

CAPITAL ACCUMULATION AND THE SPATIAL DIVISION OF CLASSES: WITH SPECIAL REFERENCE TO THE NEW MIDDLE CLASS IN KOREA AND TAIWAN*

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This article has examined the restructuring of spatial structures and social relations in the process of capitalist development in Korea and Taiwan. The restructuring of spatial structures and social relations in NICs is closely related to the spatial division of labor of advanced capitalist countries. This article analyzed the regional and social class problems in Korea and Taiwan taking a longitudinal approach to the spatial differentiation of the division of labor.

The results show that the proportion of the new middle class located in Region A (most industrialized areas) has been higher than that in Region B (the rest of country), and the importance of the regions which exercise external control of the production process (the capital city in Korea and Taiwan) has been increasing in proportion to the increasing importance of the regions in which production process is located, and looking at the functions of the new middle class in relation to capital accumulation (supervision, reproduction, value realization, and technological innovation) we find spatial trichotomization in Korea and spatial dichotomization in Taiwan.

INTRODUCTION

The process of capital accumulation in a capitalist economic system is subject to periodic crises generated mainly by capitalists' overinvestment aiming at higher profits (Walker and Storper 1981, p. 479). Various attempts to overcome these crises, in turn, lead to regional and class problems, namely, the spatial and social differentiation of production. Unlike the past researchers, who dealt with the problems of capital accumulation, regions, and classes separately, today's scholars tend to focus on their dynamic relations.

*A longer version of this paper appeared in the author's unpublished Ph.D. dissertation, "Spatial Division of Classes in the Newly Industrializing Countries: With Special Reference to the New Middle Class in Korea and Taiwan," Department of Sociology, Seoul National University, 1990.

They hold that the spatial differentiation of classes is closely associated with the internationalization of capital and the global reorganization of production as the advanced capitalist countries attempt to defuse the accumulation crisis (Carney 1980; Dame tte & Poncet 1980; L pple 1985). Some researchers have employed this theoretical framework to examine the relationship between regions and classes (Buck and Atkins 1978; Buck 1979; Burris 1980; Urry 1981; Abercrombie and Urry 1983).

Most of the recent work on the relationships among capital accumulation, regions, and classes derives its theoretical impetus from the so-called regulation school. According to this school, global Fordism has been developed as a new way of dealing with the acceleration of the accumulation crisis since the early 1970s. The proponents of global Fordism challenge the two major perspectives concerning development (dependency and modernization theories), arguing that the success stories of some newly industrializing countries (NICs) should be understood in conjunction with the crisis of Fordism in the advanced capitalist countries and their efforts to overcome it (Lipietz 1980a, 1986; L pple 1985).

Capital accumulation in Korea and Taiwan is evidently linked to global Fordism. During the 1960s, these two countries built an extensive regime of accumulation by specializing in labor-intensive export industries. However, an intensive regime of accumulation began in the 1970s, as they engaged in a heavy and chemical industrialization drive.¹

The dynamic relations among capital accumulation, regions, and classes are most evident in the process of transition from an extensive regime of accumulation to an intensive regime of accumulation. Korea and Taiwan are not exceptional. In both countries, there is a great need to transform 'inherited space' to 'projected space' in order to accommodate spatially the Fordist production process (Cho 1987, p. 9). Since the beginning of an intensive regime of accumulation in the 1970s, the class and regional problems in both countries have become more obvious.

In this respect, the rise of the new middle class is very significant because it is closely related to the mechanisms of crisis resolution in the process of capital accumulation. This paper compares the restructuring of regions and classes in Korea and Taiwan in terms of the functions performed by the new middle class, namely, supervision, reproduction, value realization, technological innovation.

¹But they remain peripheral in the sense that in the global circuits of productive sectors, qualified employment positions (above all in engineering) remain largely external (Lipietz 1986, p. 32).

THEORETICAL OVERVIEW

Capital Accumulation and Regions

The regional problem in capital accumulation results largely from the internationalization of productive capital and the fragmentation of the productive process. This problem developed first within the advanced capitalist countries and then spread to some Third World countries as the global reorganization/relocation movement of production process grew rapidly. Take the clothing and textile industry of the Netherlands as an example. Table 1 shows that its production and subcontracting facilities moved from the Netherlands to some peripheral regions in Eastern and Southern Europe and then to East Asia.

The intensification of Fordism tends to divide the world capitalist system into regions in which direct production is performed and regions with management and supervision centers. As a result, the relative importance of the new middle class grows in the advanced capitalist countries, while semi-skilled and unskilled workers occupy a significant class position in the Third World as the site of global factories.

Spatial divisions, in relation to capital accumulation, occur not only within the world capitalist system but also within individual countries. Lipietz (1980a, pp. 67-8), attempting to explain the spatial division of labor in advanced capitalist countries, identified three types of regions in France.

Regional Type 1: those with a high-technology environment, with close links between business centers, innovation centers and centers of research and technological and scientific teaching.

Regional Type 2: those with a high proportion of skilled personnel (techni-

TABLE 1. THE FILTERING-DOWN PROCESS IN THE REORGANIZATION AND RELOCATION OF THE DUTCH TEXTILE AND CLOTHING INDUSTRY

Period	Location in the Netherlands	Production via 'subcontracting'					Location abroad	
		Netherlands	Belgium	Eastern Europe	South Europe	East Asia	Belgium	Outside Europe
1950-9	+	+						
1960-4	+	+	+				+	
1965-9	-	-	+	+			+	
1970-3	-	-	-	+	+	+	-	+
1974--	-	-	-	-	+	+	-	+

+ : increase. - : decrease.

Source: Läßle (1985, p. 66).

cians, professional workers), which presupposes an industrial tradition corresponding at least to the stage of large-scale industry.

Regional Type 3: those with reserves of labor that can be regarded as unskilled and as having a very low value of reproduction.

While peripheral Fordist countries perform most of the direct production activities in the world capitalist system, an internal differentiation of space into direct production activities in the world capitalist system, an internal differentiation of space into direct production regions and management/supervision regions does occur within these countries. Spatial divisions in peripheral countries are created largely by the initiatives of the state. The state makes geographical rearrangements of industries in accordance with its political interests. The so-called Yashugi Proposal in 1970 is a good example. This proposal suggested building a Korean-Japanese economic cooperation area linking the Southeastern region of Korea with Japan's Kansai region (Kim 1986). These various spatial strategy can be categorized as the 'technical-economic function' type of spatial strategy. This type of spatial strategy includes planning, subsidies, tax control, and infrastructural provision. The building of export processing areas and industrial estates is a good example of the 'technical-economic function' type of spatial strategy.

Theories of the New Middle Class and Its Functions

1. Technological Perspectives

One of the most popular theories of the emergence of the new middle class sees the new middle class as a product of the technological expansion associated with industrialization. Mills (1951), for instance, argued in *White Collar* that the technological revolution led to the expansion of professionals. Galbraith (1969) similarly argued that since modern capitalism requires technological specialties beyond the reach of traditional capitalism, the massive employment of technical specialists becomes necessary.

The new working class theory, proposed by Mallet, Touraine, and Gorz, relates the transformation of the class structure to autonomous technological developments. The theory also contends that the increasing automation of production process under today's monopoly capitalism has produced the new working class, which consists of intellectual workers, such as engineers, technicians, supervisors, and scientists, who can control production. Therefore, theories of the 'new working class' are one version of this approach.

One of the criticisms most frequently leveled at the technological explanation of the new middle class is that this approach tends to reify technology by treating it as something extra-social (Burris 1980, p. 20). This approach, by

assuming that technological development is independent of particular social relations, suggests that the mode of technology used in production directly influences the occupational structure. However, these theories overlook the fact that technology, rather than being isolated from social structure, is a material expression of sociopolitical dynamics. Moreover, the technological theory is not supported by empirical evidence. For example, Maglin showed that major technological and organizational innovations in the early 19th century occurred not by the advance of technology but by the attempt by the capitalist's to tighten work discipline (Burris 1980, p. 20).

2. Internal Contradictions of Accumulation

Another theory explains the emergence of the new middle class as a product of the interaction between the contradictions in the process of capital accumulation and the subsequent class conflict, on the one hand, and the response to these contradictions and conflict on the other hand. Capital accumulation is contingent upon the three general conditions of capitalist development: the production sphere, where surplus value is extracted; the exchange sphere, where surplus value is realized; and the reproduction sphere, where conflict between labor and capital is regulated (Hadjimichalis 1987). The accumulation crisis is inherent in each sphere of capitalist development, transforming the class structure.

Apropos the rise of the new middle class, three inherent contradictions and the following modes of responses can be identified. These contradictions respectively correspond to the three spheres of capitalist development. The first contradiction in capital accumulation is related to the falling rate of profit in the sphere of production. In order to increase profits, capitalists strive to reduce labor costs, to increase productivity, to promote technological innovation, and to increase the scale of production (Hadjimichalis 1987). Consequently, the ratio of constant capital to variable capital increases, raising productivity. However, this rising organic composition of capital eventually lowers profits. Under monopoly capitalism, however, the state, in order to maintain conditions favorable to accumulation, makes a planned and systematic effort at technological innovation. As a result, the occupational positions of those working in high technology fields expand.²

The second contradiction accounting for the growth of the new middle class is class antagonism between labor and capital, taking place mainly in the sphere of reproduction. Capital accumulation, in turn, expands the working

²This is the empirical foundation of the technological perspective on the new middle class. But there is evidence that the contribution of technological development has stopped with the creation of a small group of professionals in science and technology (Burris 1980, p. 30).

class, the ultimate source of surplus value. The enlarged working class and its subsequent organization (e.g., labor unions) pose a threat to capitalists, who initiate various labor-control strategies on the part of capital. On the shop floor, capitalists, aiming to suppress the unified working class resistance, try to stratify positions within a firm by introducing a merit system and internal labor markets. Moreover, in order to ensure a stable reproduction of capitalist social relations, capitalists make every effort to depoliticize class antagonism and promote capitalist ideologies. An important consequence of their efforts is the expansion of new middle class positions in such fields as education, mass communication, advertisement, and social welfare (Burris 1980).

The third contradiction is linked to the realization of surplus value in the sphere of exchange. Since potential problems of underconsumption and stagnation are ubiquitous in capitalist societies, capitalists are greatly concerned with increasing purchasing power, developing markets at home and abroad, and shortening the cycles of capital and commodities (Hadjimichalis 1987). Consequently, new middle class positions grow in such related fields as advertisement, market research, sales, and finance. In addition, the extensive intervention of the state in the process of value realization facilitates the expansion of the new middle class in the state sector.

3. The Functions of the New Middle Class

There are two perspectives on the functions performed by the new middle class. One is a functionalist approach represented by Croner, who classifies the functions of the new middle class into administration/design, analysis, planning/management, supervision and commerce (Hyman & Price 1983, p. 48). Croner classified the content of jobs that were transferred to the new middle class by the capitalists. This classification, however, has nothing to do with capital accumulation. The other perspective bases its classification scheme on the roles played by the new middle class in resolving the internal contradictions of accumulation (Burris 1980).³

The functions of the new middle class according to this perspective are as follows: The function of *supervision* concerns the control of labor. This has long been a major criterion by which the new middle class is distinguished from the working class. As the increasing size of capital accelerated the concentration of capital, new jobs were created and expanded to perform the managerial and supervisory functions formerly performed by individual capi-

³There are two other arguments regarding the function of the new middle class. Carchedi (1977) argues that the new middle class generally performs the global function of capital and the function of collective worker such as controlling and supervising labor. Abercrombie and Urry (1985, p. 123) attribute functions of control, reproduction, and conceptualization to the new middle class.

talists.

The function of *reproduction* concerns the dissemination of capitalist social relations and ideologies. As the process of capital accumulation advanced, class conflicts between capitalists and laborers become intensified. The capitalists, in order to weaken the intensity of class conflicts, try to spread capitalist ideologies and to reproduce capitalist social relations by investing a large sum of capital in such fields as education, mass communication, law, religion, health, social welfare and so on.

The function of *value realization* concerns the expansion of the capitalist system. The capitalist regime becomes stagnant without mechanisms for market and surplus absorption. In order to overcome this difficulty, the regime tries to increase the purchasing power of the population and facilitate the circulation of capital and commodities.

The function of *technological innovation* allows the capitalist to enjoy a competitive position vis-à-vis other capitalists. During the transition from extensive capital accumulation to intensive capital accumulation, research and development (R & D) and technological innovation become the main factors in the process of capital accumulation.

TABLE 2. OCCUPATIONAL CATEGORY ACCORDING TO FUNCTIONS OF THE NEW MIDDLE CLASS

Supervision	Reproduction	Value realization	Tech. innovation
managers, clerical supervisors, transportation & communication supervisors, managers (wholesale & retail), managers (catering & lodging), housekeeping & related supervisors, farm managers & supervisors	medical & veterinary workers, statisticians, mathematicians, systematic analysts & related technicians, economists, accountants, jurists, teachers, workers in religion, authors, journalists & writers, sculptors, painters, photographers & related, composers & performing artists, athletes, sportsmen & related workers, legislative officials & government administrators, government executive officials,	sales supervisors & buyers, technical salesmen & manufacturing agents, insurance, real estate & business service salesmen,	physical scientists & related technicians, architects, engineers & related technicians, aircraft & ship's officers, life scientists & related technicians, other professionals, technicians & related workers.

Table 2 summarizes the above functions of the new middle class in terms of standard occupational categories.

DATA AND METHODS

The Scope of the Study

This study deals with the period from the 1950s to 1980. Since a qualitative transformation of capital accumulation in Korea and Taiwan took place in the early 1970s, I will divide the whole process of accumulation into two distinctive phases: the extensive regime of accumulation before the early 1970s and the intensive regime after the early 1970s. In terms of the spatial dimension, the study divides regions into two categories: industrial and non-industrial. In the case of Korea, Region A represents the most industrialized areas, such as Capital region (Seoul, Kyunggi province) and the country's Southeastern regions (Pusan, Kyungbuk province, Kyungnam province). Region B encompasses the rest of the country. In Taiwan, Region A includes the Capital region (Taipei municipality, Taipeihsien, Keelung city), export centers (Kaohsiung city, Tainan city), an industrializing area (Taichung city), and the areas surrounding these cities (Kaohsiunghsien, Tainanhsien, Taichunghsien). Region B encompasses the rest of the country.⁴

To analyze the spatial variation of classes, I divide Region A into two sub-regions: the Capital region, where most of supervisory functions are performed, and the other region, which has a high concentration of direct production facilities. The former is called Region 1 (Seoul, Kyunggi province in Korea and Taipei city, Taipeihsien, Keelung city in Taiwan), and the latter Region 2 (Pusan, Kyungbuk province, Kyungnam province in Korea and Kaohsiung city, Kaohsiung hsien, Tainan city, Tainanhsien in Taiwan). In addition, to analyze the functions of the new middle class, I select one representative area from each category, namely, Seoul, Kyungbuk province, Jeonbuk province in Korea, and Taipei municipality, Kaohsiung city, Pingtughhsien in Taiwan.

Data and Limitation

Since this study deals with the relations among capital accumulation, re-

⁴For a spatial analysis of industrialization, see KIET et al. (1988) for the Korean case and Ho (1980) for the Taiwanese case. Ho selected the Taipei municipality, Keelung city, Taipeihsien, Kaohsiung city, Tainan city, and Taichung city as industrialized regions. Thus his analysis excluded the peripheral areas of these cities, such as Kaohsiunghsien, Tainanhsien, Taichunghsien. The present study includes the peripheral areas of these cities in order to compare them with the Korean regions selected for analysis.

gion, and class with a focus on the new middle class, statistical data on the spatial differentiation of classes are required. However, it is almost impossible to obtain reliable data on both countries. The most realistic method is to use cross-tabulations of work status with the medium level classification of occupations reported in the population censuses. However, such data were available only in the 1960 census report. Data for other years(1970, 1975, 1980) were therefore drawn from reconstructed tables by Hong Doo-Seung from sample tapes of censuses of these years.

Methods

There are three possible ways of comparing Korea and Taiwan in terms of the changing pattern of spatial differentiation of the new middle class. First, one can compare the regional shares of the new middle class. Second, one can compare average growth rates. Third, one can compare the size of the new middle class as a percentage of the total labor force. The discussion below will focus on the first and third comparisons.

THE SPATIAL DIFFERENTIATION OF THE MIDDLE CLASS

When examining spatial differentiation of the new middle class in Korea, perhaps the most striking observation is that Region A's share has increased whereas that of Region B has declined(see Table 3). However, this increase in the share of Region A is not equally distributed throughout the region. Rather, it has been concentrated in the Capital regions(Seoul and Kyunggi province). In particular, the Capital region's share in 1980 reached 50.4 percent, a heavy concentration of the new middle class. But within this region, the increase in Seoul's share has been sizable whereas the increase in the Kyunggi province's share has been minimal.⁵ In short, Seoul became the center controlling the production process in Korea.

Thus, the new middle class which controls, manages, and supervises the production process and which engages in research and development of new technology, has become highly concentrated in Seoul. Meanwhile the proportion of the new middle class living in the Southeastern region has been decreasing. This has occurred despite the fact that Korean capitalist development assumed a super-intensive regime of capital accumulation in the 1970s and thus the Korean government intentionally located heavy industries in this region. This shows that while the important role played by the Southeastern region in the process of capital accumulation has been limited only to produc-

⁵Of the total new middle class, two fifths resided in Seoul and only 9-10 percent resided in Kyunggi province.

TABLE 3. THE REGIONAL DISTRIBUTION OF THE NEW MIDDLE CLASS IN KOREA AND TAIWAN, 1956-1980.

(Unit: Percent)

	Korea				1956	Taiwan			
	1960	1970	1975	1980		1960	1970	1975	1980
Nation	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Region A	61.2	68.5	74.2	76.2	58.5	57.9	62.1	67.8	70.3
Region 1	31.0	42.1	46.1	60.4	31.4	26.9	34.9	41.7	42.2
Region 2	30.2	26.4	28.1	25.8	19.1	22.3	18.9	18.6	19.8
Region B	38.8	31.5	25.8	23.8	41.5	42.1	37.9	32.2	29.7

*Region 1: Capital region, Region 2: Southeastern region(Korea), Southwestern region(Taiwan)
Source: Population censuses in respective years.

TABLE 4. THE PROPORTION OF THE NEW MIDDLE CLASS OF THE LABOR FORCE IN KOREA AND TAIWAN, 1956-1980

(Unit: Percent)

	Korea				1956	Taiwan			
	1960	1970	1975	1980		1960	1970	1975	1980
Nation	2.5	3.7	4.3	6.3	3.4	5.3	6.1	8.1	9.5
Region A	3.1	4.4	5.3	7.4	4.3	6.2	7.7	10.6	11.8
Region 1	4.1	5.8	6.7	9.3	5.8	7.2	10.5	15.1	14.7
Region 2	1.4	3.2	3.9	5.2	3.1	5.4	5.6	7.2	9.1
Region B	1.9	2.7	2.8	4.3	2.6	4.5	4.6	5.5	6.5

*Region 1: Capital region, Region 2: Southeastern region(Korea), Southwestern region(Taiwan)
Source: Population censuses in respective years.

tion, the center of external control has been Seoul, which to direct and regulate the production process. On the other hand, Region B experienced a drastic decrease in the share of the new middle class during the twenty year period.⁶

Table 4 shows the spatial distribution of the new middle class as a proportion of the labor force. At first glance, there is no noticeable difference in the proportion of the new middle class between Region A and Region B. The proportion of the new middle class has been increasing in both regions.

⁶The national annual growth rates of the new middle class during this period was 7.8 percent. Only Seoul and Kyunggi province experienced an annual growth rate of the new middle class higher than the national rate. The annual growth rates of the new middle class for the other regions were below the national rate. Region B experienced an annual growth rate of the new middle class that was much lower than the national rate. The annual growth rate of the new middle class in Jeonbug province was only 4.2 percent, the lowest rate in the nation.

However, the difference between the two regions increased during the twenty years. Within Region A we also see a rapid increase in the difference in the proportion of the middle class between the Capital region and the Southeastern region. The proportion of the new middle class in the Capital region has been two or three times that of other regions.

The figures for the Southeastern region have been as low as those for Region B. As mentioned above, these figures clearly show that the Korean new middle class has been concentrated not in the production site but also in the Capital region, which exercises the external control for the production process. This phenomenon became more noticeable in the 1970s, the period during which Korean capitalist development launched an extensive capital accumulation process. Seoul became the only center for both research/development and management/supervision. Through financial mechanisms, Seoul regulates the production processes both in its own peripheral areas and in the Southeastern region, and thereby absorbs and manages the surplus value. In sum, the spatial differentiation of the Korean new middle class has been proceeding into three regional types: the Capital region, the Southeastern region, and Region B.

A similar pattern may be observed in Taiwan (see Table 3). However, there are two noticeable differences in the spatial differentiation of the new middle class between Korea and Taiwan. One is that the new middle class in Region 2, in which factories are heavily concentrated, has not been decreasing. The other is that a noticeable increase in the proportional share of the new middle class occurred not in the Capital city but in the backyard of the Capital city.⁷ In other words, the spatial differentiation of the Taiwanese new middle class has been proceeding in two regional types: Region A and Region B. Table 4 presents the proportions of the new middle class among the labor force in the period of 1956-80 in Taiwan. Here the spatial differentiation of the new middle class is clearly revealed. The difference in the proportion of the new middle class among the labor force between the two regions (Region A and Region B) has increased from 1.7 percent in 1956 to 5.3 percent in 1980. Within Region A the proportion of the new middle class among the labor force in the Southwestern region has been increasing as rapidly as that in the Capital region. Thus, the Taiwanese new middle class has been concentrating in the whole area of Region A.

⁷The proportion of the new middle class in Taipei municipality has slightly increased from 20.2 percent in 1956 to 25.9 percent in 1980, but that of Taipeih sien has rapidly increased from 7.8 percent in 1956 to 14.2 percent in 1980.

TABLE 5. THE REGIONAL DISTRIBUTION OF THE SUPERVISION FUNCTION IN KOREA AND TAIWAN, 1956-1980

(Unit: Percent)

	Korea				Nation	Taiwan				
	1960	1970	1975	1980		1956	1960	1970	1975	1980
Nation	100.0	100.0	100.0	100.0	Nation	100.0	100.0	100.0	100.0	100.0
Seoul	35.1	49.8	45.1	53.5	Taipei c.	27.9	15.3	37.9	40.1	31.1
Kyungbuk	13.3	10.2	10.5	8.1	Kaohsiung h.	6.3	18.1	8.9	7.1	8.6
Jeonbuk	4.9	3.8	3.9	2.2	Pingtung h.	4.7	2.5	3.3	2.0	2.1

Source: Population censuses in respective years.

THE FUNCTIONAL SPATIAL DIFFERENTIATION OF THE NEW MIDDLE CLASS

Above, we mentioned four different functions of the new middle class in relation to the resolution of internal contradictions of capital accumulation: i) supervision of the labor process, ii) reproduction of capitalist relations and ideologies, iii) realization of surplus value, and iv) technological innovation.

Now we will look at the process of spatial differentiation in these functional terms. For the purpose of comparing of the processes of spatial differentiation in Korea and Taiwan, we have selected three comparable locations from each country. In Korea these are Seoul, Kyungbuk province, where many manufacturing industries are located, and Jeonbuk province, which is a typical agricultural area. Seoul and Kyungbuk province belong to Region A and Jeonbuk province is representative of Region B. In Taiwan the regions are Taipei municipality, Kaosiung city, where manufacturing industries are located, and Pingtungshien, the second largest agricultural area in Taiwan. Taipei and Kaohsiung city belong to Region A and Pingtungshien is representative of Region B.

The difference in the spatial differentiation of the new middle class between Korea and Taiwan becomes clear when we compare the internal characteristics of Region A of these countries, especially in terms of the supervisory function. In Korea, the relative importance of the supervisory function has increased only in Seoul, and the relative importance of this function in Kyungbuk province has decreased. Considering the fact that manufacturing factories are moving out of Seoul and into Kyunggi province, whereas Kyungbuk province includes large industrial estates such as Pohang Industrial Estate, the concentration of the supervisory function in Seoul becomes even more significant. Thus, in Korea there is an internal spatial differentiation of

TABLE 6. THE PROPORTION OF THE REPRODUCTION FUNCTION OF THE LABOR FORCE IN KOREA AND TAIWAN, 1956-1980

(Unit: Percent)

	Korea					Taiwan				
	1960	1970	1975	1980		1956	1960	1970	1975	1980
Nation	1.9	2.6	2.8	3.5	Nation	2.3	3.3	4.4	4.3	4.3
Seoul	4.0	4.4	5.1	5.5	Taipei c.	4.1	5.8	8.5	8.4	7.5
Kyungbuk	1.8	2.4	2.6	3.0	Kaohsiung h.	3.1	3.8	4.3	4.8	4.9
Jeonbuk	1.6	2.3	2.3	3.3	Pingtung h.	2.0	3.0	3.3	3.2	3.8

Source: Population censuses in respective years.

the new middle class in Region A. The spatial differentiation of Region A in Taiwan is quite different from that in Korea. The relative importance of the new middle class both in Taipei and in Kaohsiung city in Region A have been increasing, whereas in Pingtungshien it has been decreasing.⁸

The same can be said of the function of reproduction of capitalist social relations and ideologies. Looking at the functional distribution of the new middle class jobs, we find that the proportion of jobs related to this reproduction function is larger than the proportions of jobs related to other functions, ranging from 74.6 percent in 1960 to 54.1 percent in 1980 in Korea, and from 67.1 percent in 1956 to 52.3 percent in 1985 in Taiwan. Also it is noticeable that this proportion has generally been decreasing (Kang 1990, p. 129).

At issue here is the reason for the decrease, not the spatial distribution of this function. Because both Korean and Taiwanese governments took firm hands over labor in the process of capital accumulation, the need for the capital to resolve conflicts with labor was minimal. Therefore, capital has not made conscious efforts to reproduce capitalist social relations and ideologies within or without the production process: it has neither tried to establish internal labor markets nor soften class antagonisms. Instead, both governments reproduced capitalist social relations by resorting to physical force with anti-communist ideology (Hwang 1989, p. 56). This is reflected in the fact that the relative size of the reproduction function expressed in terms of the

⁸Unlike the situation in Korea, the annual growth rate of the new middle class in Kaohsiung city, where manufacturing industries are concentrated, has been higher than that in Taipei city, where factories are moving into the peripheral area. Because the magnitude of the supervisory function has tripled during the twenty years (or during the twenty-four years to be exact in case of Taiwan), in both countries the spatial differentiation of the new middle class may not be clearly noticeable when the analysis is based on the proportion of the new middle class among the total labor force. However, the spatial differentiation may be clearly seen in the 'regional differences' in the proportion of the new middle class among the labor force.

TABLE 7. THE REGIONAL DISTRIBUTION OF VALUE REALIZATION FUNCTION IN KOREA AND TAIWAN, 1956-1980

(Unit: Percent)

	Korea				Nation	Taiwan				
	1960	1970	1975	1980		1956	1960	1970	1975	1980
Nation	100.0	100.0	100.0	100.0	Nation	100.0	100.0	100.0	100.0	100.0
Seoul	41.4	49.6	45.8	50.2	Taipei c.	47.6	44.6	41.1	28.3	42.3
Kyungbuk	6.6	7.6	9.6	8.4	Kaohsiung h.	6.3	7.6	10.0	7.2	7.9
Jeonbuk	4.5	4.0	3.9	2.2	Pingtung h.	1.6	2.6	2.5	2.8	1.8

Source: Population censuses in respective years.

labor force does not show much regional variation (see Table 6).

The function of value realization is to maintain and expand the capitalist regime. This function is performed by commerce, finance, and advertisement. The capitalist development in Korea and Taiwan has not reached, in absolute terms, an advanced stage where the stagnation of the capitalist regime itself becomes the issue. Therefore, the proportion of the new middle class who are working in the area of value realization is insignificant.

However, as shown in Table 7, the spatial distribution of this function is quite different from that of other functions. Look at the magnitude of geographical concentration of this function in both countries. During the entire period, over 40 percent of workers performing function were located in the Capital city of each country with only one exception (Taipei in 1975 held 28.3 percent of the jobs in this area).

This may be the result of a characteristic specific to peripheral Fordist regimes. In such regimes, all modes of controls are located in a particular region, which supplies capital and absorbs surplus value. This phenomenon may be easily understandable in case of Korea, where all decision-making authorities are centralized. However, the Taiwanese case needs further explanation, because the concentration of the value realization function in the Capital city appears to contradict the Taiwanese national policy of regional industrial development and the institutionalization of local autonomy. The high concentration of the value realization function may be related to the fact that ever since the accumulation of capital began in earnest, the state has monopolized control over public and private enterprises through the utilization of 'government-commercial capital'. 'Government-commercial capital' has been a structural characteristic of Taiwanese economy since World War II and has been located mainly in Taipei.⁹ An additional explanation may be

⁹Liu (1975, pp. 293-9) argues that the foundation of capitalism in Taiwan lies in 'government/commercial capital' which dialectically resolves the contradictions between the Nationalist Party

TABLE 8. THE REGIONAL DISTRIBUTION OF THE TECHNOLOGICAL INNOVATION FUNCTION IN KOREA AND TAIWAN, 1956-1980

(Unit: Percent)

	Korea					Taiwan				
	1960	1970	1975	1980		1956	1960	1970	1975	1980
Nation	100.0	100.0	100.0	100.0	Nation	100.0	100.0	100.0	100.0	100.0
Seoul	23.4	42.1	43.5	36.7	Taipei c.	26.6	13.4	27.1	27.9	22.0
Kyungbuk	9.4	6.3	11.1	8.6	Kaohsiung h.	11.0	6.1	10.6	11.9	11.5
Jeonbuk	5.1	3.2	1.5	2.3	Pingtung h.	3.5	5.6	3.0	2.5	3.4

Source: Population censuses in respective years.

that since the value realization function controls the whole process of production through finance, it tends not to be easily affected by the dispersion of capital and decision-making authority. For these reasons, the value realization function tends to be highly concentrated in the Capital city.

Technological innovation is the most powerful mechanism that capitalists have to achieve a competitive position over other capitalists. Therefore, technological innovation is a major factor in capital accumulation in contemporary capitalism. The spatial distribution of the technological innovation function is slightly different from those of other functions. Table 8 presents the spatial distribution of this function in both countries. In Korea, the proportion of this function located in Seoul is very high in general, but that in the Kyungbuk province, where many factories have been located during the past twenty years of capital accumulation, is also sizable. On the other hand, the proportion of this function located in Region B has been decreasing.

In Taiwan, a spatial dichotomy of this function has not appeared during the past twenty years. The proportional shares of this function in Seoul and Taipei have been decreasing since 1970s, when both countries entered the intensive regime of accumulation. The relative dispersion of this function may be explained by the close relationship between technological innovation and the production process, and is a reflection of the movement of production processes to the peripheral areas of the Capital region in both countries.

SUMMARY AND DISCUSSION

This article has examined the restructuring of spatial structures and social relations in the process of capitalist development in two NICs. The NICs

bureaucrats and the capitalists. 'Government/commercial capital' has a structural feature in which government bureaucrats and capitalists have independent statuses in public and private enterprises, respectively, and at the same time, are closely associated with each other.

have provided mechanisms for capital accumulation for global capitalism in the intensive regime of accumulation and for the process of crisis resolution. Therefore, the restructuring of spatial structures and social relations in NICs is closely related to the spatial division of labor of advanced capitalist countries. With this perspective, this article examined two representative NICs, Korea and Taiwan, focusing on the spatial differentiation of the division of labor in relation to the process of capital accumulation in the respective countries. The analysis focused on the new middle class, whose development is closely related to the process of capital accumulation.

The regional and social class problems of Korea and Taiwan began to surface significantly as these countries began an intensive regime of accumulating capital. This article analyzed the regional and social class problems in Korea and Taiwan taking a longitudinal approach to the spatial differentiation of the division of labor.

The findings are as follows. Firstly the proportion of the new middle class located in Region A (in which the conception function is concentrated) has been higher than that in Region B and it has been increasing in both countries. Looking at the new middle class as a proportion of the total labor force, we find that spatial differentiation appears more closely in Taiwan than in Korea. This is revealed in the fact that the ratio of the working class has been increasing in Region B in Taiwan. In other words, there appears to be a spatial dichotomy, with Region A being the center of external control and Region B having a high concentration of production workers. In Korea, the spatial differentiation of the division of labor includes three regional types. Korean space is first dichotomized into Region A, where industrialization has been rapidly proceeding, and Region B, where the absolute size of the labor force is decreasing. Region A is, in turn, dichotomized into Region 1, the Capital region, which is the center of external control and which performs mainly the conception function, and Region 2, the Southeastern region, where production laborers are concentrated. Thus the spatial trichotomization has occurred in Korea. Region 2 in Korea is similar to Region B in Taiwan in terms of labor force characteristics.

Secondly, the Capital city in each country functions as the center of the external control of the production process. It has been observed in advanced countries that efforts to resolve the crisis of capital accumulation have led to the fragmentation of production process which, in turn, has created demands for the new middle class in particular regions. As similar events are occurring in both Korea and Taiwan, the importance of the regions which exercise external control of the production process has been increasing in proportion to the increasing importance of the regions in which production process is located.

Thirdly, looking at the four functions of the new middle class in relation to capital accumulation (supervision, reproduction, value realization, and technological innovation) we find spatial trichotomization in Korea and spatial dichotomization in Taiwan. This is more clearly shown in supervision and reproduction functions. But the value realization function has been highly concentrated in the Capital region, due to the strict control of finance by this region. The function of technological innovation is closely related to the production sphere and, therefore, is also located in the area where the production facilities are concentrated, as well as in the Capital region.

In spite of the similar processes of the capital accumulation in Korea and Taiwan, the spatial differentiation of the new middle class in the two countries take different forms. There are two reasons for this difference. The first is that there are different modes of industrialization in the two countries: centralized industrialization in Korea versus regional industrial development in Taiwan. In Korea, the state intentionally concentrated manufacturing facilities in particular regions, such as the Capital region and the Southeastern region, and Seoul controls the whole production process. The Taiwanese government dispersed manufacturing facilities throughout the country, except for three export processing regions. Accordingly, the production activities are equally distributed throughout the country. Only the conception function, which controls the production facilities, is concentrated in a few regions.

The second reason for the difference concerns the distribution of power in the two countries. Capital accumulation proceeds more effectively when the production, reproduction and circulation spheres are closely related to one another. This process is carried out mainly by the state. The central government is the main actor but local governments can also play important roles in this process. In other words, like the central government, the local government also has resources with which to intervene in the spheres of production, reproduction, and circulation. To this extent the local government can to a certain extent wield the power of decision-making relegated by the local population through such mechanism as voting.

In every nation, long-term planning of capital accumulation is carried out by the state, mainly by the central government. In this case, a policy of regional distribution of capital may not work effectively. On the other hand, detailed, short-term plans for capital accumulation may be carried out by the local government. In this case, the regional distribution of power can make a difference in establishing and executing short-term plans for capital accumulation. Of the four functions of the new middle class, the value realization function is an example of the former strategy. This function is concerned with the maintaining the capitalist regime and, therefore, is not affected by a policy of capital dispersion. This is shown by the fact that in Taiwan, where

the new middle class is relatively equally distributed in regions with a high degree of industrialization, the function of value realization is concentrated in Taipei. On the other hand, the technological innovation function may be easily transferred to different regions by a policy of capital dispersion and regional distribution of decision-making power. Therefore, regional industrial development strategy can be effective in Taiwan, where local authority is institutionalized, whereas the same strategy may not work in Korea.¹⁰ For this reason the Taiwanese new middle class is relatively evenly distributed within Region A, where industrialization is proceeding. Conversely, the Korean new middle class is concentrated in Seoul, where the decision-making power is concentrated.

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¹⁰The fact that the spatial differentiation of the new middle class varies according to dispersion or concentration of power is well documented in Buck (1977)'s study which compared Germany and Australia, which have the federal government system, with England and France, which do not have the federal system.

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