

**Regionally Embedded Spatial Autonomy: The Spatial Process  
of the Developmental State in South Korea, 1970s**

**Jung Won SONN**

[j.sonn@lse.ac.uk](mailto:j.sonn@lse.ac.uk)

Department of Geography and Environment  
London School of Economics and Political Science  
Houghton Street London WC2A 2AE, UK

ISBN: 07530 1830 6

Acknowledgement: I thank to Elsona van Huyssteen and Bae-Gyoon Park for their helpful comments.

---

## ABSTRACT

This paper sheds light on the spatial aspects of South Korea's industrial transformation during the 1970s. South Korea's phenomenal economic growth owes a great deal to the state's intervention. But the state's spatial strategies and the socio-spatial conditions that allowed the state to be successful under those strategies have not been fully understood. By analyzing diverse sources such as speeches, memoirs, government documents and statistics, this paper finds that: 1) It was economically rational that the South Korean state used a polarized development strategy to facilitate the structural transformation into the heavy and chemical industries; and 2) For the polarized development strategy to work, regions that were not selected as the polarized development site had to have weak political representation, which happened to be the case in South Korea in 1970. Therefore, it is my conclusion that the South Korean spatial strategies owe their success to a combination of the state's rationality and historical accidents. These findings contribute to the developmental state theory and to state theory in general by showing that spatial strategies are an essential part of the state's intervention in a developing economy.

**Keywords:** Economic development in South Korea, embedded autonomy, polarized development strategy, developmental state, East Asia, heavy and chemical industries, industrialization

---

## 1. Introduction

In 1960, South Korea's income level was lower than Somalia and Angola. In 2004, however, South Korea's income level had reached a level that was similar to those of Spain and Portugal. Along with Taiwan, South Korea constitutes one of those rare countries that managed to rise from a low-income nation to a high-income nation in such a short period of time<sup>1</sup>. Such development attracted interest in South Korea from both the academic and policy communities. Although many issues are still under debate, most South Korean development experts have reached a general consensus that the state's active involvement in the economy played an essential role in its phenomenal growth. Evidence was found that the South Korean state was, unlike its counterparts in most developing countries, capable of coming up with economically rational long-term plans and of implementing those plans. It is, however, still not very clearly understood what social and political conditions had to be in place for the Korean state to achieve these capabilities. In this context, this paper contributes to filling in some of the literature's gaps from a spatial point of view. More specifically, this paper has two objectives. First, this paper attempts to extend the concept of the developmental state by looking at the South Korean state's spatial strategies. It has been reported that the South Korean state has intervened in private businesses' location decisions for the purpose of promoting economic growth (Suh 1993). I will extend the statist approach to encompass spatial strategies' roles and to show how those strategies contributed to industrialization. The second objective of this paper is to explain the specific socio-spatial conditions that are necessary if the state is to implement those spatial strategies. In so doing,

---

<sup>1</sup> Singapore and Hong Kong, which are often grouped together with South Korean and Taiwan were actually middle income economies in 1960 in terms of GDP per capita.

I propose a new concept, “regionally embedded spatial autonomy,” which is a spatial extension of Peter Evans’ (1995) concept of “embedded autonomy.”

My discussion is focused on those strategies that were used in the development of the heavy and chemical industries during the 1970s. I chose to focus on the 1970s because this time period constitutes the climax of the developmental state in South Korea. During most of the 1960s, the state was still evolving toward a developmental state making unrealistic import substitution plans and discovering the importance of export (Lee 1999). After these trial and errors, by 1970s, the South Korean state became able to map out its economic development as the developmental state. Among many policies that were in place in the 1970s, I chose to focus on policies that were related to the heavy and chemical industries. That is because, unlike its earlier success in the consumer product industries, South Korea’s success in the heavy and chemical industries was clearly preplanned and thus is a good showcase of the developmental state’s policies. Therefore, by investigating the state’s spatial strategies for the heavy and chemical industries during the 1970s, I will be able to discuss the developmental state’s spatial strategies in general.

Data for this research were acquired from diverse sources, such as key figures’ memoirs and autobiographies, legislative documents, President Park’s and other political leaders’ speeches, government reports, planning documents and economic and political statistics. Data that were taken from existing research were also extensively used.

## **2. The Statist Approach to South Korean Industrialization and its Lack of Spatiality**

### **2.1. The Statist Approach and Embedded Autonomy**

In the 1970s, the rapid economic growth in Taiwan and South Korea began to catch scholars’ interest in the academia outside those countries. Since the early 1980s, a consensus emerged that it was the state’s guidance rather than the

market that played the primary role in East Asia's economic development (Deyo 1987; Amsden 1989; Wade 2003). By direct involvement in the market and in the guidance of private businesses, the East Asian state led the economic transformation from agricultural-based economy to light industries-based and then to heavy industries-centered. Highly consistent, long-term economic plans played critical roles in this transformation.

This state centered approach or the statist theory has presented a detailed description of the developmental state. However, the focus of the statist approach is the state's capability and its roles. Thus, this approach does not explain the social conditions that must exist for a state to be deemed a developmental state. In that sense, statist are not free of the criticism that they overlook the social context in which the state exists (Park 1998). Peter Evans (1995) responded to this kind of criticism by further developing the statist approach with an empirical study of South Korea.

According to Evans, the critical social condition for a state to be a developmental state like the South Korean states is to have what he calls "embedded autonomy." Autonomy means that the state is relatively isolated from market forces. Without autonomy, the state will become the battleground of different interest groups, all of whom are pursuing their own interests at the entire country's expense.

However, autonomy is not a sufficient condition for a state to be deemed a developmental state. When a state is completely insulated from society, that state will not have access to the necessary information for economic planning that private sector possesses. Therefore, states can produce development only when "...they are embedded in a concrete set of social ties that ...provide institutionalized channels for the continual negotiation and renegotiation of goals and policies." (Evans 1995: 12) Only when a state simultaneously possesses

embeddedness and autonomy the state can be a developmental state, Evans argues.

## **2.2. Missing Spatiality in the Statist Theory**

As previously stated, the statist approach provides a relatively coherent theory of East Asian development. And Peter Evans' concept of embedded autonomy explains the society-state relation under the developmental state. However, its lack of spatiality hinders some of the important aspects of Korean state and economic development. As briefly mentioned in this paper's introduction, spatial planning was an important economic development apparatus in South Korea. It is an intriguing feature of the South Korean state, one that is not only an important element in understanding the developmental process in South Korea but also a challenge to the conventional understanding of spatial policy. That's because in most capitalist countries, spatial planning is traditionally regarded as distribution-oriented rather than a growth-oriented (O'Connor 1973; Garn and Ledebur 1982). As we know from the French example, spatial planning by the Western central government was typically a matter of distributing a given amount of industrial activities to underdeveloped regions so that inter-regional disparity could be reduced (Hansen, Higgins and Savoie. 1990). In South Korea, on the other hand, by further investing in already developed areas such as Seoul and the Yong-Nam region, the state aimed to increase the country's wealth. Furthermore, regionalism that interacts with spatial planning has always been an important driving force behind political development, including the transition from an authoritarian regime to a liberal democratic one. Without understanding these spatial aspects, our understanding of South Korea's developmental state is not complete.

There have been only a limited number of related attempts. Ann Markusen and Sam Ok Park (1993) analyzed the role of the state in the development of a defense industry complex in Changwon, South Korea. Bae-Gyoon Park (1998)

compared Korea's housing policy with that of Singapore's and concluded that the exclusive ruling coalition that exists between the state and Chaebols has made the South Korean state less than active in providing social services, such as low-income housing, to its citizens. Bae-Gyoon Park (2003b) studies local responses to the state's strategy of polarized development. With these authors, I share the emphasis on the South Korean state's spatial policy but I have a different aim. Markusen and Park (1993) were interested in location of defense industry, where strategic consideration is an important factor for locational decisions. On the other hand, the focus of this paper is the state's involvement in industrial location in general where economic efficiency is the most important criterion. I share with Bae-Gyoon Park (1998) the emphasis on social relations that condition spatial policies but his empirical research focused on housing policy and thus does not deal with industrial locations. Park (2003b) and this paper are complementary to each other in the sense that Park (2003b) focuses on the local actors' response to the state's polarized development strategy, of which process, consequences and conditions I explore in this research.

This paper deals with the state's involvement in industrial location. To that end, I draw upon the statist literature but attempt to amend it by emphasizing its spatial aspects. More specifically, I explain what kind of spatial policies were used in 1970s and how those policies served the purpose of industrialization. I also delineate what socio-political conditions were behind those spatial policies. For this purpose, I suggest a new concept, "regionally embedded spatial autonomy," to explain the South Korean model of industrial location policy. This concept finds its theoretical root in the statist approach to South Korea's economy, in particular in Peter Evans' concept of "Embedded Autonomy," which was explained in Section 2.1.

Regionally embedded spatial autonomy is spatial version of "embedded autonomy." The need for geographification of this concept is related to the

simple fact that any government decision has spatial outcomes. In particular, the impact of investment for fixed collective goods by the central government is very spatial because there exists a spatial threshold in the spread of fixed public collective goods' externalities (Swyngedow 1992). For example, when a bridge is built, it will contribute to improving the country's productivity but its benefit will be exploited more by people and businesses nearby than those on the other side of the country. Therefore, when the central state is conceiving a plan to invest in infrastructure, regions attempt to attract the investment. Because the fixed public collective goods benefit both individuals and businesses in designated place, it becomes a class-cross, sector-cross mission to attract them. Of course, as Cox and Mair (1988) explained, some classes and sectors benefit more but fixed public collective goods benefit most influential actors in a region by creating investment opportunities for capitalist class, by creating jobs for workers and by increasing rent for landlord class etc. These possibilities trigger the formation of regional growth coalitions across different sectors and various classes of regional actors (Harvey 1985; Molotch 1976).

These coalitions, which can be called "regional growth coalitions" would attempted to influence the central government's investment decisions via diverse channels, such as exerting pressure on local members of the national assembly, manipulating public discourse and lobbying to bureaucrats. Such attempts by regional growth coalitions have more often than not proven contradictory to the central state's pursuit of national growth (Park 2003a). Because regional growth coalitions do not have a strong incentive to pursue the country's long-term economic gains, when an investment decision is made by regional growth coalitions, it is not likely that they consider long-term national economic growth in the same way the central state does. Even worse, the power structure among regions changes and the winners in the dispute over the investment decisions

change accordingly. This alteration, in turn, prevents continued investment in a few selected places, which is essential in the early phase of development.

Therefore, the state's relative insulation from regional growth coalitions is a necessary condition for consistent spatial planning in long-term perspective and being a developmental state within the realm of spatial planning. I call this condition "spatial autonomy." Obviously, there is always discontent with the government decisions. If well-organized political power groups exist that represent those unselected regions, then the central politics may experience turmoil or even the administration's legitimacy crisis. Therefore, it is a necessary condition that those unselected regions are not well-represented in the central politics.

If the state is, however, completely isolated from society and the business community in particular, it will experience difficulties in finding optimal locations. Determining economically rational locations for industries might not be a formidable task if the state has enough resources and time to devote to the task. However, in the rapid development process, where resources are insufficient, the state has to make a fast decision and the information on which that decision is based must be available quickly. The fastest way to acquire that information is to ask the businessmen the state can trust for it. Therefore, it is necessary for the state to maintain a certain relationship with the business community, as Evans (1995) argued with his concept of "embeddedness." What Evans (1995) overlooked, however, was that embeddedness may undermine spatial autonomy. As ties with the business community become stronger, the state will become more vulnerable to the regional growth coalitions' political pressure. The only way to become immune to regional growth coalitions and to simultaneously have easy access to needed information is for the state to choose a small number of regions and create strong ties with the business communities within those regions. That's what I call "regional embeddedness". Only when

regional embeddedness is acquired can the state concentrate its infrastructure investment into economically rational locations and pursue a “polarized development” strategy.

There is also political reason for regional embeddedness. Whether well-organized or not, the residents in the regions that are not selected can still vote and may express their discontent in the elections. Therefore, the state has to compensate its support by earning stronger support from the selected region. Formal and informal networks between central politicians, bureaucrats and local elites from selected regions would be a powerful apparatus in mobilizing political support from the selected region.

This concept of a “regionally embedded spatial autonomy” will be used in Section 4 to illuminate the developmental state’s spatial conditions. Before that can occur, however, it should first be determined whether the South Korean state was actually a developmental state in the realm of spatial planning as well, a task that will be accomplished in Section 3.

### **3. Spatial Strategies for Heavy and Chemical Industries**

#### **3.1. South Korea’s Transformation to Heavy and Chemical Industries**

In 1973, the South Korean state announced its “Plan for Heavy and Chemical Industries” and began its endeavor to make those industries the economy’s central sectors. The heavy and chemical industries showcase how policies under the developmental state are different from those under a market-oriented doctrine or those under an import substitution doctrine. As Amsden (1989) found, the heavy and chemical industries in the early 1970s were not as profitable as the non-durable consumer industries, which had been the main driving force for economic growth and exporting in the 1960s. Therefore, transformation to heavy and chemical industries went against the neoclassical doctrines. The state’s primary strategy was “dual industrialization” that attempts

to simultaneously accomplish import substitution and export (Yoo and Lee 2001; Lee 2003; Yoo 2003).

The transformation to heavy and chemical industries also shows what the developmental state's apparatuses were. Two main apparatuses used in the industrialization of the heavy and chemical industries were public investment and Chaebols (conglomerates). The state-owned businesses occupied a substantial share in their national economies (Castells 1992; Yu 1997). Throughout the 1960s and 1970s, specifically between 1963 and 1979, on average, public investment occupied 35.2% of the economy (Cho 2003: 141). An illustrative case is Pohang Steel Company (POSCO), which becomes one of the world's largest steel producers later in the 1980s. Alongside with running state-owned companies, the state gave incentives to Chaebols in heavy industries. Financial incentives in particular were well-documented. Until the late 1970s, few South Korean companies had a good enough credit in the international financial market. Thus, the state's payment guarantee was necessary if South Korean firms were to receive international loans. Also, the state kept the domestic banks' interest rates much lower than the market rate and offered loans to Chaebols that engaged in heavy and chemical industries. The state guaranteed Chaebols monopolistic states in the domestic market's heavy and chemical industries so they could invest in spite of the fact that they did not have a comparative advantage within these sectors on the global market (Castells 1992). These privileges allowed Chaebols to accomplish the economy of scale that helps Chaebols to be competitive in the international market.

### 3.2. Spatial Strategies for the Industrial Transformation

In promoting heavy and chemical industries, the state passed a series of bills.<sup>2</sup> In terms of spatial strategies, the most important legislation was, probably, the “Industrial Complexes Promotion Act” of 1973. Article 8 of this law ordained that when the minister of construction designates an industrial complex according to this law, any other legal procedures would be bypassed. This means that when the minister of construction designates a place as a national industrial complex, relevant zoning laws, environmental regulations and all other planning restrictions can be simply ignored.

Based on the Industrial Complexes Promotion Act, the state developed a vast area of industrial complexes. Between 1972 and 1976, 87.5% of industrial complexes’ total area was developed by the central or local governments. That’s a very high ratio even by South Korean standards, considering that only 56.7% of the cumulative total area between 1967 and 1988 was developed by the central or local government entities. The state’s development of industrial complex gave the state a very strong leverage on private businesses’ location decisions because at that point, land for industrial use was scarce<sup>3</sup>.

The state used this leverage in pursuing polarized development strategy. The First National Comprehensive Physical Plan, which set the urban and regional planning guidelines for both central and local governments, clearly shows the state’s desire for polarized development. The Plan’s main concept was “nodal region,” which was based on a spatially polarized development strategy. (Suh and

---

<sup>2</sup> The bills pass for this purpose are Mechanical Industry Promotion Act (1967), Shipbuilding Industry Promotion Act (1967), Electronic Industry Promotion Act (1969), Steel Industry Promotion Act (1970), Petrochemical Industry Promotion Act (1970).

<sup>3</sup> In a survey of businesses conducted by Jin and Cheon, the availability of land was voted as the most important factor in their locational decisions (cited in Kim 1992: 103).

Lee 1990: 14) The Plan points at Southeast coast of Yong-Nam Region as the node of development.<sup>4</sup>

This Southeastern Coastal Industrial Belt Region is expected to be responsible for approximately one-third of the nation's manufacturing output. This productivity would, in turn, create an increase in population in major cities on the Southeastern coast. There would appear mega cities of commercial and industrial functions such as free-trade zones, which will be base camps for the [country's] international outreach (The Government of Republic of Korea 1971: 28)

The Southeastern Coastal Industrial Belt includes several cities in Yong-Nam Region such as Pohang, Ulsan, Busan, Mansan, and Changwon. Among the seventeen industrial complexes designated by the central government during the 1<sup>st</sup> National Comprehensive Physical Plan period, seven were in the Southeastern Coastal Industrial Belt and three in other parts of Yong-Nam. Only five were in other regions. (See Figure 1). Ulsan Petrochemical Industrial Complex, construction of which began in 1968 and was completed in 1972, is an illustrative showcase of the Park Administration's spatial strategy for industrialization. By the year 1980, Ulsan had become a large metropolis with a population of almost one half million in and an employment count of one hundred forty-nine thousand. (Han 2002 Table 11) Those figures represented 551% and 455% in growth respectively in comparison to 1962 figures. By mid 1970s, Ulsan and other cities in Yong-Nam became the home for Hyundai Heavy Industry, Hyundai Auto

---

<sup>4</sup>One noteworthy fact is that one can easily find written references to the impact regional balance had on The First National Physical Plan. "In particular, this plan put emphasis on the de-concentration of metropolitan population and industries and on the growth of small- and medium-sized cities...thereby balancing the development of national territory." Based on this kind of statement, some scholars argue that the plan was designed for regional equity. However, a closer examination of the plan reveals that its emphasis on regional equality was seldom put into practice. Unlike the introduction, chapters on the plan's actual policies emphasize infrastructure development over regional balance (Kim, 1992: 70).

Company, and other Chaebol-owned as well as state-invested big companies such as POSCO within the heavy and chemical industries.

The industrial development accompanied with transportation projects. The project that symbolizes the polarized development strategy was probably the Gyeongbu Expressway, which was completed in 1970. Connecting Seoul and the Southeastern Industrial Belt Region, this expressway represented the developmental axis of South Korea's economy. As evident in Figure 1, most national industrial complexes were located on or nearby this expressway.

Obviously, the spatially polarized strategy for industrialization resulted in a regional disparity in the level of development. By 1982, Yong-Nam was heavily industrialized, an achievement comparable only with the capital region in terms of employment, value added and total industrial assets. (See Figure 2.). The capital region's development is not surprising given that the capital city's dominance is quite commonplace in both the developing and developed world as we know from cases such as London, Paris, Tokyo, Buenos Aires and Mexico City. South Korean state's heavy investment in the Yong-Nam did not stop the capital region's economy because the capital region housed the headquarters of Chaebols whose production functions were located in Yong-Nam. Chaebols had the incentive to locate their headquarters in the capital region because of the highly interventionist state that often makes important decisions in informal and sometimes even unlawful ways. The combined effect of the Chaebols' headquarters, the state agencies and the continued strength of the region's consumer product industries made the capital region thrive, even though the state did not intentionally support its growth.

On the other hand, a comparable development of a non-capital region is not as common, particularly in a developing country. Such uncommon development in South Korea was mainly attributable to its deliberate concentration of investment into this region under the strategy of polarized development.

### 3.3. Rationality in Spatial Policies

A developmental state makes economically rational<sup>5</sup> decision in long-term perspectives. If South Korean state is a developmental state in the realm of spatial planning, its spatial strategies should be economically rational.

*Did the State had to Invest in New Industrial Complexes?*

The first question arises is whether the state's development of industrial complexes was economically rational. If so, on what grounds? Besides the fact that the state did not have enough resources to invest equally across the territory, industrial complex development had other advantages.

1) The state's involvement in industrial complex development gave assurance to other investors. When the construction of an industrial complex began, domestic businesses and foreign renters, assured of the state's will, were less reluctant to getting on board (Oh 1996 pp.59-60). The state's assurance of the project's success was an especially necessary factor in the investors' decision since the heavy and chemical industries' profit rate was lower than it was in the consumer products industries.

2) Heavy and Chemical Industries requires large scale productive infrastructure (such as industrial complexes, ports, roads, utilities etc.) that individual businesses could not afford. This point is clearer when the characters of heavy and chemical industries are compared with those of consumer product industries, South Korea's motor of growth in the 1960s. Companies in these sectors free-rode existing urban infrastructure by locating themselves in urbanized areas in the capital region both in terms of productive infrastructure. Most of companies were small-scale sweatshops and thus did not require large

---

<sup>5</sup> I would like to clarify that rationality in this context means instrumental rationality which is making best choice in efficient means without questioning the legitimacy of the end. Therefore, "rational" in this context is not necessary "just." It means "the most efficient" for economic growth.

scale supply of land. In terms of utilities, existing electricity, water and sewage service in the urban areas sufficed these industries. Also, because their products were small and light, no special transportation system was necessary. Heavy and chemical industries were not the case.

3) Heavy and chemical industries need to retain trained workers unlike consumer product industries. Consumer product industries in the 1960s were free-riding existing metropolitan areas in terms of the reproduction of their labor as well as their productive infrastructure. The majority of these industries' labor force is comprised of low-skilled workers without a high level of education. Businesses found this kind of low-skilled labor force in the single females who migrated from the countryside to the capital region for job opportunities. The supply of women from the countryside had effectively no limit, a situation that is similar to Lewis's theory of industrialization with an unlimited supply of labor (Lewis 1954). Therefore, sweatshops did not have incentive to spend much on good quality collective consumption goods. In the sweatshop districts such as Guro or Bupyong in the Capital Region, poor quality collective consumption goods were developed by the market force without much intervention from the state's urban and regional planning. Naturally, housing, roads, sewage and water were of extremely poor quality. This tendency, of course, had negative impacts on workers' health and on urban environment. But for those sweatshops that hired these workers, the situation was a cost-saving one. In other words, those companies were externalizing its cost into existing urban area and into individual workers.

Heavy and chemical industries, on the other hand, require trained workers. The heavy and chemical industries need to keep their skilled labor for a certain period time because these industries involve a longer training process. Bureaucrats in the Park Administration realized this issue when they were planning the heavy and chemical industries. Won Chol Oh was President Park's

long time aid in 1970s. His words, although tainted by quite explicitly sexist expressions, show that bureaucrats were aware of the necessity for workers' long-term commitment in the heavy and chemical industries.

Men unlike women can work for thirty or forty years until they retire. Therefore, for the country's further economic development, men should take initiative (Oh, 1999: 222)..... Heavy and chemical industry cannot succeed without excellent male workers. A representative example is machinery industry that needs large quantity of male workers.(244).

President Park himself saw that longer training is required in the heavy and chemical industries.

Coping with the development of the heavy and chemical industries and the resulting industrial transformation, the government will prepare for scientific and technical education. (Park 1976).

When training takes a long time, it becomes necessary for businesses to retain workers for a long period of time. For that purpose, decent-quality collective consumption goods that within commuting distance from the factories should be provided for workers and their families. A good example is Pohang Steel Company (POSCO). The state built POSCO a housing complex for the company's workers, even before it secured financing for the plant itself (POSCO 2005). Subsequently, POSCO created a whole new town for the workers, one that was not too far from its plants, where high-quality collective consumption goods, including good schools for the workers' children, were provided.

4) The costs resulting from the dual industrialization strategy should be compensated for. The dual industrialization strategy that was explained in the section 3.1 called for industrial complex development, too. In dual industrialization strategy, the coexistence of import substitution and export orientation caused many difficulties. Most of all, there was the problem of scale. For import substitution to be efficient, the scale of a factory had to be designed to meet domestic demand. But for successful exportation, the low pricing that

could be acquired through economy of scale was necessary. When the difference between these two scales was too large, the state had to choose a scale that fell somewhere in between.

The development of Ulsan Heavy and Chemical Industrial Complex, that I mentioned previously, is a good example. In the case of a petrochemical plant (nafta cracking), thirty thousand tons per year would meet the country's domestic demand, but a production capacity of three hundred thousand tons was required for competitive pricing. Under such circumstances, the administration decided to build a one-hundred-thousand-ton-capacity plant (Oh 1996: 47-50).

But choosing the scale in the middle does not completely solve the problem. There will be surplus production beyond domestic demand and the unit price will be higher than internationally competitive price. A possible solution to this situation was a direct subsidy, but the Park Administration chose to develop an industrial complex.

By concentrating related plants in a designated site, the state could hand out privileges that enabled those plants to be internationally competitive despite their lack of economy of scale. First, by simultaneously building plants in related industries, demand was artificially created (Oh 1996: 48). Although the state's primary goal was to have a petrochemical plant, in the Ulsan complex, plants that use nafta as intermediary material — basic material systemization plant, resin production plants, and synthetic fiber plants—were built simultaneously so that some of the surplus production can be consumed inside the complex<sup>6</sup>.

Second, the land was transferred to businesses under very favorable conditions. In the case of Ulsan, the down payment for land was only 20% with the remaining 80% to be paid over five years, after a two-year grace period. (Oh 1996: 63) This was an unusually favorable financing condition because at that

---

<sup>6</sup> This served for import substitution of resin and synthetic fibre, too.

time, the market's interest rate was more than 15%. Also any purchase tax related to the building of factory in the complex was exempt.

Finally, the state founded the "Petrochemical Business Support Agency," which supplied high-quality utilities, including electricity, water and maintenance service, at prices that were much lower than the going market rate (Oh 1996: 64-66). It is important to point out that the lower price of utility was achieved not by subsidy but by economy of scale that was in turn made possible only by the agglomeration of businesses in related sectors. If individual companies chose their own locations, individual companies' different situations would have prevented agglomeration. But the state gave incentives to firms to agglomerate thereby making possible the utility and maintenance service produced collectively and thus for lower price.

#### *Why Cities in Yong-Nam?*

The four reasons that are covered in the previous subsection should have clarified why the development of new industrial towns with productive infrastructures and decent-quality collective consumption goods was more cost-effective than the redevelopment of Seoul or other existing metropolitan areas was. But even if industrial complexes were necessary, did Park Administration have to build them at cities in Yong-Nam? If Park Administration chose Yong-Nam when President Park and the majority of the high rank bureaucrats were from Yong-Nam, would it not favoritism? This question should be answered by testing whether the choice of Yong-Nam as their site for polarized industrialization was economically rational. Some evidence exist that Yong-Nam was not a bad choice.

Firstly, cities in Yong-Nam were better prepared for industrialization because of historical reasons. During Japanese occupancy between 1910 and 1945, cities in Yong-Nam were more industrialized than cities in other regions in the Southern area of the peninsula, which would later constitute South Korea,

although not comparable to cities in the Northern part of the peninsula. Pusan, the largest city in Yong-Nam was industrialized more than any other cities except Seoul because of Pusan's proximity to Japan. In 1940s, Yong-Nam occupied 13.8% of total industrial output, which is higher than other regions in South Korea except capital region.<sup>7</sup> Furthermore, during the Korean War, Young Nam was the only region that remained mostly preserved from battles, war-time chaos and US Air Force bombings. Consequently, Yong-Nam emerged as the economic center and continued to remain so even after the war. Therefore, it was quite natural that Yong-Nam attracted more state and foreign investment than other regions in the 1950s. For example, 17.3% of United Nations Korean Reconstruction Agency (UNKRA)'s aid was to Kyung Book, the northern province of Yong-Nam (Kim 1997 p.206).

In addition to the generally favorable conditions the Yong-Nam region possessed, the region also had many cities with excellent conditions to support the heavy and chemical industries. Again, Ulsan's case clearly shows Park Administration's locational decision was economically rational. In 1967, the Ministry of Construction conducted a location assessment of four candidate sites and selected Ulsan because of its favorable conditions, such as its abundant water supply, its widely available land, its proximity to a major port and its convenient land transportation. (Chang 2002) However, the choice of Ulsan had already been made even before the official assessment took place. The purpose of the assessment was to make the government appear as if it were giving fair opportunities to the other regions and as though it were concerned about regional disparity. (Oh 1996:50). Many sources suggest that the Association of Industrialists, which was composed of the owners of the country's biggest

---

<sup>7</sup> The share of the other regions are as following: Capital Region: 18.9%, Kang Won region: 5.5%, Chung Chung region: 2.6%, Honam region: 7.7% and all regions in North Korea: 51.5%

businesses, made the initial suggestion. (Kang and Lee 1987) However, Oh (1996) argues that Ulsan was such an obvious choice that anybody in his right mind would have made the same decision. (Oh 1996:52) This assertion shows that the state made a rational choice based on informally acquired information rather than formal procedure, a typical process that Evans (1995) would call “embeddedness.” Other industrial cities such as Pohang, Jinhae, and Masan also went through similar process and they have good natural and social conditions for heavy and chemical industries.

#### **4. Regional Embeddedness and Spatial Autonomy**

The previous section showed that the South Korean state’s choice of Yongnam for a polarized development strategy was an economically rational one. Then the question becomes “How did the South Korean state do it when many other developing countries’ states could not. The easiest answer would be that the South Korean state simply had a good understanding of industrial location and agglomeration economy, but that cannot be the answer. As explained in the previous section, South Korea’s spatial planning was based on the concept of polarized development, which was almost the standard prescription for developing economies in the 1960s and 1970s. Writings about this strategy by Boudeville, Myrdal, Hirshman and Friedman were widely read and actually put into practice in many countries. Then what made South Korea different from most of other developing countries? This section analyzes the socio-spatial conditions that enable the South Korean state to implement a polarized development strategy based on the concept of a “regionally embedded spatial autonomy” as proposed in Section 2.3.

##### **4.1. Spatial Autonomy: The Weakness of Regional Representation**

The Park Administration was able to implement polarized development strategy in a rather consistent way because the administration was relatively

insulated from region's political pressure. Among the five regions in South Korea's mainland, Yong-Nam Region was the main beneficiaries of the state's polarized development strategy. Then, would the other regions not attempt to redirect the investment? The capital region did not have to because it was thriving without the state's support. The other three regions' attempts were only limited because those regions did not have strong representation in the national politics. Among those three, Kang Won Region and Chung Chung Region are smaller regions and have seldom been major actors in modern Korean politics. But Ho-Nam had enormous potential. Its population was similar to those of Yong-Nam and the Capital Region and also had material foundation thanks to its fertile agricultural land. Furthermore, Ho-Nam was the home for Kim Sung Soo and his group, the most influential group in the latter part of the Japanese occupancy. Therefore, Ho-Nam could have become the main challenger to Park Administration's polarized development strategy if a series of incidents in 1950s did not debilitate Kim Sung Soo's group.

During Japanese occupancy, Kim Sung Soo and his group's emerged due to their cooperative attitudes toward the Japanese colonial government. Although this group included some strict nationalists such as Song Jin Woo, the majority of them, including Kim Sung Soo himself, cooperated with the Japanese colonial government for their business and political opportunities. Even the nationalist wing of this group pursued semi-independent administration within the Japan Empire rather than complete liberation. Naturally, this group was favored by the Japanese colonial government over more radical nationalist groups such as Kim Koo's Korean Provisional Government that were organizing violent struggle against Japan for complete liberation. It was also natural that Kim Sung Soo's group expanded its influence in business and politics under Japanese colonial government. When Japan's loss of the Second World War became evident, the Japanese colonial government's trust on this group and the latter's increasing

influence in Korea led the former even considered having the latter take over the administration.

When Japan retreated from Korea upon its loss in the Second World War in 1945, Kim Sung Soo and his group remained as the most well-organized political group although their background of collaboration with the colonial government made them not perfectly accepted by the people. Therefore, it was natural for Syngman Rhee, the first president of modern South Korea—who had public support but did not have organized support—built an alliance with Democratic National Party organized by Kim Sung Soo's group, to consolidate his power against leftists and radical nationalists. Therefore, until 1948, when Kim Sung Soo's and Ho-Nam elites were the most influential political group except Rhee Syngman. In 1948 however, when these Ho-Nam elites opposed to President Rhee's appointment of his aids as ministers and his radical plan for agricultural land reform, President Rhee broke the alliance.

Land reform was of particular importance in understanding of the further collapse of Kim Sung Soo and his group because this group was supported by the landlord class. Peasants, in spite of their conflicting interest, also supported Kim Sung Soo's group because of the landlord class' influence. Naturally, Kim Sung Soo's group was resistant to President Rhee's radical plan for agricultural land reform. However, the fluctuating political situation, people's desire for land, and successful land reform in North Korea let President Rhee implement the land reform in a relatively radical way. The landlord class collapsed because the government's compensation for land repossession was substantially lower than market price. According to one estimate, only 15% of the landlord class received reimbursement more than subsistence level (Kim 1993: 54). This means that Kim Sung Soo's group lost its main supporter and material foundation. What's more, peasants who received land with favorable conditions became independent of landlord class's influence and began to support President Rhee (Kim 2000).

Consequently, in the 1950 general election, the Democratic National Party, now called Korean Democrat Party, and its allies won only 22% of the seats that is substantially lower from 38% in the 1948 election (Kim 2000: 199). Their decreased influence was even clearer in Ho-Nam Region, where agriculture was the main industry. Their share of vote in two provinces in Ho-Nam was 11.6% and 20% substantially down from 26.1% and 37.7% in the 1948 general election (National Election Commission 2005) After the Korean War broke out, the Korean Democrat Party attempted to attack back by making wide alliance with independent members of the Assembly but that alliance was broken by Rhee Syngman's self coup and his embracing of the independent members afterwards (Kim 1993).

Of course, Kim Sung Soo and Korean Democrat Party's fall should not be equated with the fall of Ho-Nam because regionalism was not a main variable in politics in the 1950s. It is, however, evident that if Kim Sung Soo and National Democratic Party did not collapse, they would have resisted against President Park's reliance on Yong-Nam elites and polarized development strategy in the 1970s. In that sense, the collapse of Kim Sung Soo and Korean Democrat Party resulted in Ho-Nam Region's loss of its potential advocate.

In 1960, the Korean Democrat Party, now called the Democrat Party, had another opportunity. The April 19th civil uprising forced President Rhee to admit his fraudulent election and step down. The Democrat Party won the subsequent election. But less than one year later, General Park Jung Hee overturned the Democrat government by military coup. Then Park placed restrictions on the political rights of many former politicians with the excuse of eradicating corruption.<sup>8</sup> As a result, the Ho-Nam elites found themselves outside the institutionalized politics. During the eighteen years of Park's presidency, the

---

<sup>8</sup> "Eradication of corrupted politics" was one of the six items in Park's pledges announced upon the success the coup (see Park 1961).

remaining members of Democrat Party and its successor, the New Democrat Party, comprised the main opposition. The representation of Ho-Nam, however, was diluted because the region embraced a variety of social groups that were against President Park. Kim Yung Sam, the direct successor of Kim Sung Soo, was elected to the Yong-Nam Region. On the other hand, Kim Dae Jung, a charismatic figure who was elected in Ho-Nam, represented groups other than Kim Sung Soo's successors. In fact, Kim Dae Jung was not fully accepted as Ho-Nam's leader until the late 1980s.

Therefore, Ho-Nam never had a strong representation in national politics, except for one year, 1960-1961, during which the Democrat government reigned. What's more, the discrimination against Ho-Nam within the bureaucracy deprived the region of another representation channel. It commonly accepted fact that people from Ho-Nam were discriminated in promotion opportunities inside the bureaucracy.

The combined effect of exclusion from politics and policy process were Yong-Nam elites' monopoly of power. This caused bitter sentiment in Ho-Nam Region and partially influenced Kwangju Democratic Uprising in 1980. This exclusion at the same time, gave the state spatial autonomy in planning and consistently implementing economically rational but politically unfair investment decisions under polarized development strategy.

But as previously explained, spatial autonomy is not a sufficient condition for a state to be a developmental state. The state also needs ties with a small number of regions that serve as information channels and political supporters. Section 4.2 captures these necessary ties with the concept of "regional embeddedness."

## **4.2. Regional Embeddedness: The Park Administration's Ties with Yong-Nam Region**

We can understand the regional embeddedness that existed under the Park Administration by analyzing who are members of the ruling coalition what the relationship among subgroups like inside the ruling coalition. The ruling coalition was comprised of the administration (President Park and his bureaucrats), political leaders (National Assembly members from the ruling party) and leaders within the business community (owners of Chaebols and their aids).

Firstly, politicians who were personally from or elected in Yong-Nam region composes the core group in the ruling coalition. I said previously that Park placed restrictions on the political rights of politicians of the previous regimes. However, in building a new ruling party, Park reinstated some of the old politicians and installed them in the party. That was mainly because there was not enough time and manpower to build a ruling party from scratch. But it was also partially because Park and his follower wanted to curb Kim Jong Pil. Kim Jong Pil had been Park's number one in the coup and who now was the main challenger to General Park. He was responsible for building a political party that would support the military regime and organized intellectuals and professionals who had not been involved in the previous regimes. He and his followers wanted to build a party that organizes a big mass of citizens instead of one that is under Park's personal control and many intellectuals and professionals were supportive of Kim Jong Pil's idea. Kim Jong Pil made that choice because, without mass mobilization, Kim Jong Pil and his followers' political future would be shadowed by General Park's charisma. However, before this project was completed General Park and his followers fought back and send Kim Jong Pil into exile overseas (Chang 2000). And to outnumber Kim Jong Pil's recruits, Park reinstated politicians from the old regime and used them under his direct control. The

importance of this event in this research is related to the fact that many of the reinstated politicians were from Yong-Nam Region. For example, Uhm Min Yung, the first former politician from the Liberal Party to be reinstated, resided in the same boarding house as General Park while they were in high schools in Yong-Nam. After reinstated, Uhm became President Park's politics tutor and recruited his mates from Kyung Book Highschool, a prestigious high school in Yong-Nam. The politicians from Liberal Party recruited by Uhm Min Yeong include Lee Hyo Sang, who would become the Speaker of the National Assembly, Kim Sung Gon and Baik Nam Uk, two of the four who were President Park's proxy in the Republican Party until 1973, and Park Jun Kyoo. (Kim 1996) Furthermore, during Park's Presidency, 30.8% of candidates for party-list proportional representation and Yoo Jung Hwe members (the members of the National Assembly appointed by the President) came from the Yong-Nam Region as well. (Kim and Park 1991: 4 table 1)

Yong-Nam Region was over-represented in the bureaucracy as well. Thirty-five percent of the 394 ministers and vice ministers under Park came from the Yong-Nam Region. That was quite big number considering that the population of Yong-Nam was only 19.0% in 1943<sup>9</sup>. The president's secretaries were more regionally biased. At the initial stage, in 1963, four out of six senior secretaries and six out of eight secretaries were from Yong-Nam Region. Given the unchecked presidential power under President Park's authoritarian regime, a presidential secretary was more influential than ministers or members of the National Assembly.

Then, why did Park have to recruit politicians and bureaucrats from the Yong-Nam Region? Would he not have gotten more support if he had evenly

---

<sup>9</sup> I used 1943's population instead of that from the 1960s or 1970s because the highest power elites are mostly in their 40s, 50s or 60s and thus were born in the 1930s at the latest. The oldest population data I could acquire with a regional breakdown was 1943 data.

distributed his recruitment? The answer to these questions is related to the fact that he assumed power by military coup. His political networks were very limited and he did not have enough time to widely and formally recruit talented people. Park had to recruit via his personal ties former politicians he could personally rely upon. People who shared a background with General Park were obvious candidates and thus Army veterans and/or individuals from the Yong-Nam Region had better chance to be recruited.

Moreover, in many ways, exploiting personal ties was not only unavoidable but also “rational” (Kim 1990). The Park Administration could not expect a formal chain of command to work perfectly for two reasons: 1) because of the immature state of the bureaucracy and 2) because of unorthodox or sometimes even unlawful methods in his policy implementations. Personal communication and a personal chain of command, one that was based on personal trust and personal authority, worked better. A big part of this personal trust and authority was formed around the region. Alumni networks from prestigious schools, such as Kyung Book High School, and hometown-based informal organizations within and between formal organizations played particularly important roles in the Park Administration.

The advantage of an informal relationship was present in other societal domains, including the economy, too. When the market economy is not fully mature and the state is taking economic development initiatives, relationships with state officials are critical to businesses. Furthermore, Park often lured Chaebols with rent incentives, thereby causing them to comply with the state’s plan in spite of the high risk. For instance, Chaebols could venture into the heavy and chemical industries in spite of those industries’ low profit rate because Chaebols trusted that in the event of failure, the state would compensate them for their loss by allowing them to rent in some other way. Providing rent incentives to a certain Chaebol often required unorthodox or even unlawful

methods. Thus, formal assurance was often impossible. Instead, the state offered President Park or high-rank officials' informal promises, which Chaebols trusted. This kind of trust and secrecy is more easily acquired when the two involved parties have a common background or a common acquaintance. Having personally come from Yong-Nam and having collaborators from the same region, it is not surprising that President Park disproportionately formed ties with Chaebols from Yong-Nam. It is also not surprising that the majority of Chaebols were Yong-Nam-based. Chung Joo Yung, the founder of the largest Chaebol, Hyun-Dai, was originally from North Korea but his business base was the Yong-Nam Region. The founders of the second (Sam Sung), third (LG) and fourth (Daewoo) largest Chaebols were personally from the Yong-Nam Region. Among the owners of the 50 largest Chaebols, 22 or 44% were from the Yong-Nam Region. Such trust reinforces the informal transactions and informal transactions even further reinforces personal trust.

Yong-Nam's dominance was not limited to politics, bureaucracy and business. According to Kim Man Heum (1997), who surveyed the power elites in Korean society, a disproportionately large number of powerful positions—from executives of banks to generals in the military to editors and publishers of daily news papers—were filled by people from the Yong-Nam Region. (p.179, Table 2-7)

This networking effect spilled over through the social and economic hierarchy. The Yong-Nam Region was over-represented in the companies that belonged to Chaebols, which meant more opportunities for the Yong-Nam workers to find jobs in those companies and for small businesses to have subcontract with Chaebol. The government's uneven investment toward Yong-Nam Region benefited landlord class in Yong-Nam by increasing land rent.

This benefits that Yong-Nam Region enjoyed across the boundaries of social class resulted in Yong-Nam Region's strong political support of President

Park. In the series of elections especially in the presidential elections, Yong-Nam people's preference of President Park to opposing party's candidates was apparent.

Of course, economic benefits did not automatically generate political support: There were Park and his men's deliberate attempts to mobilize regionalism in Yong-Nam Region. In 1963, Lee Hyo Sang, the Speaker of the National Assembly, said in his speech in support of General Park at Daegu, "Candidate Park Jung Hee is a proud descendent of Shilla Kingdom's royal family. We shall elect and serve him as our king for the millennium." (Lee Hyo Sang quoted from Segye Times 1992). This is a very explicit regionalist remark because Shilla was an ancient kingdom of which territory roughly coincided with contemporary Korea's Yong-Nam region. In spite of Lee Hyo Sang's and other political leaders' explicit attempts, their effects were only limited at the beginning. In 1963, Park's vote from the Yong-Nam Region was 56.7%, which was only 10.1% higher than what he received from the entire country. In the 1967 presidential election, however, he won 65.9% of the Yong-Nam Region's vote, higher than the national average by 14.5%. Regionalist mobilization continued its rise and became even more explicit. In 1971, Lee Hyo-Sang, who had continued to be the Speaker of the National Assembly, said, "Everybody in Yong-Nam except those who are mad, should vote for Park." (Hankook Ilbo 2000) This kind of explicit regionalist mobilization had influenced the Yong-Nam people and 71.1% of them voted for Park that year, a percentage that was 17.9% higher than the national average. (See Table 1).

Table 1. Park's Votes in the Presidential Elections

|                 | 1963  | 1967  | 1971  |
|-----------------|-------|-------|-------|
| Yong-Nam Region | 56.7% | 65.7% | 71.1% |
| National        | 46.6% | 51.4% | 53.2% |
| Difference      | 10.0% | 14.2% | 17.9% |

Data: National Election Commission 2004

As such, ties with Yong-Nam region was of fundamental importance to Park's presidency. Politicians and bureaucrats from Yong-Nam were recruited via personal ties and region-based networks were formed with business owners. The benefits of these region-based ties benefited residents of Yong-Nam thereby providing political support that compensate for the Park Administration's lack of legitimacy.

## **5. Further Discussion**

The findings of this paper show that political regionalism and a polarized development strategy are intertwined rather than the former being the outcome of the latter. President Park's lack of legitimacy left him no other choice but to create ties with politicians from the same origin. This bonding, in turn, gave him leveraging capability to implement polarized development. Recruitment of Yong-Nam politicians and support of a polarized development strategy attracted further support from Yong-Nam residents. In turn, this widened support enabled Park to continue his polarized development strategy in spite of other region's discontent.

From this, we also learn that a polarized development strategy depends on complex historical conditions. Park and his bureaucrats did have ideas regarding polarized development, but if they did not find their supporters from the Yong-Nam Region—which just happened to be the most rational destination for polarized development—then the outcome might be different. Furthermore, even after they did make the right choice, the polarized development strategy might have been met with strong resistance if the political representation of the Ho-Nam Region had not been disarmed through a series of incidents in the 1950s. This finding resonates with recent developments in statist literature that the developmental state in South Korea was not completely preplanned. Rather, it was at least partially an outcome of historical accidents. Earlier statist authors such as Amsden (1989) depicted South Korean bureaucrats as master-minded

maestro of industrialization. Recently, however, it was found that the South Korean state had evolved into a developmental state through historical accidents and experience. World system theorists show that South Korea's integration into the global production chain and U.S. support for Japan's recovery played an enormous role in South Korea's industrialization (Arrighi 1996; Borrero 1995). According to Lee (1999), the Park Administration became a developmental state following a sequence of external shocks and accidents, such as the failure of their initial plan for a strictly planned economy and the intervention of the U.S. This paper illuminates the spatial aspects of historical accident accumulation that contributed to the formation and success of the developmental state.

In Hirshman (1958)'s research, along with other authors of his times, it is assumed that the state bureaucracy is a rational actor that works in a political vacuum. Along this line, in regional development theory, Myrdal (1964) and Friedman (1979), who contributed to the conceptualization of polarized development, thought that the state could reverse the cumulative causation and create spillovers. For the state to follow Myrdal and Friedman's suggestion, the state should be completely free from politics and be able to make decisions for underdeveloped regions. Recent findings on the statist approach, such as Evans (1995) and Park (1998) made, show that the state is actually an actor in the social relations web and thus influenced by society's power structure. Adding to these findings, this paper shows that the central government is not a completely isolated actor. Rather, it is an actor that is influenced by power relations between regions. Therefore, a polarized development strategy is planned and implemented in the context of spatial-political relations. Ties between the central government and one region play critical roles in the introduction and implementation of a polarized development strategy and in its success. Along with the economic process of cumulative causation, these ties will be strengthened. Thus, breaking off such ties will become more and more difficult as the tied region accomplishes

economic growth. In other words, early success of a polarized development policy will block the possibility of that policy's reversal.

The findings of this paper have implications beyond the issue of South Korean development. In an academic context, the findings of this research call for rebuilding of the bridge between geography/regional planning and development studies. Only 30 years ago, developmental study theories were very spatial. Growth centers lay at the core of the discussion while other spatial concepts, such as spatial organization and rank-size law, were commonly discussed. Since then, however, spatiality has been a missing element in the discussion. Statist literature on East Asian development, one of the most important progresses in development studies in recent years, serves as a clear example. While spatial concepts such as growth centers were apparently used in the formation of development strategies in South Korea and East Asia, major statist contributors overlooked those elements. Findings of this paper show that the spatial perspective can shed lights on some of those overlooked elements.

The spatial perspective is required for practical purposes as well. Governments in the developing world require spatial development strategies and yet what they have is a 50-year-old concept of growth centers and polarized development. Furthermore, because the spatial dimensions of the East Asian experience, which is currently serving as a model of development, is not well-documented in the existing literature, it would be difficult for the planners and policymakers to learn lessons, positive or negative, from East Asian development. Further research on the spatial dimension of East Asian development and on the practical implications of these experiences is very necessary.

## Reference

- Natteogowon mangan bukeuowon baektae (shameless remarks and shameful acts). 1992. *Segye Times*, March 24, 12.

- To manggookbong dotnage hana (exacerbating a disease that ruins the nation). 2000. *Hankook Ilbo*, March 4, 1.
- Amsden, A. H., Kochanowicz, J., and Taylor, L. 1998. *The market meets its match: Restructuring the economies of eastern europe*. Cambridge, Massachusetts: Harvard University Press.
- Arrighi, G. 1996. The rise of east asia: World systemic and regional aspects. *The International Journal of Sociology and Social Policy* 16 (7/8):6-44.
- Borrego, J. 1995. Models of integration, models of development in the pacific. *Journal of World Systems Research* 1 (11).
- Castells, M. 1992. Four asian tigers with a dragon head: A comparative analysis of the state, economy, and society in the asian pacific rim. In *States and development in the asian pacific rim*, ed. R. P. Appelbaum and J. Henderson. Newbury Park: Sage Publications.
- Chang, H. 2000. Minjoo konghwa dang-eui silpaehan silhum (republican party's failed experiment). Paper read at Conference on Korea in the Park Jung Hee Era, at Seoul: Korea University.
- Chang, B.-I. 2002. Sanop-eui baldal (industrial development). In *Ulsan gwangyeok si sa (the history of ulsan metropolitan city)*, ed. The Editorial Committee for History of Ulsan Metropolitan City. Ulsan, Korea: The Editorial Committee for History of Ulsan Metropolitan City.
- Cho, Y. C. 2003. Chaebol system and growth-oriented ruling coalition. In *Gaebaldokjae-wa park jung hee era (developmental authoritarianism and park jung hee era)*, ed. B. C. Lee. Seoul: Changbi Publishers.
- Cox, K. R., and Mair, A. 1988. Locality and community in the politics of local economic development. *Annals of the Association of American Geographers* 78 (2):307-25.
- Deyo, F., ed. 1987. *The political economy of the new asian industrialism*. Ithaca: Cornell University Press.
- Duk-Hyun, K. 1992. Economic development and the change of spatial structure in south korea. Ph.D. Dissertation, Seoul National University, Seoul.
- Evans, P. 1995. *Embedded autonomy: States and industrial transformation*. Princeton: Princeton University Press.
- Friedmann, J. 1979. A general theory of polarized development. In *Growth centers in regional economic development*, ed. N. M. Hansen. New York: Free Press.
- Garn, H., and Ledebur, L. 1982. Congruencies and conflicts in industrial policies. In *Regional dimensions of industrial policy*, ed. M. Bell and P. Lande. Lexington, Mass: Lexington Books.
- Han, S. J. 2002. Gongdan hyeongseong-gwa saneop-eui byeonhwa (the formation of the industrial park and industrial change). In *Ulsan gwangyeok si sa (the history of ulsan metropolitan city)*, ed. The Editorial Committee for History of Ulsan Metropolitan City. Ulsan, Korea: The Editorial Committee for History of Ulsan Metropolitan City.

- Hansen, N., Higgins, B., and Savoie, D. J. 1990. *Regional policy in a changing world*. New York: Plenum.
- Harvey, D. 1985. *The urbanization of capital: Studies in the history and theory of capitalist urbanization*. Baltimore: Johns Hopkins University Press.
- Hirschman, A. O. 1958. *The strategy of economic development*. New Haven: Yale University Press.
- Kang, B.-K., and Lee, H.-D. 1987. Background force on formation of urban structure of ulsan combinat. *Journal of Korean Planner's Association* 22 (1):89-119.
- Kim, Y. H. 1990. Elite choongwon-e issoso-eui jiyokgyokcha (regional disparity in elite recruits). In *Hanguok-eui jiyokjooeui-wa jiyokgaldeung (regionalism and regional conflicts in korea)*, ed. K. S. Association. Seoul: Sungwon.
- Kim, M. C., and Park, H. S. 1991. Regionalism in korea : Formation process and characteristics. *Korean Cultural Studies* 24.
- Kim, I. Y. 1993. Busan jongchipadong-eui jongchisajok euimi (the political hisotorical implications of busan political crisis). *Korea and World Politics* 9 (1).
- Kim, K. 1996. Park jung hee sidae (park jung hee's era). *Kukminilbo*, September 6, p.11.
- Kim, M. H. 1997. *Hankook jongchi-eui jae insik (revisiting korean politics)*. Seoul: Poolbit.
- Kim, I. Y. 2000. Nonji gaehyon-eul doolossan sinhwa-eui haeche. *The Journal of the Korean Association for History of Politics and Foreign Affairs* 22 (1):175-216.
- Korea Highway Corporation. 2005. *The webpage of korean highway corporation* [cited May 30 2005]. Available from <http://www.freeway.co.kr/>.
- Lee, B. C. 1999. Park cheong hee jeongkwonkwa baljeongookga mohyeongueui hyeongseong (park cheong hee administration and the formation of developmental state model). *Korean Journal of Development Economics* 5 (2).
- \_\_\_\_\_, ed. 2003. *Gaebaldokjae-wa park jung hee era (developmental authoritarianism and park jung hee era)*. Seoul: Changbi Publishers.
- Lewis, W. A. 1954. Economic development with unlimited supplies of labor. *The Manchester School of Economics and Social Studies* 22:139-91.
- Markusen, A., and Park, S. O. 1993. The state as industrial locator and district builder : The case of changwon, south korea. *Economic Geography* 69:157-81.
- Molotch, H. 1976. The city as a growth machine: Toward a political economy of place. *American Journal of Sociology* 82:309-31.
- Myrdal, G. 1964. *Economic theory and under-developed regions*. London: G. Duckworth.
- National Election Commission. 2005. *Yokdae songo jongbo system (historical election information system)* 2004 [cited 22 July 2005]. Available from <http://www.nec.go.kr/necis/index.html>.
- O'Connor, J. 1973. *The fiscal crisis of the state*. New York: St. Martin's Press.

- Oh, W. C. 1996. *Hanguksik gyongjae gonsol (building economy in korean style)*. Seoul: Kia Institute for Economic Research.
- \_\_\_\_\_. 1999. *Nae-ga jonjaeng-eul bajaneun got-to abnji anneunya (it is not like i suggested a war or something)*. Seoul: Korean Model for Economic Development.
- Park, J. H. 1961. Hyonmyong gongyak (revolution pleges): KBS Radio.
- \_\_\_\_\_. 2005. *1977 nyondo yesanan jechool-ae jeoumban sijong yonsolmoon (public speech on the government budget for the year 1977)*. Internet Memorial Hall for President Park Jung Hee 1976 [cited July 22 2005]. Available from <http://www.516.co.kr/board/>.
- Park, B.-G. 1998. Where do tigers sleep at night?: The state role in housing policy in south korea and singapore. *Economic Geography* 74 (3):272-88.
- Park, B.-G. 2003. Territorialized party politics and the politics of local economic development: State-led industrialization and political regionalism in south korea. *Political Geography* 22:811-39.
- \_\_\_\_\_. 2003. Politics of scale and the globalization of the south korean automobile industry. *Economic Geography* 79 (2):173-94.
- POSCO. 2005. *Creation history*. POSCO Museum [cited July 11 2005]. Available from <http://museum.posco.co.kr/museum/docs/kor/creStory/s91b1050010v.jsp>.
- Suh, C. W., and Lee, H. Y. 1990. A study on the evaluation of national physical development in korea (1960-1990), Korea Research Institute for Human Settlements, Seoul.
- Suh, C. W. 1993. A study on the national physical development model and impact on spatial inequality. *The Journal of South Korea Planners Association* 20.
- Swyngedouw, E. 1992. Territorial organization and the space/technology nexus. *Transactions, Institute of British Geographers* 17 (4):417-33.
- The Government of Republic of Korea. 1971. Comprehensive national physical plan, 1972-1981. Seoul: The Government of Republic of Korea.
- Wade, R. 2003. *Governing the market : Economic theory and the role of government in east asian industrialization*. Princeton: Princeton University Press.
- Yoo, C. G., and Lee, K. M. 2001. Chookcheokchejeeui jodojeok changchoolkwa baljeon: 1970 nyeonda (institutional creation and development of regime of accumulation: 1970s). In *Hankook jabonjooeni baljeon modeleni hyeongseongkwa haeche (economic development in korea: Institutions and history)*, ed. J. E. Kim. Seoul: Nanum Press.
- Yoo, C. G. 2003. Institutional conditions for financial oppression. In *Gaebaldokjae-wa park jung hee era (developmental authoritarianism and park jung hee era)*, ed. B. C. Lee. Seoul: Changbi Publishers.
- Yu, T. F. 1997. Entrepreneurial state: The role of government in the economic development of the asian newly industrialising economies. *Development Policy Review* 15:47-64.



Fig. 1. National Industrial complexes and Expressways in 1970s  
 Data: The Ministry of Construction and Transportation (2005); Korean Highway Corporation (2005)

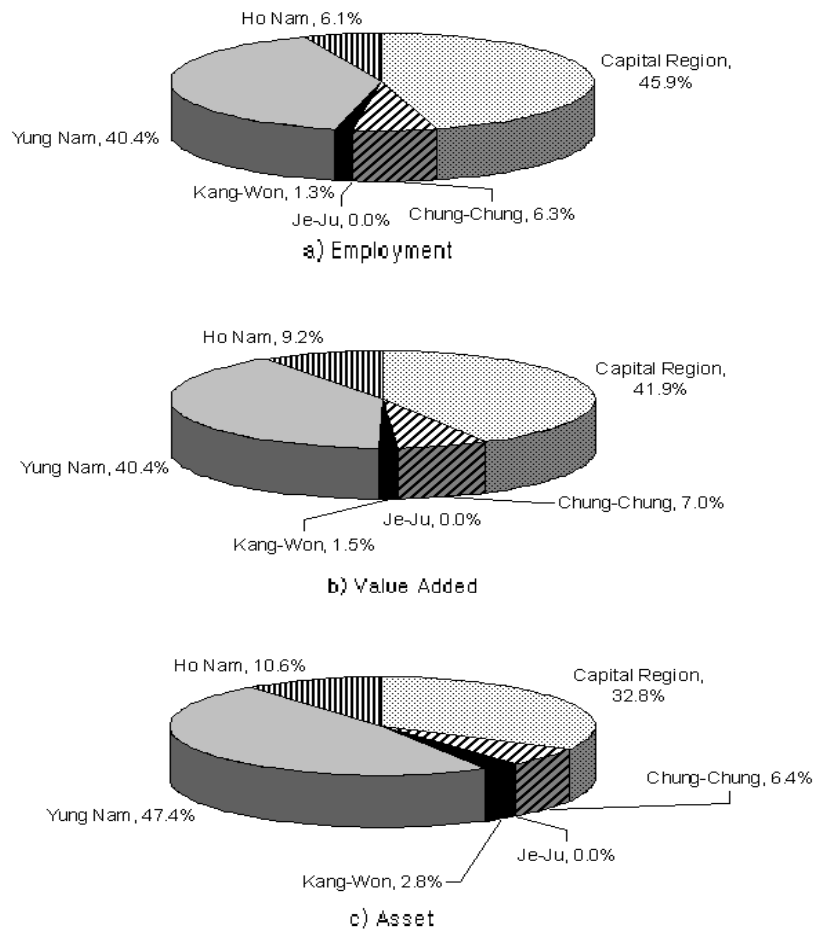


Fig. 2. Each Region's Share in Manufacturing in 1980  
Data: Kim 1992: 124

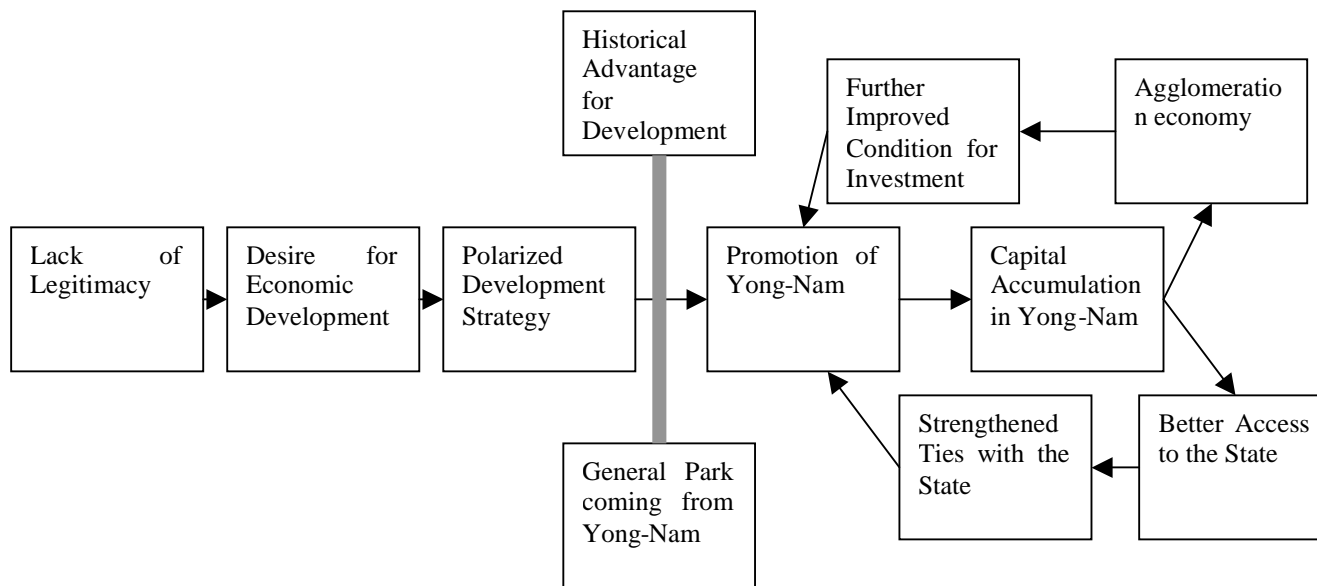


Fig. 3. Economic and Political Cumulative Causation in Polarized Development