

REGIONAL DEVELOPMENT AND REGIONALIZATION: RETROSPECT OF CHINA'S HISTORICAL ENLIGHTENMENT

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ABSTRACT: Chinese had noticed regional differences in ancient times and thus arouse the concept of regional sustainable development which was successfully applied to delta cultivation and civilization. Over the long term of regional development and regional exchange, much experience therefore was accumulated based on coastal zones, toward both inner land and open ocean. Regionalization, a basic job preceding sustainable development of a region, has also been carried out in China since ancient times. More important, patterns of regionalization were retained, these presents serve as references even today. Reflections on China's historical enlightenment can assist us in locating the breakthroughs in regional development in the 21st century; facing the oceans with the seaport cities as nucleuses.

KEY WORDS: regional sustainable development, delta civilization, regionalization, fuzzy boundary, hinterland expansion

I. HISTORICAL ENLIGHTENMENT OF REGIONAL DEVELOPMENT

1. Regional Differentiation and Regional Sustainable Development

Even in ancient times, Chinese had the idea of regional differentiation. Nearly 4000 years ago, Xiayu, the Xia Dynasty emperor, divided China into nine territories according to different people and land formations. In this way, the concept of regional sustainable development gradually grew. It is embodied in numerous peasants' proverbs which hold to this day. The concept was successfully applied to the cultivation of deltas and the formation of delta civilization.

2. Delta Civilization and Wetland Exploitation

Since the 14th century, the Zhujiang(Pearl) River Delta developed a dyke-pond system (DPS)(Chen, 1993), an intensive eco-agricultural technology to reclaim marshland and tidal

flat. Mulberries were initially cultivated along the dyke for raising silkworms, whose faeces were used to feed fish in ponds, while deposited nutrients on the bottom of the ponds were in turn reused to fertilize the mulberry trees. In this way, a rational ecological circle was formed, capable of adapting to existing regional natural conditions. Later, sugarcane was cultivated and then vegetables and flowers. The dyke-pond system has proved to be the most efficient means of wetland farming in the world and has spread to such far-flung places such as Denmark and Brazil. In addition, another engineering technique helps the DPS to exchange material with the external environment, it is called *stealing-fresh-water*, which makes use of the ebb and flow of tides to carry fresh water from the rivers into the ponds and the salty water from the ponds out into the sea. In the Zhujiang River Delta, the DPS itself is a regional sustainable development mode.

The Changjiang (Yangtze) River Delta has its own method of regional development. More than 120 small rivers and canals connect Taihu Lake and the Changjiang River, keeping a balance between land and water area. Organic waste from farmyard enters the river to nourish fish, while deposited debris on the river floor becomes fertilizer for farming. In harvest season, rice, oranges and tea are sent to Suzhou and Shanghai, the region's trading centers, to supply the nation's market. Under this development mode, which is a rather open ecological circle as compared to the DPS mentioned above, the Taihu Lake Plain became the *rich land of fish and rice*, where regional sustainable development is ensured, and thus the process of civilization advanced:

In the Mega-delta of the Huanghe (Yellow) River, which is relatively young in its formation, regional development to a great degree concerned the harnessing of the river. In the Xia Dynasty, to control the floods, ancient Chinese adopted a method of so-called *stream-diversion* to transfer the flood water and sand to its old delta, the North China Plain. Later in the Shang Dynasty when bronze tools appeared, people were able to build dykes, and the strategy of harnessing the Huanghe River became *removing sand with water*, which is forced by dykes. After the Song Dynasty, the dyke system emerged, and the Huanghe River became a river higher than the surrounding area. Today, those dykes are still being heightened 1 m and widened 50 m every three years. Nevertheless, disharmony in regional development around this area never completely disappeared after the construction of the dykes. For instance, the strategy of stream-diversion thousands of years ago is being used again in the upper and middle reaches of the river, causing severe water shortage downstream. In short, regional sustainable development of the Mega-delta of the Huanghe River has not reached unqualified agreement even after several thousand years.

Although the Zhujiang River Delta and the Changjiang River Delta have successful experience in wetland exploitation, the Mega-delta of the Huanghe River does not. Yet the concept of regional sustainable development never died in this area. Today, it is increasingly important for us to re-evaluate and carry on such concepts before their great potentials is lost.

3. Reawakening of Ocean Concept

In Chinese history, an indispensable part of regional development is to exploit the oceans. In one hand, this can be simply observed through tracking the shifting capitals of ancient dynasties. In the Zhou Dynasty, the capital was originally established at Xi'an, then moved eastwards to Luoyang. In the Song Dynasty, it was at Kaifeng and in the Ming Dynasty first at Nanjing and soon afterward at Beijing. Obviously, the movement indicates that the direction of regional development is toward the sea. In the other hand, countless folk and governmental efforts were made to enhance overseas cultural exchange before the Qing Dynasty. For instance, a monk Jianzhen in the Tang Dynasty and a monk Huishen in the Song Dynasty sailed to today's Japan and Mexico, and an official Zhenghe in the Ming Dynasty, led a large fleet, visiting the Red Sea and Somali during his seven great sailings.

It is safe to say that the ocean concept in ancient China was very strong and even stronger in some respects than today's. Every Chinese knows that the area of the motherland is 9.6 million km², which, although a common knowledge, a mistake indeed, because this figure does not include the area of the territorial sea. As a result, the land inside the Bohai Gulf which is formed by deposition at the estuary of the Huanghe River is delineated as the 'newest and youngest' territory of our country. But how can one explain that the Bohai Gulf, as an inner sea, itself already belongs to the nation? What a new territory within our own territory! This thinking exposes the weakness of the current concept of ocean when dealing with regional development. Had we taken the ocean as an indivisible part of regional development together with the land, we would not have witnessed repeated thoughtless dumping of waste into the sea accounting for more than 80% of China's total marine pollution.

Although the ocean played a key role in the formation of the traditional Chinese concept of regional sustainable development, it has much more contemporary meaning for us to follow when facing new patterns of regional development in the future.

4. Reflections on the Great Wall

Investigation into the mode of regional development in ancient China reveals that it was aiming at both ocean and inner lands while resting on deltas, but China's topography, with the Qinghai-Xizang (Tibet) Plateau in the southwest and the large deserts in the north, turns out to be prohibitive against any regional development activities. Such activities were forced to go northwestward and northeastward.

As early as in the Western Han Dynasty, Zhangqian explored the western territories, initializing the cultural exchange between the Han nationality and the western minority groups. The world famous Silk Road took shape, and at the same time, the Great Wall stretched straight to the Jiayu Pass to defend the road against nomadic tribes from north. Though challenged by extremely rigorous conditions, the ancient Chinese never ceased their advance west-

ward across the centuries. The achievement was fruitful only recently with the completion of the Eurasian Continental Bridge as well as the following lines: a double-track railway, a super highway, an optical fiber communication line and a gas pipeline, extending northwestward and linking Xinjiang with the central plains, making the former a base of cotton and petroleum. It can be thereupon concluded that the regional exchange of material and culture also constitutes a vital component in regional development.

Northeast China is a fertile land exploited relatively late. After the vast territory along the west Pacific coast, north to Heilongjiang River and east to Wusulijiang River, was ceded to Russia by the governor of the Qin Dynasty. The ocean-facing window of this region therefore was shut, otherwise it should have been more intensely developed.

In conclusion, five thousand years of Chinese history cradles a glorious civilization, based on the concept of regional sustainable development. In the process of regional development and regional exchange, Chinese made great contributions to world civilization.

II. HISTORICAL EXPERIENCES OF REGIONALIZATION

Ancient China placed considerable importance on regionalization, particularly in administration, a practice dating back thousands of years (Tan *et al.*, 1990). In primitive society, grids were used to divide land, symbolized by #. Later in the Qin Dynasty, China was unified and a county system was implemented. The Tang Dynasty saw another system called *dao* which is an equivalent of the prefecture system.

Administrative regionalization is still emerging at the present time. Past Chahar and Suiyuan provinces were discarded and Hainan Province was established. Sanxia Province, though planned, failed to be implemented. As a matter of fact, this dynamic change of administrative regionalization is required by the regional needs to coordinate social and economic development, and to rationally allocate and use natural resources. If we are going to achieve the goals, studying history will be useful.

1. Objectives of Regionalization

Three objectives should be taken into account when regionalizing. First, keep in the region an internal centripetal force. Hainan Province was successfully set up while Sanxia Province was not. The reason is obvious: the former has such a force while the latter does not. In the planned Sanxia Province, which consists of hilly territories, its western part is attracted by the Chongqing City in Sichuan Province and the eastern part is invited by Hubei Province; no attractive force is in Sanxia to create a self-reliant unit. On the other hand, such a force is the very one that works in Hainan Province, an island with coast lines, coastal plains, mountains and a large central city—Haikou, radiating a network of roads that covers the whole island.

Second, keep in a region an optimal and stable critical balance between centralization and

localization. An example is the division of a nation into dukedoms in ancient times. Neither excessive power nor abnormal weakness of the independent dukedom can be accepted, since in the case of centralization, a nation is endangered by separation, and in the case localization, the power of central government can hardly be maximized. In history, the Tang Dynasty exemplified localization, while the Qin Dynasty excessive centralization caused its demise shortly after its establishment.

Third, subdivide the fuzzy boundaries of regions(Chen, 1963). As we know, no absolute boundaries ever exists between regions of either the administrative or physical type(Huang, 1959). Subdivision of such boundaries was an innovation by our ancestors. For instance, the distribution of nationalities in China is that the Han resides primarily in the east and the minorities live in the west, and a mixture of all shows up between them. As a result, those provinces such as Sichuan and Qinghai—with the Han nationality forming the major part—have subdivisions of autonomous minority prefectures. Conversely, one autonomous minority region like Xinjiang and Xizang has several autonomous prefectures of other minorities.

2. Principles of Regionalization

In ancient times, four major principles we summarize here were applied when determining different regions. The first, an innovative principle, is to keep the spatial coincidence of administrative region and physical unit, which is exhibited in the names of provinces of China, like Henan which means south of the Huanghe River, and Hebei, north of the Huanghe River. In mountainous southwest China, almost every county is a small intermountain basin. Its central town is located on the terrace of a river which flows through the lower part of this basin. The boundary between one county and another is determined by the water divide. Such a structure meets the requirement of agricultural economic stability, so this principle has held true for so long a time.

The second principle is to share superiority of resources among the different territories. In those counties noted above, the lower central part of the basin is better in terms of resources than that of the peripheral area. For this reason they are set up as a county. Otherwise, the part around border cannot survive if it is isolated. The same rule works, in Tarim Desert of Xinjiang Uygur Autonomous Region; establish county-level administrative regions which are long and narrow with one end at oases on the piedmont plain of Tianshan Mountain, and the other end stretching into the desert.

Referencing traditions of nation and culture is the third principle. Many villages in China have people sharing the same surname, since they are all from one big family or tribe(Hu *et al.*, 1990). This integrity must be considered when considering administrative regionalization, and the government must never break up a natural village into several administrative units.

Every region must have one center which is normally a town or city. It is this principle that emphasize the regions of different levels, like counties and provinces, have cities of varied

classes and dimensions as their centers. They are towns, cities, capitals and special districts which represent a rigid hierarchy, thus guaranteeing the internal rational allocation of resources and the sound interflow of energy, material and population in a region.

3. New Problems after the Opening and Reform

After China's opening policy took effect, the regionalization practice was complicated by many new problems, leading us turn to historical experience for answers.

Boundary settlement is one of them. It includes boundaries of nation, province, territorial sea and exclusive economic zones. Recently Russia, Kazakhstan and China reached agreement on boundary settlement, which was a successful use of geographic boundaries.

Hinterland expansion is receiving increasing attention (Fig. 1). As the economy rapidly grows, the former economic circles of Hong Kong, Shenzhen, Shantou and Xiamen, covering Guangdong Province and south of Fujian Province, are now combining and enlarging inwardly to the south of Hunan and Jiangxi provinces, incorporating part of an economic loop previously belonging to the Changjiang River. Similarly, seaports along Beibu Gulf by their economic power are encircling a large area of inner land from the east of Kunming to the south of Guiyang, especially when the Nanning - Kunming railway opens. Thereafter, the economic zone of the former Changjiang River and the Xijiang River will again be annexed. Besides, Fuzhou City declared lately that its economic cooperative zone contains Huangshan Mountain of Anhui Province, the northeast part of Jiangxi Province and south part of Zhejiang Province around Wenzhou. This zone accordingly overlaps that of the Changjiang River. Hinterland expansion shows that boundaries between regions are continually oscillating, regardless of what kind of regions they are——economic region, physico-geographic one or administrative one, so it should be taken into account when regionalizing.

River basin separation exposes itself as an unusual problem as well. In the lower reaches, the Huanghe River supervised by authority is only an area between the dykes where is not the whole river basin as it should be. The consequent disorder in allocation of water and land resources have been thus proven inevitable. Likewise, the Three Gorges Dam under construction is cutting off the normal relationship between the middle and lower reaches of the Changjiang River. Though it possesses five sluice gates, the flow of material, energy and population inside the whole river basin will still be blocked. River basin separation is worthy of further inspection, for it can hinder economic development.

Through looking back into China's long history, one can find that many experiences hold in regionalization. These tend to be stable and have considerable potential of further reference in the current age. Studying past regional development and regionalization is to explore a new mode of such activities challenged by the coming century——to face the vast oceans with the seaport cities as the nucleuses in regional development, for it is the key force to achieve the optimal interflow of material, energy and population inter-regionally and intra-regionally.

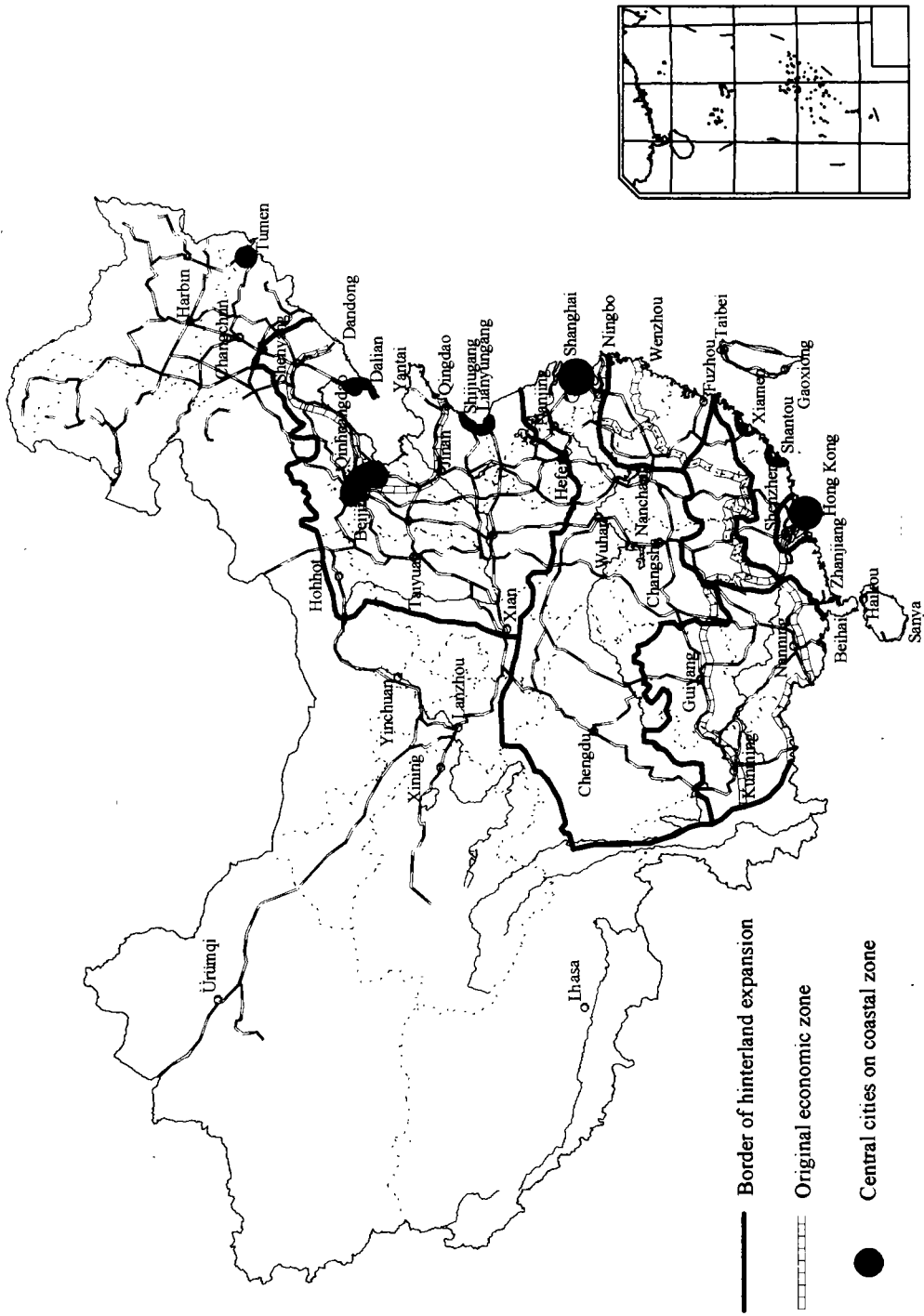


Fig. 1 The hinterland expansion

III. FURTHER THOUGHTS

(1) It is meaningful to inherit and re-glorify the concept of regional sustainable development of Chinese nation.

(2) Progress in science and technology plus advancement of human civilization are keys to make regional social-economic development surpass certain historical stages and surmount the limitations of resources and environment.

(3) Re-combination of regional economy of the world in an Asian-Pacific era affords opportunities to create new modes of regional development with characteristics of China.

(4) Union and prosperity of each separate nation precede the advent of a united world, and further awakening of human progress is still to be preferred.

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