexin & Chen Deguang (2007). Eco-spatial structure of urban agglomeration. *Chinese Geographical Science*, 17(1), 28-33.
- He Lian (2011). The early film in Shanghai in "Shenbao". *Journalism Quarterly*, 108(1), 122-132. (In Chinese)
- Hitters, E. (2011). Back to Hilversum: consolidation of the Dutch broadcast cluster. In:Karlsson, C. & Picard, R. G. (Eds.). *Media cluster. Spatial Agglomeration and Content capabilities*. Cheltenham: Edward Elgar, 99-119.
- Hodgson, G. & Knudsen, T. (2006). Why we need a generalized Darwinism and why generalized Darwinism is not enough. *Journal of Economic Behavior and Organization*, 61(1), 1-19.
- Janzen, D. H. (1980). When is it coevolution. *Evolution*, 34(3), 611-612.
- Karlsson, C. & Picard, R. G. (2011). Media cluster: what makes them unique? In: Karlsson,C. & Picard, R. G. (Eds.) *Media cluster. Spatial Agglomeration and Content capabilities*.Cheltenham: Edward Elgar, 3-29.
- Lewin, A. Y. & Volberda, H. W. (1999). Prolegomena on coevolution: A framework for research on strategy and new organizational forms. *Organization Science*, 10(5), 519-534.
- Liu Yuqing (2007). The divisions, splits and new developments of Shanghai cinema traditions (1945-1965). Shanghai: University of Shanghai. (In Chinese)
- Liu Yuqing (2014). The analysis of Shanghai filmmakers in 17 years movies. *Contemporary Cinema*, 1, 55-60. (In Chinese)

- Long Jin (2004). The types of enterprises and business models in Chinese film industry in early time. *Film Art*, 04, 31-38. (In Chinese)
- Lou Jiajun (2012). The film industry in 1930s. *Dongfang Daily*, 2012-06-26. (In Chinese)
- Malerba, F. (2006). Innovation and the evolution of industries. *Journal of Evolutionary Economics*, 16, 3-23.
- Martin, R. & Sunley, P. (2006). Path dependence and regional economic evolution. *Journal of Economic Geography*, 6(4), 395-437.
- Mossig, I. (2004). The networks producing television programmes in the Cologne media cluster: new firm foundation, flexible specialization and efficient decision-making structures. *European Planning Studies*, 12(2), 155-171.
- Mossig, I. (2008). Global networks of the motion picture industry in Los Angeles/Hollywood using the example of their connections to the German market. *European Planning Studies*, 16(1), 43-59.
- Motion Picture Association of America (2015). Theatrical Market Statistics Report. Washington, DC: MPAA.
- Murmann, J. P. (2002). *The coevolution of industries and national institutions: Theory and evidence* (No. FS IV 02-14). WZB Discussion Paper.
- Murmann, J. P. (2003a). The coevolution of industries and academic disciplines. *Evolutionary Theories in the Social Sciences, WP03-01*.
- Murmann, J. P. (2003b). *Knowledge and competitive advantage: the coevolution of firms, technology, and national institutions*. Cambridge: Cambridge University Press.
- Nelson, R. R. (1994). The co-evolution of technology, industrial structure, and supporting institutions. *Industrial and Corporate Change*, 3(1), 47-63.
- Nelson, R. R. (1995). Co–evolution of industry structure, technology and supporting institutions, and the making of comparative advantage. *International Journal of the Economics of Business*, 2(2), 171-184.

- Onuzulike, U. (2007). Nollywood: the influence of the Nigerian movie industry on African culture. *Human Communication*, 10(3), 231-242.
- O'Regan, T., Goldsmith, B. & Ward, S. (2011). Sydney's media cluster: continuity and change in film and television. In: Karlsson, C. & Picard, R. G. (Eds.). *Media cluster*. *Spatial Agglomeration and Content capabilities*. Cheltenham: Edward Elgar, 199-222.
- Öz, Ö. & Özkaracalar, K. (2010). What accounts for the resilience and vulnerability of clusters? The case of Istanbul's film industry. *European Planning Studies*, 19(3), 361-378.
- Öz, Ö & Özkaracalar, K. (2011): Path dependence, locl-in, and the emergence of clusters: The case of Isranbuls's Film Cluster. In: Schreyögg, G. & Sydow, J. (Eds.). *The hidden dynamics of path dependence*. Palgrave Macmillan: 161-177.
- Ren Wei (2011). Entertainment, business and nationalism-take the dissension caused by film "welcome danger" in 1930 as a centre. *Academic Monthly*, 43(2), 138-147. (In Chinese)
- Schamp, E. W. (2010). On the notion of co-evolution in economic geography. In: Boschma, R. & Martin, R. (Eds.). *The Handbook of Evolutionary Economic Geography*, 432-449.
- Scott, A. J. (2000). French cinema: economy, policy and place in the making of a cultural-products industry. *Theory Culture & Society*, 17(1), 1-38.
- Scott, A. J. (2002). A new map of Hollywood: the production and distribution of American motion pictures. *Regional Studies*, 36(9), 957-975.
- Scott, A. J. (2005). *On Hollywood: The place, the industry*. Princeton, NJ: Princeton University Press.
- Scott, A. J. & Pope, N. E. (2007). Hollywood, Vancouver, and the world: employment relocation and the emergence of satellite production centers in the motion-picture industry. *Environment and Planning A*, 39(6), 13-64.
- Sotarauta, M. & Srinivas, S. (2005). The co-evolution of policy and economic development: a discussion on innovative regions. *Massachusetts Institute of Technology, Industrial*

- Performance Center, Special Working Paper Series on Local Innovation Systems, MIT-IPC-LIS-05-001.
- Storper, M. & Christopherson, S. (1987). Flexible specialization and regional industrial agglomerations: the case of the US motion picture industry. *Annals of the Association of American Geographers*, 77(1), 104-117.
- Sydow, J. & Staber, U. (2002). The institutional embeddedness of project networks: the case of content production in German television. *Regional Studies*, 36(3), 215-227.
- Taeube, F., & Lorenzen, M. (2007). The banyan and the birch tree: Institutional field overlaps and network relations in the Indian film industry in Bollywood. In: *The DRUID Summer Conference 2007 on Appropriability, Proximity, Routines and Innovation*, 18-20.
- Ter Wal, A. L. & Boschma, R. (2011). Co-evolution of firms, industries and networks in space.

 Regional Studies, 45(7), 919-933.
- Volberda, H. W. & Lewin, A. Y. (2003). Co-evolutionary dynamics within and between firms: From evolution to co-evolution. *Journal of Management Studies*, 40(8), 2111-2136.
- Wang Chaoguang (2003). The relationship between development of Shanghai film industry and modernization of Shanghai in early time. *Archives and History*, 03, 28-35. (In Chinese)
- Wang Xuan (2005). The research on the history of Chinese film industrialization. Beijing: Beijing Film Academy. (In Chinese)
- Wang Xianping (2012). The developing strategy of Shanghai movie in early time.

 Contemporary Cinema, 10, 145-148. (In Chinese)
- Yang Jinfu (2006). Century of Shanghai film. Hong Kong: Wenhui Press. (In Chinese)
- Yi Fengao (2009). The evolution of Shanghai image. Shanghai: Shanghai Theatre Academy. (In Chinese)

Zhao Lanying (1993). The Shanghai film industry: How to make a breakthrough. *Outlook Weekly*, 52, 38-40. (In Chinese)