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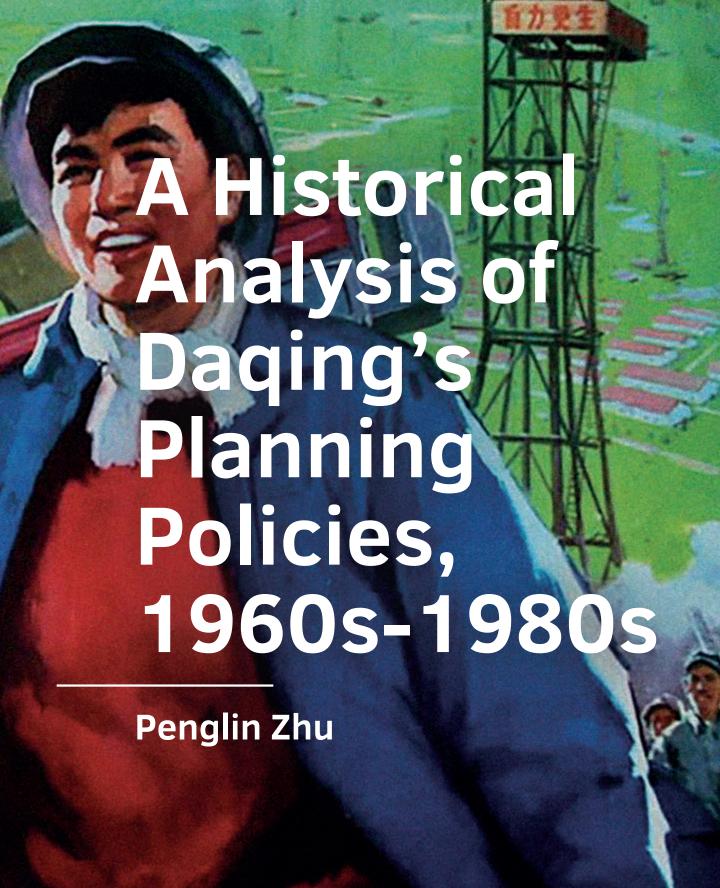
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A Historical Analysis of Daqing's Planning Policies, 1960s-1980s

Penglin Zhu



$\textbf{A+BE | Architecture and the Built Environment} \mid \mathsf{TU} \; \mathsf{Delft} \; \mathsf{BK}$

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A Historical Analysis of Daqing's Planning Policies, 1960s-1980s

Dissertation

for the purpose of obtaining the degree of doctor
at Delft University of Technology
by the authority of the Rector Magnificus, prof.dr.ir. T.H.J.J. van der Hagen
chair of the Board for Doctorates
to be defended publicly on
5, December 2024 at 15:00 o'clock

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Summary

The thesis traces the tangible and intangible heritage resulting from the Chinese government's industrial planning and construction legacy in Daging from the late 1950s to the late 1980s. It highlights the significant role that petroleum industrial infrastructure, related facilities, and residential planning and construction played in transforming the local built and unbuilt environment. The thesis examines the existing literature on the concepts of "planning heritage" and "planning legacy" as interpreted by both international and Chinese scholars, with a specific focus on Daging's planning history. It argues that documenting planning history—especially by highlighting and discussing planning failures—provides Chinese planning historians with a feasible approach to preserve planning heritage that may conflict with the values promoted by an authoritarian government. Unlike the grand heroic narratives of Daging's Oilfield construction widely promoted by the Chinese government over the past 60 years, this work focuses on the less perceptible and often concealed aspects of mining area planning systems, architectural construction, local living conditions, and their representations that diverge from the government's propagated values. By addressing the nuances and complexities in these historical narratives, the research aims to emphasize the significance of a comprehensive view of planning history, one that includes both achievements and failures.

This thesis employs the analytical framework of the Global Palimpsestic Petroleumscape (GPP), focusing on the path dependencies and lock-ins of policies, rules, concepts, and directives in Daqing's planning. Additionally, it examines how power struggles among central government leaders at seven key periods served as external forces that disrupted these path dependencies. This research attempts to extend the application of the GPP, initially designed for a capitalist free-market petroleum industry, to the context of Daqing's petroleum planning heritage within China's closed socialist market from the 1960s to the late 1970s and the restricted market economy from the early 1980s.

By revealing that Daqing's planning heritage has been suppressed, this thesis undertakes the critical task of theorizing and empirically studying planning legacies with negative impacts. I trust it will be a valuable reference for scholars and students engaged in the study of architectural and urban history and planning.

Samenvatting

Deze scriptie traceert het tastbare en ontastbare culturele erfgoed dat het gevolg is van de industriële planning en bouwlegaten van de Chinese overheid in Daging vanaf de late jaren '50 tot de late jaren '80. Het benadrukt de belangrijke rol die de petroleumindustriële infrastructuur, bijbehorende faciliteiten en de planning en bouw van woningen hebben gespeeld bij het transformeren van de lokale gebouwde en ongebouwde omgeving. De scriptie onderzoekt de bestaande literatuur over de concepten "planningserfgoed" en "planningsnalatenschap" zoals geïnterpreteerd door zowel internationale als Chinese geleerden, met specifieke aandacht voor de planningsgeschiedenis van Daging. Er wordt betoogd dat het documenteren van planningsgeschiedenis—vooral door het benadrukken en bespreken van planningsfouten—Chinese planningshistorici een haalbare benadering biedt om planningspatrimonium te bewaren dat mogelijk in conflict is met de waarden die door een autoritaire overheid worden gepromoot. In tegenstelling tot de grootse heroïsche verhalen over de constructie van het olieveld in Daging die de afgelopen 60 jaar door de Chinese overheid zijn bevorderd, concentreert dit werk zich op de minder waarneembare en vaak verborgen aspecten van de mijnbouwplanningssystemen, architectonische constructie, lokale leefomstandigheden en hun voorstellingen die afwijken van de door de overheid gepropageerde waarden. Door de nuances en complexiteiten in deze historische verhalen aan te pakken, streeft het onderzoek ernaar de betekenis van een uitgebreide visie op planningsgeschiedenis te benadrukken, een visie die zowel prestaties als mislukkingen omvat.

Deze scriptie gebruikt het analytische kader van het Globale Palimpsestische Petroleumschap (GPP), gericht op de padafhankelijkheden en insluitingen van beleid, regels, concepten en richtlijnen in de planning van Daqing. Verder onderzoekt het hoe machtsstrijden tussen centrale regeringsleiders in zeven sleutelperioden fungeerden als externe krachten die deze padafhankelijkheden verstoorde. Dit onderzoek probeert de toepassing van de GPP, oorspronkelijk ontworpen voor een kapitalistische vrije-markt petroleumindustrie, uit te breiden naar de context van het petroleumplanningerfgoed van Daqing binnen de gesloten socialistische markt van China van de jaren 1960 tot de late jaren 1970 en de beperkte markteconomie vanaf de vroege jaren 1980.

Door aan te tonen dat het planningerfgoed van Daqing wordt onderdrukt, onderneemt deze scriptie de kritische taak om planningsnalatenschappen met negatieve effecten theoretisch en empirisch te bestuderen. Ik vertrouw erop dat het een waardevolle referentie zal zijn voor onderzoekers en studenten die zich bezighouden met de studie van architectuur- en stedelijke geschiedenis en planning.

1 Introduction

This dissertation examines the planning practices that took place in the Daqing Oilfield from the late 1950s to the late 1980s, interpreting these practices and their representations from a perspective that diverges from the grand and heroic historical narratives promoted by the Chinese Communist regime to legitimize its continued rule.

During the last decades, the Chinese Communist Party's leadership underwent a new round of transitions during the last decades, with Xi Jinping succeeding Hu Jintao as the core leader of the new administration. Abroad, I closely followed a series of policies and their impacts initiated under his leadership, including anti-corruption campaigns, the Belt and Road Initiative, the "Chinese Dream" strategy, the "Made in China 2025" plan, the U.S.-China trade war, the Hong Kong protests, and the stringent lockdown measures and use of "health codes" during the COVID-19 pandemic from 2020 to 2023. Chinese state media have referred to Xi Jinping as the "People's Leader"—a term previously used to describe Mao Zedong but rarely applied to his successors, including Deng Xiaoping, Jiang Zemin, and Hu Jintao. Meanwhile, emerging terms like "Xuexi" (meaning "learning"), playing on the phonetic resemblance to "Xi," began appearing on platforms like Sina, signifying support for his ideology. Due to rapid technological advancements, especially in internet and media technologies, the organization and presentation of contemporary political movements differ significantly from those in the past. However, this era of concentrated political events in China feels like a return to the pre-1980s era, reminiscent of Mark Twain's observation: "History doesn't repeat itself, but it often rhymes."

One of the most representative rhymes of history can be observed in the planning of China's energy industry, alongside the urban planning undertaken to support it, the lifestyles it fostered, and the symbolic representations of these planning practices. Between 1958 and 1962, Mao's Great Leap Forward nearly devastated China's economy and agriculture, leading to the Great Chinese Famine from 1959 to 1961. During this period, the nation suffered severe deprivation, with at least 20 million people reportedly dying from hunger and local militias even being mobilized in some areas to prevent residents from fleeing famine-stricken regions. Yet, almost simultaneously, a large oilfield was discovered on the Songliao Plain, and the Chinese government swiftly built the infrastructure necessary to support an emerging oil industry. This oilfield was named "Daqing," a term symbolizing great celebration. By 1963, just four years after production began, the Daqing Oilfield was producing

enough crude oil to meet domestic demand and generate foreign exchange through exports. In the official narrative of the Chinese Communist Party, the development of Daqing achieved energy self-sufficiency and laid a solid foundation for China's industrial development. Daqing's success became a key lever for Mao to regain influence following the setbacks of the Great Leap Forward. It played an important role in the 1963 "Learn from Daqing in Industry" campaign and the Cultural Revolution of 1966, symbolizing the triumph of Mao Zedong's ideology and policies.

During the COVID-19 pandemic from 2020 to 2023, nationwide lockdown measures in China transformed localized restrictions into a nationwide mandate, with almost all major cities undergoing city- or district-wide lockdowns. Although official data on COVID-19 fatalities remains limited, the prolonged lockdowns had profound economic impacts across industries. Against this backdrop, Xi's administration aggressively pursued the development of the new energy sector—particularly the electric vehicle industry—under the banners of clean energy promotion and carbon neutrality. The rapid establishment of expansive industrial parks led to such high production capacity that the United States and Europe implemented sanctions over concerns about their own industries. Domestically, however, these industrial achievements were celebrated as symbols of breaking through Western technological sanctions and monopolies, reshaping the public perception of Xi's administration, which had been affected by stringent COVID policies. As a planning historian, while it remains uncertain whether the new energy sector will become a symbol akin to the Daging Oilfield, it is evident that, from the oil industry of the 1960s to the green energy sector of the 2020s, the Chinese government has treated these developments as emblematic successes used to address the challenges facing the current leadership's policies. Given these parallels, examining the planning history of Daging from the 1960s to the 1980s may offer valuable historical insights into contemporary and potential future planning phenomena in China.

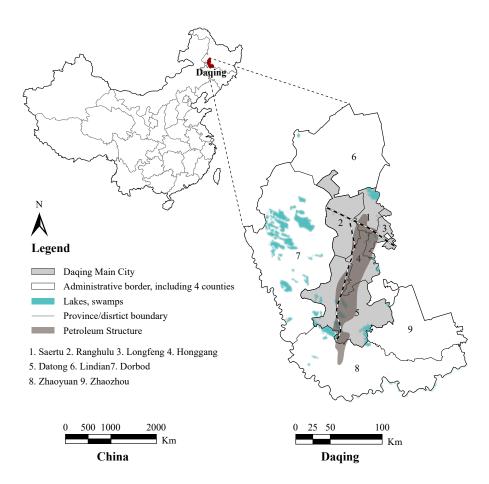


FIG. 1.1 Analytical map showing the Geographical Location of the Daqing Oilfield within China. Drawn by: Penglin Zhu. Source: Author's collected materials.

The planning history of the Daqing Oilfield undeniably stands as a significant model of the Chinese Communist Party's approach to energy industry development. This importance stems from the dramatic spatial transformations that have taken place within the region. Discovered in 1959, Daqing was the first gigantic oilfield identified after the establishment of the People's Republic of China. Situated in northeastern China's Heilongjiang Province, it spans the area between the provincial capital Harbin and the city of Qiqihar, with its oil-bearing structures extending southward into Jilin Province (see Fig. 1.1). At the time of discovery, the region was primarily pastureland, with only a few storage sheds constructed by local herdsmen and an otherwise undeveloped natural landscape. The sole existing transportation

infrastructure was the China Eastern Railway, which extends northeastward through the area (Figure 1.2). In 1960, the Chinese government initiated significant efforts to develop the oil industry, drawing in an initial population of approximately 60,000 permanent residents, including officers, oil workers, and technical experts. This population influx and industrial growth led to noticeable changes in the region's natural landscape. By the end of 2022, Daging City, established around the oilfield, had evolved into a large industrial city with a population nearing 2.718 million, an urban area of approximately 5,100 square kilometers, and an administrative area encompassing nearly 21,000 square kilometers, including four subordinate counties. Figure 1.3 presents a series of three morphology maps depicting the city's spatial form at 20-year intervals, illustrating the development trajectory of this oil city—from rapid expansion during the oil industry's peak, through gradual growth post-industrial decline, to its current state. Over more than 60 years of planning and development driven by the Chinese Central and local governments, much of the original natural environment in the region has been transformed into a predominantly oil-centered industrial landscape.

The petroleum landscape of Daqing encompasses all stages of the petroleum industry, including management and planning, exploration, drilling, storage, refining, education, and ancillary welfare facilities. This aligns with the concept of "Petroleumscape," introduced by Carola Hein, Professor of History of Architecture and Urban Planning at TU Delft. This framework serves as a tool for studying the tangible and intangible heritage produced by the planning and construction of the petroleum industry. It encompasses spatial practices in planning and construction, representations, and the public's imagination surrounding the oil industry. Figure 1.3 presents a series of photographs showcasing the petroleum industrial landscape and its profound influence on local residents' lives. The monumental oil company headquarters, constructed at great expense in 2007, symbolizes the immense profits of the petroleum industry, while extraction machines located at the entrances of residential communities, beside local higher education institutions, and in front of commercial complexes visually represent the enormous impact of petroleum on the daily lives of the local population. In this regard, the planning and development of the Daging Oilfield are highly representative, although the information is relatively scarce due to the fact that the whole enterprise of developing Daging was mainly kept secret.

¹ Hein, C., (2018). Oil spaces: The global petroleumscape in the Rotterdam/The Hague area. *Journal of Urban History*, 44(5), pp.887-929.

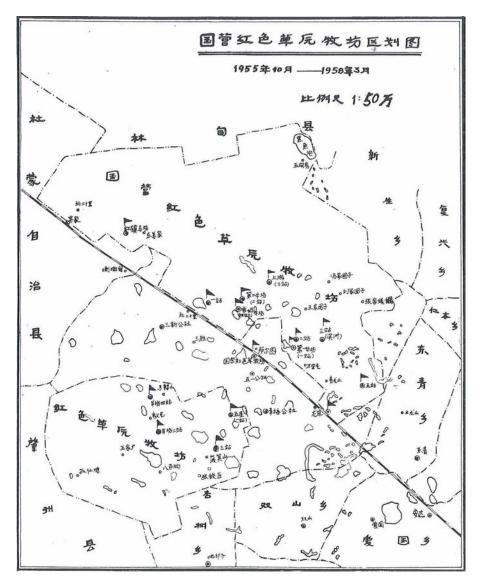


FIG. 1.2 Diagram Map of Red Prairie People's Commune. It depicts the spatial form of the area before the development of the Daqing Oilfield, from October 1955 to March 1958. Source: Author's collected materials.

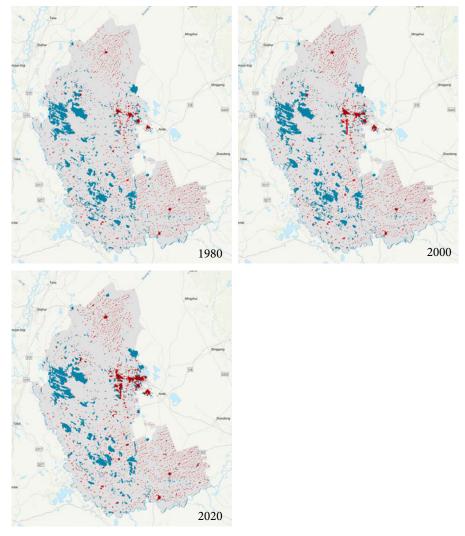


FIG. 1.3 Three Urban Morphology Maps Drawn Every 20 Years, Showing the Evolution of Daqing. Drawn by: Penglin Zhu. Source: Author's collected materials.

Over the past 60 years, the planning and development of the Daqing Oilfield, along with its promoted "production first, living second" lifestyle, have been deeply embedded in the grand heroic narrative advanced by the Chinese government, widely known and far-reaching in its impact. These top-down planning practices and representations are closely tied to government policies and, particularly, to the authority of Chinese leaders, resulting in a highly positive portrayal within official historical narratives. The perspective chosen and the degree of critique permitted

in documenting potential planning failures in Daqing's history are often controlled by official historians, particularly given the close connection of such city planning histories to central policies and the authority of top leadership. For example, Daqing's planning initiatives are depicted as successful, and the residents' lifestyle is viewed as a faithful embodiment of Chinese Communist Party ideology. However, this does not represent the full reality of Daqing's planning and development history. Assuming that all planning undertaken by the government over 60 years was successful defies basic logic. In this context, Daqing's planning history is not merely a record of technical or policy achievements but also a tool that serves the official narrative, possibly concealing overlooked planning issues and controversies behind its positive façade.









FIG. 1.4 A Series of Photos Showing the Daqing's Petroleum Landscape. The series includes images of the Oil Administration Bureau, oil storage facilities, oil fields adjacent to residential areas, and oil infrastructure alongside a department store. Source: Author's collected materials.

In the current political environment in China, planning historians face significant challenges in effectively researching, documenting, and publishing research on the failures within the planning practices of the Daqing Oilfield. Pulitzer Prize-winning author Ian Johnson highlights in his seminal work, *Sparks: China's Underground Historians and Their Battle for the Future*, the stringent suppression of dissenting

voices in historical research under Xi Jinping's administration.² This suggests that the official historical narrative may fall short in capturing the entirety of Daqing's industrial legacy, particularly in terms of potential "planning disasters"—a term Peter Hall uses to describe planning failures caused by political and economic constraints, limited public involvement, and fragmented authority.³ While Hall's criteria may not fully align with Daqing's specific circumstances, employing this terminology not only more accurately conveys the educational value of these negative cases but also situates this study within the broader academic discourse.If these "planning disasters" remain unaddressed in the official narrative, the absence of critical reference points may hinder the development of heritage registries related to the petroleum industry, leaving a significant academic gap.

The planning practices and representations of the Daqing Oilfield from the 1960s to the 1980s stand as a significant part of China's industrial heritage and a classic example of "planning heritage". This concept, initially defined and continuously expanded by international planning historians and heritage scholars such as Robert Freestone and Jyoti Hosagrahar, encompasses not only the physical structures produced by planning practices—like historical buildings and landscapes—but also the evolution of planning ideas, policies, practices, and the compilation of planning heritage lists.^{4/5} David Hamer, a former history professor at Victoria University, suggests further directions to enrich the using scenarios of planning heritage by examining the gradual convergence of urban planning and heritage conservation from 1880 to 1980.6 Since 2000, a global historical perspective has gained traction within the planning field, while the heritage conservation community has introduced the concept of "temporality," advocating for the assessment of heritage value over extended historical spans. ^{7/8} These newer perspectives offer greater flexibility and efficacy in studying and analyzing Daqing's planning heritage, enabling a broader application of the concept.

- 2 Johnson, I., (2023). Sparks: China's Underground Historians and Their Battle for the Future. Oxford University Press.
- 3 Hall, P. (1980). Great Planning Disasters. London: Weidenfeld and Nicolson.
- 4 Freestone, R. (2010). Suburban Dreams. In: *Urban Nation: Australia's Planning Heritage.* Csiro Publishing.
- 5 Hosagrahar, J., (2017). A history of heritage conservation in city planning. In Hein, C. (ed.), *The Routledge Handbook of Planning History* (pp. 441-455). Routledge.
- 6 Hamer, D., (2000). Planning and heritage: towards integration. In *Urban planning in a changing world* (pp. 194-211). Routledge.
- 7 Hall, P., (2014). Cities of tomorrow: An intellectual history of urban planning and design since 1880. John Wiley & Sons. (Fourth Edition)
- 8 Harvey, D.C., (2001). Heritage pasts and heritage presents: Temporality, meaning and the scope of heritage studies. *International journal of heritage studies*, 7(4), pp.319-338.

1.1 In the Name of Heritage Conservation: How China's Heritage Lists Overlook the Planning Heritage of Daqing's Petroleum Industry

The Chinese government relies on a registry of protected cultural units to safeguard its rich immovable cultural heritage. Based on the current condition, historical, cultural, and social values, this list is divided into three levels: national, provincial, and municipal/county. The Major Cultural Heritage Sites Under National-level Protection (MCHNP) was first announced by the State Council in March 1961. To date, after 15 expansions, the government has declared 8 batches covering 5058 heritage sites. Provincial governments (including municipalities directly under the central government) have established their own provincial lists. For instance, Beijing and Hubei province introduced their first provincial heritage lists as early as 1956 and 1957, respectively. In contrast, Heilongjiang province did not introduce its first list until January 1981. The situation with municipal and county-level heritage lists is similar, with different city governments responsible for their formulation and publication at various times.

The Chinese government has set a high threshold for the establishment of the national-level list, which serves as the highest protection level for immovable cultural heritage. The national list is formulated by the Ministry of Culture and each batch must be approved by the State Council and announced by it. It represents the highest level of protection for immovable cultural heritage ratified by the Chinese government. Since 2002, following the resolution of the Ninth National People's Congress in its thirtieth session, the administrative department for cultural heritage under the State Council has two methods to determine new national cultural heritage sites: direct designation or selection from provincial and municipal/county lists based on their significant historical, artistic, and scientific values. Direct designation signifies central government recognition of a specific immovable heritage site, while selection from lower-level lists highlights the value of the national list—representing the most representative and relevant heritage. This is not only due to the stringent value and quality requirements the Chinese government places on national cultural heritage sites but also because these sites receive more funding for protection and greater promotional efforts for tourism, which necessitates strict control.

⁹ State Council. (2019). Notification on the approval and announcement of the eighth batch of national key cultural relics protection units [国务院关于核定并公布第八批全国重点文物保护单位的通知], October 16. Beijing.

As of March 2024, the MCHNP list includes both individual buildings and large-scale planning heritage from Daqing. The large-scale planning heritage consists of two sites: the Bronze Age Baibaojin Site in present-day Daqing's Zhaoyuan County, included in the fourth batch of MCHNP announced in November 1996, and the Xiaohala Site, dating from the Neolithic to the Warring States period, included in the seventh batch of MCHNP announced in March 2015. The individual building heritage also comprises two sites: Daqing's first oil well (Songji 3 Well), included in the fifth batch of MCHNP announced in June 2001, and the Iron Man's first well site (Sa 55 Well), built in 1960 and included in the seventh batch of MCHNP in March 2015. The large-scale planning heritage sites, originating from ancient times, contrast with the individual building heritage from the 1960s oil field development era. This discrepancy is linked to the nature of the heritage: large-scale planning heritage sites are remnants of ancient Chinese settlements, while the individual heritage sites are oil wells. The relatively short history and well-preserved condition of the oil wells facilitate their inclusion as individual heritage sites.

Although the heritage included in the cultural heritage protection registers is not limited to built heritage and encompasses cultural heritage of historical, artistic, and scientific value from various categories, the immovable heritage listed in the Daging area demonstrates a significant enthusiasm for the petroleum industrial heritage constructed in the 1960s. This point is evident from the construction dates of the listed built heritage. When categorized by era, the built heritage in the Daging area listed in both registers can be primarily divided into two types: ancient and modern. Compared to the extensive time span of the ancient heritage, ranging from the Bronze Age to the Neolithic period and the Western Zhou Dynasty, the time span of the listed modern built heritage is straightforward and short. Except for the Daging First Underground Water Reservoir, built in 1963, all other modern built heritage were constructed during the petroleum campaign that began in 1960. Furthermore, all listed modern heritage are associated with the petroleum industry and the necessary infrastructure for its development. Of the four units listed in the national heritage register, two are ancient sites, and two are built heritage related to the petroleum campaign. Among the 17 built heritage sites listed in the Heilongjiang Provincial Heritage Register, six are related to the petroleum campaign. It can be said that both the national and Heilongjiang provincial heritage registers have a significant proportion of built heritage associated with the Daging petroleum campaign (specifically, the construction model of the Daging oil field promoted by the Chinese Ministry of Petroleum in the early to mid-1960s). This situation contradicts the originally broad scope of the heritage registers, which are supposed to cover a wide range of categories rather than specializing in a particular type.

The focus on the built heritage from the Daging Great Petroleum Campaign of the 1960s, as demonstrated in the national and Heilongjiang provincial heritage registers, has become a prerequisite influencing the formulation of the Daging municipal heritage list. An excellent example illustrating this point is the Daging City Industrial Heritage (Sites) Municipal Cultural Heritage List, published by the Daging Municipal Government in June 2007. Firstly, the municipality issued the local heritage list of industrial heritage as a separate list, indicating their specific attention to this type of built heritage. Notably, the Daging Government's action of publishing an independent industrial heritage list predates the Ministry of Industry and Information Technology's national industrial heritage list by ten years. Secondly, the built heritage from the petroleum campaign period constitutes the vast majority of the sites listed. Of the 19 built heritage sites included in the list, 13 are petroleum facilities, office buildings, and residential areas constructed during the Great Petroleum Campaign. Of the remaining six, except for a weather station built in 1956, the others are petroleum industrial facilities built in the 1970s and 1980s. Thus, it can be said that whether at the national, provincial, or municipal level in Daging, the primary focus of the heritage lists is on the petroleum industrial heritage constructed during the early 1960s petroleum campaign.

Overall, the heritage sites in the Daging Oilfield listed in the national, provincial, and municipal cultural heritage registers are primarily single buildings. Specifically, the national-level list includes two sites from Daging: Daging's first oil well (Songji 3 Well) and the Tieren No. 1 Well (Sa 55 Well), both representing single facilities in the oil extraction process. Apart from these two sites elevated to the national list, the provincial list includes four additional units: the old Daging Oilfield Command Office, the Daging Oilfield Foundation Well (including Sa 66 Well, Xing 66 Well, and La 72 Well), the Red Flag Village Gandalei Dwellings, and Daging Oilfield's first underground water source. These correspond to oil industry management, extraction, residential, and industrial infrastructure, respectively. Except for the Red Flag Village rammed earth houses, all projects are single buildings. While the Red Flag Village rammed earth houses could be considered heritage at the village scale, their inclusion in the provincial list focuses on their construction using scientific rammed earth techniques and their technical innovation over traditional methods. Hence, this unit's inclusion may not necessarily account for much planning heritage consideration. The municipal-level industrial heritage list follows this logic, where 18 out of the 19 listed oil industry heritage sites are single buildings related to various aspects of the oil industry. The only villagescale heritage site, Chuangyezhuang, is listed to commemorate the "Revolution" with Five Shovels," rather than its planning value, making it difficult to classify it as direct planning heritage. Therefore, whether it is the national, provincial, or Daging municipal heritage lists, large-scale constructed heritage is not a primary

consideration. Even if a few projects reflecting planning ideas are included, their inclusion is not necessarily aimed at commemorating and preserving the historical value of planning in shaping the local spatial structure.

Unfortunately, the system established by the Chinese government in 1982 to protect large-scale spatial heritage through the designation of national historic cities, towns, and streets has not addressed the gaps in the heritage lists. According to the "Law of the People's Republic of China on the Protection of Cultural Relics," a "historical and cultural city" is defined as one that preserves an abundance of cultural heritage of significant historical and cultural value and revolutionary significance. Despite this, Daqing has not been included in any of the lists of historic cities, towns, or villages. Neither the first batch of 24 historical and cultural cities announced by the State Council in 1982, the 39 cities added in 1986, the 37 cities added in 1994, nor the subsequent additions, which collectively include 142 cities, feature Daqing. The same exclusion applies to the batches of Chinese historical and cultural towns and villages released by the Ministry of Housing and Urban-Rural Development and the State Administration of Cultural Heritage since November 2003.

One possible reason for this exclusion is that, although the Ministry of Petroleum began constructing substantial residential areas within the Daqing Oilfield in the 1960s, Daqing did not achieve official local government status until 1979. However, this reasoning is not entirely convincing. For instance, Zunyi and Yan'an, both hailed as revolutionary sanctuaries by the Chinese Communist Party and not historically designated as cities, were included in the first batch of historical and cultural cities announced by the State Council. This discrepancy suggests that there may be differing views within the Chinese government regarding whether Daqing's urban planning and construction hold significant historical value and revolutionary significance. Even if a few projects reflecting planning ideas are included, their inclusion is not necessarily aimed at commemorating and preserving the historical value of planning in shaping the local spatial structure.

Around 2003, urban planning scholars and practitioners initiated academic discussions on the protection of industrial heritage and the utilization of this heritage to promote tourism. These discussions laid the theoretical foundation for the "Notice on Strengthening the Protection of Industrial Heritage," issued by the State Council to cultural and heritage departments in various provinces, autonomous regions, and municipalities in December 2006. However, it was not until 2016 that relevant government departments began to establish protective lists. The Ministry of Industry and Information Technology started to draft and release the National Industrial Heritage Conservation List (NIHCL) in 2017. To date, five batches have been released, covering 197 industrial heritage sites. The NIHCL identifies industrial

heritage sites as crucial carriers of industrial culture, documenting key stages in China's industrial development and witnessing significant historical, technological, socio-cultural, and artistic values. Notably, the Chinese government quickly transformed these industrial heritage sites into new tourism brands. The National Tourism Administration released the National Industrial Tourism Innovation Units list in November 2016 and the National Industrial Tourism Demonstration Sites list in November 2017. This strategy achieved dual objectives: these industrial heritage sites became bases for ideological propaganda while also generating economic benefits through tourism.

With Xi Jinping becoming the President of China in 2012, his new policies, particularly the emphasis on using various tangible and intangible heritage as an integral part of political work to consolidate the Communist Party's rule, changed the Chinese government's reliance solely on the aforementioned register and lists. There is no doubt that these policies have been the driving force behind the creation of the related heritage lists by relevant departments. In the national ideological work conference on August 19, 2013, Xi proposed eight work directions, including "consolidating and expanding mainstream ideological public opinion," "telling China's story well," and "deeply promoting socialist education with Chinese characteristics." These three directives clearly conveyed his goal: requiring all levels of government in China to actively engage in propaganda and ideological work, constructing a national narrative system that positively and optimistically promotes China's history, culture, and system. The foundation of this narrative system is undoubtedly to align with the Communist Party of China's ruling legitimacy and political interests.

Despite the abundance of industrial heritage in Daqing, the second batch of the National Industrial Heritage Conservation List (NIHCL), issued on November 15, 2018, only included the "Iron Man No. 1 Well" site (Sa 55 Well, unloading platform, drilling rig, water well) built in 1963. It did not include any large-scale heritage sites. Ironically, these lists, including the new industrial heritage protection lists, failed to follow President Xi's directives to give equal importance to built heritage at the urban and regional planning scale. At the Central Urbanization Work Conference on December 12, 2013, President Xi emphasized the protection of historically significant old districts and opposed demolishing authentic old districts to construct fake ones. At the Central Urban Work Conference on December 20, 2015, he expanded on these views, stating, "We must protect the cultural heritage left by our predecessors, including cultural relics, historical and cultural cities, towns, villages, historical districts, historical buildings, industrial heritage, and intangible cultural heritage. We must avoid the foolish act of 'demolishing genuine historical sites to build fake antiques.' We must protect both

ancient and modern buildings; both individual buildings and streets, alleys, and urban layouts; both exquisite buildings and local dwellings with strong regional characteristics." On September 28, 2020, during the 23rd collective study session of the 19th Central Politburo, he emphasized, "We must improve the protection mechanism for immovable cultural relics and incorporate the protection and management of cultural relics into the preparation and implementation of territorial spatial planning." From the perspective of built heritage protection, Xi not only called for the protection of representative individual buildings but also for the protection of planning heritage at the district and town scales. These lists have not only failed to include tangible built heritage at the urban and regional planning scale, but more importantly, they have also lost the potential to provide effective references for the formulation of related intangible cultural heritage.

It is particularly noteworthy that the aforementioned various lists not only lack the inclusion of large-scale heritage sites, but they also almost entirely ignore intangible cultural heritage. The lack of attention to intangible cultural heritage related to urban and regional planning in Daging is another major obstacle preventing these newly created lists from effectively supplementing the national heritage protection register. The national heritage register is designed to focus on immovable tangible cultural heritage, thereby excluding intangible cultural heritage related to built heritage. Despite not being restricted by regulations, these new specialized heritage lists, such as the NIHCL, have similarly failed to include intangible industrial heritage. This must be considered a significant oversight. It can be said that the lack of necessary attention to urban and regional planning-scale built heritage in Daging oilfield within the existing heritage lists is not an isolated incident; it reflects a broader issue affecting planning-scale heritage in other regions as well. These lists all clearly convey a common characteristic: being incomplete!

It cannot be ruled out that the Chinese government and relevant academic institutions, when developing preservation policies, may prioritize tourism development or view monuments as more valuable for preservation than urban collective forms, with tangible heritage often deemed easier to maintain than intangible heritage. Although these issues extend beyond Daqing and industrial heritage, they underscore a pressing need for planning historians and built heritage researchers focused on Daging and China's petroleum legacy to intensify their efforts, as significant work remains. Typically, the Chinese government seeks expert input from academia before compiling such lists. For instance, during the formulation of the 2018 Chinese Industrial Heritage List, the Urban Planning Society of China participated as a representative of the academic community.

It also remains uncertain whether planning historians and built heritage scholars raised concerns similar to those discussed here during the list's compilation or whether the government declined to incorporate their input. Since the initial release of the Industrial Heritage List on January 27, 2018, the Central government has issued four supplemental lists, yet the concerns raised in the first edition remain unaddressed. If early national and provincial heritage listings overlooked intangible heritage due to a lack of awareness, this is more understandable. However, with the 1994 World Commission on Culture and Development report highlighting the significance of intangible heritage over 24 years ago, the 2018 Industrial Heritage List should reflect corresponding awareness. If planning historians and built environment experts indeed held differing views and offered recommendations, even if these were not incorporated into the updated lists, academic papers and discussions reflecting these perspectives should be available. Regrettably, such academic contributions remain notably absent.

1.2 Research Question

The thesis seeks to explore a potential solution to the following academic question through a historical research approach: How could Chinese planning historians preserve the planning heritage that may conflict with the values upheld by an authoritarian government? To address this question, three sub-questions are proposed:

- What is the definition of planning heritage from the perspective of international and domestic scholarship?
- What are the characteristics of the petroleum industry's planning heritage in Daqing during the 1960s and 1980s, and what are its main components?
- How can planning disasters within Daqing's petroleum industry heritage be leveraged to support the preservation of future planning heritage that may conflict with government values?

1.3 Research Method

This study employs the Global Palimpsestic Petroleumscape (GPP) as the primary framework for conducting a historical analysis of Daging's planning practices and their representations from the 1960s to the 1980s. This analytical framework was gradually developed and refined by Hein between 2013 and 2018, originating from her critical examination of the oil industry and trade within the context of a capitalist free-market system. 10 Benefiting from her extensive observations of the petroleum industries in Pennsylvania, USA, 11 The Haque, Netherlands, 12 and the North Sea region, ¹³ and combining Henri Lefebvre's concept of the Production of Space, ¹⁴ Hein developed three categories: the Spatial Petroleumscape, the Representational Petroleumscape, and the Represented Petroleumscape, to classify different layers to facilitate the study of tangible and intangible planning heritage produced by the petro-industrialization. Beyond the liquid material flow of petroleum itself, Hein emphasizes the need to simultaneously focus on the various other attributes that petroleum as a commodity facilitates in market circulation, including politics, economics, trade, industrial technology, and planning ideologies. 15 She considers the footprints produced during these flows, such as the various infrastructure and facilities that support it, materials serving political and business propaganda, and technical blueprints, as different layers within the GPP. Due to the societal calls for energy transition, these layers are becoming new tangible and intangible planning heritages – legacy of planning petroleum industry. 16

Thanks to the comprehensive analytical framework provided by the GPP, which encompasses the Spatial, Representational, and Represented Petroleumscape of the oil industry, it offers an effective reference for examining the tangible and intangible heritage within Daging's petroleum industry planning legacy. Specifically, the GPP's

- 10 Hein, C., (2021). Space, Time, and Oil: The Global Petroleumscape. In Oil Spaces (pp. 3-18). Routledge.
- 11 Hein, C. and Lessoff, A., (2021). The Original North American Petroleumscape: Oil-and-Gas Empire, Petrochemical Nation. *In Oil Spaces* (pp. 21–42). Routledge.
- 12 Hein, C., (2018). Oil spaces: The global petroleumscape in the Rotterdam/The Hague area. *Journal of Urban History*, 44(5), pp.887-929.
- 13 Couling, N. and Hein, C., (2019). Energy Logistics of the North Sea: A crowded industrial void. *Lo Squaderno-Explorations in Space and Society*, (51), pp.21–25.
- 14 Henri, L. and Donald, N.S., (1991). The production of space. Massachusetts: Blackwell.
- 15 Hein, C., (2018). "Old Refineries Rarely Die": Port City refineries as key nodes in the global petroleumscape. *Canadian Journal of History*, 53(3), pp.450-479.
- 16 Hein, C., Mager, T. and Hauser, S., (2021). Refining the heritage narrative of post-oil landscapes. Transcending the nostalgic: Deindustrialised landscapes across Europe. de Gruyter.

spatial petroleumscape corresponds to the tangible heritage within oil planning heritage. In this part, Hein proposed a framework comprising eight layers, covering various spatial practices necessary for the oil industry and commerce. These include industrial, retail, administration, oil-funded ancillary, infrastructure architectures, and philanthropy and state welfare.¹⁷

The Representational Petroleumscape corresponds to both tangible heritage within oil planning heritage. Hein identifies five layers: Corporate Media, Popular Media, Architectural, Artistic, and Popular Culture. Within these layers, Corporate Media and Architectural include roadmaps, brochures, and architectural and urban designs, which are tangible heritages. In the layers of Popular Media, Artistic, and Popular Culture, both tangible heritage, such as newspapers, magazines, children's toys, postcards, and amusement parks, and context-dependent heritage—falling under either tangible or intangible categories—such as advertisements, TV, radio, and music, are included. Whether tangible or intangible, they all represent the practices of oil industry planning. Therefore, another significant contribution of the Representational Petroleumscape is that it transcends the simple distinction between tangible and intangible heritage, offering a new perspective on understanding the attributes of planning heritage. The Represented Petroleumscape, on the other hand, pertains to the intangible heritage associated with the public's perception of the urban spatial forms, living and transportation modes, and healthcare shaped by the oil industry. These perceptions often exist in the form of language.

By classifying the existing tangible and intangible petroleum planning heritage using the GPP framework—dividing it into spatial and representational petroleumscapes and further organizing these into different layers—potential gaps become apparent. These gaps can assist in identifying heritage elements that may have been lost to post-1990s urbanization or obscured due to conflicts with Communist Party ideology, rendering them less visible or perceptible. Although this may be due to the uniqueness of Daqing's spatial and represented petroleumscapes, the systematic approach provided by the GPP can still offer an effective reference for identifying the Daqing oil heritage.

In the period from the 1960s to the early 1980s, the characteristics of Daqing's spatial and representational petroleumscape were distinctly different from those based on the capitalist free market operations described by the GPP. During this time, Daqing's oil lacked the attributes of commercial circulation, which also meant the absence of planning focused on retail, showcasing the prosperity of oil

¹⁷ Hein, C., (2018). Oil spaces: The global petroleumscape in the Rotterdam/The Hague area. *Journal of Urban History*, 44(5), pp.887-929.

companies, and other civil-commercial properties, along with the corresponding spatial petroleumcape layers. This also led to a significant difference between Daqing's representational petroleumscape and the representational petroleumscape serving commercial activities. Even today, the rights to oil extraction, refining, and strategic storage remain entirely in the hands of the Chinese government. Although, in principle, private or foreign investments are allowed in oil retail and commercial storage, in practice, access to these sectors remains extremely limited. Therefore, these potential differences call for a localized approach to applying the GPP to analyze China, particularly Daqing.

Since the economic reforms of the 1980s, the Chinese government began circulating oil as a consumer commodity, leading to the spatial petroleumscape in China, including Daging, beginning to exhibit layers similar to those in the GPP's spatial petroleumscape. For instance, in the Administration layer, to better control stateowned enterprises directly under the State Council, PetroChina, Sinopec, and CNOOC established their headquarters in Beijing. Notably, PetroChina's headquarters, designed by Beijing ZXD Architects in 2003 and completed in 2008, located in Dongzhimen, Beijing, with a building area of nearly 200,000 square meters, is a prime example of the spatial practice showcasing central authority in the oil industry. This building features a large-span steel structure, spacious open spaces internally, and an exterior façade of marble and glass curtain walls. The PetroChina branch office in Daging mirrors its Beijing headquarters, featuring a 23-story design and a grand three-story glass curtain wall entrance at its center. These architectural design elements, and the use of expensive structures and materials, can also be seen in the designs of Western oil companies. It can be said that regardless of the political system or market mechanism, the Administration layer within the spatial petroleumscape of the oil industry symbolizes power and wealth. These spatial petroleumscapes, altered due to changes in the political system, highlight the need to pay special attention to the transformations in political and economic agendas, and the corresponding changes in planning policies, when applying the GPP to analyze the Daging case.

Despite the GPP's significant potential for studying the tangible and intangible heritages resulting from the Daqing oil planning from the late 1950s to the early 1990s, current scholarship using this framework reveals a lack of rigorous academic reflection among Chinese planning historians. This deficiency in scholarly criticism is partly due to the limited recognition of the framework's potential by Chinese scholars, as evidenced by only two published academic works to date. One

¹⁸ Zhu, P., (2019). Economic Development and Environmental Protection the planning of China's National Strategic Petroleum Reserves in port cities. *PORTUSplus*, 8(Special Issue).

of the works is "Production First, Livelihood Second: The Life and Death of Worker-Peasant Model Villages in a Chinese Oil Field" by Li Hou, published in 2021 in the book "Oil Space," edited by Hein. Hou uses the Ancillary layer from the Spatial Petroleumscape of the GPP framework to delve deeply into the planning of worker villages by the Petroleum Ministry in Daqing. In the conclusion, she argues that the various layers within the Spatial Petroleumscape of Daqing's regional planning have had a lasting and profound impact on the spatial layout of China's oil industry, thereby contending that the Daqing-Modeled Petroleumscape has not disappeared. Hou's argument is a valid scholarly reflection on using the Spatial Petroleumscape from the GPP framework to analyze Chinese cases. One limitation, is however, her article does not address whether the Representational Petroleumscape still exists.

Another article is by Zhiming Sun, Associate Professor of Architecture at Northeast Petroleum University, titled "Analysis of the Systematic Conservation of China's Petroleum Industrial Heritage: A Case Study and Analysis of the Petroleum Industrial Heritage in Daqing," published in Built Heritage in 2023.²⁰ This paper directly employs the GIS spatial analysis methods from the GPP framework to examine different layers of Daging's spatial petroleumscape. This paper could have been an excellent opportunity to explore whether and to what extent the spatial analysis methods of the GPP are suitable for studying the Daging case. However, the author uncritically accepts it without engaging in a substantive discussion of its applicability. While utilizing the GPP to discuss Daging's petroleum industrial heritage, Sun fails to identify that the core of Daging's petroleum industrial heritage which is the planning heritage. In addition, as the reviewer of this paper, I have observed that the author has repeatedly attempted, in both the original and several revised drafts, to rebrand the GPP as her own framework while retaining its structure and content. This includes renaming the GPP or adding an intermediary layer between the spatial, representational, and represented categories and their respective layers. Such an approach fails to take the Daging's Petroleumscape seriously, lacks academic rigor, raises concerns about scholarly integrity.

This study employs the GPP framework to analyze how the planning policies, regulations, principles, and perspectives implemented in Daqing from the 1960s to the 1980s shaped the local spatial configuration, residents' lifestyles, and their representations. It also explores the extent to which these factors led to path dependency or even lock-in within local planning practices. The case

¹⁹ Hou, L., (2021). "Production First, Livelihood Second": The Life and Death of Worker-Peasant Model Villages in a Chinese Oil Field. In *Oil Spaces* (pp. 194-208). Routledge.

²⁰ Sun, Z., (2023). Analysis of the systematic conservation of China's petroleum industrial heritage: a case study and analysis of the petroleum industrial heritage in Daqing. *Built Heritage*, 7(1), p.10.

analysis focuses on seven key time periods, where power struggles among central government leadership emerged as pivotal factors in altering or further reinforcing the established trajectory of local planning practices.

1.4 Thesis Overview

The structure of this dissertation comprises four main sections across 12 chapters: Introduction, Theoretical Framework, Case Analysis, and Conclusion.

The Introduction (Chapter 1) outlines the research motivation, identifies existing gaps in the literature, presents the academic hypothesis, and formulates the main research question along with three sub-questions, concluding with an overview of the dissertation's structure.

The Theoretical Framework (Chapters 2 and 3) addresses the conceptual foundations of planning heritage, planning historiography, and heritage preservation. It explores influential Chinese planning historians' definitions of planning heritage, including their philosophical and academic interpretations. **Chapter 2** presents an extensive review of recent international and domestic literature on "planning" and "heritage/legacy," arguing that while planning historiography can indeed contribute to constructing planning heritage, Chinese planning historians and heritage scholars have yet to fully utilize this approach to foster a framework that incorporates both planning wisdom and planning disasters. **Chapter 3** examines the accessibility of Daqing's urban planning data and existing studies, highlighting the possibility that Daqing's planning history, closely aligned with Chinese Communist Party policies, could be or suppressed if it conflicts with CCP ideology.

The Case Analysis section (Chapters 4 - 11) organizes the examination into seven key time periods in chronological order. During these periods, power struggles among central government leaders acted as pivotal forces, either altering or reinforcing the existing path dependencies of local planning practices. This section is divided into three segments, comprising a total of eight chapters. The first segment focuses on the establishment of petroleum planning policies and regulations. **Chapter 4** outlines the historical background of Daqing oilfield exploration and development since the mid-1950s. It demonstrates how the newly established Chinese Communist regime viewed the construction of the petroleum

industry as a key indicator of its governance legitimacy. This perspective of the Chinese government influenced the leadership changes within the Ministry of Petroleum and laid the groundwork for development model. Chapter 5 explores the management system and planning principle implemented by the Ministry of Petroleum during the development phase of the Daging oilfield, known as "The Great Petroleum Campaign." Due to limited support from the central government, the Ministry of Petroleum had to prioritize the allocation of scarce resources for industrial construction through its local body, the Songliao Petroleum Campaign Leading Group. This group effectively allocated resources and established spatial planning guidelines, emphasizing principles such as "surface serves subsurface" and "Production First, Livelihood Second." Chapter 6 analyzes how Premier Zhou Enlai formalized the planning practices and architectural designs of the Daging oilfield in 1962, adopting a top-down approach. Zhou summarized the Ministry of Petroleum's spatial planning quidelines, such as "surface serves subsurface" and "Production First, Livelihood Second," into the Daging planning principles, which became the foundation for all subsequent industrial planning. He also promoted the establishment of the "integration of government and enterprise" model, enhancing the local planning control of the Ministry of Petroleum. This chapter details Zhou's use of administrative power to drive the establishment of the Daqing planning principles and the development of three new workers' towns.

The second segment addresses the path dependencies of petroleum planning policies, regulations, ideas, and opinions as influenced by political campaigns. Chapter 7 examines the "Learning from Daging in the Petroleum Industry" campaign initiated by Mao Zedong, which promoted cost-efficiency in architectural design and urban planning. This process involved both political and technical dimensions, driven top-down by the central government. Starting in 1963, Daging's nine construction experiences were politically celebrated and promoted nationwide. The 1966 annual meeting of the Chinese Architectural Society underscored the concept of "cost-effectiveness" as central to improving housing cost-performance ratios. This chapter also highlights that urban planning and architectural design were not merely technical activities but also carried political objectives, conveying and promoting Mao Zedong Thought and socialist values through these endeavors. Chapter 8 discusses how, during the Cultural Revolution, the practices associated with the Daging oilfield were utilized as instruments for political maneuvering. The Central Committee of the Communist Party, through the People's Daily, promoted Daging's narrative as "Mao Zedong's Red Flag," with Premier Zhou Enlai reshaping this narrative to stabilize the political situation. In 1971, a People's Daily editorial proclaimed that the Daging spirit embodied Mao Zedong Thought and should be promoted nationwide. Consequently, numerous art pieces themed around Daqing emerged, including photography and painting, emphasizing political goals. These

works not only showcased the government-endorsed industrial and a communist utopian but also constructed a gender-neutral, collectivist image of the "Daqing people." However, these works often lacked critical analysis and questioning of the official discourse. **Chapter 9** explores how local power expanded the scope of local planning policies and regulations through national political movements. For example, in 1966, Daqing authorities proposed structural modifications to the scientific Gandalei dwellings to improve residents' living experience, incorporating brick pillars and reinforced concrete beams. In the mid-1970s, Daqing authorities demonstrated innovation and balance by flexibly applying the planning policies' ambiguous boundaries to adjust spatial structures and alleviate population and spatial pressures, reflecting an adaptation to both planning principles and practical needs.

The third segment focuses on the transformation of petroleum planning policies in the post-Mao era. Chapter 10 explores how, in the post-Mao era, the Daging oilfield became a strategic stage for power struggles, integral to reconstructing local planning policies. Deng Xiaoping emphasized an economic strategy focused on improving workers' living standards and envisioned a "Beautiful Daging," promoting the construction of buildings using new materials and multi-story structures. However, local authorities and design institutes may have inadequately explored and realized this vision, treating it merely as an architectural design scheme and neglecting the importance of comprehensive urban planning. This chapter reveals the need to transcend traditional architectural boundaries and adopt multi-dimensional urban planning approaches. Chapter 11 examines the formulation of Daging's first comprehensive urban plan in the 1980s, marking the gradual institutionalization of "urban rights." Local authorities attempted to adjust the "Production First, Livelihood Second" quideline to align with Deng's "Building a Beautiful Daging" agenda. Through discussions with the Central government on administration system reforms, local authorities appeared to support reform while maintaining the status quo, establishing a "triple-partite" system while retaining the "integration of government and enterprise" power structure. These changes reflect the continued dominance of state-owned enterprises in local governance and guide the evolution of local urban planning policies and regulations. This chapter also highlights the increasing power of the Daging Urban Planning Bureau in formulating and implementing urban planning.

2 Curated Silences:

The Art of Selective Definition in Planning Heritage and Translation of Planning Legacy by the Influential Chinese Planning Historians

We should now seriously discuss the efforts of some influential urban planning and planning history scholars in China who have written to introduce "Planning Heritage" and "Planning Legacy" to their domestic professional peers, and have attempted to define these academic terms. Although they assert that their work is grounded in the definitions put out by renowned international planning historians such as Robert Freestone, the Chinese definition they present deviates significantly from the supposed base, as indicated by the existing scholarly literature. By leveraging the relative unfamiliarity of these concepts among Chinese scholars and the linguistic differences, especially in translation terminology between Chinese and English, these Chinese planning historians are effectively shaping a uniquely Chinese version of "Planning Heritage" and "Planning Legacy." These discrepancies pose significant challenges. They not only hinder Chinese urban planning and planning history scholars from conducting future research in accordance with the consensus standards established by international planning historians, but they also risk isolating Chinese research outcomes from the broader framework of international planning history research.

If one searches for the keyword "Planning Heritage" or its Chinese equivalent "规划遗产," it becomes evident that a surge of related academic papers has appeared more frequently since 2020. This uptick is largely attributable to the Urban Planning Society of China (UPSC) and its subordinate Urban Planning History and Theory Subcommittee, which adopted "Planning Heritage" as the theme for the 11th Advanced Symposium on Urban Planning History and Theory in 2019 and presented related conference reports. One cannot dismiss the fact that UPSC has long neglected the construction of the secondary discipline of planning history. It was not until November 2012 that UPSC established the Urban Planning History and

Theory Subcommittee within its structure, nearly 20 years after the International Planning History Society (IPHS) was founded in January 1993, let alone the Planning History Group, the predecessor of IPHS, which was established in 1974.²¹ Compared to other subcommittees under UPSC, the Urban Planning History and Theory Subcommittee has fewer active participants and relatively lower influence. This can be seen in the disparity in the number of related articles published in three key domestic urban planning journals: "Urban Planning Forum [城市规划汇(学)刊]," "City Planning Review [城市规划]," and "Urban Planning International [国际(外)城市规划]." These factors collectively contributed to the significantly delayed organized discussion on the concept of Planning Heritage among Chinese urban planning historians compared to their international counterparts.

Based on the analysis of existing literature defining Planning Heritage in Chinese, the discourse is currently concentrated among a few dominating urban planning history professors and their teams from Tsinghua University, Southeast University, and Huazhong University of Science and Technology. By examining scholarly articles on "Planning Heritage (规划遗产)" published in the three key Chinese urban planning journals previously mentioned, it is evident that Chinese scholars have produced five major papers introducing the concept's origins, its application in Western contexts particularly in Australia and the United States—and how it can be implemented in China. These five papers are authored by Professor Tinghai Wu from Tsinghua University, who has extensively published on planning-scale built heritage, along with his doctoral student Yale Ye; Professor Baihao Li from Southeast University, who is also the Secretary-General of the Chinese Urban Planning History and Theory Association, and his team; and Professor He Yi from Huazhong University of Science and Technology, a prominent figure in urban planning, along with his doctoral student Zhang Yang. Apart from the leading professors' academic positions, their teams collectively publish the most papers in the field of Chinese planning history. represented by Baihao Li and Tinghai Wu's groups.²² Therefore, these authors and their teams hold significant influence in the field of urban planning history in China.

The so-called the Chinese-specific version of the "Planning Heritage" definition originates from the article titled "Concepts of Planning Heritage and Corresponding Practices in the World," published in 2022 in Urban Planning International by Yale Ye

²¹ Dong, W. (2013). Formation of the Academic Committee of Planning History and Theory, China. *Planning Perspectives*, 28 (4), 643-643.

²² Tong, M., Li, B. and Li, Z., (2022). Retrospect and prospect: a review of research contributions on China's planning history (2011–2020). *Planning Perspectives*, 37(3), pp.615-627.

and Tinghai Wu from Tsinghua University, and Baihao Li from Southeast University.²³ The title itself reveals the article's intention to systematically introduce Chinese urban planning professionals to the discussions and developments regarding the concept of Planning Heritage by foreign scholars. However, the article's ambition extends beyond merely introducing the concept to Chinese scholars. In the concluding section, the authors propose a definition for Planning Heritage: "Planning Heritage embodies Planning Legacy, witnesses historical processes, and reflects universally valuable planning governance." Without a thorough examination of the context, this definition may not seem particularly problematic.

It is difficult to dismiss the possibility that the authors' affiliations play a significant role in the acceptance of their definitions of Planning Heritage by other scholars interested in this concept. Their institutional affiliations undoubtedly lend their work a certain priority and authority within the Chinese academic community, influencing the broader discourse on Planning Heritage in the country. These scholars mutually support each other and have begun promoting this specific version of the "Planning Heritage" definition through their continuous application in various papers. Zhang and He have already adopted this definition in several of their published works. placing it prominently at the beginning and in the titles of their articles. 24/25 This version of the definition has thus become a small-scale consensus among Chinese urban and regional planning history scholars. The term small-scale is used because the number of Chinese scholars actively participating in the Planning Heritage discussion is currently limited, and the published works mainly originate from these few representative scholars and their teams.

Considering this small consensus has a high potential to form the basis for a broader consensus among Chinese urban and regional planning historians, we must nonetheless question whether and to what extent this definition possesses the quality to effectively serve future research on Planning Heritage within the Chinese context.

²³ Ye, Y., Li, B., & Wu, T. (2022). Concepts of Planning Heritage and Corresponding Practices in the World [国际上规划遗产的不同概念和相应实践]. Urban Planning International [国际城市规划], 37(2), pp.82-87.

²⁴ Zhang, Y. & He, Y. (2022). The Nature, Connotation, and Characteristics of Planning Heritage [规划遗产 的本质辨析、内涵解读与特征识别]. Urban Planning Forum [城市规划学刊], 270 (04), pp. 35-42.

²⁵ Zhang, Y. & He, Y. (2023). Above Form: On the Value Form of Planning Heritage – Based on the Dialectical Perspective of "Tangible - Intangible" [形式之上:规划遗产的价值形态刍议 – 基于"有形 – 无形"的辩证视角]. City Planning Review [城市规划], (08), pp. 38-46, 65.

2.1 Only the Positive? A Philosophical Inquiry into the Selective Discussion of Planning Heritage and Planning Legacy

In the article's opening, Ye, Wu and Li, much like mathematicians employing the method of substitution to tackle integrals, preemptively redefine one challenging concept to facilitate the ensuing discussion on the definition of planning heritage. Specifically, they subtly alter the intended definition of Planning Legacy through two approaches. First, by arguing that "for a long time, the international urban planning community has actively explored the historical and theoretical development patterns of cities and their planning, summarizing the urban planning wisdom, and providing abundant planning thought heritage for human construction," the authors effectively introduce the concept of "规划智慧" in Chinese. The term 智慧 originates from the ancient Chinese text "Mozi: Shangxian Zhong," signifying intelligence and the ability to quickly and accurately recognize changing situations.²⁶ According to the 7th edition of the Modern Chinese Dictionary, widely used in mainland China and compiled by the Chinese Academy of Social Sciences' Institute of Linquistics, 智 慧 is defined as "the ability to analyze, judge, and invent."27 Moreover, Professor Chen Bo from Wuhan University's philosophy department, argues that 智慧 is a commendatory term with moral attributes.²⁸ According to the Oxford Advanced Learner's English-Chinese Dictionary, "智慧" translates to "wisdom", thereby 规划 智慧" translates to "planning wisdom" in English. By summarizing the history and development patterns of urban planning under the term "规划智慧," the authors have already positioned themselves beyond criticism.

Following this, they exploit the logical structure of the Chinese language and the nuances of Chinese-to-English translation to substitute the term Planning Legacy with a new name in Chinese. They further argue that "This intangible 'Planning legacy' (planning legacy, hereinafter referred to as '规划智慧'), focuses more on patterns and theories, and lacks sufficient attention to planning history itself."

²⁶ The term 智慧 (wisdom) originates from the ancient Chinese text "Mozi: Shangxian Zhong," specifically from the phrase "若此之使治国家,则此使不智慧者治国家也,国家之乱,既可得而知已," which translates to "If such people are used to govern the country, then those who are not 智慧 (wise) will govern the country, and the chaos of the country will be inevitable."

²⁷ Chinese Academy of Social Sciences. Language Research Institute. Dictionary Editing Office. (2002). Modern Chinese Dictionary [现代汉语词典]. Beijing: Commercial Press.

²⁸ Chen, B. (2023). 'Philosophy: Knowledge or Wisdom? [哲学:知识还是智慧]', Social Science in China [中国社会科学], (08), pp. 142–161+207.

Setting aside the question of whether their definition of Planning Legacy as intangible and focused on patterns and theories is accurate, the language logic of the sentences suggests that the authors equate 规划智慧 with Intangible Planning Legacy from the previous sentence. Furthermore, in a footnote, the authors clarify, "For convenience of narration and to avoid semantic confusion, the term 'Planning Heritage' will be used for tangible planning heritage, while 'Planning Legacy' will be referred to as '规划智慧'." Here, the authors claim that to avoid semantic confusion—since both heritage and legacy translate to "遗产" in Chinese—they translate Planning Legacy as "规划智慧," which means "Planning Wisdom" in English. In other words, the authors' provided Chinese definition of planning heritage needs to be "correctly" retranslated as: "Planning Heritage embodies Planning Wisdom, witnesses historical processes, and reflects universally valuable planning governance." Could this translation effectively explain the precise meaning of the term "Planning Heritage" to Chinese readers?

While it is true that heritage and legacy both translate to "遗产" in Chinese, this semantic challenge should not be an insurmountable barrier to understanding the distinction between planning heritage and planning legacy for Chinese planning historians who are capable of reading in English. From the perspective of Chinese word choice, translating "legacy" as "wisdom" lacks academic credibility. The authors had a range of options to translate "Planning Legacy," without being confined to one specific Chinese term. They could have translated it as "非物质规 划遗产" (the intangible planning legacy/heritage) instead. However, translating "planning legacy" as "planning wisdom" is undeniably incorrect. In both English and Chinese semantics, the term of "legacy" does not equate to "wisdom." Typically, a legacy left by predecessors or events includes not only wisdom but also unwisdom. In English linguistics, "legacy" and "heritage" have rich yet subtle distinctions that require careful analysis by linguists. International scholars have not substituted "planning legacy" with "planning wisdom" either. While it is not entirely clear what constraints or motives led the authors to propose this translation, using such a term inherently excludes or filters out the negative aspects—the Planning Disaster proposed by Hall—in the study of China's Planning Legacy. This warrants serious refutation.

After completing the near-sleight-of-hand translation of Planning Legacy into Chinese, the authors further define Planning Legacy as a subset of Planning Heritage. This move might further diminish the frequency and academic visibility of the Planning Legacy concept within Chinese discourse. At the beginning of their article, the authors make the following statements:

- 1 Compared to Planning Wisdom (Planning Legacy), Planning Heritage emphasizes tangible entities.
- 2 Planning Heritage contains Planning Wisdom (Planning Legacy).
- 3 Unlike the term Planning Wisdom (Planning Legacy), which pertains to specialized knowledge within the planning discipline, Planning Heritage holds more universal value.

The aforementioned three definitions all require reevaluation and scrutiny!

First, an examination of existing English literature reveals that both Planning Heritage and Planning Legacy refer to tangible and intangible cultural heritage. For instance, Gordon Cherry, a renowned British planning historian and one of the key founders of the International Planning History Society, described utopian, ideal communities as part of the British Planning Heritage in his 1991 paper.²⁹ As early as in his 1970 publication, Town Planning in the Social Context, Cherry discussed Robert Owen's reconstruction practices at New Lanark's cotton mills and his works, New View of Society and Report to the County of Lanark, as integral components of these utopian communities. 30 Therefore, there is no assertion that planning heritage inherently focuses on tangible entities. Moreover, in Rassem Khamaisi's 1997 paper, planning legacy referred to the British Mandate's physical planning legacy in Palestine, which formed the basis of the Israeli Planning System.³¹ Similarly, Robert Freestone described in Urban Nation, "... Charles Read's most important and complete physical legacy in Australia...".32 These examples indicate that Planning Legacy does not exclusively pertain to intangible aspects. Therefore, both Planning Heritage and Planning Legacy encompass tangible and intangible heritage.

While planning historians have not explicitly differentiated between the Planning Heritage and Planning Legacy, I contend that the semantic differences between "Heritage" and "Legacy" can effectively highlight the subtle yet rich distinctions between the two. Using UNESCO's definition of World Heritage— "Heritage is our legacy from the past, what we live with, and what we pass on to future generations"—

²⁹ Cherry, G. E. (1991) 'Planning history: Recent developments in Britain', *Planning Perspectives*, 6(1), pp. 33–45. doi: 10.1080/02665439108725717.

³⁰ Cherry, G. E. (1970) 'The Social Tradition in Town Planning', *Town planning in its social context*, pp. 9-41. London, Leonard Hill Books.

³¹ Khamaisi, R. (1997) 'Israeli use of the British Mandate planning legacy as a tool for the control of Palestinians in the West Bank', *Planning Perspectives*, 12(3), pp. 321–340. doi: 10.1080/026654397364672.

³² Freestone, R. (2010). Suburban Dreams. In: *Urban Nation: Australia's Planning Heritage*. Csiro Publishing, pp. 179.

as an example, 33 Heritage emphasizes what comes to you from the past. It typically refers to customs, traditions, or properties handed down through generations within a culture or community, encompassing both tangible assets such as buildings. artworks, and landscapes, and intangible assets such as languages, customs, and cultural practices. Accordingly, Planning Heritage can be defined as the extant structures, neighborhoods, cities, and regions that exist due to human planning activities and practices, as well as images representing these planning heritage sites. It also includes the language that documents these planning heritage practices.

While Planning Heritage focuses on the tangible and intangible heritage itself, Planning Legacy not only addresses these tangible and intangible assets but also the events that drive them. Legacy emphasizes things that are left behind by events or people's actions. Therefore, Planning Legacy primarily refers to the tangible and intangible heritage left behind by planning practices driven by significant events, such as specific policies or legislation, academic movements, or the influence of key figures. Thus, the distinction between Planning Heritage and Planning Legacy lies in their different perspectives on the same set of tangible and intangible assets closely related to planning activities.

Secondly, Planning Heritage does not encompass the concept of Planning Legacy. Though the authors' statements effectively establish a hierarchy where Planning Legacy is subsumed under Planning Heritage, they are two distinct academic concepts operating on the same level but used for different research perspectives. Therefore, we must reject the authors' attempt to define Planning Legacy as a subset of Planning Heritage, as this could potentially limit the scope and depth of future academic discussions about Planning Legacy in the Chinese context. The reasoning is straightforward: if the concept of Planning Heritage already includes Planning Legacy and offers a more comprehensive perspective, why would subsequent scholars bother to use Planning Legacy? Thus, the authors' approach effectively weakens Planning Legacy as a separate research perspective from Planning Heritage at the conceptual level. This redefinition not only alters the conceptual landscape but also restricts the exploration of negative planning legacies—those aspects that may involve mistakes or failures in planning history.

Thirdly, while the authors argue that Planning Heritage, unlike Planning Legacy which belongs to broader planning expertise, and therefore holds more universal value, they are correct but also deliberately overlook the fact that this relative

³³ UNESCO (n.d.). World Heritage. Available at: https://www.unesco.org/en/worldheritage#:~:text=Heritage%20is%20our%20legacy%20from,sources%20of%20life%20and%20 inspiration [Accessed 15 June 2024].

universality also applies to political and social relations. Planning—whether urban planning, industrial planning, or any other form—is fundamentally a public policy of central and local governments, especially in China. Therefore, when we talk about Planning Legacy, based on the previous analysis, we are discussing the tangible and intangible heritage left by a particular planning decision or policy initiated by the central or local government. This implies that it is challenging to avoid discussing the policymaking process and the government, political leaders, senior urban planning officials, and relevant experts who promote and implement these policies. Given the "one party state" form of the Chinese government and the intricacies of social relations within Chinese culture, discussing Planning Legacy is undoubtedly highly politically and socially sensitive.

From the perspective of Planning Heritage, it is undoubtedly possible to effectively avoid touching upon the interests of the Chinese government, urban planning officials, and the influential academic veterans who previously helped formulate these planning policies. According to UNESCO's definition, "Cultural heritage includes artefacts, monuments, a group of buildings and sites, museums that have a diversity of values including symbolic, historic, artistic, aesthetic, ethnological or anthropological, scientific and social significance,"34 Planning Heritage does not avoid discussing relevant policies, individuals, and events. It also addresses historic and social values, albeit to a lesser extent than Planning Legacy. By limiting the universality of Planning Heritage compared to Planning Legacy to academic content, the authors effectively sidestep discussions about planning actions as government policies. Furthermore, arguing that Planning Heritage is more universal than Planning Legacy essentially encourages scholars to prefer using Planning Heritage.

Translating Planning Legacy as Planning Wisdom, treating Planning Legacy as a subset of Planning Heritage, and limiting the universality of Planning Heritage compared to Planning Legacy solely within the planning discipline are all efforts by the authors to shape the future direction of discussions among Chinese planning history scholars. This involves promoting a narrative of Planning Legacy that only acknowledges Planning Wisdom while ignoring Planning Disaster; encouraging the use of Planning Heritage while neglecting the research perspective of Planning Legacy; and focusing on the academic aspects of Planning Heritage while overlooking the policy and social implications inherent in discussions of Planning Legacy. It is hard to deny that the authors are deliberately avoiding discussions about the potential existence of Planning Disaster in China, the government policies that lead to such outcomes, the policymakers themselves, and the role of senior figures in the

³⁴ UNESCO Institute for Statistics (2009). Cultural heritage. UNESCO Framework for Cultural Statistics. Available at: https://uis.unesco.org/en/glossary-term/cultural-heritage [Accessed 15 June 2024].

planning academia in these projects. By doing so, the authors aim to prevent Chinese scholars from engaging with these critical issues in the future. Therefore, their definition of Planning Heritage cannot be considered an international standard but should be recognized as a uniquely Chinese version of Planning Heritage—one that exclusively highlights positive planning legacies.

However, we, as researchers of China's planning history, are perhaps the least justified in ignoring the study of cases representing planning failures within our planning heritage/legacy. This is deeply rooted in the traditions and cultural legacy left to us by great historians of Chinese history. For instance, around 700 AD, the Tang Dynasty historian Wu Jing stated in his political history book "Zhenguan Zhengyao" (Essentials of Government of the Zhenguan Reign): "Using history as a mirror, one can understand the rise and fall."35 This idea was further developed by Ouyang Xiu and Song Qi in the "New Book of Tang, Biography of Wei Zheng": "Using bronze as a mirror, one can correct their attire; using history as a mirror, one can understand the rise and fall; using people as a mirror, one can discern right from wrong."36 In 1084 AD, during the Northern Song Dynasty, Sima Guang echoed this sentiment in his representative classical chronicle, "Comprehensive Mirror to Aid in Government" (Zizhi Tongjian), stating: "By reflecting on the rise and fall of previous eras, one can examine the successes and failures of the present."37 These statements convey a similar message: learning from history requires studying not only its triumphs but also its downfalls and mistakes, to help us better assess and judge contemporary practices. It is clear that ancient Chinese thinkers and historians emphasized the need to study history with a dialectical perspective.

Simultaneously, the progress of urban planning and construction in China, especially the rapid urbanization over the past 30 years, despite significantly improving the quality of life for many people, has also seen numerous issues that equally call for the attention of planning historians. For instance, the Wenchuan Earthquake on May 12, 2008, exposed a large number of facilities, including schools and housing, that were built without adequate seismic standards. The widespread use of prefabricated panels in these structures led to significant casualties.³⁸ These facilities can be considered as part of the planning legacy that followed

³⁵ Wu, J. (2019). Zhenguan Zhengyao [贞观政要] (1st ed.). Beijing: National Library of China Publishing House

³⁶ Ouyang, X. & Song, Q. (1975). New Book of Tang, Biography of Wei Zheng [新唐书 魏征传], Beijing: Zhonghua Book Company. Edited by Tang Ge.

³⁷ Sima, G. (1975). Zizhi Tongjian [资治通鉴], Beijing: Beijing United Publisher.

³⁸ Xu, Y. (2008). Thoughts triggered by earthquakes regarding precast prestressed hollow core slabs [由地震引发对预制预应力圆孔板的思考]. *Building Structure [建筑结构]*, 38(7), pp. 7-9.

the trend of using prefabricated panels, with the main advantages being rapid construction and relatively low cost. Moreover, the development model dominated by industry and mining in recent modern times has caused severe damage to the ecological environment of the Wenchuan area, which is one of the significant factors exacerbating earthquake disasters. Should we regard these planning legacies as "Planning Wisdom"? Effectively and bravely confronting these negative urban planning practices, and recognizing them as integral parts of our planning heritage, can provide a valuable resource. They can serve as constant reminders for future urban and regional planners to avoid repeating these mistakes. Both cultural tradition and practical necessity demand that Chinese planning historians pay equal attention to both the wisdom and the disaster found within our planning legacy and heritage.

It is impossible to exclude China's political history and realities, particularly the continuous political movements from the late 1950s to the late 1970s under the Chinese Communist Party as the sole ruling party, as factors influencing these Chinese planning historians to deliberately weaken the perspective of Planning Legacy and avoid discussing potential policy failures. Their papers indirectly support this point. For instance, in 2010, Baihao Li and Han Wu published an excellent paper titled "Nationalist trends in the history of modern Chinese urban planning" in the Urban Planning Forum. ⁴⁰ This paper discusses the influence of nationalism on Chinese urban planning idea and practice between 1840 and 1949. They explored how the emphasis on national sovereignty and independence, driven by the Self-Strengthening and Reform movements around 1909, impacted urban construction planning. They also analyzed how, during the 1930s Japanese invasion, the use of Chinese nationalist sentiment to promote the political district planning of the pseudo "Manchukuo" capital, Xinjing, was a case of "pseudo-nationalism." This paper is an excellent exploration of the wisdom and disaster within the Planning Heritage of nationalism.

However, it is noteworthy that this intriguing study concludes its timeline in 1949, coinciding with the establishment of the People's Republic of China by the Communist Party. If the paper's theme was confined to modern times, the authors would not need to discuss post-1949 events. However, neither they nor other scholars have extended this theme further. Does this imply that the influence of nationalism on urban planning practices ceased to exist in China after 1949? Not coincidentally, the first author of this paper is also one of the scholars involved in defining the Chinese-specific version of the "Planning Heritage". This suggests that avoiding discussions

³⁹ Li, H. & Ma, K. (2008). Historical Geography of Towns in Wenchuan Area [汶川地区城镇发展历史地理考]. City Planning Review [城市规划], (11), pp. 78-86.

⁴⁰ Li, B. & Wu, H. (2010). Nationalist trends in the history of modern Chinese urban planning [中国近代城市规划史上的民族主义思潮]. *Urban Planning Forum* [城市规划学刊], (004), pp. 99-103.

of Planning Legacy related to failures of Communist Party policies has developed as somewhat of a tradition. The introduction of a Chinese-specific version of the "Planning Heritage" can be seen as a way to institutionalize previously discussed content while continuing to avoid addressing policy-related failures post-1949.

Interestingly, the Chinese Communist Party has its roots in Marxism, which promotes materialism and dialectics. These philosophies inherently encourage thus a dialectical perspective on historical development. The example of Emperor Taizong of Tang using history as a mirror has long been included in Chinese primary education textbooks for decades. Additionally, Chinese President Xi Jinping emphasized the importance of "taking history as a mirror" and the concept of "observing the present with reference to the past; without the past, there can be no present" at the Sixth Plenary Session of the 19th Central Committee of the Communist Party of China on November 8, 2021. ⁴¹ This indicates that, institutionally and ideologically, the Chinese government still advocates a dialectical view of history. Therefore, Chinese urban planning historians should resolutely reject a truncated and one-sided version of the Chinese "Planning Heritage" and call for equal attention to both Planning Heritage and Planning Legacy perspectives. This includes not only focusing on Planning Wisdom but also addressing Planning Disaster and considering the period both before and after 1949

2.2 Understanding Planning Heritage as "Planning Heritage"? Theoretical Challenge to Conventional Interpretation

Although Ye, Wu & Li were not the first scholars to cite Ray Taylor's 1975 book "Britain's Planning Heritage" as the origin of the Planning Heritage concept, this approach may limit further discussion on defining Planning Heritage. According to the references in Ye's article, Nakajima Nato, a professor of urban planning history at the University of Tokyo, mentioned Taylor's book as the earliest source of the term "Planning Heritage" in a 2015 report introducing the practices of Australian and American urban planning societies and scholars in developing their respective

⁴¹ Xi, J. (2022). Learn from history to create the future: Work hard and forge ahead with courage [以史为鉴, 开创未来 埋头苦干, 勇毅前行]. *Qiushi* [求是], 1(6).

national planning heritage lists. 42 This might be one reason Ye, Wu & Li attributed the origin of the term to Taylor's book. However, tracing back to the references in Nato's report, Robert Freestone, Professor of Planning and Urban Development at the University of New South Wales, discussed the contributions of this book in his various papers and books. Freestone did not define it as the first book to propose the concept of Planning Heritage, but rather described it as an outstanding exception of the rare national surveys⁴³ and "a vaguely comparable international survey."⁴⁴ It is important to note that there has not yet been an assertion in any international peerreviewed paper that this concept originates from Taylor's book.

Taylor's book is undoubtedly an important publication involving the concept of Planning Heritage, but it should not be regarded as the earliest source to propose this concept. The aim of this book was to provide foreign and local visitors interested in the UK's social, economic, political, and natural history with engaging examples that showcase the conscious development of towns and villages to control and plan their social and natural environments. 45 In terms of content, the book divides the UK into 15 regions, with each region's planning and construction history written by different urban planners. It presents each site included in the list in an entry format. These selected sites were built based on a specific planning scheme or the implementation of a planning act. They are not only individual buildings but also large-scale projects such as Portsmouth, North Harbour reclamation, and Cookstown. Essentially, this book serves as a tourism guidebook, a practical publication rather than an academic work that proposes and explores the concept of Planning Heritage.

The approach of creating heritage lists to protect or to raise awareness for the protection of historical relics, as applied in Taylor's book, was, however, already in place for a long time. The National Heritage List for England, established in 1882, already used such an approach. Moreover, the consecutive Town and Country Planning Acts of 1944 and 1947 established the listing of buildings of special

⁴² Nakashima, N., Tsutsumi, T., Sano, H., Hatsuda, K., Nishinari, N. & Nakano, S. (2015), Recent efforts in selecting "urban planning heritage" in the United States and Australia [米国および豪州における 「都市計画 遺産」選定に関する近年の取り組み]. Journal of Architectural Institute of Japan Technical Reports [日本建築 学会技術報告集], 21(48), pp. 789-794.

⁴³ Freestone, R., Marsden, S. and Garnaut, C., (2008). A methodology for assessing the heritage of planned urban environments: an Australian study of national heritage values. International Journal of Heritage Studies, 14(2), pp.156-175.

⁴⁴ Freestone, R. (2010). Suburban Dreams. In: *Urban Nation: Australia's Planning Heritage*. Csiro Publishing,

⁴⁵ Taylor, R., Cox, M. and Dickins, I., (1975). Britain's planning heritage. London: Croom Helm London. ISBN: 0-85664-92-8

architectural or historic significance. The Planning Act of 1968 explicitly introduced the concept of a listed building, ⁴⁶ thereby formalising the approach of creating heritage lists. Therefore, while Taylor's book may be the initial publication to have the word "Planning Heritage" in its title, it should not be regarded as the definitive work that officially introduced the notion.

It is worth mentioning that the book "Britain's Planning Heritage" not only includes positive examples of the UK's planning heritage, such as Castle Acre Village. An example vividly illustrates the continuity of settlement characteristic of English villages within defensive earthworks established shortly after the Roman Conquest. It also features negative examples, such as Cookstown, a commercial center grandly designed by William Steward in 1750 to rival Dublin. However, the town did not achieve this planning goal, and the 18th-century road network became a "rigid" linear structure that hindered local development. Additionally, the Derbyshire County Council's efforts to clear the "unwanted heritage" of the South Wingfield coal mine are also documented. Unfortunately, Taylor's inclusion of cases with both positive and negative impacts in the planning heritage list does not seem to have significantly influenced Ye, Wu and Li's approach to defining the Planning Heritage in terms of both method and content.

Attributing the origin of the term "Planning Heritage" to Taylor's book implies that the authors have accepted "Planning Heritage" as a fixed term. However, this could potentially overlook the historical development process in which the terms "planning" and "heritage" evolved from separate concepts into a combined term. The articles in the reference list all feature "Planning Heritage" as a fixed term, which supports the idea that they conducted their literature review using "Planning Heritage" as a keyword. However, the term "Planning Heritage" was not inherently present. It emerged as urban theorists, planners and planning historians, through their practices and discussions in the 20th century, brought these two words together. In the book "Urban Planning in a Changing World," edited by Robert Freestone in 2000, David Hamer, former Professor of History at Victoria University, pointed out that the integration of the terms "planning" and "heritage" was gradually promoted by sympathetic and influential urban planners and theorists such as Patrick Geddes and Camillo Sitte in the early 20th century.⁴⁷ This indicates that the integration of urban planning and heritage conservation was not straightforward. The challenges encountered during this process are fundamental to the initial definition of Planning Heritage. Therefore, understanding the development process

⁴⁶ UK Parliament, (1968), Town and Country Planning Bill 1968, 31 January 1968. London

⁴⁷ Hamer, D., (2000). Planning and heritage: towards integration. In *Urban planning in a changing world* (pp. 194-211). Routledge.

of the term "Planning Heritage" is crucial for accurately defining its content and usage contexts.

Urban planning theorists in the UK and continental Europe, dissatisfied with the urban forms shaped by 19th-century industrial development, were among the first to call for planning to address heritage conservation and take on related responsibilities. Camillo Sitte, an Austrian urban planning theorist, was undoubtedly a representative of this movement. His dislike to straight lines in Vienna's urban planning led him to advocate for the preservation of the winding road networks of the 18th century. ⁴⁸ He directed a similar critical perspective at mid-19th century French urban planner Georges-Eugène Haussmann. In carrying out Napoleon III's urban planning directives for Paris, Haussmann almost ruthlessly cleared traditional streets surrounding historical monuments. Sitte opposed this clear-cut planning approach. He strongly advocated for a method of heritage conservation that preserves buildings within their original environments. This argument clearly conveys an approach to the built heritage conservation from an urban planning scale. It emphasizes that urban planning should not only focus on protecting individual buildings while allowing their surrounding built environments to change. Sitte's argument could be a crucial definition of planning heritage: considering heritage conservation from the scale of urban planning.

This call for incorporating heritage conservation into urban planning during the industrial era also appears in the works of Scottish urban planner Patrick Geddes. Driven by dissatisfaction with the planning legacy of Victorian industrial cities, particularly the slums, he advocated for the preservation of the 18th-century heritage of Scottish cities, such as the urban spatial form and architectural design of Edinburgh. Alongside Sitte, they expanded the use of the words "planning" and "heritage" to advocate for planning as a tool for heritage conservation. Although there was still some textual distance between the two terms at this time, the theoretical distance between them had undoubtedly narrowed significantly.

It is particularly noteworthy that both Sitte and Geddes, when using the terms "planning" and "heritage" together in academic discussions, established the philosophical logic for their usage – a bold critical perspective. Both were motivated by dissatisfaction with the then urban planning practices in various cities, which prompted them to propose their own alternative ideas. It was through this bold

⁴⁸ Sitte, C., (1979). The art of building cities: city building according to its artistic fundamentals. Ravenio Books.

⁴⁹ Geddes, P., (1915). Cities in evolution: an introduction to the town planning movement and to the study of civics. London, Williams.

and persistent debate in the free expression of ideas that the terms "planning" and "heritage," which had been practically antagonistic in practice, began to form a dynamic connection. This also indirectly proves that Chinese scholars, who consider "planning heritage" as a fixed phrase, fail to understand the fundamental definition of planning heritage – the courage to criticize through academic inquiry.

Dissatisfaction with the urban forms shaped by 19th-century Victorian industrial development was not only addressed by advocating for the preservation of earlier heritage, such as that from the 18th century. Another powerful voice emerged, calling for the complete destruction of the built environment of industrial cities. Ebenezer Howard, a British journalist and planning theorist, proposed the concept of the "garden city." This concept is one of the most representative among these voices. Motivated by his strong dislike for the crowded and unsanitary slums constructed in the centers of Victorian cities, Howard's proposal was almost revolutionary: the creation of a city form where human communities are surrounded by fields or gardens. 50 Although his vision of improving the living conditions of the working class was widely welcomed,⁵¹ this concept might be negative for preserving built heritage from the 19th century. Numerous examples of this concept's implementation can be found not only in garden cities like Letchworth and Welwyn in the UK but also in the USA, Australia, Germany, and France. 52/53 While it did not advance, and arguably even distanced, the connection between planning and heritage, these garden city practices have now become part of the planning legacy that represents this idea.

The two World Wars of the early to mid-20th century undoubtedly marked the "brown decades" for Heritage Conservation. This was not only due to the destruction of historic buildings and neighborhoods in European cities by warfare but also because the dictators driving these wars sought to use urban planning to alter the urban form and landscape of historical city centers, transforming them into tools serving their political and ideological agendas.⁵⁴ One example is Mussolini, who selectively preserved ruins from the Roman Empire that showcased his fascist political ideals.

⁵⁰ Howard, E., (1902). Garden city of tomorrow. London. Passim.

⁵¹ Fishman, R., (1982). Urban Utopias in the Twentieth Century: Ebenezer Howard, Frank Lloyd Wright, Le Corbusier. MIT press.

⁵² Hall, P., (1988). The City in the Garden, in *Cities of tomorrow: An intellectual history of urban planning and design since 1880.* John Wiley & Sons. (Fourth Edition in 2014)

⁵³ Ward, S., (2005). The garden city: Past, present and future. Routledge.

⁵⁴ Cavalcanti, M.D.B.U., (1997). Urban reconstruction and autocratic regimes: Ceausescu's Bucharest in its historic context. *Planning Perspectives*, 12(1), pp.71-109.

while demolishing medieval and Baroque structures that contradicted his ideology.⁵⁵ Another example is the Third Reich in Germany, where architecture was used as a political weapon to demonstrate the authority, power, and greatness of the new regime. Urban planning and architecture design became decisives tool of state propaganda. Hitler personally planned and constructed key imperial buildings, especially as part of Berlin's reconstruction, favoring monumental classicism to reflect the magnificence of the Third Reich and the rebirth of Aryan glory and strength.^{56/57} Similarly, Soviet leader Stalin, in name of rejecting capitalist heritage for socialism, implemented a massive demolition policy during the reconstruction of central Moscow.⁵⁸ While Mussolini used urban planning to selectively preserve historical heritage that aligned with his political aims, both Hitler and Stalin deliberately severed ties with history or certain ideologies by constructing almost entirely new urban forms and landmark buildings. In summary, these practices further expanded the definition of Planning Heritage to include the use of planning tools to leverage built heritage for political purposes.

The World War II led to the extensive destruction of built heritage, yet this tragedy did not effectively motivate British planners to emphasize the preservation of built heritage in their post-war reconstruction plans. They demonstrated a mindset aligned with that of the modernist master Le Corbusier, a ruthless approach reminiscent of Haussmann's demolition of the surroundings of monumental buildings in Paris. They even welcomed the bombing and destruction of areas around monumental buildings or landmarks, viewing it as a golden opportunity to employ a "clean sweep" planning approach to address the negative urban legacy born of Victorian industrialization, most notably the unsanitary slums.⁵⁹ The war provided these urban planners with the opportunity to implement their ambitions, bringing a planned environment that was logical, efficient, and beautiful to the land. Sir Patrick Abercrombie, a renowned British urban planner and professor at the University of London, proposed the Great London Plan in 1944, also known as the Abercrombie Plan, which defined the metropolis of London as "inchoate," "obsolete," and

⁵⁵ Cederna, A., (2006). Mussolini urbanista: lo sventramento di Roma negli anni del consenso. Venezia: Corte del Fontego. In Italian.

⁵⁶ Taylor, R.R., (1974). The word in stone: The role of architecture in the national socialist ideology. University of California Press.

⁵⁷ Scobie, A., (1990). Hitler's state architecture: the impact of classical antiquity (Vol. 45). Pennsylvania State University Press.

⁵⁸ Kopp, A., (1970). Town and revolution: Soviet architecture and city planning, 1917-1935. London: Thames and Hudson.

⁵⁹ Ravetz, A., (1980). Remaking cities: Contradictions of the recent urban environment. London: Croom Helm

"unsuitable." The Abercrombie Plan offers a nearly exhaustive new blueprint for London. Thomas Sharp, appointed as the reconstruction planner for several historic cities such as Exeter, Durham, Salisbury, and Oxford, was undoubtedly another representative. He argued that "The watchword for the future should be – not restoration, but renewal." Under such thinking, it is not surprising that the reconstruction plans proposed by the British urban planners paid little attention to protecting the surroundings of buildings listed in the National Heritage List for England since 1882. Heritage conservation remained a niche preference still. It can even be said that the clean-sweep style of planning at this moment severed the already established link between urban planning and heritage conservation.

The post-World War II economic downturn in the UK and various European countries played a role in preventing the concepts of urban and regional planning and heritage conservation from drifting further apart. Even cities in the UK that were spared from wartime destruction sought to demolish unlisted heritage and their surrounding environments in new plans to keep pace with cities undergoing reconstruction. 62 However, many planned projects did not come to fruition, which indirectly protected the built heritage that was originally scheduled for demolition. Furthermore, for some projects that had already begun, local governments required planners to simplify their original plans, turning them into relatively economical alternatives. Such actions usually go against the planners' original intentions. An example of this occurred in Milan, Italy, with the Quartiere Dell'Ottiva Triennale (QT8), a new residential area project conceived during the 8th Edition of the Triennale di Milano. Milanese Urban Planner Piero Bottoni conceived three different versions of the plan from January 1947 to 1953. All three versions proposed a complete civic center serving the entire community at the foot of Parco Monte Stella. However, due to a lack of funds, the final implemented plan excluded the civic center. 63 Its absence continues to drive professors at the Politecnico di Milano's urban design studios to research ways to complement it.⁶⁴ At this time, economic constraints became a crucial factor preventing the two concepts of planning and heritage conservation from diverging further.

⁶⁰ Abercrombie, P., (1944). Greater London Plan. His Majesty's Stationary Office.

⁶¹ Sharp, T. and Henrion, F.H.K., (1946). Exeter Phoenix: A plan for rebuilding. London: Architectural Press, p.88.

⁶² Cherry, G. E., (1988). Cities and plans: the shaping of urban Britain in the nineteenth and twentieth centuries. London: Edward Arnold.

⁶³ Bottoni, P., (1954). Il quartiere sperimentale della triennale di Milano: QT 8. P.5. In Italian.

⁶⁴ Tonon, G., (2005). QT8: urbanistica e architettura per una nuova civiltà dell'abitare. In *Le case nella Triennale. Dal parco al QT8* (pp. 34-103). Electa. In Italian.

Simultaneously, the government's need to stimulate economic development also promoted the convergence of urban and regional planning with heritage conservation. Heritage tourism became one of the means for the government to drive economic improvement. From 1960s, the historical buildings and districts, originally underestimated in urban planning, thus became favorites among some planners. They began to center their plans around these heritage sites, incorporating various facilities aimed at boosting tourism revenue. Taylor's book, Britain's Planning Heritage, could be a practical product born in response to this trend. Tourismoriented planning became a driving force compelling urban planners to protect built heritage.

In the late 1950s and early 1960s, the active involvement of sociologists from the UK and the US played a significant role in changing the way urban planners viewed slums, which enriched the definitions of planning heritage and planning legacy. The post-war construction of residential areas in the UK aimed to address the shortage of 475,000 homes caused by World War II and eliminate slums that, as evidenced in The Census of 1951, lacked sufficient amenities.⁶⁶ It can be said that during this period, residential planning schemes represented a significant aspect of post-war planned development in the UK. In 1957, Young and Willmott, two British sociologists, questioned these planning and construction efforts. They contended that despite urban planners provided corresponding public and recreational facilities in the new communities, and significantly improved each family's sanitary conditions and living space, the community spirit of the displaced neighborhoods could not be reestablished in these new areas. 67 Given that community spirit constitutes intangible cultural heritage, the two sociologists called for urban renewal plans to consider reasonable ways to protect intangible cultural heritage of the planning legacy.

In 1960, Jane Jacobs, an American journalist who was married to an architect, continued to expand the contexts in which planning and heritage, as well as planning and legacy, were used after her critique of urban planning practices that eliminated urban diversity which received international recognition. In discussing the case of New York's Greenwich Village, she criticized the American planners' strategy of

⁶⁵ Hamer, D.A., (1998). *History in urban places: The historic districts of the United States*. The Ohio State University Press.

⁶⁶ Cherry, G. E., (1976). Aspects of urban renewal. In Hancock, T. (ed.), *Growth and Change in the Future City Region*. London: Leonard Hill.

⁶⁷ Young, M. & Willmott, P. (1957). *Family and Kinship in East London*. London: Routledge and Kegan Paul. [1962 edition]. Harmondsworth: Pelican.

eliminating slums as an effort "to impose rational patterns of simplicity." ⁶⁸ Similarly, Columbia University sociology professor Herbert Gans, in his book Urban Village, echoed Jacobs' perspectives through the example of the Italian-American working class in Boston's West End. 69 Both scholars seriously challenged the renewal programs of the 1950s and 1960s in the United States, which defined downtown slums as areas imposed upon the working class by external forces, thereby providing a rationale for their undemocratic destruction. These renewal programs' definition of slums aligns with the perspective of planning legacy. They saw slums as the legacy of capitalist urbanization and industrialization, which is a structure imposed on the working class. Jacobs and Gans skillfully pointed out that this was a deliberate definition by the renewal programs to create a pretext for undemocratic urban renewal. They essentially countered by defining these programs' use of slums as negative planning legacy as a new negative planning legacy, which they deemed to be a hypocritical, undemocratic urban renewal planning heritage. At this moment, we can understand Planning Heritage as preventing using planning as a means to eliminate the heritage left behind by the previous planning legacy.

Moreover, the resistance of resident groups in preventing the destruction of historic city centers by modernist urban planning schemes should not be overlooked. One notable case is the opposition by residents around Covent Garden in London to the Abercrombie Plan's proposals for the area. After decades of struggle, an active resident group composed of influential individuals such as writers, publishers, and actors forced the Conservative-supported Greater London Council, established in 1968, to abandon the plan in 1973.70/71/72 Consequently, Covent Garden was preserved. Similar resistance occurred in Australia. From the late 1960s to the mid-1970s, Sydney's city center and inner-city areas experienced significant gentrification due to an influx of foreign real estate capital. This led to substantial physical changes in the city's social geography: the widespread loss of Edwardian and Victorian buildings in the Central Business District (CBD), negative reactions to large-scale redevelopment and highway construction plans, and concerns over

⁶⁸ Jacobs, J., (1961). *The death and life of great American cities.* 1961. New York: Vintage, 321, pp.9783839413272-099.

⁶⁹ Gans, H.J., (1962). Urban villagers. New York: The Free Press.

⁷⁰ Edwards, B. and Gilbert, D. (2008) 'Piazzadilly!': the re-imagining of Piccadilly Circus (1957–72), *Planning Perspectives*, 23(4), pp. 455–478.

⁷¹ Klemek, C., (2011). The transatlantic collapse of urban renewal: Postwar urbanism from New York to Berlin. University of Chicago Press.

⁷² Jenkins, S. (2023). The battle for the soul of London: The capital survived the Blitz only to be attacked by zealous city planners – but its citizens fought back. *The New Statesman*, 28 May.

the authoritarian characteristic of the planning system. 73 These factors stimulated protest movements by local resident groups, particularly work unions. The urban center planning supporting the gentrification movement posed a threat to heritage conservation, which provoked public resistance, calling for urban planning practice to take into account heritage conservation from a grassroots perspective.

The debates from sociologists and grassroots resistance drove the governments of the UK, the USA, and Australia to institutionalize the responsibility of urban planning to include heritage conservation through legislation. Specifically, the UK established the registration of buildings of special architectural or historic interest in the Town and Country Planning Acts of 1944 and 1947. The Planning Act of 1968 explicitly introduced the concept of a listed building. The US government had earlier enacted the American Antiquities Act of 1906, the Historic Sites Act of 1935, which set criteria for National Historical Landmarks, and the National Historic Preservation Act of 1966. Australia's legislative efforts began later, starting with the 1955 legislation and culminating in the Australian Heritage Commission Act of 1975. Among these three countries, the UK undoubtedly went the furthest with its legislative measures. It not only established the National Heritage List for England but also incorporated heritage preservation into planning laws.

Furthermore, the UK government actively promoted the convergence of the concepts of planning and heritage conservation in practice. The Ministry of Housing and Local Government initiated a new survey, known as "resurvey," to address the intensive urban redevelopment of the 1960s. This naming convention was intended to differentiate it from the "salvage lists" survey they led in 1947, which determined whether a building should be protected from demolition after bomb damage. The resurvey initially focused on 39 historic cities and towns, whose centers were particularly threatened by post-war renewal plans. Starting in December 1970, these surveys were published in spiral-bound volumes with green covers, hence the name "the Greenbacks." ⁷⁴ The Greenbacks revised the selection criteria and significantly strengthened the valuable concept of group value of themes. These initiatives represented the government's legislative efforts to forcefully bring planning and heritage conservation together, preventing the two concepts from drifting further apart.

⁷³ Daly, M.T., (1982). Sydney Boom, Sydney Bust: the city and its property market, 1850-1981. Allen & Unwin, Sydney.

⁷⁴ Mays, D., (2017). Listing's 70th Anniversary: From the Modern Domesday to digital enrichment, from the humble to the splendid, through Greenbacks and Bluebacks, listing brings beauty and culture to social and economic life. Context 152, 11, pp.6-7.

In the 1970s, planning historians with a natural affinity for heritage conservation assumed the role previously from urban planning theorists and sociologists, becoming the new driving force in merging the concepts of planning and heritage. Active figures such as Gorden Cherry and Anthony Sutcliffe, along with other urban and regional planning historians, expanded the significance of the terms "planning" and "heritage" within their field. Their influence was reflected not only in the surge of research and publications on urban and regional planning history during the 1970s but also in the establishment of the Planning History Group (PHG) in 1974.⁷⁵ This organization initially functioned as a platform for British scholars interested in the history of urban planning, and later served as a source of inspiration for the establishment of similar associations in the USA, Germany, and Japan. ⁷⁶ In 1993, the PHG evolved into the International Planning History Society (IPHS), a global platform for scholars with similar interest, preceding the Society for American City and Regional Planning History (SACRPH).⁷⁷ The formation of these associations provided institutionalized platforms for international scholars of urban planning history. Additionally, the founding of the journal Planning Perspectives in 1983 under the auspices of the former PHG, later IPHS, offered a forum for scholars researching urbanization and environment, regional planning, architecture and urbanism, architectural forms and landscapes, and places and people from a historical perspective. Many of the references cited in this chapter are from this journal. The research associations and journals promoted by planning historians laid the foundational groundwork for the further development of the concepts of planning and heritage.

It can be said that the rise of planning history field in the 1970s and the discussions about the integration of urban and regional planning with heritage conservation were mutually reinforcing. Nancy H. Kwak, associate professor of history and urban studies and planning at the University of California, San Diego, argues that planning history should be understood as a field rather than a discipline with self-conscious and entrenched characteristics, primarily because of its interdisciplinary nature. Rehard the sample of someone adept at using interdisciplinary tools. He graduated from the geography program at Queen Mary University of London and served in the Newcastle upon Tyne City Planning Department before becoming

⁷⁵ Cherry, G. E. (1981). Chairman's Note. Planning History Bulletin, Vol. 3, No. 2, 1-2.

⁷⁶ Cherry, G. E. (1984). Ten Years of the Planning History Group, *Planning History Bulletin*, Vol. 6, No. 2.

⁷⁷ Ward, S.V., (2017). The Pioneers, Institutions, and Vehicles of Planning History. In Hein, C. (ed.), *The Routledge Handbook of Planning History* (pp. 13-24). Routledge.

⁷⁸ Kwak, N.H., (2017). Interdisciplinarity in planning history. In Hein, C. (ed.), *The Routledge Handbook of Planning History* (pp. 25-34). Routledge.

a professor of urban and regional planning at the University of Birmingham.⁷⁹ His educational and professional background well-equipped him to adopt multidisciplinary research methods to explore the relationship between British planning and heritage conservation concepts, achieving remarkable results.⁸⁰ Benefiting from its inherently interdisciplinary nature, planning history research can draw on various theoretical frameworks and models from geography, urban planning, sociology, anthropology, and political economy, to explore how urban and regional planning integrates heritage conservation. Moreover, Freestone vividly described Cherry's keynote speech at the 1986 World Housing and Planning Congress in Adelaide as "characteristically broad in its scope, philosophical in its basis, and historical in substance, it helped bring home the relevance of the historic dimension in understanding and planning cities and regions to even the most blasé practitioner."⁸¹ This not only conveyed Cherry's interdisciplinary prowess but also highlighted the potential of planning historians to positively influence urban and regional planning practitioners.

Although not the single factor, the rise of the field of planning history, particularly its international exchanges, became a significant influence on urban and regional planning practitioners' focus on heritage conservation. In the 1980s, the UK, the US, Australia, and other countries began to emphasize the preservation of historic districts in their planning practices. A representative initiative was the designation of historic districts, termed "conservation areas."82 This initiative evolved into numerous "Main Street" restoration programs.83 A significant number of conservationists have embraced a comprehensive strategy, acknowledging that concentrating exclusively on individual buildings is too limited. They understand that in order to safeguard these buildings, it is imperative to also maintain the surrounding environment. Heritage conservation in the UK and the US shifted from focusing on single buildings to emphasizing the context in which these buildings are situated. The emphasis gradually moved towards protecting areas that were valuable as a whole, even if individual buildings did not meet traditional preservation standards. This approach essentially rejected the Haussmannite's isolation of individual monumental buildings, instead emphasizing the importance of the surrounding environment. In other words, the definition of planning heritage, as argued by Sitte—that Heritage Conservation requires a Planning Scale—was put into action.

⁷⁹ Cherry, G. E. (1970) 'Acknowledgements', *Town planning in its social context*, pp. 9-41. London, Leonard Hill Books.

⁸⁰ Boulton, J. (1996, March2) Obituary: Professor Gordon Cherry. The Independent.

⁸¹ Freestone, R. and Hutchings, A., (1993). Planning history in Australia: The state of the art. *Planning Perspective*, 8(1), pp.72-91.

⁸² Larkham, P.J. (1996). Conservation and the City. London: Routledge. (2002 Edition)

⁸³ Hamer, D.A., (1998). *History in urban places: The historic districts of the United States*. The Ohio State University Press.

The period from 1970 to 1990 witnessed a flourishing of publications on the history of urban and regional planning, which broadened the definition of planning heritage in the academic realm to include conserving the heritage/legacy of past planning practices through writing the planning history. The volume of scholarly articles published during this time is undeniably objective, to the extent that they themselves have become material for state-of-the-art literature reviews by planning historians from various countries. Two notable examples are Cherry's 1991 publication, Planning history: Recent developments in Britain, and Freestone's 1993 work, ⁸⁴ Planning history in Australia: The state of the art. ⁸⁵ Specifically, Freestone made significant contributions to this area of research, not only continuing to focus on the development of planning history research by Australian scholars but also analyzing and categorizing the research achievements of international scholars around the period from 1900 to 2000. ^{86/87/88} This not only conveys their quantity but also indicates their quality, which required considerable academic effort to categorise and further analyze these publications.

When planning historians emerged as the new driving force, their publications soon exhibited a perspective on using the terms "planning" and "heritage" differed from that of urban planning theorists and sociologists. They viewed the history of planning as a heritage (legacy). This approach interprets historical urban and regional planning practices as both tangible and intangible heritage through historical analysis. A representative achievement in this regard is the work of Peter Hall, Professor of Planning and Regeneration at UCL, specifically his publications "Urban and Regional Planning" in 1975 and "Cities of Tomorrow" in 1988. Although Hall is more widely known as an urban planner, planning theorist, and geographer, it is noteworthy that planning historians such as Cherry, Sutcliffe, Stephan Ward, and Freestone all regard Hall as a key player in setting an agenda for planning history field from the early 1970s and as a potential planning historian. ⁸⁹ This is firstly because his publications Urban and Regional Planning provided planning historians with a new analytical tool which is the urban and regional planning approach.

⁸⁴ Cherry, G. E., (1991). Planning history: Recent developments in Britain. *Planning Perspective*, 6(1), pp.33-45.

⁸⁵ Freestone, R. and Hutchings, A., (1993). Planning history in Australia: The state of the art. *Planning Perspective*, 8(1), pp.72-91.

⁸⁶ Ward, S.V., Freestone, R. and Silver, C., (2011). Centenary paper: The 'new' planning history: Reflections, issues and directions. *The Town Planning Review*, pp.231-261.

⁸⁷ Freestone, R., (2014). Progress in Australian planning history: Traditions, themes and transformations. *Progress in planning*, 91, pp.1–29.

⁸⁸ Freestone, R., (2017). Writing Planning History in the English Speaking World. In Hein, C. (ed.), *The Routledge Handbook of Planning History* (pp. 121–133). Routledge.

⁸⁹ Freestone, R., (2014). Peter Hall's planning history, *Planning Perspectives*, 30(1), pp. 11–15.

He pointed out that the definition of urban and regional planning is not only the craft of physical planning but also a process in which urban planners navigate conflicting values. It is a dialogue between societal collective needs and individual freedoms and property rights, ultimately reaching a compromise and consensus. 90 Additionally, in "Cities of Tomorrow," published in 1988, Hall presented nine key paradigms of the history of urban and regional planning development in different chapters, which were expanded with three more in the third edition in 2002 and the fourth edition in 2014: 91 (Summarized by the author of this thesis)

- 1 1880-1990 Slum cities
- 2 1900-1940 Mass transit in suburb
- 3 1900-1940 Howard and Garden City's worldwide practice
- 4 1900-1940 The birth of regional planning
- 5 1900-1945 The City Beautiful movement
- 6 1920-1970 The influence of Le Corbusier
- 7 1890-1987 The autonomous community
- 8 1930-1987 The planning of highway
- 9 1955-1987 The influential urbanists and urban planners.
- 10 1972-2000 The great capital cities
- 11 1990-2010 The new developing directions
- 1920-2011 The polarized social cities

Hall conducted an in-depth exploration of the trends and specific practices in urban and regional planning by theorists, planners, architects, and sociologists from different periods. These twelve paradigms include both specific planning practices and constructions, along with their associated blueprints, representing diverse planning ideas and the underlying philosophical, sociological, and technical understandings. Therefore, they can be viewed as defining planning heritage and planning legacy from the perspective of urban and regional planning approach, as articulated by Hall. These paradigms not only lay a solid foundation for the thematic focus of planning historians but also establish the groundwork for the subsequent practical endeavors of these scholars.

⁹⁰ Hall, P., (1975). Urban and regional planning. Routledge. Sixth Edition with Tewdwr-Jones, M in 2019.

⁹¹ Hall, P., (1988). Cities of tomorrow: An intellectual history of urban planning and design since 1880. John Wiley & Sons. (Fourth Edition in 2014)

The early 2000s witnessed efforts by Australian planning historians like Freestone, Marsden, and Garnaut to institutionalize the heritage conservation of earlier planning practices. They argued that Australia's heritage discourse, as represented by the Environment Protection and Biodiversity Conservation Act 1999, the Environment Protection and Biodiversity Conservation Amendment Regulations 2003 (no. 1), and the establishment of the National Heritage List within the Act, failed to acknowledge the contributions from previous planning practices. Therefore, they advocated for the creation of a registry to systematically catalog the planning heritage for future supplements. In a 2008 publication, they demonstrated the methods for creating a planning heritage list and the specific criteria for assessment:92

- the aesthetic design of places;
- technical achievement in the introduction of innovative planning concepts;
- 3 contribution to improving sustainable environmental quality;
- 4 creation of new communities;
- the history of the nation's economic, cultural and social development;
- 6 planning movements, the planning profession, and notable planners.

The influence of the twelve paradigms proposed by Hall could be seen in the six themes put forward by Freestone, Marsden, and Garnaut. Their achievements have been recognized by the Australian Heritage Council, serving as an important reference in identifying over 200 national planning heritages later on. Although these heritages have not yet been legislatively added to the National Heritage List, they have already become candidates. Their contributions not only involved establishing criteria for selecting heritage from historical planning practices, but also in practice, they promoted the emergence of "planning heritage" as one unified term within heritage conservation frameworks.

In 2001, David C. Harvey, Associate Professor in Critical Heritage Studies at Aarhus University, emphasized the importance of Temporality in Heritage Studies, effectively linking heritage studies with the field of planning history research. He argues that although heritage studies typically focus on contemporary practices, the historical roots of heritage run deep, and its processes span various social and cultural contexts.⁹³ Heritage should not be viewed merely as a modern phenomenon or tangible objects; instead, it should be understood as a dynamic cultural process,

⁹² Freestone, R., Marsden, S. and Garnaut, C., (2008). A methodology for assessing the heritage of planned urban environments: an Australian study of national heritage values. *International Journal of Heritage Studies*.

⁹³ Harvey, D.C., (2001). Heritage pasts and heritage presents: Temporality, meaning and the scope of heritage studies. *International journal of heritage studies*, 7(4), pp.319-338.

serving as a crucial tool for constructing social power and identity. Harvey criticized the simplistic definition of heritage as a modern phenomenon, stressing the need to see it as a long-term social process and to explore its specific manifestations across different historical periods. Planning history research, similarly, examines urban planning practices over extended periods and their impacts on the built environment and daily life. In "Cities of Tomorrow," Hall outlined twelve key paradigms of urban planning, covering the years 1880 to the 2010s, a span of nearly 140 years of urban planning practice. Therefore, in emphasizing the need for a long-term research perspective, the introduction of the concept of Temporality demonstrates a consensus between heritage studies and planning history research.

Around 2010, the rise of the Global South, represented by countries like China, India, and Brazil, began to prompt planning historians to explore new ways and methodologies for writing global planning history. Changes in these writing methods have the potential to enrich the definitions of planning heritage discourse. It is essential to acknowledge once again the remarkable foresight of Peter Hall. In the supplementary section of the fourth edition of his seminal work, "Cities of Tomorrow," published in 2014, Hall clearly conveyed the absence of a truly global account of planning history. He called upon future scholars to address this significant gap. ⁹⁴ Writing the planning history of the Global South stands as a primary task and a unique challenge. This is due to the intricate connections between urban planning practices in these regions and the processes of colonialism and postcolonial national independence. Thus, writing the planning history of the Global South necessitates a long-term discussion of the relationship between urban planning and heritage conservation, emphasizing the impact of temporality on planning heritage.

In 2017, Jyoti Hosagrahar, the Deputy Director of the World Heritage Centre at UNESCO, through an analysis of the historical development of heritage conservation in city planning practices from the mid-19th century to the 21st century, proposed seven urban agendas that scholars writing the global history of planning should pay attention to:⁹⁵

- 1 From Slum City to Beautiful City in the US and the UK
- 2 The City as a Colonial Project
- 3 Urban Heritage Conservation and Theocratic Institutions
- 4 The City as a Technology

⁹⁴ Hall, P., (2014). Cities of tomorrow: An intellectual history of urban planning and design since 1880. John Wiley & Sons. (Fourth Edition)

⁹⁵ Hosagrahar, J., (2017). A history of heritage conservation in city planning. In Hein, C. (ed.), *The Routledge Handbook of Planning History* (pp. 441-455). Routledge.

- 5 City as Community
- 6 Conservation and the Global Community
- 7 The City as Cultural Uniqueness

Through these five agendas, Hosagrahar highlighted the importance of temporality in writing the planning history of the Global South. It is crucial to note that, for the Global South, the specific meanings of these agendas must be analyzed in the context of each country and region, considering their unique timelines of decolonization and pre-independence institutional frameworks. This reveals that writing the planning history of the Global South necessitates attention to the methodologies and perspectives of heritage studies. Analyzing the tangible and intangible heritage produced by planning actions requires a long-term approach, emphasizing their "temporality".

Some urban planners and planning historians continued to refine their comparative frameworks already initiated, while others attempted to develop approaches that could be used to analyze cases from different regions globally. Among these, two research methodologies addressing the writing of global history are particularly noteworthy and worthy of discussion. Since 2000, urban politics scholars, represented by Jennifer Robinson, have been long developing a theory known as the "reformulated comparative urbanism." This theory has the potential to equip planning historians with analytical tools to respond to Peter Hall's call for global planning history research. The challenge of reformulated comparative urbanism lies in how to legitimately and seriously establish comparative parameters, as cities A and B might have entirely different systems, cultures, and historical contexts. Robinson suggests focusing on the flow of urban policies and observing their localization in new urban contexts as a basis for establishing comparative connections. 98

André Sorensen, Professor of Geography at the University of Toronto, has effectively introduced Robinson's call for reformulated comparative urbanism into the field of planning history, proposing a practical analytical approach. He advocates for the use of Historical Institutionalism (HI) from political economy in planning history

⁹⁶ Robinson, J., (2005). Ordinary cities: Between modernity and development. Routledge.

⁹⁷ Robinson, J., Harrison, P., Shen, J. and Wu, F., (2021). Financing urban development, three business models: Johannesburg, Shanghai and London. *Progress in Planning*, 154, p.100513.

⁹⁸ Robinson, J., (2016). Thinking cities through elsewhere: Comparative tactics for a more global urban studies. *Progress in human geography*, 40, 3-29.

research to advance comparative studies in the field.⁹⁹ He argues that the three indicators provided in the HI analytical toolbox—path dependence, key periods, and incremental change, which can effectively assist planning historians in capturing the varied urban planning institutions across different jurisdictions.¹⁰⁰ Especially considering the interdisciplinary nature of the planning history discipline, the socio-cultural considerations in new institutionalism might not be beneficial for comparative studies in planning history. For research in the field of Planning History, HI offers a robust framework, as these three indicators constrain potentially overly broad historical research approaches within a scope that is both manageable and worthy of discussion.

Another significant contribution by Sorensen is his advocation of the use of Historical Institutionalism (HI) in comparative planning history research, where he defined Planning Institution, thereby enriching the content of intangible planning heritage/legacy. He suggested that the definition of Institution by American political economist A. Hall, which refers to 'the formal rules, compliance procedures, and standard operating practices that structure the relationship between individuals in various units of the polity and economy', 101 is applicable to planning history research focused on planning norms and ideas. The definition by sociologists Streeck and Thelen, which refers to "collectively enforced expectations with respect to the behavior of specific categories of actors or to the performance of certain activities", 102 is suitable for research on legal and regulatory approaches in planning history.

Sorensen advocated for a narrower definition based on Streeck and Thelen for planning history research using the HI analytical approach. He defines planning institution as "collectively enforced expectations with respect to the creation, management, and use of urban space. Here, collective enforcement refers primarily to the use of coercion by the state to enforce laws and bylaws, and the recourse of private actors to the courts to enforce contracts." Whether Sorensen's defined Planning Institution or the other potential Planning Institution definition based on A. Hall; they both understand planning institutions as forms of constraints that

⁹⁹ Sorensen, A., (2015). Taking path dependence seriously: An historical institutionalist research agenda in planning history. *Planning perspectives*, 30(1), pp.17-38.

¹⁰⁰ Sorensen, A., (2023). Taking key periods seriously: theory and method for causal analysis of rapid institutional change. *Planning perspectives*, 38(5), pp.929-947.

¹⁰¹ Hall, P. A. (1986). *Governing the Economy: The Politics of State Intervention in Britain and France*. Oxford and New York: Oxford University Press.

¹⁰² Streeck, W. and Thelen, K. (2005). Introduction: Institutional Change in Advanced Political Economies. In: Streeck, W. and Thelen, K. (eds.) *Beyond Continuity: Institutional Change in Advanced Political Economies*. Oxford: Oxford University Press, pp. 1–39.

emerge from negotiation and compromise, ultimately achieving a consensus between collective needs and individual rights. Sorensen's work can be seen as a further development of the concept of the history of planning as a heritage (legacy) outlined by British planning theorist Hall (different from A. Hall).

Another approach to practicing Hall's call for writing global history is represented by the Global Palimpsestic Petroleumscape (GPP), proposed between 2013-2018 by Carola Hein, Professor of History of Architecture and Urban Planning at Delft University of Technology. Through theoretical argumentation and extensive empirical research, Hein aims to construct a framework for studying the tangible and intangible heritages born from the petroleum industry planning and construction based on the capitalist free market in different global regions. One of her primary intentions in proposing this systematic framework was to address the previous scholars' focus on specific aspects of oil industry planning based on experiences from different locations, often neglecting a comprehensive academic examination of the entire oil planning process. 103 The framework aids planning historians in systematically and comprehensively understanding how the behaviors of the oil industry and commerce shape and alter our urban spaces and built environments at various stages, and how these corresponding planning practices constitute the industrial heritage of the post-oil era. Combined with the discussion of "planning" and "legacy/heritage", such a systematic spatial analytical framework conveys Hein's belief that the protection of oil industry heritage requires consideration of planning at the spatial scale, and that studying oil industry heritage necessitates a planningoriented approach.

These two analytical approaches exhibit significant differences in methodology, particularly in conducting comparative research within international case studies. Sorensen advocates for comparative studies in planning history using the HI Approach, while Hein's GPP encourages global research within a unified framework. Sorensen's HI Approach for planning history research comprises a toolkit with three instruments: Path Dependence, Key periods, and Incremental Changes. Hein's work on GPP, particularly her studies on the Petroleumscape of The Hague and Rotterdam, also utilizes these three instruments through historical analysis. The difference lies in Hein's use of GIS to spatially present the impact of each Key period on the path dependence of the Petroleumscape in The Hague and Rotterdam, illustrating how some aspects of the Petroleumscape became "locked in" while others underwent incremental changes. 104 Sorensen noted the lack of effective spatial interpretation of

¹⁰³ Hein, C., (2021). Space, Time, and Oil: The Global Petroleumscape. In *Oil Spaces* (pp. 3-18). Routledge. 104 Hein, C., 2018. Oil spaces: The global petroleumscape in the Rotterdam/The Hague area. *Journal of Urban History*, 44(5), pp.887-929.

path dependence in planning history research. 105 GPP effectively addresses this gap, offering a method that goes beyond traditional comparative research in planning history. 106 These two evolving and discussed research approaches enrich the breadth and depth of research methodologies in planning and heritage conservation.

The above literature review reveals the multi-layered definitions that the term "Planning Heritage/Legacy" conveys when used by urban planning theorists, planners, and planning historians in their arguments and practices. This indicates that if "Planning Heritage/Legacy" is employed as a fixed academic term without considering its historical development, it may significantly diminish the richness of its potential definitions. Table 2.1 provides a summarized overview of the various practices discussed above that contribute to the rich definitions of planning heritage. Understanding the historical depth embedded in Planning Heritage/Legacy is therefore particularly crucial for studying practices in China. Daniel Abramson, Associate Professor of Planning History at the University of Washington, argues that what Chinese planning historians are doing is somewhat unique. This uniqueness may be related to China being a one-party socialist state that views urban planning as a key tool for economic growth. 107 Consequently, planning history in China still primarily focuses on spatial analysis of the built environment and tracing design ideas, lacking the perspective of historical institutionalism to examine how social, economic, and environmental policy changes shape urban planning. This brings to mind Peter Hall's depiction of regional and urban planning practices in Europe before World War II. Considering the arguments made by British and American sociologists like Jacobs in the late 1950s, this planning practice may no longer meet the needs of societal development, especially regarding planning as a national policy response to individual interests and rights. In this context, it is particularly important for Chinese planning historians and cultural heritage scholars to focus on how the two separate terms "planning" and "heritage" have evolved and merged into an academic term, highlighting the process's emphasis on individual rights.

Based on the above analysis, the following usage scenarios exist as "Planning" and "Heritage" converge:

¹⁰⁵ Sorensen, A., (2015). Taking path dependence seriously: An historical institutionalist research agenda in planning history. Planning perspectives, 30(1), pp.17-38.

¹⁰⁶ This argument originates from discussions between Hein and the author at the "Asia's Carbon Territories: Infrastructure, Environment & Society from the Age of Imperialism to the Climate Crisis" conference, held at the National University of Singapore from February 22-24, 2024.

¹⁰⁷ Wu, F., (2015). Planning for growth: Urban and regional planning in China. Routledge.

 TABLE 2.1 The various scenarios of using Planning Heritage in International Scholarship. Source: the author.

Definitions	Time	Scholars
Considering heritage conservation from the scale of urban planning	1889-1915	Sitte, Geddes
Advocating for planning as a tool for heritage conservation	1889	Sitte
Planning for the Garden City, not the heritage sites	1898	Howard
Using planning tools to leverage built heritage for political purposes	Early 1940s	Dictators
A "clean sweep" planning approach to address the negative urban legacy	1944	Abercrombie
Economic downturn preventing planning and heritage conservation from drifting further apart	Late 1940-1960	
Tourism-oriented planning became a driving force compelling urban planners to protect built heritage	1960s	Taylor
Preventing using urban renewal plans as a means to eliminate the heritage left behind by the previous planning legacy	1957 1961	Young & Willmott, Jacbos, Gans
Calling for urban planning practice to take into account heritage conservation from a grassroots perspective	1960s-1970s	Residents in UK, USA, Australia
Conserving the heritage/legacy of past planning practices through writing the planning history	1970s-	Cherry, Sutcliffe, Hall, etc
Planning Heritage as one unified term within heritage conservation frameworks	2000s-	Freestone, Marsden, & Garnaut
Analyzing the tangible and intangible planning heritage produced requires a long-term approach, emphasizing their "temporality".	2017	Hosagrahar
Using the Historical Institutionalist approach for comparatively study of planning legacy, specifically planning institutions	2010s-	Sorensen
The Global Petroleumscape as an analytical framework to study planning heritage and legacy associated with petroleum industry	2010s-	Hein

2.3 More Talk, Less Action: Five Evolving Definitions of "Planning Heritage" and "Planning Legacy" in Chinese Scholarly Literature

By using "planning" and "heritage/legacy" as search terms, we can analyse publications in Chinese urban planning and landscape academic journals. This analysis reveals that Chinese urban planning scholars, planners, heritage scholars, and planning historians have been discussing the connection between planning and heritage conservation since the early 2000s. It is important to note that considering "heritage" and "legacy" share the same Chinese translation – "遗产" – we will discern what "遗产" specifically refers to, based on the previous discussions. From the perspective of planning history or planning heritage, Chinese scholars have published extensively. This section will focus on Chinese-language papers published in key journals in related fields in China by urban planning, planning history, cultural heritage, and cultural history scholars after the founding of the People's Republic of China in 1949. This section will systematically review these documents to study how scholars use "planning" and "heritage/legacy" in their discussions and attempt to summarize the definition of planning heritage and planning legacy in the Chinese context.

2.3.1 "规划遗产" as Advocating for Planning as a Tool for Heritage Conservation

The Chinese Civil War in the mid-1940s was a driving factor for the involvement of China's urban planning and architectural scholars in shaping the context of "planning heritage." Unlike the international cases discussed in the first part, the planning here was literally not urban and regional planning but part of war planning. In December 1948, as the Chinese Communist Party gradually gained the upper hand in the civil war, they invited Liang Sicheng, the principal founder of the architectural discipline in China, along with his team from the China Construction Society and Tsinghua University, to compile the "Brief Index of Ancient Architectural Monuments throughout China" (BIAAMC). This document served as a reference manual for People's Liberty Army (PLA) generals to protect local cultural heritages

and buildings during combat and the subsequent takeover of cities. The compilation was completed in March 1949 and handed over to the military for use. This list effectively protected numerous ancient Chinese built heritage sites, including largescale monuments like the Ming and Oing Imperial Palaces, which require protection at the urban planning scale. 108 After the founding of the People's Republic of China in 1949, this list became the prototype for the National Cultural Heritage Protection Register. This list made significant contributions to heritage conservation both during wartime and in peacetime.

Although the BIAAMC adopted a similar national cultural heritage classification list approach as Taylor's "Britain's Planning Heritage," the goals and target audiences of the two were completely different. One aimed to serve the general public's understanding and enjoyment of the historical and cultural heritage of their surrounding built environment, while the other called for the preservation of historical heritage and its surrounding environment to prevent destruction during wartime, so that future generations could understand and appreciate these heritage sites and their values at a later time. Of course, we should not overlook the temporal gap between 1948 and 1975, and the impact of the political events during these periods, when comparing the differences between the two lists. Although the BIAAMC was not part of urban planning but was instead part of war planning, it became an opportunity to bring the concepts of planning and heritage conservation closer together in China, despite the tragedy inherent in this opportunity.

Liang Sicheng, who led the compilation of the BIAAMC, could have become a prominent advocate for further aligning urban planning and heritage conservation in China. He had the potential to advocate for the practice of heritage conservation in urban planning after 1949. Specifically, in February 1950, Liang and another Chinese urban planning scholar Chen Zhanxiang jointly proposed a plan for Beijing, later known as the Liang-Chen Proposal, or Suggestions on the Location of the Central Government Administrative Center. This proposal opposed the Soviet experts' plan to transform the old city of Beijing and establish an administrative center around Tiananmen. Instead, it advocated for the preservation of the old city and the establishment of a new administrative center in the Sanlihe area to the west of Beijing. In essence, the Liang-Chen Proposal's main recommendation was to preserve the original appearance of old Beijing and construct a new political center adjacent to it.

108 Zheng, X. (1986). Remembering the achievements of Professor Liang Sicheng [缅怀梁思成教授的业绩]. Traditional Chinese Architecture and Garden [古建园林技术], (3). pp. 10-13.

However, the Chinese government adopted the Soviet experts' plan to build the new city over the existing old Beijing. Consequently, Beijing, the ancient capital that had spanned the Ming and Qing dynasties, lost the opportunity to preserve its original spatial configuration. Although the leaders of China's domestic urban planners and architects had proposed using urban planning to protect the built heritage of Beijing, the authorities opted for the Soviet experts' plan, which paid little attention to the conservation of the old city. Thus, while the fields of planning and heritage were moving closer together within the academic realm of urban planning, they were moving apart in government practice.

The complex domestic economic situation in the late 1950s, the deterioration of relations with the Soviet Union, and the Cultural Revolution that began in 1965 further widened the gap between planning and heritage conservation in China. A significant starting point for this divergence was the policy of "*Not Undertake Urban Planning for Three Years.*" ¹⁰⁹ This directive was a verbal instruction issued by then Vice Premier Li Fuchun at the Ninth National Planning Meeting convened by the State Planning Commission on November 18, 1960. Coupled with Li's speeches at the Politburo meeting in June and the Central Work Conference in July-August of the same year, this directive was effectively implemented. In reality, the enforcement of this directive extended far beyond three years, and it was not until the post-1976 Tangshan earthquake reconstruction planning that China's urban planning work was officially resumed.

The implementation of this policy undoubtedly weakened the potential benefits that the State Council's Provisional Regulations on the Protection and Management of Cultural Heritage, issued in March 1961, might have had in bridging the gap between planning and heritage conservation. Article 6 of the regulations required that "when formulating production and construction plans and urban construction plans, all levels of people's committees should include the protection of cultural heritages within their jurisdiction." 110 The reasoning is simple: with urban planning projects suspended, using urban planning as a tool for heritage conservation became implausible. Subsequently, during the Cultural Revolution, various factions within the Communist Party, driven by different political agendas, initiated the demolition of numerous built heritage sites under the pretext of opposing ideologies that contradicted communism.

¹⁰⁹ Li, H. (2012). Historical retrospect and reflection—written on the 50th anniversary of the proposal "Three Years Without Urban Planning" [写在"三年不搞城市规划"提出 50 周年之际]. *City Planning Review* [城市规划], (1), pp. 73-79.

¹¹⁰ State Council. (1961). Provisional Regulations on the Protection and Management of Cultural Heritage [文物保护管理暂行条例]. In: State Council Gazette of the People's Republic of China [中华人民共和国国务院公报], 1961(4), March 31, Beijing, p. 77.

They also persecuted scholars in related fields who spoke out in defense of these heritage sites. The political movements of the 1960s and 1970s led to a stagnation in urban planning, extensive destruction of built heritage, and the persecution of related scholars, further distancing the concepts of planning and heritage.

With the relaxation of the political climate following the 1978 reform and opening up, Chinese urban planning scholars once again began to promote the convergence of urban planning and heritage conservation. Zheng Xiaoxie, a renowned Chinese urban planning expert and ancient architecture preservation specialist, emerged as a key proponent of this movement. In 1980, Zheng published an article titled "Protection of Cultural Relics and Urban Planning" in the Architectural Journal, where he pointed out: "It is very clear that isolating the protection of cultural relics from comprehensive urban planning, or neglecting the importance of cultural relics within urban planning, will lead to the disordered environment and spatial imbalance around the relics."111 This statement clearly conveyed Zheng's concern about the contemporary urban planning practices that neglected the protection of cultural heritage and the independent efforts of relic preservation that did not integrate with urban planning. He called for the incorporation of cultural heritage protection as a key component of urban planning. Zheng also proposed the stringent demarcation of protection zones for cultural heritage. Specifically, he suggested learning from the five-level protection zone system implemented in the old city planning of Paris, distinguishing different levels of protection zones. This zoning concept later became one of the foundations for the protection of historic and cultural cities under his leadership. Through this paper, Zheng's call can be considered an example of advocating for planning as a tool for heritage conservation in the Chinese context.

However, there is a fundamental difference between the calls made by Zheng and Sitte. Sitte's appeal was almost entirely academic and speculative, while Zheng's call was heavily infused with political ideology from the Chinese Communist Party. This resulted in Zheng's appeal lacking the depth of academic reflection that Sitte has possessed. Among the four issues he discussed, he first emphasized the need to break the ideological shackles of the Cultural Revolution, asserting that protecting cultural heritage was not an endorsement of feudal culture, capitalism, or revisionism. Instead, it played a positive role in promoting socialist economic and cultural construction in China. Zheng also advocated for the construction principle of "applicability, economy, and aesthetic consideration under possible conditions," a guideline rich in CCP values originating from the early years of the People's Republic of China.

¹¹¹ Zheng, X. (1980). Protection of cultural relics and urban planning [保护文物古迹与城市规划]. Architectural Journal [建筑学报], (4). pp. 11-13.

This method of argumentation was highly timely, especially in attributing the destruction of built heritage in the 1960s and 1970s to Lin Biao's ultra-leftist line. Zheng's argument on the relationship between urban planning and heritage conservation incorporated strong discussions on Chinese Communist Party ideology. A similar approach appeared in his paper at the Fifth National Congress of the Chinese Architectural Society in 1980, where he refuted the idea of developing heavy industries such as steel, petroleum, and chemical plants in Beijing, claiming it contradicted the recommendations of the Central Secretariat. 112 Given the political climate in China at the time, this combination of political ideology and academic argumentation granted Zheng a transcendent position not only in the urban planning and heritage conservation circles but also enabled him to effectively communicate his views to the central government leaders and gain their support. For instance, in 1979, Zheng successfully contacted Chen Yun, then the second most powerful figure in the Chinese government, to urgently halt the Beijing municipal government's plan to demolish Deshengmen Arrow Tower to construct an overpass. 113 Therefore, while this approach may not conform to the broader academic argumentation norms, it is undeniable that this blend of scholarly and political reasoning was an effective tool for Zheng to advance the convergence of urban planning and heritage conservation.

During this period, not only urban planning researchers but also scholars in art history were advocating for the integration of heritage conservation into urban planning. highlighting the convergence of the disciplines of planning and heritage conservation. Chen Guilun, a teacher at the Central Academy of Fine Arts' Sculpture Department, wrote in 1982, calling on urban planners to consider heritage conservation at the onset of projects and to heed the advice of heritage restoration professionals. She warned that failure to do so could lead to the destruction of historical architectural ensembles. Additionally, she urged the state to invest in the development of relevant academic fields. 114 Chen's article undoubtedly responded to Zheng's advocacy for planning as a tool for heritage conservation. It conveyed two critical messages: first, that urban planning practices in China at the time did not sufficiently prioritize heritage protection, and second, that the Chinese government had yet to recognize the need to invest in the development of related disciplines. This indicates that, at that time, planning for heritage was still primarily a preliminary concept proposed by scholars in relevant fields, with significant gaps remaining before its practical implementation.

¹¹² Zheng, X. (1981). Discussion on several issues of socialist urban planning in China. [对我国社会主义城市 规划几个问题的探讨]. Architectural Journal [建筑学报], (2). pp. 8-12, 82-83.

¹¹³ Wang, Z. (2000). Urban planning predecessor and pioneer of ancient city protection: Remembering Mr. Zheng Xiaoxie [城市规划前辈 古城保护先驱—— 记郑孝燮先生]. Planners [规划师], (1), pp. 115-116.

¹¹⁴ Chen, G. (1982). Historical responsibility—protecting historical and cultural heritage [历史的责任——保 护历史文化遗产]. City Planning Review [城市规划], (3). pp. 25-27.

In February 1982, the State Council officially approved a document on the designation of historical and cultural cities, announcing the first List of National Famous Historical and Cultural Cities (LNFHCC) in China. This marked the government's initial effort to institutionalize the concept of planning as a tool for heritage conservation through formal regulations. Zheng played a crucial role in the creation of this list. In May 1981, as a key member, he participated in a National Committee of the Chinese People's Political Consultative Conference delegation to Henan, Shaanxi, and Shanxi to investigate heritage protection. 115 The investigation report he contributed to was subsequently submitted as a "suggestion" to the General Secretary of the CCP Central Committee and the Premier of the State Council. Subsequently, the National Construction Committee organized several discussions on the report, which emphasized the importance of considering the historical context of cities in urban planning. This ultimately led to the creation of the LNFHCC which was a significant step by the Central Government towards formalising the collaborative efforts from both urban planning and heritage conservation scholars to promote planning for heritage conservation.

At the same time, urban planners and planning historians seized the opportunity presented by the State Council's issuance of the list of historical and cultural cities to further discuss the standards for the preservation, conservation, and rehabilitation of iconic buildings, districts, and related heritage within these historical cities. Li Xiongfei from Tianjin University, a distinguished scholar in planning history, proposed seven criteria for defining preservation and protection projects in historical and cultural cities. ¹¹⁶ These include:

- Historical and revolutionary monuments identified by various national cultural heritage departments.
- 2 Buildings that, while not classified as monuments, have made significant contributions to urban development history and architectural art history. These structures represent the highest achievements in urban construction and artistic design or maybe projects whose exploration and attempts were limited by the technical conditions of their time but still offered valuable insights.
- 3 Buildings that characterize the features of a city.
- 4 Works of renowned domestic architects.
- 5 Representative residential buildings.
- 6 Former foreign concessions.
- 7 Architectural heritage resulting from unforeseen factors.

¹¹⁵ Wang, Z. (2000). Urban planning predecessor and pioneer of ancient city protection: Remembering Mr. Zheng Xiaoxie [城市规划前辈 古城保护先驱——记郑孝燮先生]. Planners [规划师], (1), pp. 115-116.

¹¹⁶ Li, X. (1982). Protection of architectural heritage in historical and cultural cities [历史文化名城建筑遗产的保护]. City Planning Review [城市规划], (3), pp. 5-13.

While Li's seven principles are generally reasonable, some aspects of his discussion in criteria 1, 2, 6, and 7 require careful scrutiny. These four criteria together reveal the implicit boundaries Li set for future discussions on urban planning and architectural heritage. Firstly, by listing historical and revolutionary heritages side by side in the first criterion, Li introduces a categorization that is more politically motivated than academically sound. Revolutionary heritages, specifically related to the founding and governance of the Chinese Communist Party, should be considered part of historical heritages if the Party's history is viewed as an integral part of China's broader history. Thus, the separation appears more politically charged.

Secondly, in the second criterion, Li's suggestion to include both the highest achievements and less successful historical projects indicates a dialectical approach to heritage, recognizing the educational value of both successes and failures. However, it is important to note that Li's focus on the negative aspects of heritage pertains only to failures in urban planning and architectural design and construction techniques. Thirdly, when addressing foreign concessions built due to colonial invasion in the sixth criterion, Li advocates for appreciating their artistic value rather than dwelling on the national and ethnic humiliation they represent. This perspective highlights a potential—through rational argumentation—to subtly alter the negative historical impacts of these heritages.

Fourthly, in the seventh criterion, Li categorizes heritage resulting from war, poverty, and other adverse circumstances as "heritages caused by unforeseen factors", calling for their preservation. However, the examples he provides are either non-Chinese, occurring in Japan and Germany, or events preceding the establishment of the People's Republic of China. This analysis suggests that Li's recommendations underscore the focus on preserving built heritage in historical and cultural cities with specific priorities and boundaries—emphasizing heritages that glorify the Chinese Communist Party's revolutionary history and confining the evaluation of heritage to the realms of planning and architectural techniques. Li's suggestions were actually consistent with Zheng's arguments and went further by incorporating Chinese Communist Party ideology into the criteria for evaluating historical cities.

Although the criteria proposed by Li were not broadly defined as planning heritage standards but rather as urban heritage standards, his seven criteria showed some similarities to the methods and specific evaluation subjects proposed by Freestone, Marsden, and Garnaut 26 years later for the Australian planning heritage list. Both sets of criteria included local aesthetic design, residential areas (creating new communities), works by renowned planners or architects, and technological achievements introducing innovative planning concepts. Of course, there are also clear distinctions between the two sets of standards. The first factor causing these

differences is time. Freestone Marsden, and Garnaut's criteria for contributing to improving sustainable environmental quality did not exist in 1982 when Li proposed his standards. The second factor is the differing historical backgrounds and political systems of the countries, which shaped their understanding of contributions to national economic, cultural, and social development. Li's list also included heritage from China's semi-colonial and semi-feudal period, but he articulated this heritage through the lens of Communist ideology. In contrast, Freestone's criteria are relatively broader, encompassing both colonial heritage and heritage from the period after the establishment of a democratic government in Australia, considering the role of various political parties. The biggest difference between the two is that Freestone's criteria led to the creation of a list that gained the favor of the Australian Heritage Council, becoming a candidate list. Meanwhile, Li's criteria, though later used as a reference in policy formulation and research, remained largely an academic achievement. The primary distinction lies in whether the theory was translated into practice.

The practical implementation of the first LNFHCC did not yield the anticipated effects expected by the government and academic circles, particularly with respect to urban planning practices that continued to overlook the protection of historical heritages. On October 8-9, 1983, during the "Academic Conference on the Protection, Planning, and Construction of Small and Medium Historical and Cultural Cities" held in Yangzhou, organized by various subcommittees of the Chinese Society of Architecture—including the Urban Planning Academic Committee, the Architectural History and Theory Academic Committee, the Landscaping Academic Committee, the Architectural Design Academic Committee, and the Municipal Engineering Academic Committee—six areas in need of improvement were identified.

The first issue highlighted was the incomplete implementation of relevant cultural heritage protection laws and regulations pertaining to the protection of historical cities in urban planning. Secondly, there was a noted lack of investment by research, design departments, and universities in the research and design work for small and medium historical and cultural cities. Additionally, some city governments had yet to promote coordination among departments related to urban planning, architectural history, landscaping, architectural design, and municipal engineering. The third area of concern involved three specific issues within urban planning: the lack of strict

¹¹⁷ Architectural Society of China Urban Planning Academic Committee, Architectural History and Theory Academic Committee, Landscape Architecture Academic Committee, Architectural Design Academic Committee, and Municipal Engineering Academic Committee. (1983). Suggestions on the protection, planning, and construction of small and medium-sized historical and cultural cities [关于中小历史文化名城保护、规划与建设的几点建议]. Architectural Journal [建筑学报], (12), pp. 2-4.

review processes for project site selection in small and medium historical cities, the failure to harmonize the renovation and reconstruction of old urban areas with the style of historical cities, and the insufficient cooperation with housing management departments and local residents in the restoration of key streets. Fourthly, there was a lack of funding sources dedicated to the protection and construction of historical cities. Fifth, there was an absence of a unified management system for the protection and construction of historical cities. Finally, the sixth issue was the need to promptly halt the creation of the second and subsequent lists of historical cities.

This joint statement from multiple subcommittees of the Chinese Society of Architecture clearly conveyed the urgent call from experts in related fields for more institutional, financial, and administrative support from both the central and local governments in China.

Published concurrently in the December 1983 issue of the Architectural Journal. alongside the aforementioned joint statement, was an interview with Zheng Xiaoxie. In this interview, Zheng not only provided vivid and detailed examples to elucidate the issues raised in the statement but also made a noteworthy comment: "The important historical sites of historical cities impart historical and cultural knowledge, as well as patriotic and revolutionary tradition education to future generations. Although the historical environment has changed, the spiritual influence they embody is enduring. This influence is both positive and negative, involving both direct, tangible interactions and subtle, thought-provoking impacts." 118Through this remark, Zheng clearly indicates that the influence of significant historical sites on the general public is both positive and negative. This dual perspective is highly appropriate, reflecting the potential of cultural heritage to be evaluated in terms of both its beneficial and detrimental values.

However, considering the examples Zheng provides later, he clearly narrows the scope of positive and negative impacts of historical sites, effectively expressing more explicitly what Li had subtly suggested earlier. Specifically, Zheng cites the spatial form and cave dwellings of Yan'an, where the Chinese Communist Party lived and fought, as historical sites representing positive influence. In contrast, he identifies certain areas of Shanghai as negative sites that document the atrocities of the Japanese invasion. He regards Beijing as a city that records the prosperous societies of the Yuan, Ming, and Oing dynasties, thus bearing positive historical significance, while he considers the Old Summer Palace (Yuanmingyuan) a negative site representing imperialist aggression. This creates an interesting phenomenon:

118 Zheng, X. (1983). On the protection of the traditional characteristics and appearance of historical and cultural cities [关于历史文化名城的传统特点和风貌的保护]. Architectural Journal [建筑学报], (12), pp. 4-13. apart from universally recognized sites representing Chinese culture, those deemed to have positive value are largely associated with the Chinese Communist Party's struggle, whereas the negative sites are entirely from before the CCP's founding of the People's Republic of China in 1949.

It is challenging to ascertain whether Zheng's examples reflect his genuine belief that there were no negative aspects of urban planning and construction after the establishment of the CCP in 1949, or whether he deliberately chose this method to steer future discussions. Nonetheless, these examples undeniably avoid addressing the potential for negative impacts arising from urban planning, architectural design, and socio-cultural developments after 1949 under the CCP's governance.

The aforementioned literature illustrates that between 1948 and 1982, the definition of "规划遗产" in China was centered on advocating for planning as a tool for heritage conservation. Initially, similar lists for built heritage protection emerged in China as part of war planning, aimed at safeguarding the nation's historical sites from wartime destruction. This marked the beginning of the convergence between the concepts of planning and heritage conservation in China. However, after the establishment of the People's Republic, especially from the late 1950s to the late 1970s, the two concepts drifted apart. This divergence was due to the failure of economic policies, the stagnation of urban planning projects, and the severe destruction of built heritage during the Cultural Revolution. After the 1978 reform and opening-up, urban planning scholars, represented by Zheng Xiaoxie, began to advocate for using planning as a tool to conserve China's built heritage. Their efforts not only facilitated the convergence of urban planning and heritage conservation within the academic discipline but also encouraged the Chinese government to create the first List of National Famous Historical and Cultural Cities, thereby institutionally promoting the alignment of planning and heritage conservation. However, throughout this period, there was a lack of practical implementation of heritage conservation within urban planning projects. Therefore, I argue that during this phase, the notion of planning heritage was primarily about advocating for planning as a tool for heritage conservation.

2.3.2 "规划遗产" as Planning in the Name of Prioritizing Heritage Conservation

In the mid-1980s, the Chinese government used legislation as an effort to bring the concepts of "urban planning" and "heritage conservation" closer together. As previously discussed, the joint appeal drafted by various branches of the Architectural Society of China became one of the main factors driving the government to mandate the protection of cultural heritage in urban planning through legislation. In January 1984, the State Council issued the "Urban Planning Regulations," stipulating that urban planning must effectively protect cultural heritage, promote national styles, and preserve local characteristics. In 1986, the State Council decided to designate districts, architectural complexes, small towns, and villages that concentrated cultural heritage or preserved the traditional appearance and local characteristics of a specific historical period as historical and cultural conservation areas based on their historical and scientific significance. In December 1989, the "Urban Planning Law" was promulgated, specifying that urban planning should protect historical and cultural heritage, traditional urban features, local characteristics, and natural landscapes. Following the issuance of the "Urban Planning Regulations" by the State Council, Chinese urban planning experts began writing articles exploring how to consider cultural heritage protection in urban planning practice and what methods and approaches should be used to leverage planning tools. It appears that the government's legislation had an immediate effect, with urban planning practices in China beginning to place greater emphasis on "heritage conservation."

Zheng Xiaoxie once again played a leading role in advancing relevant scholarly discussions. In 1986, he authored an article in Architectural Journal, wherein he deliberated on key issues that require attention in Beijing's urban planning and construction. 119 First, he asserts that it is crucial to differentiate between the historic city and the emerging new development areas when considering future planning. And the two areas should maintain their respective characteristics in terms of style and historical context. When planning, it is important to consider the historical and cultural values of the area, while also ensuring that the designed environment between the historical and new areas are in harmony with each other. He, thereby, called for emphasizing national characteristics in architecture and cultural expression. Second, Zheng highlighted the need to differentiate between modernism and postmodernism in the planning process in line with the architectural design trends of the time. He stressed the need for architecture to coexist harmoniously

¹¹⁹ Zheng, X. (1986). On the Cityscape of Beijing [论首都规划建设的文化风貌问题]. Architectural Journal [建筑学报], (12). pp. 8-11,82.

with the environment, discouraging the excessive pursuit of skyscrapers, and placing greater emphasis on infrastructure and environmental preservation. Thirdly, regarding planning and construction management, Zheng emphasized the strict adherence to Beijing's master plan to ensure sustainable and orderly urban development. If Zheng's earlier articles mainly discussed the importance of preservation, in this article, he began to explore specific measures for heritage conservation in urban planning.

Chongnian Yan, a renowned expert on Qing Dynasty history and director of the Manchu Studies Institute at the Beijing Academy of Social Sciences, wrote in 1990 urging that urban planning efforts should protect the historic city of Beijing and preserve the existing layout of the ancient city. 120 Citing numerous historical documents, he made a compelling case for the preservation of Beijing and proposed "comprehensive planning, zoned measures, prioritized protection, and integrated coordination" as four key recommendations. Yan further stated, "People are always inheritors of historical and cultural heritage – good inheritors can make cultural heritage shine brightly, while bad inheritors often lead to endless problems with cultural heritage." Although he did not explicitly state whether we are good inheritors of Beijing's cultural heritage, this is already apparent and obvious. Due to the failure to adopt the Liang-Chen Plan in the 1950s and the destruction caused by factional fighting during the Cultural Revolution, Beijing no longer resembles its former self. Most notably, the old Beijing city walls were demolished, all seven gates of the outer city were removed, and of the nine gates of the inner city, only Zhengyang Gate and Desheng Gate—preserved on the recommendation of experts like Zheng Xiaoxie remain, with the other seven demolished. Additionally, six of the eight gates of the Imperial City were destroyed or burned down, except for Tiananmen and Duanmen. Yan's article can be seen as a lament from a Chinese historian on the need for urban planning to protect historic and cultural cities.

Urban planning and heritage scholars in the early 1990s identified potential challenges in protecting historical and cultural cities. Ruan Yisan, a professor of urban planning and an expert in urban heritage at Tongji University, pointed out three challenges in 1990 that constrained the protection of historical and cultural cities. The first challenge was how to protect as much built heritage as possible given the insufficient national funding. The second challenge was how to balance protection and construction, as well as protection and renovation, while developing the economy. The third challenge was how to showcase the unique characteristics

¹²⁰ Yan, C. (1990). Beijing's cultural heritage and modern urban construction [北京文化遗产与现代都市建设]. Beijing Social Sciences [北京社会科学], (3), pp. 45-53.

of Chinese cities in urban planning and architectural design. ¹²¹ From Ruan's three points, it is clear that economic efficiency was the primary constraint on the development of historical and cultural cities. Ruan was the most active scholar in the field of urban heritage in China during the 1990s and 2000s. In 1991, using Suzhou as a case study, he proposed a detailed method for classifying protection levels for preserving cultural relics within historical cities, such as individual buildings and gardens. ¹²² Ruan's approach echoed Zheng's, shifting the focus towards specific practices in urban planning.

However, neither government legislation nor the calls and discussions from urban heritage experts in the 1990s received sufficient response from urban planners. It seemed that heritage conservation through urban planning was merely a nominal concept. In 1996, Ruan Yisan published an article discussing several issues present in the urban renewal of that time. Firstly, some government leaders viewed the "old city" as a mess left by time, needing large-scale demolition. This mindset led to the destruction of many excellent residential dwellings and neighborhoods within old city centers. Secondly, real estate developers, in their pursuit of high profits, ignored building height restrictions and constructed numerous high-rise buildings. They often arbitrarily altered pre-established construction plans, for instance, building nine-story structures instead of the planned six-story ones, resulting in issues with lighting and ventilation for residents. 123 He warned that such practices were not renewing the old city, but rather creating "new cities" that would be immediately outdated from the very beginning. Ruan issued a clear warning about the damage to heritage caused by urban renewal projects in the 1990s and the social problems these projects created after their completion.

However, Ruan's warnings did not yield practical results from the mid-1990s to the early 2000s. Wang Jinghui, Chief Engineer at the China Urban Planning and Design Institute, pointed out in 2000 that the destruction of urban heritage during urban renewal projects in the 1990s was widespread in China, manifesting in three key issues. Firstly, due to the review process of the heritage protection lists, many excellent residential buildings and representative structures that had not yet been listed were demolished during urban renewal. Secondly, the surrounding

¹²¹ Ruan, Y. (1990). The current status of the protection of historical and cultural cities in China [中国历史文化名城保护的现状]. Journal of Tongji University [同济大学学报], (4), p. 452.

¹²² Ruan, Y. (1991). Research on the classification and determination of protection scope for historical and cultural cities [历史文化名城的保护分级及范围确定的研究]. *Urban Planning Forum* [城市规划学刊], (2), pp. 49-54.

¹²³ Ruan, Y. (1996). Issues of Current Urban Renewal and Reconstruction [当今旧城改建中的些问题]. *Urban Planning Forum* [城市规划学刊], (1), pp. 57-58.

environments of many protected units were damaged. Thirdly, there was extensive destruction of historical districts during urban renewal. 124 Wang's argument can be seen as an extension and development of Ruan's points, as well as demonstrating that the issues Ruan highlighted had not been resolved in the subsequent five years. It can be said that, at this time, urban planning practices in China not only failed to consider individual heritage sites but also neglected the planning scale required to protect these individual heritage sites, let alone the protection of large-scale heritage at the planning level.

The master plan for Beijing's Zhongguancun Science City, formulated around 2000, serves as an example demonstrating how urban planning, driven by the pursuit of economic interests, can neglect heritage management. This plan notably overlooked the preservation needs of the Summer Palace, a World Cultural Heritage site. In collaboration with Tianjin University, the Cultural Heritage Department of the Summer Palace Management Office published a series of critiques on the master plan of Zhongguancun Science City in Beijing's Haidian District. The critiques highlighted that the plan, placed excessive emphasis on economic benefits, neglected the preservation of this Qing Dynasty imperial palace and large royal garden, which already hold the status of being a World Heritage site. 125 This lack of attention led to the reduction of green spaces and wetlands around the Summer Palace, while the proposed high-rise buildings disrupted the palace's original spatial layout. 126 The arrival of a large population into the area altered its historic ambiance, and the extensive new urban road network planned nearly destroyed the tranquil environment of the Summer Palace. 127 This series of articles also called for a shift from focusing solely on high-grade, well-preserved individual heritage sites to

¹²⁴ Wang, J. (2000). Protection and promotion of urban historical and cultural heritage [城市历史文化遗产的保护与弘扬]. Development of Small Cities & Towns [小城镇建设], (2), pp. 85-88.

¹²⁵ Gao, D. & Qin, L. (2006). The status of heritage protection at the Summer Palace under the international wave of historical and cultural heritage protection: A series study on the relationship between the heritage protection of the Summer Palace and the planning and construction of Zhongguancun, Part One [国际保护历史文化遗产浪潮映照下的颐和园遗产保护状况——颐和园遗产保护与中关村规划建设关系问题系列研究之一]. Chinese Landscape Architecture[中国园林], 22 (1), pp. 49-53.

¹²⁶ Qin, L. & Gao, D. (2006) The planning failures of Zhongguancun Science City and their impact on the protection of the Summer Palace: A series study on the relationship between the heritage protection of the Summer Palace and the planning and construction of Zhongguancun, Part Two [中关村科学城规划之失及对颐和园保护的影响——颐和园遗产保护与中关村规划建设关系问题系列研究之二]. Chinese Landscape Architecture[中国园林], 22 (2), pp. 69-74.

¹²⁷ Gao, D. & Qin, L (2006). The protection content of the Summer Palace, its role in the planning of Zhongguancun Science City, and recommendations for overall planning objectives: A series study on the relationship between the heritage protection of the Summer Palace and the planning and construction of Zhongguancun, Part Three. [颐和园的保护内容, 在中关村科学城规划中的作用及其总体规划目标建议——颐和园遗产保护与中关村规划建设关系问题系列研究之三]. Chinese Landscape Architecture[中国园林], 22 (3), pp. 21-26.

considering the natural setting, cultural environment, historical character, and the cultural ecology of the community residents surrounding the heritage sites. They advocated for the comprehensive development and improvement of corresponding legal frameworks for urban planning and historical preservation. ¹²⁸ This series of four articles represents cultural heritage scholars' appeals to urban planners, indicating that at this time, urban planners were not being constrained by relevant legislation nor influenced by professional discussions in their practice.

Such urban renewal projects, which prioritize economic benefits over heritage conservation, have even drawn the attention of foreign scholars, who have called for Chinese urban planning to pay more attention to urban heritage. Jeffery L. Soule, the former Policy Director of the American Planning Association, openly discussed this issue at the international symposium "Planning the Future of Chinese Cities," jointly organized by the China Development Bank, the World Bank, and the World Bank Institute on October 25-26, 2004, in Beijing. He argued that there were two critical deficiencies in Chinese planning at that time: first, even by 2004, there had been no planning for historical and cultural preservation; second, planning was primarily viewed as urban design and construction, neglecting the more comprehensive work of envisioning and considering cultural and economic factors. 129 He emphasized that many local city leaders in China believed that preservation and development were oppositional. In other words, there was a perceived conflict between urban planning and heritage conservation. Notably, the conference in which Soule participated focused on planning the future of Chinese cities. He clearly conveyed that protecting China's urban heritage is integral to the future of Chinese urban planning.

The attention of both Chinese and foreign scholars to urban planning practices that neglected heritage conservation prompted the Chinese government to introduce new related legislation as well as a new term. In November 2003, the Ministry of Construction and the State Administration of Cultural Heritage announced the designation of 10 famous historical and cultural towns and 12 famous historical and cultural villages in China. In March 2004, the Ministry of Construction issued the "Guidance on Strengthening the Planning and Protection of Outstanding Modern and Contemporary Architecture," further emphasizing the need to consider the protection of modern buildings in urban planning. In 2005, the State Council introduced the

¹²⁸ Qin, L. & Gao, D. (2006) Key factors that must be considered in the planning and construction of the Haidian Zhongguancun High-Tech Park: A series study on the relationship between the heritage protection of the Summer Palace and the planning and construction of Zhongguancun, Part Four [海淀中关村高科技园区规划建设中必须重视的几大因素——颐和园遗产保护与中关村规划建设关系问题系列研究之四]. Chinese Landscape Architecture[中国园林], 22 (2), pp. 50-54.

¹²⁹ Soule, L. (2005). Cultural Conservation in Age of Change. *Urban Planning International* [国外城市规划], (1), pp. 19-20.

concept of "cultural heritage," which includes both tangible and intangible cultural heritage. Tangible cultural heritage comprises various levels of protected heritage sites, including monumental buildings and immovable cultural relics, as well as large-scale historical and cultural cities, districts, and towns. Cultural heritage is thus a composite concept that encompasses both tangible and intangible heritage.

Another manifestation of "Planning in the name of heritage conservation" is the packaging of old city renovation projects, driven primarily by economic goals, as planning for heritage in their justification. These projects have become representative of Chinese academic papers from this period. From 2007 to the present, articles involving "Planning" and "Heritage" predominantly discussed the planning practice prioritizing heritage conservation. They often focus on old town district renewal plans in which the authors were involved, elaborating on how to focus on heritage in urban and regional planning. For instance, Qiang Wu's exploration of the protection plan for the historical district of Yaodu Old Street in Dongzhi, Anhui, exemplifies this. 130 These articles typically emphasize that new plans preserve the local cultural context. the original spatial patterns, and the natural environment of the historical districts. However, these projects are commercial in nature; they do not shift away from prioritizing economic benefits or stimulating local tourism through old town renewal projects. This means that many of them do not deviate from the development model of major demolition and construction. It can be said that heritage conservation is not the main focus of these planning projects but rather their selling point. As a result, the discussions in these papers about how the old town planning projects well preserve the existing built heritage, historical character, and spatial forms remained is merely superficial – planning in the name of prioritizing heritage conservation.

Scholars in urban planning management have identified another direction in the practice of as "planning in the name of prioritizing heritage conservation". It involves an excessive focus on the preservation of cultural heritage within urban planning. This has led to a lack of planning and design that aligns with the urban function and spatial characteristics within the control zones of these protected units. Jianli Xiao, a professor of urban planning at Tongji University, noted the disconnect between China's urban planning management and urban cultural heritage management systems. 131 Specifically, she pointed out that the cultural heritage administrative departments

¹³⁰ Wu, Q. (2007). Cultural heritage historical space protection and urban design: A case study of the conservation planning and urban design of Yao Du Old Street in Dongzhi, Anhui [文化遗产历史空间保护与城市设计——以安徽东至尧渡老街历史街区保护规划与城市设计研究为例]. City Planning Review [城市规划], 31(5), pp. 93-96.

¹³¹ Xiao, J. (2008). Inducing Urban Culture Heritage Management into Urban Planning Management [纳入城市规划管理的城市文化遗产管理]. *Urban Planning Forum [城市规划学刊]*, (1), pp. 111-118.

struggle to handle the increased workload following the State Council's 2005 expansion of immovable cultural heritage units from individual buildings to include larger spatial scales such as historical cities, districts, and famous towns. The urban construction departments should play a greater role in the protection and management of such heritage, including the formulation of protection plans and related planning activities. Li argued that urban cultural heritage management should become an integral part of urban planning management to better coordinate town construction planning, cultural heritage protection planning, and tourism development planning, aiming for a win-win situation. This implies the need for cooperation among various departments related to cultural heritage conservation management. Li's paper from a planning management perspective highlights that not only does planning need to move closer to heritage conservation, but heritage conservation also needs to converge towards planning.

The above literature indicates that, from the late 1980s to the early 2000s, the definition of "planning heritage" in China was as in the name of planning for heritage conservation. Despite continuous government legislation requiring urban planning to emphasize heritage conservation, and persistent calls from Chinese urban planning and heritage scholars such as Zheng Xiaoxie and Ruan Yisan, who proposed specific methods for protecting heritage within urban planning, these efforts did not receive effective responses in the economically-driven urban planning practices. In fact, even after the government introduced relevant policies, some scholars packaged economically motivated planning projects as fulfilling the practice of planning for heritage conservation. Therefore, I argue that the planning heritage of this stage was in the name of planning for heritage conservation.

2.3.3 "规划遗产" as the Planning Legacy of Industrialisation

The "Notice on Strengthening the Protection of Industrial Heritage," issued by the State Council of China to cultural and heritage departments across provinces and municipalities in December 2006, became an opportunity to expand the definition of planning heritage in the Chinese context. This document was issued because the Chinese government recognized that the large-scale urban construction since the reform and opening-up had destroyed a significant amount of heritage sites that recorded the history of China's modern industrial development. Therefore, they regarded industrial heritage as an important and urgent issue within China's cultural heritage protection

efforts. 132 These industrial heritage sites mainly refer to modern built heritage that emerged during China's rapid industrialization, such as oil factories and cement plants. This discussion outlined a form of built heritage resulting from previous planning actions.

Industrial heritage is largely planning heritage. Regarding the definition of industrial heritage, in 2006, Shan Jixiang, then Director of the State Administration of Cultural Heritage, categorized industrial heritage into narrow and broad definitions. The narrow definition refers to modern industrial buildings from various stages in China since the Opium War, which constitute the main body of industrial heritage. The broad definition includes industrial cultural relics with historical, sociological, architectural, technological, and aesthetic value, such as buildings, workshops, mines, industrial process archives, and more. 133 In March 2023, 17 years after the notice was issued, the Ministry of Industry and Information Technology released the "National Industrial Heritage Management Measures," defining industrial heritage. According to this definition, industrial heritage refers to both tangible and intangible cultural heritage formed during China's industrial development, which holds historical, technological, social, and artistic value. Tangible heritage includes production and storage facilities such as factories, workshops, practices, mining areas, industrial management and research facilities, other living service facilities, as well as structures and machinery, production tools, office supplies, products, and archives. Intangible cultural heritage includes production processes, regulations, corporate culture, and industrial spirit. Both the tangible and intangible cultural heritage mentioned above are products of industrial planning and related construction planning. The definition published by the Ministry of Industry and Information Technology contains significant information regarding the Chinese definition of "planning heritage."

Based on the previous discussion about the definition of planning legacy, this type of industrial heritage should be translated as "the planning legacy of Chinese Industrialization." These are the products of the grand event of China's industrialization process since the Opium War. Specifically, we can understand the event of China's industrialization as comprising numerous key nodes, such as the construction plans for coal mines or cement factories. The cultural heritage produced by the industrial planning and related construction planning of these key nodes should be translated as the planning legacy of Chinese Industrialization.

¹³² State Council. (2005). Notification on strengthening cultural heritage protection [国务院关于加强文化遗产保护的通知]. Document No. Guo Fa [2005] No. 42 [国发[2005]42号], December 22. Beijing.

¹³³ Liu, Q. (2006). Industrial heritage will have conservation planning - Nine sites become national key cultural preservation units [工业遗产将有保护规划 - 九处遗产成国家重点文保单位。]. People's Daily, 19 April, p. 11. Beijing.

2.3.4 "规划遗产" as Introducing Foreign Planning Experience to Conserving Heritage

Apart from the discussions on internal practices presented earlier, one major way in which Chinese urban planning scholars and practitioners have promoted the convergence of planning and heritage conservation is by writing articles to introduce Chinese readers to urban heritage conservation experiences from European and American countries. Professor Jian Zhou from Tongji University and his master's student Kai Zhang published two articles in 2001, drawing from the experience of 19th-century residential architecture in Bordeaux and the preservation planning of the Marais historical district in Paris (Plan de Sauvegarde et de Mise en Valeur du Marais). 134 They explored the protection planning for the historical and cultural town of Tongli in Shanghai and the classification of architectural types in this area. 135 They proposed focusing on three different spatial scales—architecture, towns, and natural landscapes—in conservation planning, with potentially overlapping scopes. This approach also formed the basis of the concept planning for urban development in Lijiang, led by Zhou. 136 This comparative research approach conveyed Chinese urban planning scholars' dissatisfaction with the domestic heritage protection strategies of the time and their desire to explore more suitable methods for heritage conservation.

Chinese scholars also provided a detailed introduction to French legislation on heritage protection, hoping to demonstrate a better way of formalising urban planning and heritage conservation. In 2002, Shao Yong and Ruan Yisan adopted a historical analysis approach to systematically review the process by which France established different heritage concepts and introduced related legislation. This included the concepts of historical buildings and landscapes, the regulations introduced in 1930, the concept of the surroundings of historical buildings and the protection law enacted on February 23, 1943, the concept of protected areas and the 1962 law, as well as ZPPAUP and the 1983 legislation. ¹³⁷ This systematic

¹³⁴ Zhou, J. & Zhang, K. (2001). The Building Classification and Protection Measurements in the Preservation Planning for the Historical and Cultural Heritage [历史文化遗产保护规划中建筑分类与保护措施]. *Planning Studies* [规划研究], (1), pp. 38-42.

¹³⁵ Zhou, & Zhang. (2001). Architecture, towns, natural scenery: On the objectives, subjects, and measures of urban historical and cultural heritage conservation planning [建筑、城镇、自然风景———关于城市历史文化遗产保护规划的目标、对象与措施]. *Urban Planning Forum* [城市规划汇刊], (4), pp. 58-59.

¹³⁶ Zhou, J., Zhang, S., & Wang, J. (2003). Seeking development while preserving uniqueness—A brief on the developmental concept planning of the World Heritage City Lijiang [保护中求发展发展中守特色—世界遗产城市丽江发展概念规划要略]. Urban Planning Forum [城市规划汇刊], (02), pp. 32-38.

¹³⁷ Shao, Y. & Ruan, Y. (2002). On the legal construction of historical and cultural heritage protection [关于历史文化遗产保护的法制建设]. *Urban Planning Forum* [城市规划汇刊], (3), pp. 21-23.

review conveyed their dissatisfaction with China's related legislation and called for dedicated national-level laws for urban and architectural heritage.

In 2003, Director Liu Jinsheng from the Comprehensive Division of the Planning Department of China's Ministry of Construction wrote about the French national architects' provincial representative system and emphasized the role of provincial representatives in establishing and managing conservation areas. 138 This indicates that scholars from top Chinese universities specializing in planning, along with leaders of relevant functional agencies, are striving to advance domestic developments in this field by drawing insights from the excellent practices of heritage protection in foreign urban planning systems.

Wang Jinghui, Chief Engineer at the China Academy of Urban Planning and Design endorsed the three-tiered system of conserved units, historic district, and historic city constructed by the Chinese government in 2004. 139 He introduced the institutional processes of architectural heritage protection for individual buildings, regions, and cities in foreign governments, especially in the UK, Japan, France, Italy, and the USA, emphasizing the rationality of this system. Building on this, Wang argued in 2006 for the significant role of urban planning within this three-tier heritage protection system and called for more interaction between urban planning and archaeology professionals. 140 He stressed that architectural planning must clearly recognize the importance of planning for heritage conservation and take on the associated responsibilities. 141 It can be said that Wang is advocating for Chinese urban planners to aim for Planning for Heritage Conservation in their practices.

Simultaneously, Chinese urban planners, rather than scholars specializing in urban planning or built heritage, began to take notice of Melbourne's heritage conservation practices. They authored papers on these practices and advocated for learning from their conservation systems to avoid large-scale demolitions in pursuit of economic

¹³⁸ Liu, J. (2003). Monitoring and Control System of Urban Planning and Heritage Conservation in France: the State Service Department of Architecture and Urban Planner in Local Province 「法国对城市规划和遗产保 护的监管机制:介绍法国国家建筑师驻省代表处]. Urban Planning International [国外城市规划], (4), pp. 47-

¹³⁹ Wang, J. (2004). Policies and planning for the protection of urban historical and cultural heritage [城市历 史文化遗产保护的政策与规划]. City Planning Review [城市规划], 28(10), pp. 68-73.

¹⁴⁰ Wang, J. (2006). The role of urban planning in the protection of historical and cultural heritage: On the interaction between urban planning and cultural relics protection [历史文化遗产保护中城市规划的作用-论城市规划与文物保护的互动]. Chinese Cultural Heritage Scientific Research [中国文物科学研究], (1), pp.

¹⁴¹ Wang, J. (2006). Urban historical and cultural heritage protection [城市历史文化遗产保护]. City Planning Review [城市规划], 30(11), pp. 57-59.

benefits in urban planning. Qiyun Du and Xiaoyan Ruan, senior planners at the Zhongshan City Planning and Design Institute, advocated for gradual and cautious system updates in urban planning. 142 They called for engaging residents, fostering community development, and incorporating principles that respect the input of those affected by planning decisions. Furthermore, they urged not only the conservation of buildings with historical value and good condition but also the restoration of buildings of moderate quality. They also stressed the importance of careful deliberation about the demolition of dilapidated buildings. Finally, they emphasized that new constructions within the planning scope should integrate seamlessly with the existing environment. Assessing whether this article directly addresses the concerns raised by cultural heritage experts is difficult, as urban planning practices vary significantly across China's vast provinces and cities. The attitudes of urban planners towards cultural heritage protection, thereby, may appear fragmented across different regions. However, this article at least reflects that a few Chinese urban planners have become aware of the neglect of cultural heritage conservation in urban planning practices and are starting to seek systematic learning from advanced foreign examples. The convergence of urban planners' increasing attention to heritage and the cultural heritage experts' demand for a stronger emphasis on urban planning is starting to align.

Landscape scholars such as Xi Xuesong, Yu Kongjian, and Li Hailong noticed the concept of the National Heritage Area in the United States and introduced it to their Chinese colleagues through their writings. Xi, Yu, and Li argue that the management and planning system of the National Heritage Area in the United States is characterized by clear hierarchical structure, legal basis, integrated goals and strategies, coordinated cooperation, multidisciplinary participation, and a balance of "soft and hard" approaches. The successful experience provides valuable references for the protection planning of cross-regional linear cultural heritage in China. 143 The National Heritage Area is a method for protecting large-scale cultural landscapes, emphasizing a comprehensive understanding of the historical and cultural value of a region. It seeks to revitalize the economy through heritage conservation and address issues such as landscape homogenization, loss of community identity, and economic decline. Defined by the National Park Service (NPS), the United States currently has 37 National Heritage Areas, including heritage corridors, heritage areas, heritage partnerships, national historical areas, industrial heritage routes, and river corridors.

¹⁴² Du, Q. & Ruan, X. (2006). Rethinking conservation planning: Insights from Melbourne's heritage protection planning [对保护规划的再认识——墨尔本遗产保护规划的启示]. *Planners* [规划师], 22(S1), pp. 73-75.

¹⁴³ Xi, X., Yu, K. & Li, H. (2009). Evaluation of the U.S. National Heritage Area management planning [美国国家遗产区域管理规划评述]. *Urban Planning International* [国外城市规划], 24(4), pp. 91-98.

The introduction of the National Heritage Area concept offers not only landscape scholars and practitioners but also urban planning scholars in China a broader spatial perspective for studying heritage conservation.

The above literature indicates that, from the late 1980s to the early 2000s, the definition of "planning heritage" in China was "introducing foreign planning experience to conserving heritage." Due to dissatisfaction with practices regarding historical cities, towns, and districts in China from the 1990s to the mid-2000s, Chinese urban planning scholars, practitioners, and landscape scholars began writing articles to introduce excellent foreign examples of planning and heritage conservation to their Chinese counterparts. These articles typically provided systematic introductions to the formulation, implementation, and standards of foreign heritage protection laws. Notably, during this period, Chinese planning history scholars did not participate in the wave of introducing foreign experiences. I argue that the planning heritage of this stage was "introducing foreign planning experience to conserving heritage."

2.3.5 "规划遗产" as Surrendering the Authority to Document Planning History to Protect Planning Heritage and Planning Legacy

This section is divided into two parts, reviewing the literature that helps explain the role of Chinese planning historians in promoting the integration of planning and heritage conservation.

2.3.5.1 "规划遗产" as The Lone Chinese Scholar Writing about Negative Planning Legacy Post-1949

Hao Li, a professor of urban planning at Beijing University of Architecture, stands out as one of the rare scholars in China who has continuously contributed to the discourse on the negative planning legacy that emerged after 1949 in the major Chinese urban planning journals. He is an exceptionally productive academic in the field of planning history, with the second highest number of publications among his Chinese colleagues from 2011 to 2020, second only to Baihao Li. 144 It is important to mention that these papers on negative planning legacy only constitute a small proportion of his total publications.

¹⁴⁴ Tong, M., Li, B. and Li, Z., (2022). Retrospect and prospect: a review of research contributions on China's planning history (2011–2020). *Planning Perspectives*, 37(3), pp.615-627.

Li's papers on negative planning legacy can be categorized into three types. The first type includes papers under a broader theme, with some sections discussing negative planning legacy. For instance, discussions on urban planning and implementation issues from a historical approach, which uses basic concepts in planning history evaluation, ¹⁴⁵ or the missions in the study of Chinese urban planning history and theory, 146 or planning of the eight major cities at the beginning of New China as an example. 147 Negative planning legacy is only a minor part under these overarching themes. The second type focuses on negative planning legacy, but the structure of the papers balances ancient urban planning concepts with contemporary policies, especially post-1949, that shaped the negative planning legacy. For example, a geographical historical study of urban development in the Wenchuan area. 148 In his paper, Li spends more than half of the text analyzing the planning history of the Wenchuan area from 201 BC, only pointing out in the fourth section the destructive deforestation during the Great Leap Forward in 1958 and the mass construction of power stations in the 1980s to utilize local water resources, factors that exacerbated the potential natural damage from earthquakes.

The third category of articles by Li focuses solely on the theme of negative planning legacy, notably exemplified by his discussions on the "Anti-Four Excesses" campaign and associated political movements such as "Three Years Without Urban Planning," 149 which led to the decline of urban planning in the 1960s. 150 In these articles, Li uses a rational tone to express the regret felt by Chinese planning historians for the setbacks in urban planning development between 1949 and 1978. The existence of these three types of articles indicates Li's intention to keep discussions of negative planning legacy within a certain textual scope, limiting the discussion to the professional domain and avoiding the spread to ideological fields. The third category

¹⁴⁵ Li, H. (2017). On the basic concepts of historical evaluation in urban planning [试论城市规划历史评价的基本观念]. Beijing Planning Review, (1), pp. 164-167.

¹⁴⁶ Li, H. (2018). Learning from the History: The Mission of China's Urban Planning History and Theoretical Research [以史为鉴:中国城市规划历史与理论研究的使命]. *City Planning Review* [城市规划], (3), pp. 128-130.

¹⁴⁷ Li, H. (2019). Planning of Eight Key New Industrial Cities: The foundation stone of urban planning in new China [八大重点城市规划: 新中国城市规划事业的奠基石. 城市规划]. *City Planning Review* [城市规划], 43(7), pp. 83-91.

¹⁴⁸ Li, H. & Ma, K. (2008). Historical Geography of Towns in Wenchuan Area [汶川地区城镇发展历史地理考]. City Planning Review [城市规划], (11), pp. 78-86.

¹⁴⁹ Li, H. (2016). Anti-Four-Execesses Movement in 1957 and its Influence on the Development of Urban Planning in China [1957年"反四过"运动的历史考察 – 兼谈对新中国城市规划发展的影响]. *City Planning Review* [城市规划], (7), pp. 86-92.

¹⁵⁰ Li, H. (2012). Historical retrospect and reflection—written on the 50th anniversary of the proposal "Three Years Without Urban Planning" [写在 "三年不搞城市规划" 提出 50 周年之际]. *City Planning Review* [城市规划], (1), pp. 73-79.

is the least cited, with the "Anti-Four Excesses" campaign being referenced by only four individuals to date. This reflects two points: firstly, Chinese urban planners and planning historians are either uninterested or reluctant to engage with historical events that affected urban planning development negatively from 1949 to 1978.

Li's publications on planning legacy owe much to his excellent historical writing skills, managing to pinpoint negative planning legacies while keeping the discussion within academic boundaries. However, the influence of his educational background cannot be denied. As a student of Deci Zou, a master of Chinese urban planning and an academician of the Engineering Academy, Li undoubtedly was well protected, having access to significant social and scientific resources to complete his research. Finally, as almost the only scholar writing about negative planning legacy in Chinese literature, Li's success also suggests a possibility: he might be recognized by the Chinese government as one of the scholars with the "license" to present challenging views. Their presence could be deliberately supported by the government to demonstrate their tolerance and encouragement of diverse voices in academic discussions.

2.3.5.2 "规划遗产" as "Planning Heritage embodies Planning Wisdom, witnesses historical processes, and reflects universally valuable planning governance"

The 11th Advanced Symposium on Urban Planning History and Theory, organized by the Urban Planning Society of China (UPSC) in 2019, focused on the theme of "Planning Heritage," as selected by the Urban Planning History and Theory Subcommittee. This could have been an opportunity to advance discussions on planning heritage and planning legacy among Chinese planning historians within the Chinese context. However, as discussed in the first part of this chapter, under the leadership of several influential professors and their teams within the branch, a definition of Planning Heritage was deliberately crafted to avoid negative Planning Legacy: "Planning Heritage embodies Planning Wisdom, witnesses historical processes, and reflects universally valuable planning governance." It is worth noting that Li Hao, a member of the academic committee of the Urban Planning History and Theory Branch, did not participate in crafting this tailor-made Chinese version of the Planning Heritage definition and did not publish any papers to advance the discussion of this definition. Moreover, he did not express any skepticism about this definition, despite its clear divergence from the fundamental principles outlined in his works On the Basic Concepts of Historical Evaluation in Urban Planning and The Mission of China's Urban Planning History and Theoretical Research in China that he has conducted. Li's attitude merits thoughtful consideration.

A segment of Chinese planning historians has adopted the definition of "Planning Heritage" provided by Ye, Li, and Wu and used it as a basis for their further discussions. The adoption of this could stem from various causes, such as a lack of serious academic criticism, a reluctance to offend these influential and powerful planning history professors, or, like the authors of this tailored definition, concerns about political realities. While this foundational theoretical framework is flawed, it does not mean that the papers adopting this definition should not undergo careful and rigorous academic scrutiny. They can serve as valuable material to examine whether Chinese planning scholars are willing and how they manage to promote the integration of urban planning and heritage conservation concepts within a severely constrained academic context. These papers total eight, with four from Baihao Li and his team, three from Yi He and his doctoral student Yang Zhang, and one from Han Zou. Discussions about the definition of the Planning Heritage concept constitute four of these papers, while the other four incorporate practical case studies. (Content discussed in the first part will not be repeated here.)

A common feature of these papers is their keen interest in discussing whether "Planning Heritage" constitutes tangible or intangible cultural heritage, which clearly shows the authors' lack of understanding of how the terms of "Planning" and "Heritage" historically evolved from separation to integration. In 2019, Han Zou, a professor of planning history from Hubei University of Technology, used the term "Planning Heritage [规划遗产]" and argued that it is an intangible heritage.¹⁵¹ She defined "Urban and Rural Planning Heritage" as follows: "A type of intangible cultural heritage that has had a significant impact on human urban and rural development or the discipline of planning, or possesses universal value, including the knowledge system and skills of spatial planning that reflect the spatial layout and achievements of human settlements, as well as related physical objects and cultural sites. This includes notable urban and rural planning ideas and theories, urban and rural planning laws, regulations and policies, urban and rural planning design blueprints, urban and rural planning institutions, and typical urban and rural spaces." Among these, "related physical objects and cultural sites," "urban and rural planning design blueprints," and "typical urban and rural spaces" are clearly tangible cultural heritage, which contradicts Zou's claim of it being intangible. Furthermore, Zou does not provide a specific definition for "universal value." However, based on her subsequent examples, it appears she is referring to positive planning legacy. It can be said that her definition later aligned with those of Ye, Li, and Wu, focusing solely on positive planning heritage and planning legacy. Additionally, it is worth noting

¹⁵¹ Zou, H. (2019), Preliminary Approach to the Study and Related Issues of Urban Planning Heritage ["城乡规划遗产"概念辨析及相关问题初探]. Study on Natural and Cultural Heritage [自然与文化遗产研究], 4(11), pp. 120-124

her positive assessment of Haussmann's renovation of Paris: "The wide tree-lined avenues, orderly and beautiful buildings, and exquisite sculptures in the squares together form the unique urban landscape of Paris, making it many people's most beautiful city and capital of art." Interestingly, Sitte's critique of Haussmannite may well be the academic starting point that brought the concepts of Planning and Heritage closer together.

A second commonality among these papers is their neglect of writing planning history as a potential means to conserve the heritage/legacy of past planning practices, a key connotation when Planning and Heritage converge, which results in their vague definition of the intangible attributes of planning heritage. The paper by Yang Zhang and Yi He in 2023 discussing the dialectical perspective of tangibleintangible is a prime example. 152 Their paper shares a similar intent with Zou's work, which is to discuss both the tangible and intangible attributes of planning heritage. The difference lies in Zhang and He's argument that planning heritage is both tangible and intangible, which is undoubtedly correct. However, in their paper, they limit Robert Freestone's understanding of Planning Heritage to tangible planning heritage. Indeed, the Australian planning heritage registry spearheaded by Freestone includes tangible planning heritage derived from previous planning practices. Yet, this does not mean that Freestone's understanding of Planning Heritage is limited to the tangible aspect, as he is perhaps the scholar most representative of writing planning history as the means to conserve both tangible and intangible heritage, especially considering his continuous efforts in writing literature reviews on the development of planning history in Australia and globally. Although they frequently use the term themselves, especially in their articles introducing foreign experiences, Chinese planning historians have yet to recognize that writing planning history papers to promote heritage conservation is a primary definition of planning heritage in countries like the UK, the USA, and Australia.

Based on the above analysis, Table 2.2 presents the primary usage scenarios in which "Planning" and "Heritage" converge within Chinese scholarship.

¹⁵² Zhang, Y. & He, Y. (2023). Above Form: On the Value Form of Planning Heritage – Based on the Dialectical Perspective of "Tangible - Intangible" [形式之上:规划遗产的价值形态刍议 – 基于"有形 – 无形"的辩证视角]. *City Planning Review [城市规划]*, (08), pp. 38-46, 65.

 TABLE 2.2 The various scenarios of using Planning Heritage in Chinese Scholarship. Source: the author.

Definitions	Time	Scholars
"规划遗产" as Advocating for Planning as a Tool for Heritage Conservation.	since mid-1940s	Liang, Zheng, Chen,
"规划遗产" as Planning in the Name of Prioritizing Heritage Conservation.	1984	Zheng
"规划遗产"as Introducing Foreign Planning Experience to Conserving Heritage	2001	Zhou, Shao, Liu
"规划遗产" as the Planning Legacy of Industrialization	2005	State Council
"规划遗产" as The Lone Chinese Scholar Writing about Negative Planning Legacy Post-1949	Since 2017	Li
"规划遗产" as Surrendering the Authority to Document Planning History to Protect Planning Heritage and Planning Legacy	Since 2019	Ye, Wu, Li, He, Zhang

3 Classified and Tailored:

Key Parameters Defining the Planning Heritage and Legacy in the Daqing Oilfield

Daqing is the case study of this paper. It refers to both the oil field discovered in 1959, which began immediate development, and the variously scaled settlements constructed by the Chinese government from the 1960s to 1978 to exploit this oil field. It also refers to the area where the oil enterprise exercised local administrative authority and the region governed by the Daqing Municipal Government, which evolved from these settlements in 1979. Although Daqing's permanent population had exceeded 200,000 by the early 1970s, meeting the standards of Western cities, this thesis seeks to address whether the large-scale space shaped by the unique oilfield planning policies and principles adopted by local authorities can be interpreted as having the characteristics of a modern city.

This thesis adopts a historical analysis approach to study the urban/regional spatial planning of Daqing and its transformations from the late 1960s to the early 1990s. Based on the definition of Planning Heritage and Planning Legacy from the previous literature review section, this study can further be seen as an effort to protect Daqing's Planning Heritage and Legacy by writing a planning history paper. This section will argue that research on Daqing's heritage has overlooked the planning heritage of the oil industry in three parts.

As a historical study, it is necessary to thoroughly show the state of historical data on the Daqing, including data accessibility, credibility, and limitations, as well as how these limitations may affect the study's results. This is not only because this research adopts a historical analysis approach, which emphasizes data sources,

but more importantly because the unique political significance and economic value of the Daging oil field determine the characteristics of its historical data: secrecy. The economic value of Daging is immense. In 1964, then-Premier Zhou Enlai announced that Daging's annual oil production could meet China's internal needs. Its political value is immeasurable. In the late 1950s, due to internal and external policy failures, the Chinese Communist Party faced a severe political crisis: a severe famine emerged domestically, causing widespread suffering, and the Sino-Soviet split resulted in the cessation of Soviet technical and material aid to China. The solution to this political crisis came through political means; they needed a perfect hero story to convince the populace that domestic and international difficulties were not insurmountable. Daging was one of the heroes that the Chinese government vigorously promoted. From the mid-1960s to the late 1970s, Daging was directly linked to the achievements of China's top leader, Mao Zedong, and was given an unchallengeable status. From the early 1980s to 2010, the status of Daging did not change despite Mao's death due to the "Petroleum Clique" within the Party, a group of individuals from the petroleum sector who eventually reached high positions within the CCP, wielding considerable power. Daging became a successful case of CCP governance. After 2012, newly elected President Xi Jinping launched an anti-corruption campaign, dismantling the "Petroleum Clique," many of whom were local and petroleum ministry officials who had led multiple urban planning efforts in Daging from the 1980s to the 2010s. Considering that industrial and urban planning are crucial components of China's public policy, and given Daqing's deep entanglement with Chinese politics, these factors have the potential to influence the presentation of relevant historical data. Therefore, a careful discussion of these aspects is necessary.

The second part will analyze the discussion of Daging's planning heritage in Chinese scholars' publications. This includes not only papers published in professional journals of urban planning and architecture but also books written by Chinese scholars about Daging, especially Li Hou's work "Building for Oil," and other works that address the historical development of planning in Daging.

3.1 In the Name of Being Classified: The aspects of the state of Urban Planning Data in the Daqing Oilfield

At the very beginning of the research data collection phase for this study, I was able to clearly perceive the uniqueness of Daqing's urban planning-scale built heritage and its representative heritage: Secrecy. Based on spatial practices, representations, and what is represented, the data of interest in this study include: texts documenting the industrial planning of the Daqing Oilfield, urban and regional planning formulations, including planning drawings and explanatory notes; visual materials representing the built environment of the Daqing Oilfield, such as photographs, films, and propaganda posters; and interviews with individuals involved in the urban planning of the Daqing Oilfield.

As a researcher, it is quite tough for me to collect the data on the built environment legacy of the Daging Oilfield from the perspective of a Dutch university. These difficulties arise from the unique local political system and the closed social environment it creates. Lacking effective local connections makes it challenging for me to gather relevant research data in Daging. Even though professors from Harbin Institute of Technology and Heilongjiang University have enthusiastically helped me, allowing me to conduct research locally as their research collaborator, the process has been difficult. From 2016 to 2023, excluding the period from 2020 to 2022 when the Chinese government's stringent travel restrictions due to COVID-19 were in place, I visited Daging almost every year for 10 to 14 days of fieldwork, collecting data based on the progress and needs of my research. However, I faced inherent disadvantages in collecting data: I am not a local of Daging, nor do I have connections in state-owned oil enterprises, meaning I lack an effective local social network to aid in collecting the necessary data. My distinct accent, different from that of the locals, often arouses suspicion among local authorities, leading them to question my profession and the reasons for needing the data. This often results in my research being halted before it even begins. There is evidently a relatively closed community in the area, and without an effective introducer, it is difficult to penetrate this society and obtain useful research materials.

Collecting original urban and regional planning documents in Daqing, especially drawings and related texts with land use information, is an almost impossible task. The difficulty of this task first arises from the decreased accessibility to urban and regional planning data caused by the unique local governmental system. From

the 1960s to the late 1970s, the Central Government implemented a system called "integration of government and enterprise" in the Daging Oilfield, in which state-owned oil enterprises simultaneously assumed the role and powers of local government. Under this system, state-owned oil enterprises named what would typically be urban planning projects, or projects with similar attributes to urban planning, as surface construction plans, making them sub-plans of the overall oilfield industrial planning. Consequently, state-owned enterprises hold the planning documents from this period. The establishment of the Daging Municipal Government in 1979 marked the official end of the "integration of government and enterprise" system. Urban planning became independent from industrial planning with the establishment of the Daging Municipal Government and its affiliated Daging Urban Planning Bureau. Since then, urban planning project documents have been held by the Daging Municipal Government. Currently, Daging has two institutionally independent power entities: the Daging Municipal Government and China National Petroleum Corporation's Daging Oilfield Limited Company (Daging Petroleum Administration Bureau). Therefore, urban planning scholars and planning historians interested in Daging's urban and regional planning need to seek research data from both entities.

The highly restrictive archival access system in Daging further complicates the retrieval of urban and regional planning and construction documents. The Daging Oilfield Archives, managed by the state-owned oil enterprise, is not open to the public. Based on my research experience, despite presenting an introduction letter from the School of Architecture at Harbin Institute of Technology, which formally introduced my research and the materials needed, the reception at the archives refused my request on the grounds of an incompatible unit. It cannot be ruled out that the authority of the introduction letter I obtained was insufficient to gain access, and perhaps a letter at the school level might have been effective, or proof and endorsement from a higher authoritative body could have been useful. Nonetheless, their refusal of my provided letter indicates that the oilfield system's materials are not accessible to urban planning scholars with ordinary backgrounds. In contrast, the Daging Municipal Archives, under the jurisdiction of the Daging Municipal Government, is open to the public under strict scrutiny. However, their service does not include providing access to archives related to urban and regional planning. Instead, they issue real estate certificates or other necessary proofs for local residents. Thus, in terms of accessing historical archives and materials on urban and regional planning, both the Daging Municipal Archives and the Petroleum Administration Archives have extremely low levels of accessibility for ordinary scholars.

Additionally, the continuous evolution of local management systems, from the "integration of government and enterprise" to the "separation of government and enterprise," has become an obstacle for the petroleum aristocracy and local government in systematically organizing historical documents. Apart from the essential historical documents in the municipal archives, many of the documents related to oilfield construction from the 1960s to the 1980s have not been meticulously organized and are stored in the subordinate institutions of the original Petroleum Administration Bureau located in Ranghulu District. During my research, I attempted to obtain information from a retired local official named Mr. Gong, who had been responsible for compiling the history of local mining areas, urban, and regional construction. He clearly informed me that the distribution maps of central villages and residential points from the 1960s and 1970s were currently packed and placed within the Petroleum Administration Bureau.

Although these documents have passed their confidentiality period, their declassification requires signatures not only from local Daging leaders but also from provincial leaders and relevant leaders from the China Petroleum Administration Department. As a result, no one has applied to undertake this task. He said, "Identifying these materials requires a significant amount of manpower, and the relevant leaders need to bear considerable administrative responsibility. Therefore, neither the municipal government nor the Petroleum Administration Bureau is willing to do this, and these documents are just packed away in a room in the nearby building." This apparent separation means that neither the Daging Municipal Government nor the Petroleum Administration Bureau is willing to take responsibility for declassifying historical construction documents.

The common response from local petroleum authorities and the municipal government when unable to provide historical document services is that the requested information or documents are classified. It is possible that the drawings and documents recording the urban and regional planning schemes of Daging might contain information that could lead to the leakage of national strategic information, such as the distribution of underground oil storage and other data that could infer the distribution and total storage of the oilfield. During field research, almost all geographical information data of the Daging Oilfield is not publicly available, even for documents from many years ago. This makes it difficult for urban and regional planning historians to access the corresponding data. Whether this practice has practical significance is worth further discussion. Firstly, even if planning documents from 30-50 years ago contain related sensitive oilfield data, it is debatable whether such information still holds sensitive attributes today. Especially with the rapid advancement of satellite surveying and remote sensing technology, the significance of hiding such information is questionable. This is reminiscent of

the fact that, although domestic navigation maps in China, such as Gaode Maps, have mosaicked parts of the Daqing Oilfield to obscure the current status of oilfield development, Google Maps clearly shows the recent developments in the local oilfield. Secondly, not all primary urban and regional planning documents containing oilfield information include sensitive data, so it is unreasonable to block all related original data indiscriminately. Therefore, it can be said that the local government and petroleum magnates have abused the concept of classified documents to evade the enormous workload of screening and declassifying information and documents. These data would be very helpful in analyzing the spatial development of the Daqing Oilfield. While it is entirely acceptable for certain information to remain classified, this should not serve as a justification to deny urban and regional planning historians access to all primary data.

Compared to the strict control over primary data by the authorities, the literature documenting the planning and construction history of the Daging Oilfield, compiled and published by the Chinese government and local Daging authorities, is exceptionally abundant. Especially after the establishment of the Daging Municipal Government in 1979, the primary and secondary power institutions of the Daging Oilfield, mainly at the municipal level, district (town) level, and large petroleum industrial factories, have shown an extraordinary enthusiasm for writing the development history of their respective institutions or jurisdictions. This enthusiasm has ultimately transformed into a significant number of publications documenting the construction history of various jurisdictions. Representative examples include the "Daging City Chronicle," which was initiated by the Daging Municipal Party Committee in 1985 and officially published in 1988, and the "Daging City Chronicle (1986-2005)," compiled in 2012 and published in 2014. Additionally, since 1988, the "Daging Yearbook" has been published annually. These sources compile municipal historical data, including mining areas or urban planning and construction, within the management scale of the entire Daging Oilfield mining area (before the establishment of the Daging Municipal Government in 1979) and the city of Daging. They can provide researchers with some valuable data.

The chronicles and records compiled and published by secondary power institutions are equally numerous, reflecting these institutions' pride in their development history. These secondary institutions include district governments (such as the Worker Town) under the Daqing Petroleum Administration or the Daqing Municipal Party Committee, as well as various entities like the refinery, large petroleum extraction plants, the Daqing Design Institute, and even supporting facilities such as equipment manufacturing plants and logistics institutions, including the First Hospital of the Daqing Petroleum Administration. For urban planning scholars and even the general public, the accessibility of these secondary data sources is

remarkably high. The Local Literature Library of the Daging City Library, established in 2014, provides an open channel for accessing these materials. Chinese scholars can access the library's documents by registering with their ID cards. The collection is extensive, covering a large number of chronicles and records compiled by local primary and secondary power institutions. One notable advantage of this library is that, for some historical chronicles, it not only houses the final published versions but also collects various drafts, review versions, and internal circulation versions from the compilation process. These drafts, while largely consistent with the final published versions, contain some content changes that go beyond mere spelling corrections and are worth careful exploration. It is also worth mentioning the sources of the library's collection: besides documents supported by the Daging Municipal Government, they also rely on social donations, purchases from private collectors, and equivalent exchanges. This acquisition method suggests an alternative way to access local secondary data through private collectors. Overall, for urban planning researchers, the Local Literature Library of the Daging City Library is an effective place to obtain secondary data.

In addition, for planning historians, the advantages and disadvantages of materials found from private collectors are quite pronounced. The advantage of private collections is that they may possess documents that are not available in the Local Literature Library of the Daging City Library, providing insights into the local planning and construction history that the library may lack. However, this channel also has obvious drawbacks. Due to various reasons, private collectors often have a limited scope of collection, and the quality of their materials may be compromised due to improper storage, resulting in issues such as missing pages, damaged pages, and yellowing. Moreover, without introductions from local people or their acquaintances, it can be challenging for outsiders to connect with these private collectors. In summary, targeted visits to private collectors can offer valuable supplements to the data available in the Local Literature Library. Regardless of whether the data is sourced from the Local Literature Library or private collectors, it is important to note that the information obtained is secondary data, which are official historical records reviewed and published by the Chinese government and local authorities.

Despite the difficulty in obtaining primary data related to urban and regional planning from official archives, the historical research on the urban and regional planning of Daging has to rely on the secondary data mentioned above. However, it is still essential to have sufficient quality primary data to corroborate the authenticity of these secondary sources. The major issue with the historical records compiled and published by Daging's primary or secondary authority institutions is that they have undergone government review, which means the data presented may have been deliberately altered or concealed to align with the interests of the Chinese

government. The necessary primary data mainly fall into three categories: planning documents and drawings related to urban and regional planning, photographs that reflect changes in the built environment, and interviews with relevant individuals.

It is worth noting that the concept of classified documents is deeply ingrained not only in the process of accessing relevant literature but also in the minds of local officials, including the leaders of the Urban Planning Bureau and key planners. This makes it equally challenging to obtain valuable information through direct interviews with the individuals involved. Through the introduction of professors from Harbin Institute of Technology and Heilongjiang University, I secured three interviews with two urban planners who participated in the planning of Daging city and its mining areas. These planners were involved in the preparation of the 1982 Daging Urban Construction Master Plan; one of them was Zhu, the chief planner of the Daging Urban Planning and Design Institute at the time, and the other was Gong, the current chief planner of the Heilongjiang Provincial Urban Planning and Survey Design Institute. Both now hold leadership positions in the Heilongjiang Provincial and Daging Municipal Urban Planning Bureaus and other institutions. Despite my introducers being highly respected local professors with personal connections to these planners, during the face-to-face interviews, they remained vigilant and cautious in their responses to my questions.

Their attentiveness during my interviews led to the absurd situation of a "silent interview." In the summer of 2017, I had the opportunity to interview Chief Planner Zhu. When I arrived at his office at the appointed time and took out my notebook to start asking questions, he had his assistant hand me a photocopy of a chapter from a publication. Upon handing me the photocopy, he told me he was very busy and had no time to answer my questions, stating that the chapter's content could address any questions I might have. The chapter was titled "The History of Urban Planning in Daging," and he was the author. Although I cannot confirm whether his claim of being busy during the agreed interview time was genuine, it was evident that all possible answers to my questions had been printed in that stack of papers. Moreover, he did not reveal the specific book from which the chapter originated, suggesting that the book might not be publicly accessible. Despite extensive searches in secondary sources, I was unable to locate the specific book containing this chapter. In Daging Oilfield, there are similar publications that possess a publication number, granting them the authority of general publications, but they are not available to the public. These publications are printed in limited quantities, meant only for internal circulation within the Daging Municipal Government, the Petroleum Administration Bureau, and related units. The chapter provided by Chief Planner Zhu aligns with the characteristics of such documents, indicating it is likely of the same type. His actions conveyed a clear message: even if he had chosen to answer my questions at

that time, the content of his answers would not have exceeded what was provided in the text.

Another interview was not silent, but many parts were not significantly different from the silent interview. In the summer of 2018, I had two opportunities to interview Chief Planner Gong. Overall, he was willing to answer my questions. However, being willing to answer questions does not equate to actually answering them. When it came to geographic information, he would directly tell me he could not disclose it due to confidentiality, and without organizational and relevant approvals, he could not answer. Regarding questions about how the local government system shaped local planning practices and how institutional changes after the 1980s affected local planning practices, his answers were essentially consistent with what I could gather from "internal publications." However, he was quite willing to discuss technical aspects of planning. For instance, when I asked why there were contour lines on the first version of Daging's urban master plan, he explained that they used the map as a base map for planning. At that time, urban planning had just resumed, and in a confidential city like Daging, there was not enough time and manpower to draw blank sheets specifically for the master plan, so they had to use existing maps. Chief Planner Gong's behavior clearly indicated the accessibility of information related to Daging's planning history: data related to the oil industry could not be disclosed, data tied to the political system stayed consistent with official publications, and technical planning content could be analyzed. It was evident that in answering my questions, they cautiously kept their responses within a defined boundary, and the alignment of their answers with official documents indicated that the Chinese government was the boundary setter.

The primary planning archives in Daging, the publication status of secondary literature, and the interview materials with local people involved in Daging's urban planning all share a common characteristic: in the name of being classified.

3.2 In the Name of Writing Daqing's Planning History: The Tailored Planning and Construction History

Currently, there are very few published works on the planning history of Daging. The most influential Chinese planning and architecture journals, such as Urban Planning Forum, Urban Planning, International Urban Planning, Architectural Journal, and Architect, have all discussed Daging's urban and regional planning practices. The Architectural Journal even published a special issue in 1966 introducing the planning and construction practices in Daqing. However, apart from two interview-based articles on the planning history of Daging Oilfield by Li Hou, a former professor of planning history at Tongji University and now a lecturer at Harvard University, published in Urban Planning Forum in January and June 2013, there are no other publications on Daging's planning history. One of these articles is an interview with Zou Deci, an academician and former director of the China Urban Planning Design Institute, conducted by Li Hou and Wang Kai, in which Zou recalls how Central Government policies shaped the planning principles of Daging Oilfield in the 1960s and how then Chairman Liu Shaoqi promoted the principles and practices of Daging's spatial planning in the People's Daily. 153 The second article is Hou's interview with Zha and Yang, both Tongji University graduates who worked at the Daging Design Institute, with Zha later representing young planners and architects at the 1966 annual meeting of the Architectural Society of China. 154 While these interviews provide firsthand information for studying Daging's planning history, they are in the form of interviews rather than research papers. This means that Hou did not directly present her own views, although some of her perspectives can be inferred from the questions she posed.

In the 1980s, there were sharp criticisms of the planning and construction processes of the Daqing Oilfield. Hua Lanrong, a Chinese planner who studied in France and participated in the initial planning scheme for Beijing, questioned the Chinese government's and the Ministry of Petroleum's strategy of not building a central city during the development of the Daqing Oilfield in 1981. He criticized

¹⁵³ Wang, K. & Hou, L. (2013). Experiences of urban planning in China during the 1960s: An interview with Academician Zou Deci [1960 年代中国城市规划经历——邹德慈院士访谈]. *Urban Planning Forum* [城市规划 汇刊], (1).

¹⁵⁴ Hou, L. (2013). Those years in Daqing: Interviews with Cha Binhua and Yang Ruisong [在大庆的那些年——查滨华, 杨瑞松访谈. 城市规划学刊]. Urban Planning Forum [城市规划汇刊], (6), pp.127-128.

the local authorities' long-term adherence to this planning approach: "Particularly criticized was their 'leftist' thinking, relying solely on the courage and creativity of manual laborers, while ignoring the importance of heeding the opinions of technical personnel and experts, and not valuing modern work and management methods." 155 Additionally, in 1985, three influential Chinese architectural veterans, Deshun Gong, Denong Zou, and Yide Dou, periodized the history of modern Chinese architecture from 1949 to 1984. They argued that the construction practices in Daqing, especially the promotion of the "Gandalei" spirit, caused significant losses to the country and represented a malign development of the CCP's leftist ideology in the field of design. 156 These scholars held a critical view of the planning practices in Daqing from the 1960s to the 1980s, attributing them to the CCP's leftist ideology. Given the political climate at the time, which did not hinder academic reflection on previous Communist practices, these scholars had the opportunity to voice such criticisms.

However, the internal political movements in China in 1989 and the dissolution of the Soviet Union in 1991 alarmed the Chinese government, leading to a reduced tolerance for such academic reflections. After the 1990s, and especially after 2012, with the changes in national leadership, President Xi Jinping's emphasis on strengthening ideological propaganda further diminished the space for academic criticism of CCP policies, including spatial policies. In a 2018 interview with The Paper, Li Hou mentioned, "After returning to China, I wanted to publish some interview materials about Daqing in academic journals, but I sensed discomfort among some of the senior scholars. They felt they were political scapegoats." Political factors, though not directly affecting her at the moment, became challenges to Hou's further critical reflection on Daqing's planning practices within the Chinese context.

It is particularly noteworthy that Hou's 2020 seminal work, "Building for Oil: Daqing and the Formation of the Chinese Socialist State," is a well-behaved outlier. 158

This book is creatively structured in terms of planning history writing. She skillfully develops two parallel storylines: one begins with the Chinese government's desire for

¹⁵⁵ Hua, L. (2006). Reconstruire La Chine:trente ans d'urbanisme 1949-1979 [重建中国: 城市规划三十年 1949-1979]. Sanlian Bookstore 三联书店.

¹⁵⁶ Gong, D., Zou, D. & Dou, Y. (1985). Periodization and other aspects of the history of modern Chinese architecture (1949–1984) [中国现代建筑历史 (1949—1984) 的分期及其它]. *Architectural Journal* [建筑学报], (10), pp.5-8+83.

¹⁵⁷ Zhang, Y. (2018). Exclusive interview with Hou Li: The design revolution of Daqing Oilfield – The tension between the Republic's revolution and construction [专访侯丽 | 大庆油田的设计革命: 共和国革命与建设之张力]. The Paper [澎湃新闻]. Available at: https://www.thepaper.cn/newsDetail_forward_2624131 [Accessed June 17, 2024].

¹⁵⁸ Hou, L., (2020). Building for oil: Daqing and the formation of the Chinese socialist state. BRILL.

the oil industry in the late 1950s, and the other starts with the aforementioned Hua and Yang, who had just graduated from Tongji University in the late 1950s. These two storylines advance alternately. When the national narrative shifts, it effortlessly and immediately affects the development of the personal storyline. This depiction clearly conveys the dramatic conflict of how, under collectivism, those in power use spatial planning as a leverage to achieve their political ambitions while neglecting the basic livelihood needs of the grassroots population.

This book serves as both a milestone in Chinese planning history literature and a source of inspiration for this research. However, one issue in Hou's work is her overly subtle depiction of the planning disasters that occurred in Daging, which lacks a direct examination of how local planning policies and systems constrained the lives of residents. Additionally, it's worth mentioning that, until Hou left Tongji University for Harvard in 2023, this book had only been published in English. The Chinese edition was finally released by a domestic publisher in July 2024, four years after the original English version was published.

Political factors seem to have become a major influence in tailoring scholars' discussions on the negative planning heritage and legacy existing in Daging after 2020.

4 For Governing Legitimacy

Planning the Oil Extraction in Daging as a Battle 1953-1959

Throughout the course of the Chinese Civil War, which lasted from 1945 till 1949, the Chinese Communist Party (CCP) demonstrated a steadfast commitment to the ambitious task of constructing a modern China. The promise was met with significant resonance among the populace, resulting in a substantial wave of support for the CCP. During the Second Plenary Session of the Seventh Central Committee of the CCP, held in Xibaipo on March 5, 1949, Mao Zedong expressed his enormous confidence stating, "We are not only adept at dismantling an old world but also proficient in constructing a new one." 159 After the CCP emerged triumphant in the Civil War against the Kuomintang and the subsequent establishment of political dominion over mainland China on October 1, 1949, identifying substantial petroleum reserves within the nation and establishing a corresponding petroleum industry became the top priority for achieving the reconstruction goals of the government.

Rapid urbanization and industrialization were envisioned as the metaphorical vessel for carrying its promises ahead, thereby necessitating the use of petroleum as the driving force. Nevertheless, the acquisition of this highly sought-after resource remained difficult after the inaugural Five-Year Plan (1953-1957). 160 Figure 4.1, a political propaganda poster titled "Petroleum is the lifeblood of industry," effectively conveys the significance of oil for industrial development and its crucial role for the Chinese Communist regime. This poster is part of a series created by the Chinese

¹⁵⁹ Mao, Z. (1991) 'Speech at the Second Session of the Seventh Congress', in Selected Works of Mao Zedong Volume 4 [毛泽东选集第四辑]. Beijing: People's Publishing House, pp1424-1439. Original Speech made on 5 March 1949.

¹⁶⁰ Li, F. (1955) 'Report on the First Five-Year Plan for the Development of the National Economy [关于发展 国民经济的第一个五年报告]', People's Daily[人民日报], 6 July, p. 1. Beijing.

National Science Popularization Association, aimed at educating the general public about the Central Government's plans for various industries during the First Five-Year Plan. The designer divided the image into three sections using large color blocks, each representing different themes: oil extraction and refining, the uses of petroleum products, and the increase in annual oil production over five years. Specifically, the goal of the First Five-Year Plan was to boost oil production from 436,000 tons in 1952 to 2,012,000 tons, an increase of 3.5 times. The ambitions of the Central Government exceeded by large the capabilities of medium-sized domestic oilfields, such as Yan Chang, Du Zi Shan, and Yumen, to adequately accommodate the needs. This significantly hindered the advancement of industrialization and urbanization, as illustrated, for instance, by the fact that urban autobuses were required to carry sizeable natural gas bags on their roofs to meet minimal service demands. For the top leaders of the central government, nothing was more crucial at that moment than discovering a large oil field, rapidly developing it, and bringing it into production.



FIG. 4.1 Petroleum is the lifeblood of industry [石油是工业的血液], Publisher: Chinese National Science Popularization Association, 1956, Source: National Library of China

As the navigator of this immense vessel, Mao famously posed the question, "Now that the fundamental class conflict has been resolved, where should our focus lie? Our focus should shift towards construction, guiding the entire society, leading a population of 600 million in the battle against nature, and promoting China's prosperity by transforming it into a modernized and industrialized country." ¹⁶¹ The phrase "battling against nature" clarifies Mao's mindset and the unwavering resolve in his endeavor to establish the petroleum industry. This conflict can be perceived as a rivalry between the CCP and the force of nature, striving to achieve modernization and industrialization. That was the reason why Mao could not tolerate any instances of failure that impeded the attainment of his objectives, even if they were attributed to a small amount of misfortune, whereas in his opinion success necessitated not only a marginally greater degree of patience.

The Ministry of Petroleum Industry, commonly known as the Ministry of Petroleum, was a governmental division operating under the authority of the Chinese State Council. Its primary responsibility was to oversee and regulate the rise of the petroleum industry. Nonetheless, it was the only ministry that failed to accomplish its goals throughout the First Five-Year Plan. 162 This outcome made its top leader a primary target of criticism from the Central Government, specifically from Mao. The then minister, Li Jukui, demonstrated no substantial negligence in his professional duties and engaged extensively with the Ministry of Geology in the search for oil. In 1953, they released the "Map of Prospective Hydrocarbon-bearing Areas of China (中国含油远景区划图)," indicating the existence of oilfields in the Songliao Basin. In August 1955, the Ministry of Geology and the Ministry of Petroleum sent their respective exploration teams to conduct exhaustive investigations of the Songliao Basin. 163 In partnership with the Institute of Geology of the Chinese Academy of Sciences, they published the "Long-term Petroleum Prospecting Map of the Songliao Basin (松辽盆地含油远景图)" by the close of 1957, providing the confirmation of high possibilities of oilfields in the Songliao Plain. Nevertheless, Li held accountable for the Ministry of Petroleum's failure to fulfill its mandate.

¹⁶¹ Mao, Z. (2009) 'Speech at the Jinan Party Member Cadre Meeting', in *Research Collection on 60 Years of New China (Volume I)* [新中国60年研究文集《一》], Beijing: Central Literature Publishing House, pp. 9-10. Original Speech made on 18 March, 1957.

¹⁶² Feng, L., Hu, Y., Hall, C.A. and Wang, J., (2013). *The Chinese Oil Industry: History and Future*. New York, NY, USA: Springer.

¹⁶³ Chen, G. (ed.) (2009) 'Exploration [勘探]' in *Daqing Oilfield Chronicles (1959-2008)* [大庆油田志(1959-2008)]. Harbin: Heilongjiang People's Publishing House, p. 51. ISBN: 9787207076427.

In February 1958, following Mao's directions, Li Jukui and Yu Qiuli, the political commissar of the People's Liberty Army (PLA)'s General Logistics Department, traded duties, with Yu assuming the position of the second Minister of Petroleum. The newly appointed minister, known by the nickname "One-Armed General," was a high-ranking PLA officer renowned for his perseverance. As a veteran who joined the Eighth Route Army during the Anti-Japanese War, he had lost his left arm in 1936 during the Long March. Through this appointment, Mao endeavored to convey a lucid message to the Ministry of Petroleum and the general populace: the development of the petroleum industry was a battle against nature, and all personnel engaged in oil extraction endeavors must demonstrate unwavering resolve akin to Yu's, even if it entailed sacrificing a part of their bodies in the pursuit of petroleum. Failure to do so would result in a fate similar to that of the former minister Li.

Mao's appointment held more symbolic than practical implications. If perseverance was a characteristic shared by every PLA officer who had endured warfare and survived, then both Yu and Li, another veteran soldier, embodied it. Prior to Mao's appointment, the individual supervising the Ministry of Petroleum's exploration endeavors had been its Deputy Minister, Kang Shi'en, who retained his position. Kang, a geology graduate from the esteemed Tsinghua University, served in the People's Liberation Army but at a lower military rank than Yu and Li. In 1955, he assumed the role of Deputy Minister of Petroleum for two primary reasons: his unblemished background and his expertise and technical skills in relevant fields, which he acquired through previous experience managing the Yumen oil field as a PLA representative in 1949. Retaining the vice minister, Kang, while replacing the Minister Li indicates that Mao aimed to maintain continuity in actual planning and decision-making.

The appointment of Kang and Yu to their respective positions aligned with the Central Government's modus operandi for selecting ministry leaders during that period. Conventionally, high-ranking officials from the Party and military occupied top leadership positions, responsible for the implementation of political ideas and tasks. At the same time, individuals with clean backgrounds and professional expertise were assigned as deputies to address technical and domain-specific issues. Kang held the principal position of authority with regard to the development model, planning, and construction of the recently uncovered Oilfield.

Mao's commitment to advancing the petroleum industry had far-reaching consequences, impacting not just personnel allocations within the Ministry of Petroleum but also the establishment of novel administrative structures and administrative institutions. The appointment of the new minister served as a catalyst for employees to enhance their petroleum exploration endeavors. This resulted in the allocation of significant human and material resources to the Songliao Basin, with

the aim of identifying potential underground petroleum reserves. Consequently, the Xi'an Petroleum Geological Investigation Division was disbanded in April 1958 and reconstituted into four exploration teams, one of which eventually became the Songliao Petroleum Prospecting Division. 164 Upon initiating exploration activities in May, the Songliao Petroleum Prospecting Division immediately reported evidence of local petroleum reserves. In June, the Ministry of Petroleum elevated the Division's administrative standing to secure enhanced authority for mobilizing local resources, subsequently transforming it into the Songliao Petroleum Exploration Bureau. Collaborated with the Ministry of Geology, the Bureau undertook extensive exploration endeavors in the Songliao Basin in the hope to strike oil.

As petroleum exploration efforts persistently substantiated the existence of petroleum reserves in the region, Yu and Kang orchestrated the drilling of exploratory wells. They designated a subset as benchmark wells in the Songliao Basin to validate the oil presence. Songii-1, the initial well drilled within the region, was situated at Jixin Hill, to the east of Renmin Town in Anda County. Started on July 9, 1958, the drilling continued for over half a year. By March 1959, the Songliao exploration team had yet to uncover crude oil. However, optimism prevailed among experts from both the Ministry of Petroleum and the Ministry of Geology, particularly after identifying extensive oil-bearing sandstone segments in core samples extracted at a depth of 1,879 meters. 165 Elsewhere, the drilling of Songji-2 had started on August 6, 1958, a mere month subsequent to the initiation of Songji-1. The well was positioned on the periphery of Qiaogoris Mongolian Autonomous County, approximately 200 kilometers south of Songii-1. Despite the exploration team's inability to locate crude oil, supplementary geological evidence supported the experts' hypothesis. Actual extraction remained elusive yet.

Owing to their reluctance to confront another disappointment in rapid succession, Yu and Kang opted to postpone the third drilling attempt, which was initially proposed by the experts for September. Instead, they made a formal request for the experts to conduct further exploration and research, submit additional reports, and engage in more comprehensive discussions before embarking on another potentially fruitless endeavor. This approach was consistent with the Chinese precept that misfortune should not occur three times in a row. After conducting research for a period of seven months, the experts meticulously formulated a

¹⁶⁴ Yu, Q. (1996). Yu Qiuli Memoirs [余秋里回忆录]. People's Publishing House, Beijing, ISBN: 9787010099903

¹⁶⁵ Yang, J. (1987) 'The Process of Discovering Daging Oilfield', in Discovery of Daging Oilfield, edited by Research Committee of the Chinese People's Political Consultative Conference (CPPCC) of Daging City, Harbin: Heilongjiang People's Publishing House, p. 18.

new drilling attempt scheduled for April 11, 1959. 166 This attempt was positioned approximately equidistant between Songji-1 (around 126 kilometers to the west) and Songji-2 (roughly 140 kilometers to the north), with the expectation that this endeavor would prove successful.

On September 26, 1959, a pivotal event occurred that would radically impact the region, specifically its built and unbuilt environments: crude oil began to flow from the pipe of an exploratory well, known as Songji-3.¹⁶⁷ The well's complete appellation is Songliao Basin No. 3 Benchmark Well, and it is located in Gaotaizi Village, Datong Town, Zhaozhou County, Heilongjiang Province. The unearthing of petroleum at Songji-3 unequivocally constituted a remarkable great celebration for both the Ministry of Petroleum and the Central Government.

To commemorate the great celebration associated with the discovery, Ouyang Oin, the First Secretary of the Heilongliang Provincial Committee, proposed on November 8, 1959, that the name of the city of Datong, where the well was located, be renamed Daging. 168/169 The motivation for this idea stemmed from the fact that Datong's name coincided with another city with that name in Shanxi Province, which was likewise a resource city in China renowned for its abundant coal mines. The newly adopted appellation, "Daging," consists of two Chinese characters, specifically 大 (Da) and 庆 (Qing). In the Chinese language, "Da" functions as an adjective or adverb, carrying the semantic connotations of "large" or "grand," while "Qing" serves as a noun or verb, denoting the concept of "celebration." The combination of these specific characters gave rise to a neologism whose literal meaning was "a grand celebration." Petroleum extraction from the Songji-3 well occurred close to the commemoration of the tenth anniversary of the esatblishement of the People's Republic of China's, making the oilfield a spectacular gift for the nation. Ouyang's astute choice in the naming effectively distinguished Daging, the petroleumabundant region, from Datong, the coal-producing area, and thereby conferred a novel identity upon the location.

¹⁶⁶ Chen, G. (ed.) (2009) 'Exploration, Zonal Exploration, Exploration of the Songliao Basin,' in Daging Oilfield Chronicles (1959-2008). Harbin: Heilongjiang People's Publishing House, p. 65. ISBN: 9787207076427.

¹⁶⁷ Heilongjiang Provincial Committee of the Communist Party of China (1959). Report on vigorously developing oil resources and the oil industry [中共黑龙江省委关于大力开发石油资源发展石油工业的报告]. Heilongjiang Provincial Committee of the Communist Party of China, October 23.

¹⁶⁸ Office of the Daging Local Chronicles Compilation Committee. (1988). 'Major Events - Year 1959 [大事 记 – 1960年]'. In Daging Gazetteer [大庆市志], (p. 11). Nanjing: Nanjing Publishing House.

¹⁶⁹ Mao, H., (2019). Part 3 The Daging Era (1960-1969): China No Longer "Poor in Oil". In The ebb and flow of Chinese petroleum: a story told by a witness. In The Ebb and Flow of Chinese Petroleum. Brill.

Though not explicitly mentioned in various government documents, it may be argued that Ouyang's naming essentially embodies two further layers of linguistic and practical significance. Firstly, the character "Da" primarily conveyed Ouyang's anticipations concerning the scale of the entire Daqing Oilfield. Despite the prevailing uncertainty around the exact oil volume at that time, it was revealed via the exploration of the Songji-3 well and the more southern located Putaohua region that a confirmed reserve of 200 square kilometeres of petroleum existed. 170 Secondly, the name hinted at the significance of the oilfield to the new nation. With the presence of such an extensive oilfield, the CCP's ambitious goals of urbanization and industrialization would have evolved from abstract aspirations to concrete achievements. It can be argued that Ouyang aimed to grant this location so abundant with oil a novel social identity by the renaming.

In November 1959, Yu and Kang initially struggled to mobilize a sufficient workforce in order to start an extensive oil extraction operation in the vicinity of the Songji-3 well. During this period, the Chinese government suffered from economic and food-related crises as a consequence of the "Great Leap Forward" campaign that Mao had initiated in 1957. In pursuit of Mao's objective of doubling national steel output and thus overtaking the production of the United Kingdom, the Central Government invested substantially in the steel industry's infrastructure from 1958 to 1960, with annual investment growth exceeding 10 billion RMB.¹⁷¹ Specifically, in 1960, the total investment reached 384 billion RMB, an increase of 1.80 times compared to three years earlier. To compensate for the high expenditures in the steel industry, the State Council had slash funding in other sectors, notably of non-productive construction projects. 172 Simultaneously, the Great Leap Forward's support of agricultural production cooperatives and the establishment of inflated grain output targets, known as "launching satellites," had a detrimental impact on China's agriculture sector. Consequently, the Central Government became primarily focused on crisis management, leading to the suspension or cancellation of many large-scale projects that had been previously scheduled by multiple ministries operating under the State Council. Despite the discovery of 100 million tons of oil reserves in the region, it was still insufficient to exert a significant influence on the Central Government's stance. They had to deal with the existing situation.

¹⁷⁰ Heilongjiang Provincial Committee of the Communist Party of China (1959). Report on vigorously developing oil resources and the oil industry [中共黑龙江省委关于大力开发石油资源发展石油工业的报告]. Heilongjiang Provincial Committee of the Communist Party of China, October 23, 1959.

¹⁷¹ Contemporary China Series Editorial Department (Ed.). (1988). Finance in Contemporary China [当代中国财政]. Volume 1 of Contemporary China Series. Beijing: China Social Sciences Press.

¹⁷² Zhou, E. (1959) 'Report on Adjusting the Main Indicators of the 1959 National Economic Plan and Further Promoting the Increase in Production and Savings Movement'[关于调整一九五九年国民经济计划主要指标和进一步开展增产节约运动的报告], The Fifth Session of the Standing Committee of the Second National People's Congress, Beijing, 26 August.

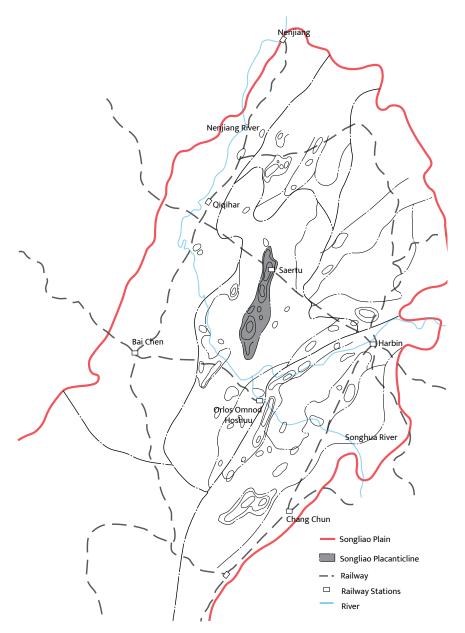


FIG. 4.2 Analytical Diagram Showing the Songliao Basin, Songliao Placanticline, Surrounding Railway Network, Key Cities, and Rivers. Drawn by: Penglin Zhu. Source: Penglin Zhu.

This circumstance led Yu and Kang to provide ample evidence of future gains to persuade the Central Government to endorse their efforts in allocating significant human and material resources for oilfield development. In December 1959, after engaging in two discussion sessions with numerous experts from the Ministry of Petroleum and the Ministry of Geology, Yu and Kang decided to establish a set of experimental wells in three areas north of the Songji-3 well, specifically Xingshugang, Saertu, and Lamadian. This decision represented a daring initiative, as it diverged from the conventional practice of drilling wells within a 2-kilometer radius of preexisting oil wells; the distances between these three areas and the Songji-3 well varied between 70 and 80 kilometers.

Yu and Kang's adventure was not unfounded; the diligent efforts and reports of the experts bestowed upon them a sense of confidence. During the excavation of these experimental wells, the ongoing acquisition of core samples and other geological data persistently substantiated the worthiness of their calculated risk. Although oil had not yet gushed from these wells at that particular moment, the geological data allowed them to essentially forecast the presence of an large oilfield in the region — Songliao Placanticline (松辽长垣) — that could potentially encompass 200 square kilometers (Figure 4.2).¹⁷⁴ In the end, Yu and Kang procured the much-anticipated evidence, which enabled them to initiate the planning for an extensive oil extraction operation that would receive a steadfast backing from the Central Government regardless of the challenges they would encounter.

During the oilfield exploration phase, Spatial Petroleumscape related to the petroleum industry primarily consisted of the benchmark oil wells, such as the Songji-1, 2, and 3 wells, where oil presence was detected, and exploratory wells in the Saertu, Xingshugang, and Lamadian regions, which aimed to verify whether the Daqing Oilfield was indeed a giant oilfield with abundant reserves. Both the Ministry of Geology and the Ministry of Petroleum made significant contributions to determining the precise locations of the wells in this field and analyzing the geological samples collected throughout the drilling procedure. These experimental

¹⁷³ Yang, J. (1987) 'San Dian Ding Qian Kun'[三点定乾坤], in *Daqing Historical and Cultural Materials/First Edition/Discovery of Daqing Oilfield*[大庆文史资料/第一辑/大庆油田的发现], compiled by Daqing Municipal Committee for Historical and Cultural Materials Research. Harbin: Heilongjiang People's Publishing House, 282p. ISBN: 7207002319, 9787207002310.

¹⁷⁴ Party Group of the Ministry of Petroleum Industry (1960) 'Report on the Status of Petroleum Exploration in the Northeast Songliao Region and the Content of Future Work Deployment [关于东北松辽地区石油勘探情况和今后工作部署内容的报告]', Work report submitted to the State Council, 13 February.

wells played a crucial role in discovering and establishing the size of the Daqing Oilfield. As a result, they have been included in both the national and provincial cultural heritage lists, as well as the Chinese Industrial Heritage List, and are thus considered to be monuments of national importance.

5 Planning for Oil not for Living

Spatial Strategy and Architecture Design of the Great Petroleum Campaign, and the Lifestyle of Personal Sacrifices for Collective Goals 1960-1964

This chapter explores the unique management and planning framework implemented by the Ministry of Petroleum throughout the development and construction stage of the Daqing Oilfield, commonly referred to as the "Great Petroleum Campaign." In light of previous failures in their economic policy, the Central Government was constrained in its ability to provide substantial financial and material assistance to the Ministry of Petroleum. As a consequence, the Songliao Petroleum Campaign Leading Group, an administration established locally by the Ministry of Petroleum, had to prioritize the scarce resources for industrial construction under this framework. The Ministry of Petroleum formed the Songliao Petroleum Campaign Leading Group as a local entity to effectively allocate limited resources for industrial building within this framework. To achieve this more efficiently, they carefully formulated guidelines for spatial planning, encapsulated by the term "surface serves the subsurface" and "Production First, Livelihood Second." This chapter offers a comprehensive exploration of these themes.

The first section comprises two sub-sections. The initial sub-section sheds light on how the Ministry of Petroleum, given the prevailing political and economic contexts, constructed the development model of the Great Petroleum Campaign. The subsequent sub-section provides a clear explanation of the rationale and process behind the Songliao Petroleum Campaign Leading Group's choice of the Saertu

region as the initial focal point for oilfield development in Daqing. The second section zooms in on the genesis and implementation of the spatial planning guidelines: "surface serves the subsurface" and "Production First, Livelihood Second." Within this part, two sub-sections are encompassed. Initially, the first sub-section probes into how local elites actualized the guideline, viewing it through the lens of architectural forms of local residential dwellings. Subsequently, the second subsection explores and deepens the discussion from the perspective of architectural forms of the local spatial structural establishment.

5.1 The Great Petroleum Campaign: Genesis and Implications

Yu Qiuli and Kang Shi'en intended to introduce a novel administration and operational strategy for the planning and construction of the Daging Oilfield, which they termed the "Great Petroleum Campaign" (GPC hereafter). Amid the extraction process of the exploratory wells in the Saertu, Xingshugang, and Lamadian regions, they had already proposed the Ministry of Petroleum's development plan for the Daging Oilfield in a report submitted to the Central Government on February 13, 1960, entitled "Report on the Situation of Petroleum Exploration in the Northeast Songliao Region and the Deployment of Future Work." 175 According to the report, Yu and Kang wanted to gather all accessible resources within the petroleum system and launch an extensive campaign employing an annihilation warfare approach. It is evident that they regarded the goal of developing the oilfield as a war, with the oilfield to be developed as the enemy they must defeat. The management mode of the petroleum industry, implemented by and following the directives of the highest leadership, represents the paramount systematic framework for the development of China's petroleum industry. After the accomplishment, this framework subsequently exerts an influence on the establishment and functioning of local spatial planning institutions.

¹⁷⁵ Party Group of the Ministry of Petroleum Industry (1960). Report on the Situation of Petroleum Exploration in the Northeast Songliao Region and the Deployment of Future Work [关于东北松辽地区石油勘探情况和今后工作部署问题的报告]. February 13, 1960. Daqing Oilfield Historical Exhibition Hall Archives.

The national leaders were keen to evaluated the Ministry of Petroleum's report, possibly owing to a fervent demand for petroleum and its industrial importance for the national economy, as well as their confidence in Yu and Kang. They remarked, "The Ministry of Petroleum, with the aim of expediting petroleum exploration and development in the Songliao region, is preparing to mobilize resources from various sectors and execute a great campaign. This methodology is commendable; kindly offer support from all regions, provided it does not substantially impede local exploration endeavors." 176 On February 20, the Central Government issued a directive document to all the provinces that shared borders with the Daging Oilfield. to the provinces involved in the oilfield-operating, and to all relevant subordinate ministries of the State Council, in which they declared the absolute power given to Yu and Kang over the GPC and all agencies involved in the extraction of oil. The Central Government consented to furnish the Ministry of Petroleum with as much financial and material backing as feasible. In addition to their regular annual funding, the Ministry of Petroleum obtained nearly 200 million RMB.¹⁷⁷ They were also granted permission to commandeer materials from provinces and cities neighboring the Daging Oilfield, particularly Heilongjiang Province, and to relocate experienced petroleum personnel from the Yumen, Xinjiang, Sichuan, and Qinghai oilfields.

The concept of the GPC incorporated not only the administrative and operational approaches, but also the composition of the necessary workforce. One of the primary goals of Yu and Kang's proposal to employ military tactics for the initial construction of the Daqing Oilfield was to gain support from the Chinese People's Liberation Army (PLA). They aimed to secure the allocation of a significant number of disciplined and hardworking soldiers to serve as the primary labor force for oilfield development. Despite the fact that Datong Town already had accommodation available for the Ministry of Petroleum staff, there was a considerable need for the ground-up construction of petroleum industry facilities and infrastructure, which in turn demanded a substantial labor force, that also needed to be housed or at least find shelter somewhere.

¹⁷⁶ Central Committee of the Communist Party of China (1960). Central approval of the report by the Party Group of the Ministry of Petroleum Industry on the situation of oil exploration in the Songliao region of Northeast China and future work arrangements [中央批转石油工业部党组关于东北松辽地区石油勘探情况和今后工作部署问题的报告]. Document No. Zhong Fa [60] 129 (excerpt) [中发〔60〕129号批示(摘录)], February 20.

¹⁷⁷ Bo, Y. (1960). Comprehensive report on accelerating oil exploration and development work in the Songliao region [关于加速松辽地区石油勘探和开发工作情况的综合报告]. State Economic Commission's Report to the Central Committee [60] Jing Bo Zi No. 463 [国家经济委员会向中央的报告〔60〕经薄字463号]., March 21.

Hence, Kang was left with no alternative but to rely on the strategic approach of "People's War." Such an approach entailed the mobilization of as many people as possible to build the required facilities for the petroleum industry. Concurrently, their expectation was that these workers would obediently follow their directives and remain stationed at the oilfield development sites, refraining from departure due to fear of harsh natural and living conditions. Taking these factors into account, PLA troops appeared as the best option. As a result, Yu expressly sought aid from Premier Zhou Enlai of the State Council, with the hope that the Chinese PLA could supply 30,000 retired veterans to support the GPC. Specifically, Zhou Wenlong, another Deputy Minister of the Ministry of Petroleum, even wrote a letter to Luo Ruiging, Chief of General Staff of the PLA, and Zhang Aiping, Deputy Chief of General Staff, in relation to this matter, asking for their unconditional support. 178 Upon Zhou's recommendation, Yu proceeded to secure the support of Mao Zedong, an endeavor that proved to be successful. On February 22, 1960, the Central Military Commission issued an order to "mobilize 30,000 retired soldiers for the Ministry of Petroleum."179 Although facing a substantial gap between the required resources and those acquired for constructing a large-scale oilfield from the ground-up, Yu and Kang managed to secure the maximum material and human resources feasible under the existing conditions.

At this stage, Yu and Kang encountered another significant obstacle in installing the petroleum industry in Daqing, namely the need to obtain the legal right to acquire land and the authority to conduct spatial planning and construction on the acquired land. Without the legal possession of these rights, they could not formulate any substantial plans. However, the Ministry of Petroleum was able to obtain favorable outcomes without much difficulty. Prior to securing policy support from the Central Government, Ouyang Qin, the Heilongjiang Provincial Party Secretary, had already made the decision to voluntarily transfer these two rights completely to the Ministry of Petroleum. In October 1959, alongside the proposal to rename Datong Town, Ouyang issued the "Decision on Establishing the Daqing District and Changing Datong Town to Daqing Town" with the support of the Heilongjiang Provincial Government. This decision identified all areas involved in petroleum exploration as

¹⁷⁸ Zhou, W. (1960). Letter requesting manpower support from the PLA, addressed to Chief of General Staff Luo Ruiqing and Deputy Chief of General Staff Zhang Aiping [石油工业部副部长周文龙关于请求解放军给予人力支持写给罗瑞卿总参谋长,张爱萍副总参谋长的信], January 15. Source: Daqing Oilfield Historical Exhibition Hall.

¹⁷⁹ Central Committee of the Communist Party of China (1960). Directive on mobilizing 30,000 demobilized soldiers for the Ministry of Petroleum [中央决定动员30000名退伍兵给石油部的指示], February 22.

special districts.¹⁸⁰ While the administration rights of these special districts were nominally held by Daqing Town, the Songliao Petroleum Exploration Bureau Office, a subordinate entity of the Ministry of Petroleum, assumed full responsibility for exploration in these areas. As a result, the actual land-use rights in these areas were effectively under the Ministry of Petroleum's control.

Ouyang's endorsement for the Ministry of Petroleum was remarkable. Beginning in March 1960, the Heilongjiang Provincial Government organized specialized teams with the purpose of providing meticulous assistance to the Ministry of Petroleum in addressing the transportation and other logistical issues related to a total of 30,000 retired military personnel, staff members, as well as diverse supplies. The teams took measures to ensure their safe arrival at the Saertu Railway station but, concurrently, the Heilongjiang Provincial Government offered considerable support in terms of production and living resources, as well as personnel, for the GPC. 181/182/183

Owing to a lack of an explicit and clear definition by the Central Government regarding the organizational relationship between the Ministry of Petroleum and Heilongjiang Province concerning the Daqing Oilfield, the Ministry of Petroleum meticulously established local representation in order to ensure the effective execution of their designed campaign plan. During this period, there was a tight affiliation of the Ministry with the two local administrative bodies in the Daqing Oilfield. They were two different entities with distinct objectives: the Ministry of Petroleum Organ Committee, founded in April 1960, and the Songliao Petroleum Campaign Leading Group, established in February 1960. The Ministry of Petroleum Organ Committee was responsible for the Ministry of Petroleum's party affairs in Daqing. It was renamed the Ministry of Petroleum Songliao Campaign Work

¹⁸⁰ Chen, G. (ed.) (2009) 'Major Events – Year 1959 [大事记 – 1959年],' in *Daqing Oilfield Chronicles* (1959-2008) [大庆油田志(1959-2008)]. Harbin: Heilongjiang People's Publishing House, p. 12. ISBN: 9787207076427.

¹⁸¹ People's Committee of Heilongjiang Province. (1959). Response to "Request for Material Supplies for Oil Exploration" [黑龙江省人民委员会"关于石油勘探需要物资供应的请求"的批复], Document No. Hei Ji Fan Zi No. 1797 [黑计范字第1797号], October 31. Daqing Oilfield Historical Exhibition Hall Archives.

¹⁸² The Provincial Committee Supporting Oil Leadership Group Office. (1960). Major Material Statistics for Supporting the Oil Campaign, compiled by the Provincial Committee Supporting Oil Leadership Group Office [黑龙江省各厅局对于支援石油大会战主要物资统计表], April 21. Daqing Oilfield Historical Exhibition Hall Archives.

¹⁸³ People's Committee of Heilongjiang Province. (n.d.). Notification on the Transfer of Labor for the Anda Oil Area [黑龙江省人民委员会关于为安达石油地区抽调劳动力的通知], Document No. Hei Lao Mi Li Zi No. 560 [黑劳秘李字第560号]. Daqinq Oilfield Historical Exhibition Hall Archives.

Committee on November 7, 1961. ¹⁸⁴ Yu served as the secretary of this organization, while Kang held the position of commander-in-chief. The Songliao Petroleum Campaign Leading Group (SPCLG) was formed as a local organization under the Ministry of Petroleum. Its leadership consisted of the Ministry's leaders and the Songliao Petroleum Exploration Bureau's head. Kang served as the director of this group, which was responsible for planning and implementing the campaign. ¹⁸⁵ This administrative body functioned as the decision-making center for the GPC, with the agency relocating from Changchun, Jilin, to Anda County near Saertu in April 1960.

Although they appeared as local administrative bodies of the Ministry of Petroleum, their leaders were in fact ministerial-level officials, thereby possessing the resources and authority of ministerial units. Concurrently, the newly established Anda City Government, subordinate to Heilongjiang Province, served as the local counterpart for the two administrative bodies of the Ministry of Petroleum. Initially a countylevel government, Anda's administrative level was elevated by the State Council to facilitate the petroleum extraction. 186 However, even under these circumstances, the administrative levels of Anda City's leadership remained considerably lower than those of Yu and Kang. According to the regulation set forth by the State Council, the responsibility of managing the oil districts was assigned to Anda City, however, the significant disparity in administrative hierarchies eliminated the potential for equitable negotiations between the two sides, thereby allowing the Ministry of Petroleum substantial authority over the local land requisition and usage rights. The purpose of this approach was to eliminate potential local frictions caused by land requisition, that were often settled in favour of achieving the goal of faster construction of oil extraction facilities.

¹⁸⁴ Party Committee of the Ministry of Petroleum Industry (1960). Notification on Designating the Party Committee of the Ministry of Petroleum as the Temporary Party Office for the Daqing Campaign [中共石油部 机关委员会关于将石油部机关党委作为大庆会战临时党的办事机构的通知], April 10. Daqing Oilfield Historical Exhibition Hall Archives.

¹⁸⁵ The Songliao Petroleum Campaign Leading Group, Ministry of Petroleum Industry (Acting) (1960). Notification on the Division of Responsibilities among the Leadership Members of the Songliao Petroleum Campaign [关于石油工业部松辽石油大会战领导成员分工的通知], November 2.

¹⁸⁶ Office of the Daqing Local Chronicles Compilation Committee. (1988). 'Major Events – Year 1960 [大事记 – 1960年]'. In *Daqing Gazetteer* [大庆市志], (p. 12). Nanjing: Nanjing Publishing House.

5.1.1 Venturing into Saertu for Oil Extraction: Confronting the void and anticipated challenges

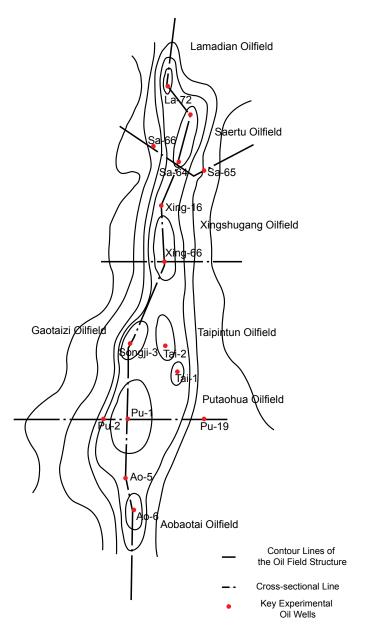


FIG. 5.1 Diagram of Battle Zones and Experimental Oil Wells Distribution. Source: from Daqing Oilfield Development Brief History [大庆油田发展简史] P.52, redrawn by Penglin Zhu.

Despite the fact that the experimental wells in the three regions were not having producing oil yet, Kang showed a reluctance to await the results before that he formulated the operational blueprint for the campaign. The interval of waiting also presented him with an opportunity to reflect on the organization and management strategies for the GPC. On March 3, 1960, at the First Preparatory Meeting for the Songliao GPC, Kang proposed the division of the entire Daqing Oilfield into five distinct "Battle Zones" for the purpose of oil extraction. 187 These zones, namely Putaohua, Taipingtun, Saertu, Xingshugang, and Gaotaizi, were determined based on available data at the time (Figure 5.1). The responsibility of developing specific zones was assigned to the Songliao Petroleum Exploration Bureau and four elite teams brought in from other regions by the Ministry of Petroleum. These were the Yumen Oilfield Management Bureau, the Xinjiang Oilfield Management Bureau, the Sichuan Petroleum Management Bureau, and the Qinghai Petroleum Management Bureau, respectively. 188 The division of the competencies was unclear.

During the preparatory meeting, Kang explicitly expressed his intention to capitalize on the competitive spirit among highly skilled oil industry professionals hailing from different regions. This approach aimed to stimulate a sense of rivalry, motivating individuals to engage in comparative assessments, ultimately leading to enhanced efficiency in drilling operations. This organizational approach described here was adapted from a longstanding practice within the Chinese People's Liberation Army known as the "Great Competition." ¹⁸⁹ This practice sought to improve a unit's combat capability by facilitating comparisons and competitions among teams from different military regions. It could certainly be argued that Kang incorporated military management models into the actual organization and management of the GPC.

If the oil pumping out from the Sa-66 Experimental Well in the Saertu region on March 11 did not astonish Kang, the exceptional geological data uncovered in the oil posed an unexpected challenge: he had to convince the other members of the SPCLG to agree with his proposal to promptly deploy additional teams to the Saertu Battle Zone. The analysis of geological data obtained from the Sa-66 revealed that the oil reservoir beneath it was substantially larger compared to those previously identified in the Songji-3 Well and the Putaohua region. It was seen that an

¹⁸⁷ Kang, S. (1960). Kang Shien's Summary of speech at the first preparatory committee meeting of the Songliao Campaign [康世恩在松辽会战第一次筹委会上的讲话纪要], March 3, 1960. Daqing City Archives Collection.

¹⁸⁸ Ibid.

¹⁸⁹ Tang, J. & Zhang, J. (2003). The origins and development of the "Great Competition" of the People's Liberation Army [人民解放军 "大比武 "的起源与发展]. *Party History Review* [党史纵览], (2), pp. 4-9.

extensive oil-bearing structure spanned 200 kilometers beneath Sa-66. 190 This information suggested that Saertu Zone exhibited a high daily production capacity and possessed an oil-bearing structure that could be capable of enduring extraction operations for a period of 30 years. 191 In light of this analysis, Kang contended that placing emphasis on the development of the Saertu Zone would yield significantly greater benefits compared to other oil Battle Zones. As a result, the swift relocation of teams to Saertu for the purpose of focused drilling seemed irrefutable.

The name Saertu has its origins in both Mongolian and Manchu languages, and it may be interpreted in two distinct ways: "the place where the moon rises" and "the place where the wind howls." Regardless of its varying interpretations, the name conveys connotations of the vastness and openness of the area. The region has historically functioned as a natural pastureland since the Qing Dynasty, and following the establishment of the People's Republic of China, it maintained this legacy by becoming the local Red Prairie Pasture. 192 Besides a few storage rooms used by nomadic communities to stock tools in the central area, the terrain consisted solely of grasslands, marshes, and puddles. In the event that a considerable number of teams were to concentrate their efforts in Saertu, they would lose access to the basic living infrastructure facilitated by Datong Town. As a result, it would be imperative for them to not only establish oil facilities and infrastructure from scratch but also establish ancillary amenities to cater to their daily living requirements.

Nonetheless, the SPCLG became entangled in intense discussions over this kind of issues. The perspectives held by the opposition mostly revolved around two key concerns. First, the road conditions between Datong Town and Saertu were below satisfactory standards. This was mostly due to the absence of any well-developed highways, as well as the lack of basic compacted earth roads. The weather also played a role. The only available pathways were muddy tracks, which further exacerbated the overall state of the road conditions. Such road conditions hindered the transport of large and heavy machinery. Moreover, the Ministry of Petroleum had a deficiency in the number of trucks for the purpose of transportation at the

¹⁹⁰ Yang, J. (1987) 'San Dian Ding Qian Kun'[三点定乾坤], in Daqing Historical and Cultural Materials/First Edition/Discovery of Daging Oilfield[大庆文史资料/第一辑/大庆油田的发现], compiled by Daging Municipal Committee for Historical and Cultural Materials Research. Harbin: Heilongjiang People's Publishing House, 282p. ISBN: 7207002319, 9787207002310.

¹⁹¹ Li, H. & Li, G. (1999). Northward Movement [挥师北上]. In: Daging Pioneer Spirit [大庆创业之光]. Northern Arts Publishing House. ISBN: 7-5317-1203-1/I 1146

¹⁹² Office of the Daging Local Chronicles Compilation Committee. (1988). 'Local Institution Change [建制延 革]'. In Daqing Gazetteer [大庆市志], (p. 47). Nanjing: Nanjing Publishing House.

time. 193 These tasks of moving equipment were heavily dependent on horses or human-powered carts, which exacerbated transportation difficulties associated with the muddy roads. Finally, and most significantly, although the housing options for oil workers in Datong were limited, the situation was far more favorable compared to those in Saertu. At this particular point in time, Yu Qiuli expressed strong support for Kang's plan. He placed significant emphasis on the need to maintain a firm approach towards advancing after the primary direction was established, even if it required overcoming formidable challenges to secure victory. 194 195 In taking this stance, he met the expectations that Mao had placed upon him.

Kang and Yu's decision to initiate a GPC in Saertu was far from empty talk or fanciful imagination. They were well aware of the potential support they could receive from the Middle East Railway in terms of resources and personnel. The construction of the railway, which had taken place from August 1897 to July 1903, facilitated the connection between Harbin, the capital city of Heilongjiang Province, and Siberia within the Russian Empire. The emergence of this railway was attributed to the Qing Dynasty's inability to effectively address the superior military capabilities of the Russian Empire. 196 Built by the Russians, the railway extended across the northern region of the Daging Oilfield, covering three stations, namely Anda, Saertu, and Wolitun (Figure 5.2). Among them, Saertu was designated as a station of third-class status, Anda as a fourth-class station, and Wolitun as a fifth-class station under Anda's jurisdiction. 197 Due to its proximity to the railway, Saertu had enhanced efficiency in the transportation of personnel and supplies compared to Datong, which is situated nearly 80 kilometers away from any railway and lacks proper road connections. Saertu's geographic advantage was even more pronounced concerning long-term development. Based on the above points, they ultimately decided to make the Saertu area the first oilfield to be developed and constructed.

¹⁹³ Yu, Q. (1963). Report at the meeting of cadres above level 17 of the central organs [在中央机关17级以上 干部大会上的报告], December 28.

¹⁹⁴ Yu, Q. (1996). Yu Qiuli Memoirs [余秋里回忆录]. People's Publishing House, Beijing, ISBN: 9787010099903

¹⁹⁵ Li, H. & Li, G. (1999). Northward Movement [挥师北上]. In: Daging Pioneer Spirit [大庆创业之光]. Northern Arts Publishing House. ISBN: 7-5317-1203-1/I 1146

¹⁹⁶ Xue, X. (1988). The October Revolution and China's struggle to regain sovereignty over the Chinese Eastern Railway region [十月革命与中国收回中东铁路路区主权的斗争]. Modern History Research [近代史研 究], (4).

¹⁹⁷ Daging Railway Annals Compilation Office (1985). Daging Railway Annals (1897-1984) [大庆铁路志]. Daqing, pp. 3-4.

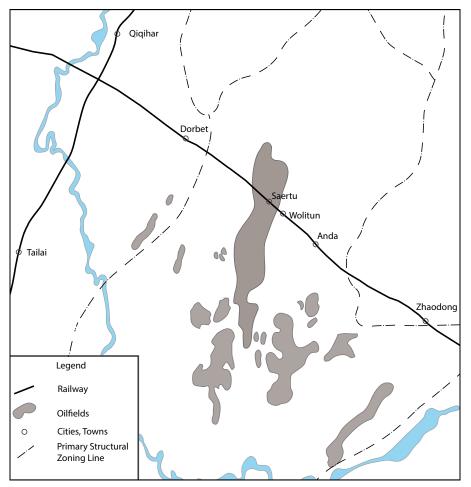


FIG. 5.2 Diagram of the Distribution of Towns along the China Eastern Railway and Oilfields in the Daqing Placanticline and its Periphery. Source: from Daqing Oilfield Development Brief History [大庆油田发展简史] P.52, redrawn by Penglin Zhu.

Throughout March, the Heilongjiang Provincial Party Committee demonstrated resolute support for the SPCLG by providing generous assistance. Thereby, the Ministry of Petroleum could effectively bring around 60,000 personnel to the oilfield. 198 These individuals included former veterans of the People's Liberation

¹⁹⁸ Heilongjiang Provincial Committee Oil Support Leadership Group of the Communist Party of China (1961). Report on the arrangements for various support tasks in the oil region for 1961 [黑龙江省委支援石油领导小组关于一九六一年对油区各项支援工作安排的报告]. April 6, 1961. Daqing Oilfield Historical Exhibition Hall Archives.

Army, highly skilled specialists in oil extraction from various national oilfields, cadres of the Ministry of Petroleum based in Beijing, recent university graduates with relevant expertise, and other personnel. It is noteworthy to mention that their transportation to Saertu and Anda was facilitated by the Middle East Railway. Such a railway, which was once seen a symbol of imperialist invasion, evolved into a vital support structure for Yu and Kang's endeavor to establish a communist oil industry in Daging.

The SPCLG issued a prompt direction to the oil teams, instructing them to swiftly assemble in the Saertu area, akin to issuing a military directive. Among these orders, on March 11, the team from Yunmen Oil Management Bureau, already en route to Taipingtun, received an order to immediately redirect their personnel and pieces of equipment to proceed directly to Saertu instead. During the second preparatory meeting on March 27-29, Kang mandated that the teams of Xinjiang and Sichuan Oil Management Bureaus should also move to Saertu. His strategic approach involved having each teamwork at Saertu temporarily to achieve the first outcomes and subsequently announcing the commencement of the GPC through a rally. 199 As the two test wells at Xingshugang and Lamadian oil structures, namely, Xing-66 and La-72, successively started producing oil on April 9 and April 25. Subsequently, the three teams arrived at Saertu, having accomplished their objectives within the month.

Yu and Kang officially launched the GPC locally in accordance with military operation traditions. The Ten Thousand People Pledge Rally for the GPC was effectively coordinated, with invitations extended to all participating teams. On April 29, 1960, the Petroleum Campaign Work Committee of the Ministry of Petroleum and the SPCLG convened a meeting at Saertu Square, where Yu and Kang gave mobilizing and inspiring speeches (Figure 5.3). The most critical aspect, however, was to motivate the enthusiasm of oil workers by creating model teams to expedite the development of the Saertu oilfield and to enhance mutual competition. Considering the month's exploration performance by various teams, the SPCLG recognized 17 units and 5 outstanding individuals, Wang Jinxi, Ma Deren, Dun Xinzhi, Xue Guobang, and Zhu Hongzhang, by presenting them with red flags.²⁰⁰ They encouraged others to emulate these exemplary figures.

¹⁹⁹ Kang, S. (1960). Speech at the Second Preparatory Meeting of the Songliao Campaign [康世恩在松辽会战第二次筹备会议上的讲话], March 27. Harbin. Daqing City Archives Collection.

²⁰⁰ Party Committee of the Ministry of Petroleum Industry (1960). Decision on launching the "Wang, Ma, Duan, Xue, Zhu" study campaign [石油工业部机关党委关于开展学习"王、马、段、薛、朱"运动的决定], July 28, 1960.



FIG. 5.3 Mobilization Meeting for the Great Petroleum Campaign, Source: "Daqing," Shanghai People's Publishing House.

Departing from Kang's goal of fostering a competitive atmosphere among various teams, Yu also sought to employ these heroic individuals to demonstrate his loyalty to Mao and, consequently, attained an elevated position of power. Starting from April 10, Yu urged all teams involved in the GPC to study two of Mao's seminal works, namely "On Contradiction" and "On Practice". The assertion made by Yu posited that the two works constituted an essential basis for enabling all individuals employed in the oil sector to acquire a comprehensive understanding of the regulations governing the oilfield and to endorse its national importance. Consequently, it was his contention that not just communists but also non-affiliated individuals should be

encouraged to familiarize themselves with the two works.²⁰¹ On April 16, at the Oil Field Technology Symposium, Yu further contended that Wang Jinxi had a steadfast determination and exhibited unwavering courage in the midst of personal sacrifices. This can be attributed largely to his affiliation with the Communist Party and his thorough reading of Mao's literary works.²⁰² By articulating such assertions within this context, it was evident that Yu regarded Mao's political treatises as essential technical resources for oilfield development and for harnessing the necessary spirit.

One justification for Yu's fervent promotion of Wang's work originated from Wang's remarkable demonstration of bravery in his role as an oil worker through the process of drilling oil wells. In an effort to control blowouts, Wang had once leaped into a mud pit, using his body to stir up the mud. This act led to Wang earning the nickname "Iron Man." Yu might have identified a youthful iteration of himself in Wang, acknowledging their shared determination, which fostered a sense of camaraderie. Nonetheless, an undeniable aspect that had a significant factor was Wang's inclination toward making provocative statements. For instance, during the Ten Thousand People Pledge Rally, Wang publicly exhorted, "Even at the expense of 20 years of our lives, we must seize the Daqing Oilfield." ²⁰³ If skillfully managed, astute political figures like Yu could embrace these events as assets to advance their political objectives.

²⁰¹ Party Committee of the Ministry of Petroleum Industry (1960). Decision on studying Comrade Mao Zedong's works "On Practice" and "On Contradiction" [石油工业部机关党委关于学习毛泽东同志所著"实践论"和"矛盾论"的决定]. Issued by Yu Qiuli on April 10, published in *Zhanbao*, April 13, 1960.

²⁰² Editorial of Zhanbao (1960). Oilfield Technical Symposium, Yu Qiuli calls for a nationwide "Six Major" campaign, learning from Iron Man Wang Jinxi, everyone becoming Iron Man [油田技术座谈会, 余秋里号召全民开展"六大"运动, 学习铁人王进喜, 人人做铁人]. *Zhanbao*, April 16, 1960.

²⁰³ Wang, J. (1977). "Read Chairman Mao's books, follow Chairman Mao's words, and strive for the proletarian cause for a lifetime" – Report by Iron Man Wang Jinxi at the National Industrial and Transportation Work Conference and the National Industrial and Transportation Political Work Expansion Conference in 1966 [读毛主席的书, 听毛主席的话, 为无产阶级事业奋斗一辈子 – 铁人王进喜同志一九六六年在全国工业交通工作会议和全国工业交通政治工作扩大会议上的报告]. People's Daily.

5.2 The "surface serves the subsurface" Guideline: Spatial practices and Implications

Upon the arrival of various teams in Saertu by the end of March, they were not only tasked with establishing oil facilities but also had to simultaneously build temporary accommodations that offered protection from the elements and served as nighttime resting guarters. Teams hailing from different regions utilized materials supplied by the Heilongjiang Provincial Committee as well as locally accessible resources to expediently construct the initial set of offices and living quarters situated close to their designated places at several oil industry installations. Examples of their constructions included encampments made from canvas tents, oil extraction station barracks assembled from wooden planks, construction command centers repurposed from free-grazing cattle sheds, and subterranean dwellings known as 'Dijiaozi (地窖 子),' which were composed of locally sourced earth, grass and other materials. The method employed for constructing the primitive Dijiaozi involved the excavation of rectangular pits in the ground, followed by the erection of pillars and the installation of raised pointed roof supports. Finally, the structure was covered with animal hides (Figure 5.4). The limited availability of construction materials for permanent residents, along with the lack of explicit building regulations from the SPCLG, the administrative body responsible for the GPC, led to a wide range of temporary structures.



FIG. 5.4 "Dijiaozi," Source: Penglin Zhu (Collected during the fieldwork).

These structures shared a unifying feature, namely the prominent display of numerous political slogans within the camp. This practice could be attributed to a custom associated with the People's Liberation Army who would use slogans to support the comabattive spirit. Figure 5.5 presents a static visual representation derived from a film documented by the Ministry of Petroleum at that time. Dutch filmmaker Joris Ivens subsequently incorporated this footage into his documentary on the development of the Daging Oilfield.²⁰⁴ The camp belonged to the People's Liberation Army veterans who were providing assistance to the oilfield. The primary architectural forms of shelter structures inside the camps were tents fabricated from canvas or tarpaulin materials. Located at the heart of the camp was an arch-like structure showcasing slogans: "Study Chairman Mao's Works" on the left, "Learn from the People's Liberation Army" on the right, and "Self-reliance and Hard Work for Strength" inscribed across the top of the arch. The appearance of this temporary structure serving political propaganda is preposterous, as the scale and materials used far exceed those needed to construct a simple Dijiaozi or tent. These materials could have been used to reinforce the shelter, better serving the participants.



FIG. 5.5 "A Grand Gathering in Daqing," a representative workers' settlement during the initial phase of the Petroleum Campaign, resembling the spatial layout and encampment patterns of wartime military bases. Source: "Daqing," Shanghai People's Publishing House.

Nevertheless, these hastily built temporary structures were unable to meet the SPCLG's demands for continuous oil extraction concerning the spatial organization, building type, structural integrity, and insulating material capabilities. Also, the

204 Ivens, J. & Loridan-Ivens, M. (1976). Autour du pétrole [Film]. In Comment Yukong déplaça les montagnes.

disorderly layout of these provisional buildings did not align with the militarized management approach envisaged by Kang. Specifically, the structures were individually small in scale, rendering them unsuitable for hosting large indoor gatherings. Moreover, their rudimentary architectural design and use of materials such as canvas and tarpaulin were insufficient to withstand the region's extensive and harsh winters. Situated in northeastern China, the Daqing Oilfield endures lengthy winters marked by adverse climatic conditions. Winter usually begins with the first snowfall in mid-October and persists until early April the following year. Temperatures typically average around -20°C and may drop to -30°C in December and January. To cope with such extreme weather, individuals require modest yet well-built accommodations that are equipped with efficient heating systems, good isolation and sturdy walls. However, the temporary structures were ill-prepared to handle these environmental challenges.

Faced with the prospect of winter arriving in a few months, the SPCLG found itself compelled to develop relevant spatial planning principles and housing construction standards in a limited timeframe while also mobilizing a substantial workforce for construction endeavors. Failing to do so would necessitate halting the GPC operation, withdrawing from Daqing, and seeking refuge from the severe cold in nearby cities like Harbin and Qiqihar when winter arrived. Such an outcome was decidedly unacceptable for both Yu and Kang.

The concept of "surface serves the subsurface" emerged as the first spatial development guideline the SPCLG established, 206 which became the foundation for the spatial (urban) form of the Daqing Oilfield. In this context, the term "subsurface" referred to the spatial distribution of petroleum structures, while "surface" signified the infrastructure and facilities associated with industrial projects such as extraction, transportation, storage, and refining, in addition to employee living quarters. Although policy support and financial subsidies from the Central Government were provided, alongside material assistance from the Heilongjiang Provincial Committee and other provinces for all aspects ranging from industrial production to the daily necessities of Ministry of Petroleum staff, the aid supplied fell notably short of the financial and resource requirements needed to build the oil industry and its associated facilities from the ground up, owing to the concurrent economic and food crises. Faced with limited resources, the SPCLG had no alternative but to direct all

²⁰⁵ Office of the Daqing Local Chronicles Compilation Committee. (1988). 'Climate [气候]'. In *Daqing Gazetteer* [大庆市志], (p. 57-58). Nanjing: Nanjing Publishing House.

²⁰⁶ Office of the Daqing Local Chronicles Compilation Committee. (1988). 'Chapter 3 Estate, Section 1 Housing [第三章房地产,第一节住宅]'. In *Daqing Gazetteer [大庆市志]*, (p. 98). Nanjing: Nanjing Publishing House.

available resources towards the construction of infrastructure and facilities related to the oil industry, which inevitably led to certain compromises. This had repercussions on all the other facets of the establishment of a suitable environment for the workers.

The "surface serves the subsurface" denoted that all spatial planning and construction must cater to the needs of oil extraction. This endeavor entailed ensuring the allocation of all material and human resources to the advancement of the petroleum industry. In particular, the Daqing Design Institute allocated a significant portion of its budget towards the procurement of expensive building materials for the purpose of constructing industrial buildings. In 1960, industrial buildings utilized brick-and-wood structures, which comprised walls made of brick and columns made of wood.²⁰⁷ In September 1962, the Design Institute initiated research into employing prefabricated concrete structures for oil wellhead buildings. The period spanning from 1964 to 1965 witnessed a gradual increase in the use and utilization of prefabricated concrete construction methods. In 1964, reinforced concrete foundations supplanted rubble foundations, which were subsequently followed by the replacement of bricks with silicate slag blocks.²⁰⁸ It could be argued that the SPCLG consistently prioritized substantial investments in order to construct industrial facilities that were structurally sound.

Owing to resource limitations, even ancillary structures supporting oil production were required to minimize their construction costs as much as possible. One of the most remarkable constructions observed in the oil regions was the distributed "underground palaces (地宮)." An "underground palace" denoted a highly rudimentary exhibition room situated in close proximity to an oil well, which graphically showcased the stratification, formation patterns, and topography of underground oil layers by utilizing a variety of charts and models (Figure 5.6). After the inauguration of the first "underground palace" at the Saertu Test Production Oil Field on August 11, 1960, there was a rapid proliferation of similar exhibition rooms across all the oil regions. Designing the underground palace in

²⁰⁷ Daqing Design Institute Chronicle Compilation Committee, (1987). Civil Construction and Roads [土建与道路]. In: Design Institute Chronicle 1960-1985 [设计院志 1960-1985]. Daqing: Internal Document, p.66.

²⁰⁸ Daqing Petroleum Administration Bureau (1983). Oilfield Construction Design Research Institute Annals 1959-1983 [油田建设设计研究院志 1959-1983], draft for review. Local History Reading Room, Daqing City Library.

²⁰⁹ Editorial of Zhanbao (1960). Practice produces truth, revolution creates science, the production test area oilfield "underground palace" officially opens [实践出真理,革命创科学,生产试验区油田"地宫"正式开放]. Zhanbao, August 12.

²¹⁰ Daqing Design Institute Chronicle Compilation Committee, (1987). Organisational setup [机构设置]. In: Design Institute Chronicle 1960-1985 [设计院志 1960-1985]. Daqing: Internal Document, p.19.

the simplest way and extensively constructing it throughout the oil fields was not contradictory, but rather a compromise in the face of limited funds.

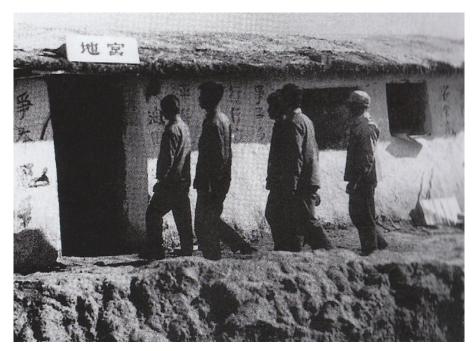


FIG. 5.6 The "Underground Palace" constructed in the 1960s, characterized by its simple architectural form. Source: Penglin Zhu (Collected during the fieldwork).

Building on the premise of "surface serves the subsurface", the SPCLG further emphasized industrial construction through the development of a localized spatial planning system. This system comprised two distinct planning categories, namely Oilfield Planning and Design, and Oilfield Surface Construction Planning, corresponding to the "subsurface" and "surface," respectively. The absence of traditional urban planning, encompassing public spaces and amenities, was evident. Instead, a comparable concept, termed "Living Construction," operated as a subset of Oilfield Surface Construction Planning (known as Basic Construction Planning in 1961).²¹¹ In the realm of Oilfield Surface Construction Planning, Living Construction was given lower priority compared to surface building projects dedicated to oil extraction, storage, transportation, and refining.

²¹¹ Chen, G., (2009). Design Principles [设计原则]. In: *Daqing Oilfield Chronicle 1959-2008* [大庆油田志 1959-2008]. Harbin: Heilongjiang People's Publishing House, p.191. ISBN: 978-7-207-07642-7/K.872.

This observation could be evidently found in the "1961 Songliao Area Crude Oil Production, Geological Exploration, and Basic Construction Planning." Established by the SPCLG in October 1960, it was an all-encompassing plan addressing both Oilfield Planning and Design, as well as Oilfield Surface Construction Planning. The sequence of the plan's title exemplifies the "surface serves the subsurface" guideline, as the Basic Construction Planning was listed as the last element. Specifically, the basic construction planning projects positioned last in the plan pertained to those serving the oil industry, such as the Saertu Comprehensive Machinery Repair Factory and two roads running parallel to the Middle East Railway within the oil region.

The SPCLG also founded two subsidiary organizations for planning and construction. The first was the Anda Design Institute of Songliao Petroleum Exploration Bureau. which was established on April 1, 1960, with the purpose of overseeing oilfield planning and design. The second was the Infrastructure Department, which was formed in June 1960 to manage basic construction in the oilfield. The responsibilities of these two institutions were distinctly defined, with the former concentrating on industrial planning and design and the latter on construction. The Anda Design Institute of the Songliao Petroleum Exploration Bureau underwent a series of name changes. In May 1961, it was rebranded as the 5th Design Institute of the Ministry of Petroleum Industry. Subsequently, in May 1964, it underwent another renaming and became known as the Oilfield Construction Design Research Institute of Songliao Exploration Bureau. Finally, in May 1968, the institute experienced its last name change and was officially recognized as the Daging Oilfield Construction Design Research Institute.²¹³ In order to address the potential difficulties arising from the diverse titles held by the organization at different time periods, this research will consistently refer to this organization as the Daging Oilfield Construction Design Research Institute (Design Institute hereafter).

The arrangement of divisions inside the Design Institute was purposefully designed to facilitate the effective execution of the spatial planning guideline of "surface serves the subsurface." Despite undergoing several changes to its organizational structure between 1960 and 1978, the fundamental composition of the eight affiliated working groups, which were tasked with developing various aspects of oilfield spatial planning, remained largely unchanged. These groups encompassed petroleum and gas transportation and storage, water distribution and drainage, machinery, civil engineering and roads, electrical and thermal energy, automation,

²¹² Ibid.

²¹³ Daqing Design Institute Chronicle Compilation Committee, (1987). Organisational setup [机构设置]. In: Design Institute Chronicle 1960-1985 [设计院志 1960-1985]. Daqing: Internal Document, p.19-21.

exploration, and archive.²¹⁴ It is worth noting that solely the civil engineering and roads working group was entrusted with the Living Construction within oilfields, whereas the remaining groups predominantly focused on advancing the infrastructure of the petroleum industry.

In the domain of Living Construction, the SPCLG introduced the guideline of "Production First, Livelihood Second." It implied that Living Construction should be subordinate to the construction of industrial production facilities and infrastructure, and personal life should be of less importance compared to collective industrial productivity. One manifestation of this principle was the significant reduction in the planning and construction of civil infrastructure and facilities, attributable to the extremely limited financial resources within the Living Construction sector. The SPCLG opted against developing independent infrastructure to address the employees' living necessities, including independent water supply, heating, electricity, and transportation networks. Instead, they favored the utilization of industrial infrastructure for these services instead. Therefore, it was not an entirely novel concept but rather a variation of the "surface serves the subsurface" quideline

The spatial practice of this principle dictated that employee residential zones should be situated within an isolation zone, approximately 1.5 kilometers from the petroleum facilities.²¹⁵ Exceeding this distance would render the provision of industrial infrastructure for living purposes economically infeasible. The creation of such a spatial composition was mutually advantageous for the SPCLG: it not only substantially diminished construction costs but also ensured the long-term retention of employees at their respective positions. Drawing a parallel between industrial production posts and battle stations, this spatial layout would quarantee the continuous presence of combatants – the oil workers – at their stations. This approach aligned with their adoption of a military management model for the GPC.

A further exemplification of the "Production First, Livelihood Second" quideline was the endeavor to minimize construction standards for essential residential facilities, with a particular focus on the dormitories allocated to oil workers and their family members. By the conclusion of March 1960, an estimated 60,000 individuals had arrived in Daqing, encompassing 30,000 retired People's Liberation Army personnel aiding the GPC, teams from diverse oilfields nationwide, employees from the Beijing Ministry of Petroleum, technical specialists, recent university graduates with

²¹⁴ Ibid.

²¹⁵ Zhu, Y. (n.d.). Planning of mine construction in the early stage of oil field development [油田开发初期 矿区规划].History of Daging Urban Planning [大庆城市规划史]. In [Unknown Book Title] (p. 629). Daging. Reviewers: D. Han, J. Lei, C. Wan, J. Wang, & D. Liu. Audio-visual file provided by Zhu Yuncai, 2017.

majors in petroleum-related fields, and professionals from other industries.²¹⁶ This considerable influx underscored the massive demand for employee accommodation. As a result, decreasing the construction costs of individual employee housing units would lead to significant savings when taking into account the extensive volume of housing necessary.

5.2.1 Gandalei Dwelling: The extensive construction prior to the Winter of 1960

To ensure the completion of comfortable accommodations with the capacity to house 60,000 occupants prior to the arrival of cold temperatures in late September 1960, the SPCLG, for this significant endeavor, appointed Sun Jinwen, an experienced Deputy Minister in the field of construction, to oversee the extensive project. Before his transition to the Ministry of Petroleum in 1958, Sun had consecutively held the position of Deputy Minister in both the Ministry of Construction Engineering and the Ministry of Urban Construction. Based on their assessment of Sun's extensive expertise in architectural design and construction procedures, alongside his elevated administrative position that facilitated the allocation of supplementary resources, Yu and Kang concluded that Sun was the most appropriate individual for the project. Upon accepting the responsibility, Sun swiftly assembled his team, comprising civil engineers and designers from the design institute, in addition to relevant specialists from the infrastructure division.

Leveraging past experiences, Sun, upon his recent appointment, rapidly formulated a plan centered around enhancing cost efficiencies in two crucial dimensions: architectural design and construction techniques. Fundamentally, these dimensions correspond to the primary stages within the construction sector, namely design and implementation. A multitude of tools was at Sun's disposal to reduce the total expenses related to employee accommodation. For example, in the sphere of architectural design, he could direct architects to forgo external wall ornamentation, downsize individual living quarters, and substitute separate bathrooms in each unit with shared amenities, among other actions. Concurrently, he had the option to ask engineers to present a straightforward, easily-constructible structural framework, while emphasizing the utilization of cost-effective building materials that were readily available within the local vicinity. As a result, petroleum workers would require very

²¹⁶ Kang, S. (1963). Report on the Daqing Petroleum campaign at the Beijing Leadership Cadre Conference [在北京市领导干部大会上关于大庆石油会战的报告], December 24, 1963. In *Kang Shien on China's Petroleum Industry* [康世恩论中国石油工业].

little instruction from skilled construction professionals to erect their own dwellings, thereby eliminating the need for additional expenses related to hiring a construction team by the committee.

Ouyang, the Party Secretary of Heilong Province, once again exhibited his selflessness by recommending that Sun should undertake an investigation into a locally prevalent earthen wall dwelling found in rural areas, referred to as Gandalei. The term Gandalei consists of three Chinese characters: namely 干(gan), 打(da), and 全(lei). "Gan" acts as an adjective, implying a sense of dryness. On the other hand, "da" operates as a verb, alluding to a repetitive action of pounding with instruments. The term "lei" can serve a dual use in this context, functioning both as a verb denoting the construction of a defensive wall made from materials such as adobe, brick, or stone, and as a noun referring to a fortified structure utilized by a military garrison to safeguard against hostile forces. In unison, these three terms distinctly describe walls fabricated from crushed dry clay. To be exact, Gandalei refers to a technique for constructing walls, but it also encompasses the dwellings built employing this specific method.

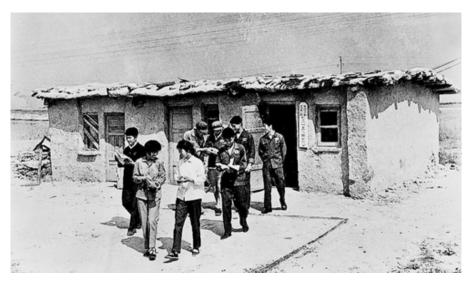


FIG. 5.7 Office for workers at Daqing Oilfield, constructed using the Gandalei method. Source: Penglin Zhu (Collected during the fieldwork).

The prevalent local adoption of the Gandalei method conveys an unequivocal message: such dwellings could effectively offer protection against harsh winter conditions. Concurrently, given that the rural areas in question had never

experienced prosperity, residents did not possess the financial capacity for substantial investment in housing construction. As a result, it is plausible that these earthen wall dwellings were likely both economical and easily constructed by local farmers. In spite of this, dwellings constructed using the Gandalei method did not embody a design that architects would admire or seek to replicate in subsequent projects. The design had a primitive nature, without intricate features or notable architectural significance. Due to the extensive use of clay and mud-based materials, the dwellings displayed a somber gray color, as seen in Figure 5.7. This color was consistent with the color palette of other oilfield installations, rather than a cheerful, luminous, or positive tone. The architectural design of Gandalei houses exhibited a notable departure from the concepts that were derived from scholarly sources by Sun's team of architects. However, the aesthetic considerations of Gandalei had never constituted a concern for Sun.

Sun did not immediately adopt Gandalei as the model for employee accommodations during the GPC. His previous professional experience highlighted the necessity of acquiring more firsthand information through research and validating the suitability of this type of dwelling through small-scale construction projects. Through sustained interactions with local villagers, Sun began to accept that traditional Gandalei dwellings were capable of maintaining indoor warmth during protracted winters and inhibiting external heat intrusion during summers.²¹⁷ Moreover, the materials predominantly employed in constructing these dwellings were comparatively costeffective. The earthen wall materials, such as clay, straw, and mud, were easily accessible locally, resulting in a notable reduction in material expenses.

Simultaneously, the technical design of Gandalei dwellings was characterized by a straightforward approach. It features self-bearing earthen walls, wooden columns and beams supporting a roof composed of insulating reed layers and alkali earth waterproofing layers. This relatively simple structure ensured that the construction process was neither difficult nor time-consuming and could be promptly replicated by the oil workers with a few days of training. In mid-April 1960, Sun initiated a pilot construction of Gandalei dwellings. This endeavor involved oilfield workers, architects, civil engineers, and local farmers with Gandalei construction experience in the Xingshugang Battle Zone.²¹⁸ This trial sought not only to evaluate the structural integrity and the possibility for guicker building of Gandalei dwellings but also to

²¹⁷ Sun, J. (1990). 'The spirit of the Gandalei dwelling shines on forever ["干打垒"精神永放光芒]', in Tian, R., Zhu, Z., & Zhang, H. (eds.) Daqing Oil Campaign - Daqing Historical and Literary Materials Volume II [大庆 石油会战——大庆文史资料第二辑]. pp. 67-72. China Literature and History Publishing House. Beijing. ISBN 5034-0130-3/k.094.

²¹⁸ Thid

examine the oilfield workers' capacity to erect them during their non-working hours. The result was considerably satisfactory as the crew successfully accomplished the construction of 512 square meters of Gandalei houses before the conclusion of the month of August. For Sun, these pieces of evidence proved that the Gandalei dwelling was the appropriate choice to address the challenge of the GPC.

Subsequent to the trial, the low cost and relative ease of constructing the process of Gandalei dwellings aligned with Sun's initial expectations. When comparing Gandalei dwellings to brick dwellings, it is evident that the former was far more cost-effective, with prices equating to less than one-sixth of the latter. Specifically, the construction expense per square meter was 30 RMB, whereas brick dwellings demanded 200 RMB.^{219/220} Simultaneously, the oilfield workers in the Xingshugang Battle Zone expeditiously built a batch of Gandalei dwellings, which demonstrated commendable quality throughout the construction process. Sun, thereby, expressed a high level of satisfaction with the trial outcomes and made the decision to select Gandalei as the prototype for employees' dwellings.

To achieve the objective set by the SPCLG within a five-month timeframe, Sun introduced his construction plan on May 4, a day commemorating the youth and revolutionary spirit in China, which was named the Rapid Assault Gandalei High-Efficiency Construction Challenge for the New Base. 221 The decision to launch the plan on Youth Day was deliberate, as Sun aimed to motivate young employees to engage in the construction of Gandalei dwellings during their off-hours. More importantly, he would like to deliver a message which is to build your own house like a revolution. Shortly thereafter, he mobilized units from Saertu, Anda, Xingshugang, and other battle zones to undertake the construction of Gandalei dwellings under the auspices of the SPCLG.

The construction progress after one month, however, proved to be disconcerting. Merely a handful of battle zone leaders had implemented Sun's plan, they argued that the primary focus should remain on oil production and desiring to excel in that

²¹⁹ Sun, J. (1990). 'The spirit of the Gandalei dwelling shines on forever ["干打垒"精神永放光芒]', in Tian, R., Zhu, Z., & Zhang, H. (eds.) Daging Oil Campaign - Daging Historical and Literary Materials Volume II [大庆 石油会战——大庆文史资料第二辑]. pp. 67-72. China Literature and History Publishing House. Beijing. ISBN 5034-0130-3/k.094.

²²⁰ Contemporary China Publishing House (1994). Building a New Type of Petroleum Mining Area. In: Brief History of Daging / Contemporary Heilongjiang Local History Series [大庆简史/当代黑龙江地方简史丛书]. Beijing: Contemporary China Publishing House, p. 80.

²²¹ Sun, J. (1990). 'The spirit of the Gandalei dwelling shines on forever ["干打垒"精神永放光芒]', in Tian, R., Zhu, Z., & Zhang, H. (eds.) Daging Oil Campaign - Daging Historical and Literary Materials Volume II [大庆 石油会战——大庆文史资料第二辑]. pp. 67-72. China Literature and History Publishing House. Beijing. ISBN 5034-0130-3/k.094.

domain. By June, the SPCLG was compelled to seriously address the issue of battle zone leaders postponing the construction of Gandalei dwellings; otherwise there would not be enough time to get prepared for the cold seasons. As a result, they delegated another responsibility to Sun, namely, to assume the role as the director of the Gandalei Construction Inspection Team.²²² This role entailed conducting daily inspections across various battle zones, supervising the construction of Gandalei dwellings, and assuring their timely finalization by the month of October. Sun gained greater power in overseeing the construction of Gandalei dwellings.

Sun and his team initially displayed unwarranted optimism regarding the quality of Gandalei dwellings constructed by oilfield workers instead of professional builders. This led to considerable difficulties during the early phases of construction. In June, as the large-scale promotion of Gandalei construction began, there were several instances of freshly erected dwellings experiencing structural failures resulting in collapse.²²³ To address this situation, Sun divided his workforce into two groups and attempted to solve the problem in two approaches. One group, originating from the Infrastructure Department, undertook a particular expedition to the forest region of the Greater Hinggan Range in Heilongjiang Province with the purpose of procuring high-quality timber that was essential for Gandalei construction. The other group, comprising professional civilian construction personnel and workers who had experience in Gandalei construction. This group was supported by the Anda City Government and functioned as a technical advisory team. This team circulated among the battle zones to provide guidance and enhance the knowledge of oil workers in the construction of swiftly deployable Gandalei dwellings.²²⁴ One of the two teams was responsible for sourcing better building materials needed for Gandalei dwellings, while the other was tasked with optimizing the construction process. By the end of September, 300,000 square meters of Gandalei dwellings had been completed in Saertu alone. 225 Yu and Kang's concerns were no longer concerned about suspending the Songliao GPC due to insufficient housing for the winter months.

²²² Chen, G. (ed.) (2009) 'Oilfield Constrution [矿区建设],' in *Daqing Oilfield Chronicles (1959-2008)* [大庆油田志(1959-2008)]. Harbin: Heilongjiang People's Publishing House, p. 582. ISBN: 9787207076427.

²²³ Office of the Daqing Local Chronicles Compilation Committee. (1988). 'Chapter 3 Estate, Section 1 Housing [第三章房地产,第一节住宅]'. In *Daqing Gazetteer* [大庆市志], (p. 99). Nanjing: Nanjing Publishing House.

²²⁴ Chen, G. (ed.) (2009) 'Title VI Production security and mine services [第六篇 生产保障与矿区服务]' in *Daqing Oilfield Chronicles (1959-2008)* [大庆油田志(1959-2008)]. Harbin: Heilongjiang People's Publishing House, p. 583. ISBN: 9787207076427.

²²⁵ Editorial Department of Zhanbao (1966). Daqing oilfield workers take pride in living in "Gan Da Lei" [大庆油田职工以住"干打垒"为荣]. Zhanbao [战报], January 11, 1966.

Although Sun's endeavors were commendable, he failed to acknowledge Ouyang's role in promoting Gandalei in his memoirs. Instead, Sun attributed this achievement only to the hard work of his team and technical employees who conducted studies in neighboring cities. The deliberate omission discussed here is a significant element of Daqing's petroleum heritage and spatial representation. Interestingly, it was suppressed even 50 years before the concept of "harmonious society" was proposed in 2006, which shows that the CCP cadres have a long-term habit of deleting all information that does not conform to their own interests, or only providing all information that is beneficial to their own interests.

Owing to the constraints posed by used materials and structural design, dwellings constructed using Gandalei wall-building techniques displayed uniform dimensions. In order to provide thermal insulation against low temperatures, clay materials need to be applied in thick layers. Additionally, the use of wooden columns was employed to support the weight of the roof, leading to a reduced structural span. These aspects limited the floor plan and size of Gandalei dwellings. Nonetheless, users could assign various functions to these dwellings, which possessed similar architectural layouts. In light of housing shortages, numerous dormitories also functioned as workspaces for regular employees, who worked, dined, and slept in the same vicinity. Specific Gandalei structures also accommodated primary schools, kindergartens, and administrative offices. Although residential Gandalei buildings maintained consistent layout designs, the floor plans of primary schools, kindergartens, and offices exhibited minor deviations, considering the distinctions in their purposes and utilization contexts. For example, a kindergarten that need a larger interior space may eliminate the internal dividing walls. In general, all Gandalei dwellings were similar in appearance and size.

The project timeline, which began with an initial investigation of the Gandalei earthen wall construction technique in early April, progressed with testing in mid-April, and concluded with planning by early May, was remarkably compressed. Consequently, Sun and his team lacked a sufficient time frame to rigorously assess the quality of Gandalei structures, especially in terms of their resilience during the harsh winter season. This expediency thereby masked underlying risks. Within months of use, numerous Gandalei dwellings incurred damage arising from the unstable physical and chemical properties of their primary materials, such as clay and reeds. Specifically, the region's humid climate easily undermined the intrinsic structure of

226 Sun, J. (1990). 'The spirit of the Gandalei dwelling shines on forever ["干打垒"精神永放光芒]', in Tian, R., Zhu, Z., & Zhang, H. (eds.) *Daqing Oil Campaign - Daqing Historical and Literary Materials Volume II [大庆石油会战——大庆文史资料第二辑]*. pp. 67-72. China Literature and History Publishing House. Beijing. ISBN 5034-0130-3/k.094.

these components: infiltration of groundwater led to cracking in clay walls, while dampness-induced decay resulted in leaks in reed roofs. These problems indicate that traditional Gandalei dwellings may not fully meet the rapid demands of the GPC initiated by the SPCLG. At the same time, these issues call on the authorities to make improvements in many aspects, such as building design, construction, structure, and the overall construction process.

These challenges progressively became a major concern for the SPCLG, which employed expert technicians from 1961 to 1963. These experts were tasked with conducting biannual inspections of the clay walls and reed roofs, as well as carrying out any required repairs.²²⁷ Nevertheless, the attempts made to repair the structures were ineffective in addressing the underlying problems and, in reality, accelerated the deterioration of those buildings. In the presence of roof leaks, maintenance employees commonly employed a remedial technique involving the application of an additional layer of clay and reeds onto the preexisting roof structure. Unfortunately, this approach increased the overall weight of the roof, bringing it closer to the upper limit of the load capacity that the underlying wooden framework could bear. Prompted by these problems, the SPCLG gathered a group of architects and structural engineers between 1962 and 1963 with the objective of enhancing the traditional Gandalei construction in terms of structural and architectural design. Specifically, they required a comprehensive and extended process of validation.²²⁸ The team coined the term "scientific" Gandalei for this iterative adaptation of the traditional method. The present research will explore this concept in greater detail, drawing upon a 1966 article from the Architecture Journal (建筑学报). However, an exhaustive examination is outside the purview of this chapter.

In official documents, the uniform design of Gandalei dwellings was cited as evidence of the government's commitment to fostering an egalitarian community, suggesting that the living conditions of both leaders and ordinary employees were equivalent. However, it is important to note that the aforementioned commitment was not entirely accurate, as exemplified by the case of "Courtyard No.2" located in Saertu, which served as the headquarters of the SPCLG. Completed in October 1960, Courtyard No.2 became the operational base for the leadership team, who relocated

²²⁷ Editorial of Zhanbao (1964). Construction of the "Gandalei" living base in the war zone is well done [战区 生活基地"干打垒"施工打得好]. Zhanbao, April 16, 1960.

²²⁸ Daging Petroleum Administration Bureau (1983). Oilfield Construction Design Research Institute Annals 1959-1983 [油田建设设计研究院志 1959-1983], draft for review. Local History Reading Room, Daging City Library.

from their Anda apartment building and remained there until the early 1980s.²²⁹ Kang adopted the People's Liberation Army model for planning and managing the GPC, as well as for establishing leadership offices and leisure facilities. In contrast to the linear layout of other Gandalei dwellings, Courtyard No. 2's spatial composition offered an enhanced level of privacy. As the name implies, the layout of the complex was characterized by a central courtyard that was encompassed by three elongated Gandalei dwellings. Photographic evidence indicated that although these structures employed Gandalei wall-building techniques, their level of dedication was beyond that of the ordinary employees' dwellings. In addition, a grand entrance gate, built from stone blocks, emphasized the users' authority through its distinctive materiality and size, while concurrently obstructing the view of individuals passing by (Figure 5.8). The difference in spatial configuration and additional structures clearly demonstrated that "Courtyard No. 2" was not a typical Gandalei dwelling.



FIG. 5.8 "Courtyard No.2" in the late 1960s, depicting a scene of administrative cadres departing from the courtyard to engage in agricultural production. They are seen just exiting the huge gate of the "No.2 Courtyard". Source: Penglin Zhu (Collected during the fieldwork).

229 Office of the Daqing Local Chronicles Compilation Committee. (1988). 'Major Events – Year 1959 [大事记 – 1960年]'. In *Daqing Gazetteer* [大庆市志], (p. 15). Nanjing: Nanjing Publishing House.

The innate privacy provided by the spatial composition of Courtyard No.2 effectively obscured the preferential lifestyle enjoyed by its user. Mao, Kang's secretary during that period, saw that Courtyard No.2. was equipped with a dedicated kitchen solely for the exclusive use of the SPCLG.²³⁰ The culinary offerings created within this particular kitchen had a notably higher level of refinement compared to the fare accessible in the communal dining facilities for the workers at large. Remarkably, even during periods of acute food shortages, the meat remained available in Courtyard No.2. The yard also operated as a club where Kang entertained guests during the infrequent leisure periods, which occurred once every two weeks in the Daqing Oilfield. Female staff members from the literary and art team were present to dance with the guests. The difference in the lifestyle in Courtyard No. 2 further proves that it is not an ordinary Gandalei house.

While such accounts are suppressed from official records, this does not suggest that they lack supporting evidence. On September 30, 1964, the Ministry of Petroleum disseminated the SPCLG's "Three-Point Covenant." The first point stipulated that "Leaders at all levels must maintain a frugal and simple lifestyle, dine in collective cafeterias, abstain from inviting guests, giving gifts, dancing, or pursuing special treatment." If these behaviors did not exist, there would be no need for the document to explicitly stress the importance of avoiding such activities. It is obvious that "Courtyard No. 2" is not a Gandalei dwelling where ordinary oil workers lived. Its essence is not to pursue and display equality between oilfield cadres and the masses, but to disquise the privileges of cadres as symbols of equality.

5.2.2 Central Village and Settlement: The planned spatial structure for management and sustenance

In 1961, the SPCLG initiated the utilization of the oilfield surface construction planning within industrial planning as the tool for shaping the local spatial form and establishing corresponding planning standards. The specific plan was the "160 km² Planning and Design of Saertu Oilfield" formulated by the Daging Oilfield Design

²³⁰ Mao, H., (2019). Part 3 The Daqing Era (1960-1969): China No Longer "Poor in Oil". In *The ebb and flow of Chinese petroleum: a story told by a witness*. In The Ebb and Flow of Chinese Petroleum. Brill. "Several interviewees provided similar descriptions during the author's field research. Although there is no official documentation on this matter, considering Kang's military background and the fact that senior officers in the PLA indeed had preferences for special meals and dancing on rest days, the author believes that the authenticity of this content is highly likely."

²³¹ Ministry of Petroleum Industry (1964). Forwarding of the "Three-Point Covenant" by the Daqing Working Committee [石油工业部转发大庆工委"约法三章"], September 13.

and Research Institute. The planning framework encompassed 14 categories: crude oil transportation, storage, water injection, drainage, fire protection, power supply, telecommunications, machine maintenance, road transportation, residential and public buildings, construction site facilities, and warehouses. Out of the 14 categories, 13 were specifically associated with the petroleum industry or its affiliated sectors. The 12th category, which focused on residential and public buildings, was the sole category that addressed the well-being and interests of the local populace. This status clearly indicated that oilfield surface planning was aimed at boosting industrial productivity.

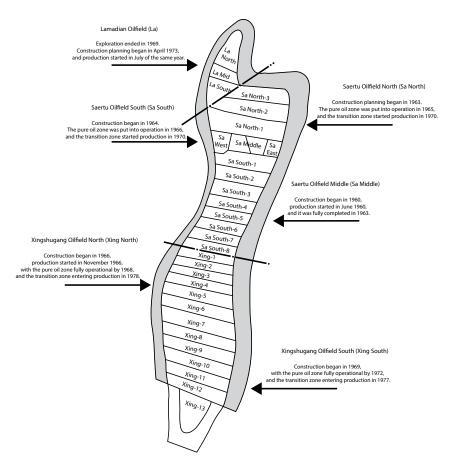


FIG. 5.9 Diagram of the proposed division of the 160-square-kilometer Saertu Oilfield plan into five zones: Central, Eastern, Western, Northern 1, and Southern 1. Source: Created by Penglin Zhu based on collected data.

It could be argued that the plan also incorporated military strategies for managing the battlefield to augment production efficiency. Specifically, the 160 km² Saertu Oilfield was divided into five distinct zones: Central, East, West, North 1, and South 1 (Figure 5.9). The oilfield's road system was designed in alignment with the arrangement of wells within each zone. In each respective zone, roads were systematically numbered based on their geographical order from north to south and from east to west, including East 1 Road, East 2 Road, and Central 5 Road, among others. The use of bearings and numerical designations to mark work zones in this context evokes a resemblance to the layout commonly observed in military barracks.

A key aspect of this plan was the implementation of a decentralized settlement arrangement, strategically distributing settlements of various sizes throughout the 160 km² oilfield. This decision was not only grounded in the guideline of "Production First, Livelihood Second" but also influenced by the scattered distribution of underground petroleum reserves. Another contributing factor was the SPCLG's aspiration to establish a completely decentralized residential system, facilitating residents in leveraging the expansive land for agricultural production. To achieve this objective, they could strategically disperse oil facilities, such as water supply stations, oil storage depots, central stations, and similar amenities, aiming to likewise decentralize the residential areas where these employees lived. The planning of living spaces was a compromise to industrial planning, which was the planning of working.

In April 1960, at the onset of the GPC, the SPCLG did not initially plan for employees and their families to farm. At that time, they provided three meals a day for both the oil workers and their family members. The purpose of this provision was to alleviate oil employees' anxieties over nourishment, allowing them to focus only on their working tasks. Nevertheless, the leadership team quickly saw that there was a consistent rise in the number of family members of oil workers who were moving to the oilfields. As a result, they found themselves unable to sustain the provision of complimentary meals to accommodate the growing population. Despite presenting themselves as seeking family reunification, the fundamental motivation behind the arrival of these individuals was survival, given that a significant number of Chinese residents during the Great Famine were unable to attain the basic necessity of three daily meals.

Subsequently, the SPCLG made revisions to the rules, announcing that they would only provide rice to employees' family members. Consequently, these people were tasked with sourcing their own vegetables and meat. Shortly thereafter, they discovered that even the initial allocation of rice was inadequate. Throughout this period, food rations for different types of workers were consistently reduced.

As a result, a significant number of employees developed edema as a result to inadequate nutrition, leading to their absence from work and significantly impeding the progress of the GPC. On August 7, 1960, during an inspection visit to Daqing, Liu Shaoqi, the then President of China, identified this issue and urged the SPCLG to coordinate the involvement of family members, specifically oil workers' wives, to engage in agricultural productions to meet their family's needs. ²³² Additionally, it was anticipated that they would engage in tasks such as mending clothes and caring for children. At this time, oil workers were engaged in oil production and the construction of the oil industry, while their families were involved in agricultural production to sustain themselves.

Another significant aspect of this plan was the development of a local spatial structure that supported the militarized management model employed by the SPCLG. First, the plan categorized residential areas for oil workers into two types based on the nature of their work, namely, fixed production unit settlements and mobile unit settlements, akin to similar category in the military. Fixed production units pertained to organizations engaged in petroleum industry production at stationary locations, such as oil extraction and storage, while mobile units referred to units without fixed work locations, including drilling and construction teams. Residential areas for fixed production units were planned around water injection wells, while mobile production units had two types of settlements: one was mobile housing units provided for workers during workdays, which would relocate according to their work assignments. The other consisted of fixed settlements for workers and their family members during weekends, uniformly planned within a 1.5 km radius of the Saertu oilfield's perimeter. This method of working categorization, similar to the military, aims to accelerate the construction of the oil industry through specialized expertise.

Second, the plan distinguished settlements into two distinct levels based on the size and importance of the work units, namely, the central village and settlement. Central villages, which were larger residential areas, were located in close proximity to major industrial facilities such as oil depots, joint stations, and transfer stations. In contrast, settlements were residential areas associated with smaller oil facilities or supporting services. Central villages were considerably larger in scale and population compared to settlements, with the capacity to accommodate approximately two times the number of oil workers and their family members. For example, a central village typically housed around 3000-4500 residents, while a

²³² Office of the Daqing Local Chronicles Compilation Committee. (1988). 'Major Events – Year 1959 [大事记 – 1960年]'. In *Daqing Gazetteer* [大庆市志], (p. 1). Nanjing: Nanjing Publishing House.

²³³ Zhu, Y. (n.d.). Planning of mine construction in the early stage of oil field development [油田开发初期矿区规划].History of Daqing Urban Planning [大庆城市规划史]. In [*Unknown Book Title*] (p. 629-630). Daqing.

settlement accommodated approximately 1500-2000 residents. ²³⁴ The hierarchical differentiation of these settlements parallels the military's approach, aiming to enhance management efficiency and better serve the needs of oil construction.

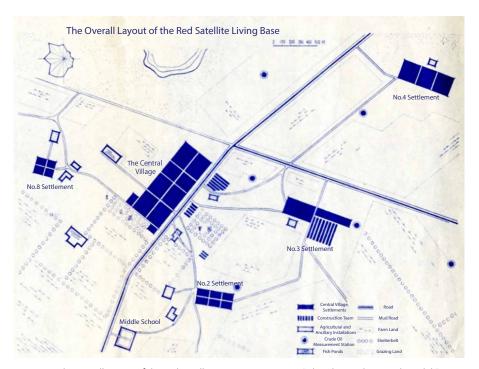


FIG. 5.10 The Overall Layout of the Red Satellite Living Base. Source: "Chenzhen Juzhuqu Guihua Shili", China Architecture & Building Press. Annotated by Penglin Zhu with various English entries.t

When a central village, along with three to five settlements, formed a cluster, they created a relatively independent living base. The distance between a central village and its surrounding settlements was typically not extensive, averaging around 2 kilometers. The Red Satellite Living Base, developed and built between 1963 and 1965, serves as a prime example (Figure 5.10). This large-scale living base was situated in the oilfield's northwest region, adjacent to a furniture factory, and encompassed a total construction area of approximately 86,200 m². It provided 51,864 m² of residential space and was

234 Office of the Daqing Local Chronicles Compilation Committee. (1988). 'Title III Urban and Rural Planning Urban Planning, Chapter 1 Urban Planning, Section 1 Masterplanning [第三篇 城乡规划 城市规划,第一章城市规划,第一节总体规划]'. In Daqing Gazetteer [大庆市志], (p. 11). Nanjing: Nanjing Publishing House.

designed to accommodate 7,628 residents. The living base comprised one central village and eight settlements, which were spatially arranged in a radial pattern around the central village. The distance between the central village and each settlement ranges from 0.8 to 2 kilometers. Within this living base, the central village housed the command center for the furniture factory, as well as construction teams and affiliated enterprises serving the entire factory. Moreover, the central village boasted a wide array of public welfare and cultural facilities, including primary and secondary schools, department stores, cultural centers, and kindergartens.

The SPCLG endeavored to strategically allocate limited resources and proficiently govern the population by employing a well-conceived spatial structure. Within the realm of local resource reallocation, central villages were designated as superior in hierarchy compared to the settlements. Central villages were methodically planned and established with a comprehensive array of social service infrastructures, encompassing large grocery stores, workshops, general maintenance facilities, postal services, wastewater management, communal bathhouses, barbershops, dining halls, elementary schools, and health clinics. In contrast, settlements only concentrated on delivering indispensable daily provisions, which included modest grocery providers, workshops, childcare facilities, and primary healthcare practitioners' humble offices. The spatial separation between central villages and smaller settlements was deliberately kept within a manageable range, ensuring that it did not become a substantial impediment when necessary.

This organizational structure also exemplified an effective approach to passively improving work efficiency. Given the significant distances separating various central villages and the insufficiency of local transportation networks, each residential base essentially constituted an isolated community. This disconnected social organization was congruent with the industrial ambitions of the SPCLG, as it prevented residents from easily departing the residential base. As a result, inhabitants maintained strong ties to their work, while their family members played a crucial role in sustaining and fostering the growth of the community.

The guest for efficiency was also manifested in the spatial composition of central villages, drawing inspiration from the layout of military camps. Analogous to numerous military camps, the Red Satellite Central Village adopted a linear layout, with facilities arrayed around a central street (Figure. 5.11), thus facilitating management. The command office building occupied a central position on this street, surrounded by other public amenities. Administrative and social service structures were meticulously planned and built in the first designated area located in the lower-left corner. This zone encompassed administrative offices (No. 10), a grocery store (No. 2), a sewing shop (No. 3), and a post office (No. 4). The medical clinic (No. 11) and patient wards (No. 12) were situated at the bottom corner of this region. In order to create a comfortable atmosphere for patients, it was necessary to plant trees around these establishments. A kindergarten (No. 16) and an elementary school (No. 15) occupied the first and second areas on the upper-left side of the plan. This central village did not incorporate the construction of a secondary school or any higher education institutions. The remaining designated areas were devoted to residential accommodations for both single individuals and families.

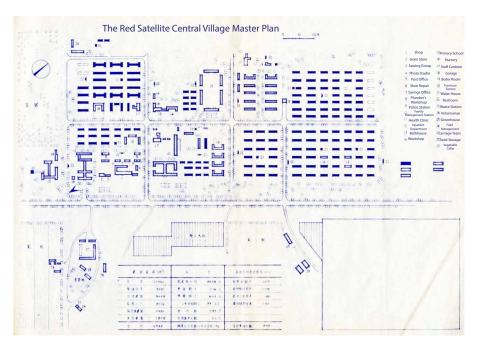


FIG. 5.11 The Red Satellite Central Village Master Plan. Source: "Chenzhen Juzhuqu Guihua Shili", China Architecture & Building Press. Annotated by Penglin Zhu with various English entries.

While the central villages boasted a relatively wealth of civil amenities, financial constraints inevitably led planners to centralize their provisions, undeniably diminishing the user experience. Specifically, in an effort to reduce construction expenses, facilities, including toilets, kitchens, hot water rooms, bathrooms, and childcare centers, were provided collectively within the central village. For example, hot water rooms (No. 21) and toilets (No. 22) were constructed according to the number of residents in each area. The first area in the lower-right corner housed two hot water rooms and two toilets, while the second area in the lower-right corner contained a single hot water room and one toilet. The central village featured a lone

public bathhouse (No. 13), situated to the north of the factory. The public bathhouse generally operated on a schedule, catering to men and women at separate times, since hot water baths were deemed a luxury during that period.

In short, the two-tier structure of central village and settlement, built on militaristic thinking, inherently did not serve the equal rights of leaders and ordinary residents. The military has a strong hierarchy that emphasizes obedience and sacrifice. Furthermore, considering the scarcity of resources, the central village in this dual structure received far more material and facility resources than the smaller residential settlements, exacerbating this inequality. Lastly, even within the central village, many basic living facilities can only be provided in a centralized manner due to funding constraints, greatly reducing the privacy of ordinary people's lives. The principle of living serving oil production was clearly implemented in the planning carried out by the SPCLG in the area.

5.3 Chapter Summary

Between 1960 and 1964, Daqing's planning heritage primarily centered on the Spatial and Representational Petroleumscape, encompassing nearly all layers except for Retail. The spatial planning system employed by the Ministry of Petroleum during the Songliao Great Petroleum Campaign, encompassing its principles of spatial planning, civil construction standards, and established lifestyles, exhibited a pronounced temporality. By embracing a military strategy akin to preparing for war, the motivation of participants was stimulated by implementing a management model in an area lacking pre-existing infrastructure. The goal of the SPCLG was to establish the petroleum industry expeditiously, and this method of development intrinsically dictated the foundational structure of its spatial practice—a colossal wartime military encampment. This encampment was characterized by an assemblage of provisional spatial planning and architectural designs.

These components represented the Ministry's pragmatic choices aimed at fulfilling the Central Government's objectives amidst severe economic and food shortages. Every facet of planning—be it the system, principles, or content—was singularly dedicated to serving petroleum industrial construction. Civil constructions did not exist as standalone planning projects but were subsumed under industrial planning. The planning quideline dictated that civil constructions should be aligned with

industrial infrastructure, sharing amenities such as electricity, water, and heating. Furthermore, the spatial planning for mining areas deliberately dispersed residential zones to allocate ample land for female family members to engage in agricultural production. The use of the Gandalei construction techniques in worker dormitories epitomized the efforts to minimize construction standards, ensuring that sufficient resources were channeled toward industrial construction.

Upon examining data from this period, a characteristic related to the planning and construction history of the Daging Oilfield gradually becomes apparent: the deliberately overlooked narratives within official documentation. Instances include the Geological Department's pivotal role in identifying the location and scale of the Daging Oilfield; the wholehearted assistance of Heilongjiang Provincial Party Secretary Ouyang Qin during the oilfield's construction, and the privileged lifestyles enjoyed by the Ministry of Petroleum leadership in Daging, epitomized by the No. 2 Courtyard. Multiple factors have contributed to this historical supresssion," and the subsequent chapters will systematically unveil these rationales.

Within the overarching framework of this paper, this chapter marks the second key time period in the development of the Spatial Petroleumscape for the Daging Oilfield. Specifically, it covers the Ministry of Petroleum's exploratory phase in Daging concerning administrative bodies, spatial planning systems, and architectural standards. Notably, these explorative endeavors took place at both local and regional levels.

6 Premier Zhou's Principle

Establishment of the Local Administrative System, Planning Practices, Architectural Design, and Lifestyle 1962

This chapter aims to analyze the process via which Premier Zhou Enlai, in 1962, formalized the exploratory planning practices and architectural designs of the Ministry of Petroleum from 1960–1962 in the Daqing Oilfield, employing a distinct top-down approach. During the inspection of the Daqing Oilfield, Zhou encapsulated the spatial planning guidelines explored by the Ministry of Petroleum in Daqing, such as the "surface serves the subsurface" and the prioritization of "Production First, Livelihood Second." the overarching decentralized spatial structure, and dry-stack housing. This encapsulation came to be known as the Planning Principle of Daqing and subsequently became the foundation for all industrial planning and architectural designs conducted by the Ministry of Petroleum in Daqing.

Premier Zhou's endorsement further bolstered the Ministry's assurance in formulating new spatial plans, prompting them to refine the spatial structure of the Daqing Oilfield. This revision centered around the inclusion of three new worker towns, laying out a three-tiered spatial structure aimed at optimizing management and resource distribution. Moreover, Premier Zhou also advanced the establishment of the "Zhengqiheyi" administrative model in Daqing, granting the Ministry of Petroleum unprecedented control over local spatial planning and construction as both a state-owned enterprise and a local government, especially in terms of land ownership rights.

The chapter will delve into the following four sections detailing the method in which Zhou Enlai leveraged state administrative power to drive the formalization of local management and spatial planning: "The Defining Moment in Planning Principle of Daqing"; "Triad Evolution: The Rise of Sartu, Ranghulu, and Longfeng Worker Towns"; "Zhengqiheyi Model: The Confluence of Government and Enterprise in Absolute Planning Authority"; and "Land Acquisition in the Name of Petroleum."

6.1 The Defining Moment in Planning Principle of Daqing

Zhou Enlai, who was serving as the Premier of the State Council at the time, visited Daqing on June 21, 1962, with the objective of identifying methods to incorporate the planning practices in the region as enduring components within the local governance framework and ultimately established them as institutionalized elements. Zhou placed great importance on the developmental progress in the Daqing Oilfield, as this national asset was of critical significance to the political and economic requirements of the country. One could argue that he was the foremost protector of the Great Petroleum Campaign (GPC), as his subordinate, Bo Yibo, who held the position of the Director of the State Economic and Trade Commission, assumed the primary responsibility within the Central Government for coordinating economic and material support for the Ministry of Petroleum. Bo would present vital reports or urgent requests from Yu and Kang to Premier Zhou in order to facilitate a prompt decision-making process.

Premier Zhou's visit to Daqing was brief, spanning only a single day, nonetheless, his itinerary encompassed a diverse range of carefully chosen locations, selected in collaboration with the Ministry of Petroleum. He persistently visited both industrial production sites and workers' accommodations. Zhou's initial stop was an active oil well, representing the ongoing development of the petroleum industry, particularly during the extraction process. His next destination was the North No. 2 Water Injection Station, which was an integral component of petroleum drilling. Water injection played a crucial role in petroleum extraction at the Daqing Oilfield. Given the distinct nature of crude oil in this area, it was necessary for oil workers to inject water underground to facilitate oil extraction. Zhou's third and fourth stops comprised amenities frequently utilized by petroleum workers, specifically the

canteen and residential settlements of the North Second Ring Water Injection Station. He sought to evaluate the quality of meals served in the canteen and the condition of the dormitories as indicators for the local population's living standards. The experience proved to be profoundly disheartening.

In accordance with Chairman Mao's political stance on the expedited progress of the petroleum sector and to motivate employees to persist in the GPC, Zhou needed to emphasize the fundamental truth: while addressing livelihood issues was indeed pressing, the rapid advancement of the petroleum industry remained a crucial obligation. He addressed the attendees, asserting, "Difficulties are a reality; to deny their existence is fallacious... Current challenges endure, but as long as we maintain diligent work and self-reliance, circumstances will undoubtedly ameliorate in the future." 235 Though he acknowledged the adversities encountered in daily life, given the strenuous situation, no alternative solutions were available. Consequently, Zhou presented an optimistic outlook of the future to his audience, underlining that perseverance would ultimately result in improved conditions. In the interim, individuals were urged to dedicate their utmost efforts to the petroleum industry.

A similar perspective was also evident in Zhou's commendation of the SPCLG's planning quideline, which emphasized "surface serves the subsurface" as well as "Production First, Livelihood Second." After listening to a presentation by representatives from the Design Research Institute, Zhou remarked, "In resourcerich areas such as Daging Oilfield, it is beneficial to avoid constructing large centralized cities. Instead, creating dispersed residential settlements, involving families in agriculture, integrating industry with agriculture, and combining urban and rural environments can promote both industrial production and residents' quality of life."236 Upon his return to Beijing from Daqing, he shared insights on the spatial decision-making and practices adopted by the SPCLG in the Daging oilfield with various local delegations, particularly those from resource-based and mining regions. Zhou concisely encapsulated the observations from Daqing into four clear, potent, and slogan-esque phrases: "Integration of workers and farmers, unity of urban and rural, facilitation of production, and convenience for living." This extreme linguistic distillation served political objectives by promoting easy memorization and dissemination. Zhou, thereby, designated these four statements as the planning principles for the Daging Oilfield's spatial constructions.

²³⁵ Song, Z. (1990). 'Premier Zhou's twenty-eight hours in the Daqing Oilfield [周总理在大庆油田二十八小 时记]', in Tian, R., Zhu, Z., & Zhang, H. (eds.) Daqing Oil Campaign - Daqing Historical and Literary Materials Volume II [大庆石油会战——大庆文史资料第二辑]. pp. 20-28. China Literature and History Publishing House. Beijing. ISBN 5034-0130-3/k.094.

²³⁶ Thid

The process of distilling and designating the SPCLG's spatial decisions and practices as the planning principle effectively exemplifies the Central Government's efforts to institutionalize local spatial practices. As defined in the Oxford Dictionary, the term "principle" refers to "a moral rule or a strong belief that influences your action; a law, a rule or a theory that something is based on; a belief that is accepted as a reason for acting or thinking in a particular way." This implies a set of guidelines to which local practitioners are expected to adhere. Importantly, the principles were introduced to delegations from other regions, with a deliberate emphasis on motivating them to thoroughly study and apply this planning principle in their respective localities. Consequently, this top-down institutionalization process significantly strengthened the SPCLG's confidence in executing its spatial strategies.

6.2 Triad Evolution: The Rise of Sartu, Ranghulu, and Longfeng Worker Towns

This confidence swiftly materialized in the SPCLG's introduction of a new third level to the spatial structure—the worker town. In 1962, following the release of the Saertu Town Planning, they successively planned two other worker towns in Ranghulu, and Longfeng regions within a month. Rather than constructing these towns entirely from scratch, they were instead established on the basis of the three most prominent pre-existing central villages. Each work town was planned with distinctive facilities and infrastructure related to administration, industry, research, and education. The SPCLG carefully designated specific functions for each town. The Saertu Worker Town was envisioned as the center for administration, culture, and social services, featuring facilities such as Courtyard No. 2—serving as the SPCLG's headquarter—and the Daqing Workers' Hospital. The Longfeng Worker Town was designated as the petrochemical production hub since the Heilongjiang Provincial Refinery was planned and constructed there. Before the refinery's construction, Longfeng was a district under the jurisdiction of Anda City. Following the National Economic Commission's transfer of the refinery from Heilongjiang Province to the

237 Ibid

Ministry of Petroleum in 1962, it underwent a change in administration and fell under the jurisdiction of the SPCLG.²³⁸ The Ranghulu Worker Town emerged as the center for industrial planning, design, and research.

If central villages were able to provide adequate daily services, worker towns possessed the capability to offer supplementary amenities that incentivize residents to stay within the oilfields, including staff hospitals and high schools. As indicated by their names, worker towns represented a differentiation from central villages. The SPCLG enforced a regulation stipulating that workers' towns should house 20,000 individuals, over three times the capacity of central villages.²³⁹ In addition, workers' towns provided an increased number of services, such as staff hospitals and high schools. These towns also acted as transportation hubs, enabling residents to navigate the expansive oilfields with ease. Although central villages previously functioned as residential areas for crucial industrial facilities, the scope of worker towns surpassed this. They served as bases for an array of facilities associated with industrial production, administrative management, research, and education. As a result, the territories of worker towns were substantially more extensive than those of central villages, not only affording a greater range of facilities but also accommodating a larger population.

The spatial arrangements of these three workers' towns manifested the strategic intention of the SPCLG to emphasize centralized authority within a dispersed oilfield plan. All three workers' towns were located along the Binzhou railway, capitalizing on the convenience of the transportation network. In the spatial planning, they accentuated the strategic position of Saertu Worker Town, which was situated between the other two towns: Ranghulu Town to the west and Longfeng Town to the east. The distances between the three workers' towns were almost equal, with approximately 17 kilometers from Ranghulu to Saertu and a similar distance from Longfeng to Saertu. In terms of spatial configuration, the balanced distribution centered around Saertu Town not only underscored its role as the central hub of the entire oilfield but also enabled the SPCLG to maintain a consistent administrative influence over the other two towns.

²³⁸ Chen, G. (ed.) (2009) 'Major Events - Year 1962 [大事记 - 1962年],' in Daging Oilfield Chronicles (1959-2008) [大庆油田志(1959-2008)]. Harbin: Heilongjiang People's Publishing House, p. 15. ISBN: 9787207076427.

²³⁹ Zhu, Y. (n.d.). Daging Oilfield Phase I Construction Plan [大庆油田第一阶段油田建设规划]. History of Daging Urban Planning [大庆城市规划史]. In [Unknown Book Title] (p. 631). Daging. Reviewers: D. Han, J. Lei, C. Wan, J. Wang, & D. Liu. Audio-visual file provided by Zhu Yuncai, 2017.

Worker town acted as a supplementary component to the existing two-leveled spatial structure of the central village and settlement. Primarily, their expansive territories facilitate hosting large-scale events, which central villages were unable to accommodate. During that period of heightened political ambiance, mass parades, and assemblies were a common occurrence in China. Specifically in the Daqing Oilfield, the SPCLG sought to motivate worker morale by persistently organizing such gatherings. Furthermore, worker towns, particularly Saertu Town, essentially served as the "urban center" for the entire oilfield, albeit with fewer infrastructural and amenity provisions compared to a traditional city center. Nonetheless, it would never evolve into an authentic urban center, as the SPCLG intended to avoid the construction of a petroleum city by instituting the three-level system comprising worker town, central village, and settlement. This tripartite arrangement constituted the fundamental spatial structure of the Daqing Oilfield.

6.3 Zhengqiheyi Model: The Confluence of Government and Enterprise in Absolute Planning Authority

During his visit to Daqing in 1962, Premier Zhou Enlai conveyed his appreciation for the Ministry of Petroleum's capacity to install a significant portion of the necessary infrastructure and equipment for the petroleum industry in the Daqing Oilfield within a short timeframe of two years. The spatial planning decisions formulated by the Ministry of Petroleum, along with the autonomous planning practice they employed locally, had a lasting impact on Zhou. The model, distinguished by the predominant role of the state-owned petroleum company, specifically the SPCLG, in coordinating the planning and development of oil mining zones, demonstrated remarkable efficacy in promoting expeditious industrialization within particular regions. As the leader of the State Council, Zhou intended to formalize this development model. The objective was not only to preserve the Ministry of Petroleum's local construction efficiency but also to investigate the feasibility of adopting this model across other domestic resource mining areas.

In 1964, the Ministry of Petroleum, along with the Heilongjiang Provincial Committee, submitted a proposal to the State Council concerning the reformation of the Daqing oilfield's administration system, which signaled the onset of the establishment of

the local administration paradigm. Within the proposal, they urged the State Council to discontinue the operations of the Anda City (Prefecture-level), which had been established two years earlier, and to establish a new Anda Special Zone and Anda Town. The recently instituted Anda Special Zone explicitly denoted the land area under the actual governance of the SPCLG, covering 1,640 square kilometers.²⁴⁰ In aspects of geopolitics and national security, the Central Government aimed to continue preserving confidentiality surrounding the development progress of the Daging Oilfield. This accounted for the naming of the special zone after Anda, as opposed to Daging.

The proposal featured a name that may potentially cause confusion—Anda Town. Although it possessed the same name and administrative tier as Anda Town before 1959, the new and historical concepts were not synonymous. The territory of the new Anda Town was considerably smaller compared to its previous incarnation, and distinct differences in the levels of administrative authority exist. This was particularly noticeable in the wake of Heilongjiang Province's transfer of the refinery to the Ministry of Petroleum in 1962, which resulted in the Longfeng District's detachment from Anda City (Prefecture-level) jurisdiction and subsequent integration into the land governed by the SPCLG. Bolstered by Zhou's endorsement, the State Council promptly reacted, granting approval for the request in March 1964.

In this proposal for administrative systemic reform, the Ministry of Petroleum and the Heilongjiang Provincial Government put forth an innovative, collaborative model between the state-owned enterprises and local government. Within the Daging Oilfield (Anda Special Zone), the SPCLG, acting as a state-owned enterprise. simultaneously functioned as the special zone government. As per official records, Premier Zhou was the foremost individual to assign a name to this management approach, terming it the "integration of government and enterprise." (Zhengqiheyi in Chinese).²⁴¹ This concept entailed merging the government and state-owned enterprises into a unified administrative organization. In the response document from the State Council addressed to the Ministry of Petroleum and the Heilongjiang Provincial Government, Zhou elucidated his characterization of this management framework, signifying the Central Government's position:

²⁴⁰ Office of the Daging Local Chronicles Compilation Committee. (1988). 'Major Events – Year 1964 [大事 记 – 1964年]'. In Daging Gazetteer [大庆市志], (p. 20). Nanjing: Nanjing Publishing House.

²⁴¹ Office of the Daging Local Chronicles Compilation Committee. (1988). 'Summery [总述]'. In Daging Gazetteer [大庆市志], (p. 1). Nanjing: Nanjing Publishing House.

"The Anda Special Zone Government is to adopt a dual leadership system, predominantly guided by the Ministry of Petroleum and supplemented by the leadership of the Heilongjiang Provincial Government. The Ministry of Petroleum will be responsible for any work and construction associated with enterprises, whereas the provincial government will supervise activities related to local affairs. The integration of government and enterprise constitutes a nascent development; therefore, it is imperative to continuously monitor the lessons gleaned from this experimental endeavor."²⁴²

To assume the responsibilities of a local government, the Ministry of Petroleum employed an unconventional response method: displaying "plaques" for both organizations outside a shared office. This meant that the identical personnel framework catered not only to the diverse sectors within the state-owned petroleum company but also to the corresponding local government institutions. For instance, the Campaign Work Committee office showcased an additional plaque for the Anda Special Zone Party Committee, while the SPCLG exhibited one for the Anda Special Zone People's Committee. This strategy was implemented not only at the special zone government level but also extended to affiliated departments such as finance, planning, and personnel. The local populace amusingly described this arrangement as "one team of people, two plaques." Within this context, the Anda Special Zone People's Government was established on January 1, 1965.

In the same year, the Ministry of Petroleum and the Ministry of Finance released "Notice No. 234 of the Ministry of Petroleum Industry and the Ministry of Finance." This notice established the practical operational framework for the "integration of government and enterprise" (hereafter referred to as Zhengqiheyi) model, with a specific emphasis on financial management and taxation within the special zone. Frequently referred to as Notice 65 in various documents due to its 1965 publication, the notice set forth the following provisions:

"State-owned petroleum companies assume responsibility for the special zone's administrative costs, cultural and educational expenditures, medical and healthcare expenses, and urban maintenance. The Heilongjiang Provincial Government refrains from imposing any local taxes or surcharges on petroleum companies. Instead, it allocates tax revenues collected from other companies and individuals within the special zone to petroleum companies as subsidies for special zone expenses. The

²⁴² State Council (1964). Approval on the establishment of the Anda Special District People's Committee [关于设立安达特区人民委员会的批复], Document No. Zhong Fa (64) No. 358 [中发(64)358号文件].

Anda Special Zone abstains from urban development. Civilian construction plans are to be integrated into the oilfield's industrial construction plans and managed by the petroleum company."²⁴³

Notice 65 was not simply a local financial regulation co-issued by the Ministry of Petroleum and the Ministry of Finance; it was, in fact, a legal document that empowered the Ministry of Petroleum Industry to engage in spatial planning and construction within the boundaries of the acquired territory in the Anda Special Zone. This authority arose from the Ministry of Petroleum's commitment to shoulder local construction expenses, while the Ministry of Finance granted the Ministry of Petroleum an exemption from local taxes and channels tax revenue from other enterprises and individuals within the special zone as financial subsidies for the Ministry of Petroleum's utilization.

6.4 Chapter Summary

This chapter investigates the period from 1962 to 1965, exploring how the State Council, led by Premier Zhou Enlai, leveraged administrative power to construct the administrative model and spatial planning in the Daqing Oilfield. Although there may be an initial perception that the "top-down" approach led by Zhou's State Council complimented the "bottom-up" practices of the SPCLG, the latter's "bottom-up" approach did not genuinely materialize. The SPCLG was essentially a representation of the Ministry of Petroleum, a major division within the State Council, not a local government entity. Hence, this top-down paradigm was evident in Zhou Enlai's various decision-making actions as well as the Ministry of Petroleum's local practices concerning resource management and spatial planning.

Urban planning practices in Daqing can be predominantly categorized into two main dimensions: technical and regulatory. These dimensions correspond to the Administration and Architecture layers within the Spatial Petroleumscape framework. In 1962, during his visit to Daqing, Zhou endorsed the spatial planning practices of the Ministry of Petroleum from 1960-1962 in the Daqing Oilfield. This endorsement

²⁴³ Ministry of Petroleum Industry and Ministry of Finance (1965). Notification No. 234 by the Ministry of Petroleum Industry and Ministry of Finance [石油工业部和财政部第234号通知].

subsequently led to the establishment of the Planning Principle of Daging. These principles became the foundation for all planning and designs undertaken by the Ministry of Petroleum in Daging in the following years, symbolizing the Central Government's initial step in construct the spatial planning system of Daqing at a technical level. By 1965, the State Council formally approved the implementation of the "Zhengqiheyi" model in Daqing, coinciding with the joint issuance of the "Notice 65" by the Ministry of Petroleum and the Ministry of Finance, marking the Central Government's acknowledgment of Daging's spatial planning system at a regulatory level.

Within the broader research context, this chapter primarily focuses on the third key time period in the evolution of the planning principle of the Daging Oilfield. It places particular emphasis on Zhou Enlai's role in representing the Central Government in formalizing local spatial planning practices through policies and regulations.

7 Learning from Daqing

Transforming Oil Industry
Planning and Housing Design into
the Supreme Leader's Personal
Political Capital 1963-1966

The primary objective of this chapter is to delve deep into the question to what extent, in 1963, Mao Zedong's nationwide political Campaign "Learn from Daqing in Industry" directed the Architectural Society of China to prioritize the concept of "cost-effectiveness" in the fields of planning, architectural design, and construction techniques. The chapter's content will be structured around the following three sections: firstly, "The Descendants of the Angang Consitution: the Ministry of Petroleum Industry's Report on the Great Petroleum Campaign"; secondly, "Deifying Leadership: The Twin Front-Page Editorials in People's Daily"; and lastly, "Reluctant Engagement: The Architectural Society of China's Involvement in the Learn from Daqing in Industry Campaign and the 1966 Edition of the Architecture Journal". The organization of this chapter follows the natural progression of events.

7.1 The Descendants of the Angang Constitution: The Ministry of Petroleum Industry's Report on the Great Petroleum Campaign

There is no specific date that marks the end of the Songliao Great Petroleum Campaign (GPC). First, neither the Ministry of Petroleum nor the Songliao Petroleum Campaign Leading Group (SPCLG) issued official statements or held events to signal the campaign's termination. Second, the notion of a petroleum campaign endured in the Daging Oilfield. During the 1960s and 1970s, when there was a need for expedited development of a recently found oil region within a limited period, local administrations always suggested implementing the campaign approach. According to numerous scholars who have conducted research on the historical development of the Chinese petroleum industry, the date of December 4, 1963, holds significant importance. This is primarily due to Premier Zhou's announcement during the Fourth Session of the Second National People's Congress, wherein he declared that China had achieved self-sufficiency in petroleum production and would no longer depend on imported petroleum.²⁴⁴ Additionally, the subsequent departure of the trains carrying refined petroleum from the Daging Refinery in Longfeng to the nearby domestic needs further symbolized this temporary triumph for the GPC. In the context of Daging Oilfield's planning history, this research concurs that December 4, 1963, constitutes a key period as it signifies the Central Government's recognition of Daging Oilfield's development achievements. This recognition was set to transform the construction paradigms of China's industrial cities and regions and additionally altered the configuration of political power within the Chinese Communist Party.

As 1963 drew to a close, the Ministry of Petroleum successfully managed to reverse its declining trend from five years earlier, thereby establishing itself as one of the most sought-after departments within the State Council. This shift can be partially attributed to invitations from the State Council and the National Economic Commission for the Ministry to present a report detailing the experiences and lessons learned from the GPC. Recognizing the substantial political opportunities

244 Editorial of People's Daily, (1963) 'The Era of Importing "Foreign Oil" is About to be Gone Forever, China's Oil Products are Basically Self-sufficient [从国外进口"洋油"的时代即将一去不返,我国石油产品基本自给],' People's Daily [人民日报], Beijing: People's Daily Publishing House, 26 December 1963.

inherent in this situation, Yu and Kang quickly moved to seize these prospects. As a result, in mid-December 1963, the Ministry of Petroleum drafted an official document entitled "Report on the Situation of the Great Petroleum Campaign" and submitted it for review to the Central Committee of the Chinese Communist Party. The report delineated nine crucial experiences that contributed to the Oil Campaign's success:

"Contemporary socialist enterprises must adopt a revolutionary approach; A strong revolutionary spirit must be integrated with rigorous scientific methodology; Modern businesses must effectively participate in mass movements: There must be a keen focus on infrastructure development and grassroots construction; Cadres need to maintain a prominent position in production consistently; The cultivation of young cadres should be given priority: Cadres must embrace and uphold exemplary work practices; Enterprises must exhibit concern for every aspect of their workers' lives; and Cadres must assiduously study the political efforts of the People's Liberation Army."245

Upon analyzing the content, it is evident that this report serves as a political tribute from Yu and Kang to Chairman Mao Zedong and should be interpreted as such. Firstly, the report aligned with Mao's General Line, which aimed to promote socialism through rapid, high-quality, and efficient development. Mao initially introduced the General Line for construction in 1957 as part of the General Line for the Transition Period.²⁴⁶ Within the context of this policy, he initiated the Great Leap Forward, which subsequently and unfortunately resulted in the Great Chinese Famine, one of the most severe and deadliest famine in history. At the time, Mao was also losing some influence due to criticisms from other high-ranking Party members concerning the economic and agricultural crises stemming from the politics of the Great Leap Forward. In this light, the report's support was akin to providing timely assistance.

Secondly, the nine key points outlined in the report strongly resonate with Mao's commentary on a previous report about the Anshan Iron and Steel Company, dating back to March 1960. Specifically, Mao underscored the necessity of cadre engagement in labor, worker involvement in management, reform of unreasonable regulations, and collaboration between workers, leading cadres, and technicians in his comments, alongside Li Lisan's 1958 proposal for constructing a Chinese

²⁴⁵ Kang, S. (1995) 'Report on the Great Campaign for Oil [关于石油大会战的报告]', in Kang Shi'en on China's Petroleum Industry [康世恩论中国石油工业]. Beijing: Petroleum Industry Press, pp. 166-207. Original presentation: December 24, 1963.

²⁴⁶ Mao, Z. (1957) 'We Must Adhere to the Construction Policy of Doing More, Faster, Better, and More Economically [必须坚持多快好省的建设方针]', People's Daily [人民日报], Beijing: People's Daily Publishing House, 12 December 1957, Front Page.

socialist factory system, dubbed "Two Participations, One Reform, and Three Combinations". He criticized five aspects that he believed were flawed operational models for state-owned industrial enterprises: overlooking the prioritization of political work, neglecting to strengthen Party leadership, failing to initiate robust mass movements, leaders not actively partaking in production labor and worker management, and not attending to the reform of unreasonable and obsolete rules and regulations, while neither fostering close collaboration between cadres, workers, and technicians nor fully committing to technological innovation and revolution.²⁴⁷ Among the nine experiences put forth by the Ministry of Petroleum, eight reiterate Mao's commentary with a positive emphasis, with the exception of the suggestion that cadres must diligently engage in the study of the political work carried out by the People's Liberation Army.

Owing to his particular political astuteness and skillful maneuvering, Mao was able to discern with relative ease that the achievements of the GPC could be strategically leveraged to further his own political agenda. Under his vigorous endorsement, on February 5, 1964, the Central Committee of the Chinese Communist Party made the decision to disseminate the Ministry of Petroleum's report as a government circular to all provinces, cities, and the People's Liberation Army. This was done with the intention of propagating Daqing's practices on a national scale and presenting it as an example to follow. The Central Committee provided the following rationale for the government circular's objective:

"While the experiences of the Daqing Oilfield may be distinctive, they hold broader implications. In accordance with the Party's General Line for socialist construction, these experiences emphasize the importance of political leadership and a mass-oriented approach, systematically study and apply the political work experiences of the People's Liberation Army, and closely integrate political thought, revolutionary enthusiasm, and scientific management, with a particular focus on practical application. This serves as an exemplar for conducting work more rapidly and effectively. Some of the core experiences derived from this case are not only

247 Mao, Z. (1968) 'Comments on "Report on the Situation of Technological Innovation and Technical Revolution Movement in the Industrial Front by the Anshan Municipal Party Committee" [对《鞍山市委关于工业战线上的技术革新和技术革命运动开展情况的报告》的批语],' in Long Live Mao Zedong Thought, 1968 Wuhan Edition [1968年武汉版《毛泽东思想万岁》]. Wuhan: Initially collected by Wang Chaoxing and distributed by the Second Bureau of Wuhan University as "internal material", p. 161. Original presentation: March 22, 1960.

pertinent to the industrial sector but also applicable to various other domains, including transportation, finance, trade, culture, and education, as well as party, government, military, and mass organizations at all levels, and can be used as valuable references."248

At this juncture, Mao made the decision to initiate a comprehensive political campaign on a national scale with the objective of methodically propagating the diverse practices undertaken by the Ministry of Petroleum in the Daging Oilfield. The primary indicators emphasized in this campaign were the achievements in oil production and spatial development of the oilfield.

Later, on February 13, 1964, Mao formally introduced the motto "Learn from Daging in Industry (工业学大庆)" for the first time during a Spring Festival symposium. This slogan constituted one-third of the comprehensive motto he put forth: "Learn from Daging in Industry, Learn from Dazhai in Agriculture, and Learn from the People's Liberation Army (工业学大庆,农业学大寨,全国学解放军)."249 All three slogans had a clear educational stance. At the time, Daging, Dazhai, and the People's Liberation Army represented the three primary focuses of the Chinese government, namely, industry, agriculture, and everyday life experiences. Moreover, within this framework, the case of Daging embodied not only the experiences in the domain of industrial development but also the traditional values of the People's Liberation Army. Mao displayed great enthusiasm in promoting the triumphant experiences of the GPC as a nationwide paradigm. This effort not only served to rehabilitate his personal reputation, which had been damaged by the Great Leap Forward, but also played a role in the fervent ideological dispute between his political party and the Communist Party of the Soviet Union, led by Nikita Khrushchev, in that particular era.

²⁴⁸ Central Committee of the Communist Party of China (CCP) (1964) 'Central Committee's Notice on Conveying the Report on the Daging Oil Battle Situation by the Ministry of Petroleum Industry 「中央关于传达 石油工业部关于大庆石油会战情况的报告的通知]', Document No. [64]78. Beijing, 5 February.

²⁴⁹ Mao, Z. (1964) 'Notes on the Spring Festival Conversation [春节谈话记要]', in Long Live Mao Zedong Thought, 1968 Wuhan Edition [1968年武汉版《毛泽东思想万岁》], Wuhan: Initially collected by Wang Chaoxing and distributed by the Second Bureau of Wuhan University as "internal material", p. 063. Original presentation: February 07, 1964.

7.2 Deifying Leadership: The Twin Front-Page Editorials in People's Daily

For the Central Government, the newspaper the People's Daily stands as a pivotal instrument for propagating the "Learn from Daging in Industry" campaign to the broader Chinese populace. Founded in 1948, It serves as one of the official news media outlets for the Central Committee of the Chinese Communist Party and is widely regarded as the most authoritative publication. A subscription to this newspaper has been mandatory for all official institutions in the nation, including all levels of government, enterprises, public organizations, and educational institutions, encompassing universities and secondary schools. The content of it consists predominantly of written documents, such as reports and editorials on governmental and economic issues, supplemented by a limited number of photographs. As the official publication of the Chinese Communist Party, its primary purpose is to convey the policy of the Central Government. Thus, the People's Daily's writing style is characterized by ideological clarity and precision. Considering that the literacy rate among the Chinese population aged 15 and above was only 52% at the time, this specific mode of presentation played a crucial role in facilitating the transmission of information from those capable of comprehending the content to those who could not.²⁵⁰ The characteristics of this newspaper ensure that it serves as the primary public media platform for disseminating the "Report on the Grand Petroleum Campaign" from the Ministry of Petroleum.

7.2.1 The Daqing Spirit and the People of the Town: Descendants of the Yan'an Spirit

People's Daily published a front-page editorial entitled "The Daqing Spirit and the People of Daqing" on April 20, 1964, two months after the Central Committee's circular had been disseminated to various provinces and cities. Alongside this editorial appears the following political slogan: "Learn from the Daqing experience,

250 Ding, Y. and Wang, Z. (2019) 'From an 80% illiteracy rate at the beginning of New China to a current 94.2% consolidation rate for nine years of compulsory education: Education first, a foundation for development (Big Data Observation · Brilliant 70 Years) [从新中国成立之初 80%的文盲率,到如今 94.2%的九年义务教育巩固率 教育优先 筑基发展 (大数据观察 · 辉煌70年)]', People's Daily [人民日报], Beijing: People's Daily Publishing House, October 25.

251 Yuan, M. and Fan, R. (1964) 'The Spirit of Daqing, the People of Daqing [大庆精神, 大庆人]', *People's Daily* [人民日报], Beijing: People's Daily Publishing House, April 20.

integrating revolutionary enthusiasm and scientific spirit." An in-depth analysis of the newspaper's layout demonstrates that the slogan's importance exceeded that of the editorial. This prominence results not only from its positioning directly above the editorial title but also from the editors' decision to increase the font size of the slogan. Additionally, an extensive grey background enhances its prominence, making it even more noticeable than the article's title (Figure 7.1). This arrangement also conveys that the editorial "The Daqing Spirit and the People of Daqing" intends to bolster the promotion of this slogan. All these visual features serve to make this apparent.



FIG. 7.1 April 20, 1964, Front Page Headline 'The Spirit of Daqing, the People of Daqing', Source: People's Daily.

In the editorial, the authors adhered to the newspaper's established linguistic practices. The title is concise, incorporating only two concepts: the Daqing Spirit and the People of Daqing. It is impactful due to its brevity and repetition of Daqing's name, obviously intended to imprint the name Daqing quickly into the readers' minds. The co-authors of the article, Yuan Mu and Fan Rongkang, both worked as journalists for the People's Daily, but were not from the Daqing area. In preparation for composing this editorial, they conducted extensive field research at the Daqing Oilfield and gathered a substantial amount of data. They were well informed.

The editorial seeks to demonstrate the practices employed at the Daqing Oilfield as descendants of the Yan'an Spirit. Yan'an, a town in northwestern China, served as a base for the Chinese Communist Party during the 1930s and 1940s. There, they initially endured adversity and progressively developed self-reliance capabilities prior to winning the Chinese Civil War and assuming authority. As a consequence, Yan'an occupies a pivotal position within the Party's culture and self-awareness, as a sacred site for the Chinese Revolution and a source of inspiration for the Chinese Communist Party. Specifically, the Yan'an Spirit constitutes the Party's central political concept. It consists of four components: "self-reliance, entrepreneurship, dedication to serving the people, the spirit of connecting theory to practice and ongoing innovation, and a pragmatic ideological stance." 252

It is clear that the title of the editorial, "The Daqing Spirit and the People of Daqing," intendedly corresponds to the Yan'an Spirit and its adherents. Yuan and Fan contended that the Daqing Spirit represented an expansion and novel evolution of the Yan'an Spirit. According to their assertion, the veteran comrades, who had dedicated years to their revolutionary voyage in Yan'an, had expressed great satisfaction upon arriving in Daqing. They drew a parallel between their experience in Daqing and their return to Yan'an, as they observed the thriving and perpetuation of the revolutionary Yan'an Spirit. By positing the Daqing Spirit as the successor and evolution of the Yan'an Spirit, the authors granted political legitimacy to the GPC, thereby establishing its political vitality. Simultaneously, it contributed to the nationwide dissemination of the Daqing story, as the Yan'an Spirit is universally recognized in Communist China.

The significant austere built environment of the Daqing Oilfield and the not very elevated material living conditions furnished by the Ministry of Petroleum established the context in which the authors emphasized the tenacity and noble character of the local people. For their characterization, both the Yan'an Spirit and its successor, the Daqing Spirit, required the presence of human embodiments. The living and working environments, along with the individual's way of life, were the most fitting indicators of a person's character. The authors emphasized the spatial contrast between the facilities and infrastructure of the petroleum industry and the residential dwellings and office buildings constructed using the Gandalei technique. They depicted with pride towering drilling rigs, enormous oil tanks, speeding oil trains, rows of overhead power lines, and dispersed oil wells, which collectively created a majestic representation of a modern oil company, and of industry in general. In contrast, they noted the existence of the low-rise Gandalei dwellings arranged in rows.

252 Li, T. (2010) 'Promote the Yan'an Spirit (弘扬延安精神)', Chinese Soul (中华魂), (10), pp. 3-6.

Some of these structures function as offices, while others serve as dormitories for oilfield personnel. Through a thorough illustration of the scale difference between oil industry buildings and the Gandalei dwellings and offices, the authors intended to underscore the disparity between oil workers' contributions and their subsequent compensation: their contributions were substantial, yet their rewards were scant.

This contrast, carefully presented within the realm of spatial practice, serves to bolster the assertion that the esteemed Daqing Spirit was a descendant of the Yan'an Spirit, which epitomized the willingness to sacrifice one's own interests in the pursuit of national and collective ambitions. The authors' choice of optimistic and affirmative language to delineate the contrast demonstrates this assertion. They intended to indicate that oil workers were readily prepared to forego their self-interests and markedly lower their living standards to accomplish the Central Government's lofty ambitions for the petroleum industry. The authors unquestionably embraced and supported these sacrifices, seeing them as justifiable and recommendable.

It is not surprising that the authors of this discourse fail to recognize the potential consequences of optimistically promoting such sacrifices, which may lead to the formation of an inequitable local community that neglects individual interests. The previously mentioned sacrifices were the result of the decision to disregard the individual quality of life in pursuit of collectivist goals, while optimistic propaganda facilitated and supported the normalization and institutionalization of these sacrifices. In the early 1960s Daging, achieving collectivist goals and protecting individual interests were mutually exclusive due to the nation's severe economic and food crises. However, the dichotomous opposition between collectivism and individual interests oughts to be temporary and should eventually evolve into a mutually dependent and reinforcing relationship in the long term. When the sacrifice of individual quality of life is institutionalized as a precondition for achieving national petroleum ambitions, it profoundly impeds the potential shift of the dichotomous relationship between collectivism and individual interests. This may result in a new form of exploitation in which individual interests could have been exploited in the name of collectivism.

From the approach taken in this report, a contradiction emerges. While the author intended to convey the story of the Daqing Oilfield and the lifestyle of its local residents to the readers, they purposely omitted details regarding its specific location, climate, and natural landscape. The Chinese government sought to maintain the secrecy and mystique encircling strategic industries, instilling dread in potential rivals as a result of the prevailing ambiguity. This objective was motivated in part by national security concerns, given the ideological conflict between the Chinese and Soviet parties, which posed a threat of armed conflict. Notably, the

Daqing Oilfield was situated only 620 kilometers from Heihe City, close to the Sino-Soviet border. Consequently, the Central Government implemented administrative safeguards to secure the Daqing Oilfield's specific geographical information. In official documents, the oilfield underwent either substitution with XX or was labeled as an agricultural reclamation area. For instance, those residing in the Daqing Oilfield who were visiting family members or returning to Daqing from external locations were required to present a permit that had the inscription "Saertu Agricultural Reclamation Headquarters." Daqing was simultaneously not depicted on publicly published maps, whether national or Heilongjiang Province maps, and the area retained the name Saertu until 1978.

The headline of People's Daily, however, garnered significant acclaim, reflected in the cascade of positive feedback. As a testament to its impact, the authors, Yuan and Fan, witnessed career advancements in the subsequent years. By 1969, Yuan ascended to the position of Head of the Research Office of the Central Organisation Department. In the 1980s, he further cemented his political stature by joining the State Council, serving in capacities such as the Deputy Secretary General of the Central Leading Group on Finance and Economics and the spokesman for the State Council. Meanwhile, Fan's trajectory led him to the helm of the commentary department at the People's Daily. His tenure there spanned over three decades, during which he penned numerous editorials. Eventually, he rose to the position of editor-in-chief of the People's Daily, overseeing the commentary and theory departments. The meteoric rise in the careers of these two individuals underscores that they successfully fulfilled the tasks assigned to them by the Party.

7.2.2 Spatial Planning of the Daqing Oilfield: A Utopian Embodiment of Marxism and Mao Zedong Thought

The second front-page editorial, "Daqing's Evolution into a Pioneering Mining District which is the Integration of Workers and Farmers, Unity of Urban and Rural," was published on the 2nd of April, 1966. It continues to endorse the enduring resilience of the local inhabitants with a tone that is both upbeat and positive, thereby amplifying this view within the field of spatial planning. The headline's subtitle ideologically posits that the establishment of the mining region mirrors the principles of "Integration of workers and farmers, unity of urban and rural, facilitation of production, and convenience for living." The subtitle meticulously rearticulates the

253 Mao, H., (2019). The ebb and flow of Chinese petroleum: a story told by a witness. Vol. 21. Brill, p.103

principles put forward and promoted by Premier Zhou Enlai. The text intentionally presents Daging as an innovative social structure, characterized by its unique and harmonious combination of both urban and rural elements. It functions as a city, yet its spatial organization resembles that of a village, while also incorporating certain urban amenities.

Zhang Haishan, the author, redirected the focus of the narrative from the Daqing people to the distinctive spatial structure and the Gandalei dwelling methods. This shift aims to provide evidence that every spatial practice in Daging is fundamentally an application of the Marxist doctrine in a certain context. In his two seminal works, namely, "The Communist Manifesto" and "Critique of the Gotha Programme," Marx ardently argues for the elimination of class divisions and for the reconciliation of the gaps between laborers and farmers, urban and rural communities, and intellectual and physical workers.²⁵⁴ ²⁵⁵It is clear that one objective of Zhang's editorial is to substantiate the assertion that Daging's spatial planning principle - the Integration of Workers and Farmers, Unity of Urban and Rural - signifies an important implementation of Marxist doctrine aimed at eradicating class distinctions between urban and rural areas and between workers and farmers, creating thus a happy society.

In order to bolster this contention, Zhang delineated three subsidiary themes, namely, the foundational planning principle of Daqing, the construction of Gandalei dwellings inspired by an ethos of frugality and self-reliance, and Zhengqiheyi — an integrated administrative institution combining governance and enterprise functions. The first sub-theme elucidates the sequence of decisions made by the SPCLG, which rejected the establishment of a centralized oil city in favor of disseminating settlements over the area, making it thus more easy for the worker to live close to their workspace. Zhang posited that establishing oil mining zones with adjoining settlements proximate to industrial amenities was the SPCLG's deliberate strategy. It aimed at moderating and ultimately eradicating class disparities, a concept central to Marx's doctrine.

The aspiration to eliminate social class distinctions permeated the second sub-theme as well. Zhang shed light on the architects' and engineers' endeavors to assimilate practical knowledge, that which is now often described with the term metis, a 'wide array of practical skills and acquired intelligence in responding to a constantly changing natural and human environment'. 256 Architects and engineers collaborated

²⁵⁴ Marx, K. and Engels, F., (2019). The communist manifesto. In Ideals and ideologies (pp. 243-255). Routledge.

²⁵⁵ Marx, K., (1972). Critique of the Gotha programme (1875). Pekin, People's Publishing House.

²⁵⁶ James C. Scott (1998), Seeing like a State, Yale University Press, New Haven.

closely with skilled farmers from the local community who possessed knowledge of the Gandalei method. By combining their total skills, they addressed particular obstacles, such as moisture and leak prevention in the Gandalei dwellings, thereby applying scientific principles to enhance the efficiency of the housing model. The narrative underscored the manner in which the intellectuals working in the oilfield were influenced by Marxist ideology, leading them to gain insights and understanding from the manual laborers. Therefore, this narrative arc served as a testament to the premise that further bolsters the narrative of eliminating social class distinctions.

In addition to advocating for the elimination of social class divisions, Zhang also posited in the written works that the spatial practices of Daqing had a role in dismantling hierarchical inequities and gender-based distinctions. Specifically, he emphasized that both the SPCLG leadership and the oilfield workers resided within the dwellings constructed using the Gandalei method. The symbolic significance of this arrangement was thereby to emphasize the lack of hierarchical distinction between the ruling entities and the common population. Also, an emphasis on gender parity was intricately woven into the narrative, with the depiction of men engrossed in industrial tasks while women took charge of agricultural duties. Here, the decentralized spatial configuration harbored a distinct benefit—it allocated abundant land for subsistence farming for the female kin of oil workers, particularly their wives, matching Marx's appeal for gender equality. In this socialist vision of China, women transcended their traditional roles as mere homemakers; they emerged as an integral pillar of the Chinese societal framework, working and contributing in tandem with their male counterparts.

To emphasize the pivotal role of political ideology in shaping the spatial structure and architectural design of the Daqing oilfield, Zhang depicted the lifestyle of the oil workers residing in Daqing as emblematic of a communist utopia. He made a point of highlighting the Daqing Oilfield as a contemporary community that combined an oil production base with agricultural farms. Specifically, everyone actively engaged in diverse roles. Education was widely accessible. Whether they were leaders or laborers, all individuals resided in accommodations provided by state-owned enterprises that adhered to uniform standards. The scenarios Zhang delineated represent a utopian society rooted in communist ideology, where everyone was involved in similar adequate jobs and living conditions. Zhang intentionally crafted a narrative with the aim of conveying that a communist utopia, which prioritizes equality, served as the motivating factor for the collective participation of local individuals in revolutionary pursuits. While his portrayal was based on tangible realities, his primary intention was more in service to political agendas.

Zhang's objective was not to praise Marx's doctrine, but rather to underscore the importance of Mao in all this. Specifically, he articulates, "Under the guidance of Chairman Mao, the mining district in Daging was established through continuous, relentless experimentation. Within the ambit of Chinese socialist construction. it represents an innovative manifestation. It radiates boundless vitality and a promising future. It could provide an exemplary benchmark for other industrial cities across China." This argument exhibits an inherent rigorous and logical structure. The principles that govern Daging's spatial planning could be traced back to Mao's seminal works, namely, "On Contradiction" and "On Practice. Moreover, these works of Mao are anchored in the application of Marxist theory within a Chinese context. Therefore, Zhang's argument strikes a dual chord, as it acknowledges the accomplishments of the GPC as the fruition of Maoism, while simultaneously underscoring Mao's pivotal role in the implementation of Marxism in the Chinese context.

There is a notable logical inversion in Zhang's discourse on the Daging Oilfield. Rather than a realization of a utopian Marxist ideal, the spatial and social aspects of Daging essentially emerged as a necessary accommodation for a severe financial shortfall and survival necessities. The planning principle advocated by the Ministry of Petroleum stemmed from the harsh reality of insufficient funding, which forced the diversion of resources from secondary destinations in order to establish infrastructure and facilities for the petroleum industry. The rudimentary nature of spatial planning and the blatant utilitarianism of the Gandalei dwellings are evident manifestations of this circumstance. It is also important to note that the claim made by Zhang on the equitable distribution of power between leadership and the general public in local resource allocation is not supported by factual evidence. For instance, the discrepancies in administrative status between cadres and rank-andfile workers were similarly discernible in local settings such as the small dedicated cafeteria and the dance hall located in Courtyard No. 2, that were intended only for higher ranked personnel. Also, the involvement of women in agricultural activities and garment making among oil employees was not a voluntary decision, but rather a consequence of the Ministry of Petroleum's inability to offer enough supplementary livelihood resources.

In brief, the two editorial headlines published in the People's Daily presented a distilled and accessible interpretation of the previously examined Ministry of Petroleum's report, targeting certain reader demographics. While the People's Daily reached a wide spectrum, encompassing government officials, researchers, academics, and grassroots cadres, the Ministry's report was geared towards a more specialized readership. Specifically, given the prevailing low literacy rates at the time, grassroots cadres often read the newspaper aloud to community members. As such,

the authors of the two editorials consciously excised substantial amounts of political jargon. They also employed straightforward and evocative language, spotlighting local exemplary workers and presenting them as role models. By adopting a narrative style, the report painted a picture of Daqing through the lens of these workers, rendering the accounts more resonant for the average reader.

The pair of sequentially published editorials articulate a continuum in their narrative, progressively attributing the initiatives in Daging as triumphs realized under the quidance of Mao Zedong thinking. The main argument of the first editorial contends that various practices in the Daging oilfield symbolize the continuation of the Yan'an Spirit. The people of Daging are depicted as the exemplars of this legacy, especially through the portrayal of their resilience against immense work pressure. local climate conditions and austere living circumstances. The second editorial underscores Mao Zedong Thought as the cornerstone behind the construction of the Daging Oilfield as exemplary initiative and a modern communist utopian community. It argues that the distinctive spatial structure and architectural design of the Gandalei dwellings, which form a particular lifestyle, are manifestations of practicing Marxism to eliminate the three major disparities. Subsequently, by presenting Mao Zedong thought as the Chinese practice of Marxism, the editorial supports its overarching argument that Mao Zedong ideas was instrumental in Daging's success. These two editorials have a complimentary nature since they fulfill the political objectives within China, namely in the context of enhancing the personal reputation of the supreme leader.

However, the inherent political motivations of these two editorials constrained their capacity for critical introspection regarding the various practices that took place in the Daqing oilfield. In the first editorial, the author's argument about the Daqing people's fearlessness towards sacrifice champions individual submission to the collective will. This narrative tactically omits a nuanced exploration of the dialectical discussion between collective will and individual well-being. The second editorial, in its bit to align with political imperatives, muddles the antecedents and consequences that shaped the unique spatial structure and architectural design of the Daqing Oilfield. The author sidesteps discussing the underlying factors that contribute to Daqing's distinctive spatial layout and building design, namely the domestic economic crisis, extreme food shortages, and the Petroleum Ministry's pressing mandate to complete the oil industry's construction on schedule. Instead, the author attributes Mao Zedong thought as the driving force behind the Petroleum Ministry's adoption of such a spatial structure and architectural design for the Daqing Oilfield.

7.3 Reluctant Engagement: The Architectural Society of China's Involvement in the 'Learn from Daqing in Industry' Campaign and the 1966 Edition of the Architectural Journal

The nationwide "Learn from Daging in Industry" campaign presented the Central Government with an opportune moment to address several prevailing challenges in the realm of urban planning and architectural design, namely the high costs associated with building designs and the inclination towards modernist architecture. Both these issues mirrored dual concerns of the central authorities at the time. On the one hand, the domestic economic crisis extremely limited their potential investments in non-productive structures and forced the to reduce costs as much as possible. On the other hand, practitioners in the architectural and planning sectors were tasked with disentangling themselves from the allure of modernist architecture, which had its roots in Western capitalist societies. The development process of the Daqing oilfield aptly catered to these dimensions. The spatial planning and residential designs adopted by the Petroleum Department were geared towards extreme cost minimization. In their promotional narratives, the achievements of Daging's spatial development were attributed to the emphasis on political work, underscoring its foundation in Marxist and Maoist principles. Therefore, for the Central Government, promoting the "Learn from Daging in Industry" ethos within the spheres of urban planning and architecture was deemed imperative. It can be anticipated that the Architectural Society of China and its official publications would be viewed by the Central Government as instrumental tools that can be utilized for this purpose.

Established in 1953, the Architectural Society of China (ASC) is an academic organization that operates under state sponsorship and the supervision of the China Association for Science and Technology. Despite its title primarily reflecting an architectural emphasis, the society also served as an association for urban planners up until 1990. When the Urban Planning Society of China (UPSC) became an autonomous organization, this dual function ceased. It's notable that, before this separation, the UPSC was a sub-branch within the ASC's organizational structure. In 1954, the ASC initiated the publication of the *Architectural Journal* to provide a forum for scholarly interaction and information dissemination. Therefore, throughout

this timeframe, the *Architectural Journal* not only provided coverage of subject matter pertinent to the discipline of architecture, but also served as a means of distributing knowledge related to the practice of urban planning.

As stated by the editorial committee in the inaugural issue, the journal's mission was to promote academic research into urban environments, architectural principles, and associated technologies. Articles included within the *Architectural Journal* encompass a range of topics, from urban and architectural theories to practical design cases, along with introductions to key advancements in architectural technology. Additionally, the journal incorporates news and highlights notable achievements within the domains of architecture and urban planning. Visual representations, especially architectural plans, photographs, and sketches, are pivotal for this publication. This stems from the nature of architecture and urban planning as disciplines where theory intricately intertwines with extensive practice: while architects and planners rely on academic articles to grasp pertinent concepts within the field, they equally depend on detailed drawings to understand ingenious spatial layouts, façade designs, innovative architectural structures, and ornamentations.

The Architectural Journal, despite its official English name, does not limit its coverage solely to academic viewpoints and research findings, as one might traditionally anticipate from a scholarly periodical. It is pertinent to highlight that, given the internal governance system and the then-extant political milieu, the Architectural Journal invariably functioned in service to the Central Government's policies. This position is further substantiated by an additional proclamation from the editorial board, affirming that "serving the Central Government's overarching strategy entails serving the development of socialist industrial cities and buildings, as well as the nation's cultural advancement." ²⁵⁷ Certain Chinese scholars with expertise in architectural history contend that the Architectural Journal, in essence, bears more resemblance to a general interest magazine than a narrowly defined research agenda with an academic scope. ²⁵⁸ At the moment, this journal is more of a publication that serves a political agenda.

²⁵⁷ Editorial Committee of the Architectural Journal (1954) 'Editorial Preface [发刊辞]', Architectural Journal [建筑学报]), (1), p. 1. Beijing. ISSN 0529-1399.

²⁵⁸ Sun, X. (2014) 'The Origin of the Editorial Concept of the "Architectural Journal" - With Discussion on Liang Sicheng's Changes in Editorial Thoughts (《建筑学报》办刊思路溯源——兼论梁思成办刊思想变化)', Architectural Journal [建筑学报], (S1), pp. 1-5.

7.3.1 The Dual Critiques on Liang Sicheng: Political Intrusions into the Realm of Architectural Journal before 1964

Despite the publication of the People's Daily editorial "The Daqing Spirit and the People of Daqing" on April 20, 1964, the *Architectural Journal* did not immediately spark a passionate or fruitful discussion among domestic scholars in architecture and planning regarding Daqing's spatial practices. While there are myriad reasons for this lack of enthusiasm toward debate, one cannot overlook the editorial board's apprehensions about political implications as a primary concern. This supposition is not unfounded.

Earlier, under the advocacy of Liang Sicheng, the founder and chief editor of *Architectural Journal* as well as a pivotal figure in Chinese architectural education, the journal witnessed intense debates from 1953 to 1955 regarding the concept of "national form with socialist content."²⁵⁹ This particular concept had its origins in the Soviet Union and was introduced to China as Soviet architects and urban scholars engaged in projects assisting Chinese construction. From 1949 to 1959, Sino-Soviet relations enjoyed a "honeymoon" period. The Soviet government dispatched a plethora of experts from various fields to aid the rapid industrialization in China. Due to the financial and human resources provided by the USSR to China for Chinese construction, the Central Government's policies were heavily oriented towards Soviet ideologies, adopting a comprehensive approach to learning from the Soviet Union.

In this context, the ASC decided to promulgate the Soviet concept of "national form with socialist content" to architects and urban planners through the pages of the journal. These papers aimed to integrate the ideologies and political concepts represented by communism and socialism into the realms of architecture and urban planning and provide an ideological foundation. It can be argued that, between 1953 and 1955, the articles published in *Architectural Journal*, pertaining to architectural and urban planning disciplines, not only refrained from avoiding political views but actively participated in their discourse. In a way, they were instrumental.

Liang's advocacy for the promotion of "national form with socialist content" in China can be seen as having substantial validity, considering the events of that moment At the time, it motivated Chinese architects to actively contemplate the potential evolution of architectural design language under Chinese socialism. However, his

259 Liang, S. (1954) 'Issues of Learning and Applying Socialist Realism and National Heritage in Architectural Art (《建筑艺术中社会主义现实主义和民族遗产的学习与运用问题》)', New Construction [新建設], 2, February. Beijing: New Construction Magazine Agency (新建設雜誌社).

fellow architects fell short in articulating what might constitute the architectural form in socialist China. Specifically, in a very unsophisticated and oversimplified manner, they saw the concept of "national form" as the fundamental embodiment of a "large roof" and sought to extend it to any public building they designed using modern construction methods. ²⁶⁰ Indeed, the roof is a striking element in traditional Chinese architecture, given its proportion in the overall building structure. Yet, these architects reduced the complexity of traditional Chinese architectural forms to an overly simplistic, one could say, ridiculized version. One could argue that they failed to grasp the essence of Liang's proposition. However, this factor did not serve as the primary catalyst for the subsequent Central Government-led critique of this architectural concept.

One of the primary catalysts for this trend was the high cost associated with such an architectural design and its unstoppable growth. The proliferation of the "large roof" was notably rapid. According to statistical data from Beijing, the construction area of this design was only 51,000 square meters in 1952. However, just a year later in 1953, this figure soared to 169,000 square meters, and further increased to 220,000 square meters in 1954. Originating in Beijing, this design aesthetic rapidly spread to numerous major cities across the country within a mere two to three years, reaching its zenith in 1954. The style, celebrated as a "national form," was not only extensively applied in civilian architecture but gradually expanded into the industrial sector as well, essentially becoming a prevailing trend in Chinese architectural design of that era. The exorbitant expenses associated with the construction of "large roof" architecture were a substantial obstacle for the Central Government, particularly for a recently constituted administration that lacked the necessary financial resources.

²⁶⁰ Xing, H. (2014) 'Issues of Opposing Architectural Waste and Criticizing "Formalism and Retroism" in Early New China [新中国初期反对建筑浪费和批判"形式主义、复古主义"问题]', CPC History Studies [中共党史研究], pp. 64-74, July 15. Beijing: Central Party History and Documentation Research Institute of the Communist Party of China [中共中央党史和文献研究院].

²⁶¹ Collaborative Writing Group of the Chinese Academy of Social Sciences and the Central Archives. (1998). '1953—1957'. In Fixed Asset Investment and Construction Industry Volume of Selected Economic Archive Materials of the People's Republic of China [中华人民共和国经济档案资料选编: 固定资产投资和建筑业卷] pp. 1088. Beijing: China Price Publishing House.



FIG. 7.2 Changchun First Automobile Works Staff Residential Area. Source: Ten Years of Architecture: Tenth Anniversary of the Founding of the People's Republic of China, 1949-1959 [建筑十年 中华人民共和国建国十周年纪念 1949-1959]. Architectural Science Research Institute, Ministry of Construction.

However, their pretext for resisting the "large roof" was that this specific architectural design was overly extravagant and wasteful, which did not align with the austere and frugal lifestyle advocated by the Party. A notable example of this trend is the workers' dormitories at the First Automobile Works in Changchun, Jilin Province, constructed with Soviet assistance in 1953. Architects from the Soviet Ministry of Construction and the China East China Industrial Design Institute participated in designing the residential areas of the factory. These residential buildings were designed according to Soviet living standards, with each person allocated 9 square meters.²⁶² The Soviet and Chinese architects each designed building facades that represented their respective national characteristics. The 301 residential area, designed by Chinese architects, incorporated the "large roof" concept. As shown in Figure 7.2, it featured a grand roof with traditional Chinese Dougong elements, a hallmark of classical Chinese architecture, while using modern building structures and materials. The First Automobile Works thus served as a stage for both Chinese and Soviet architects to showcase their interpretations of a "national form with socialist content."

262 Lu, J., Rowe, P., & Zhang, J. (2003). *Modern Urban Housing in China, 1840-2000* [中国现代城市住宅]. Tsinghua University Press Co., Ltd..

Too much useful space was sacrificed for representation. In 1954, the Beijing Municipal Committee of the Communist Party of China (CPC) criticized this architectural approach, asserting that designs should prioritize cost-effectiveness, functionality, and aesthetic appeal, rather than excessively opulent exteriors which inevitably led to soaring construction costs. By 1955, the committee reiterated that such designs were inconsistent and not in line with the Party's overarching strategies. Notably, both the People's Daily and Li Fuchun vocally criticized the wastefulness of these architectural practices. That same year, influenced by Soviet leader Nikita Khrushchev's critiques of the "national form" and wastefulness in construction during the All-Soviet Builders' Conference on December 7 1954, 263 the Central Government expressed reservations about this architectural concept and implemented a top-down intervention to limit its widespread adoption.²⁶⁴ On March 28, 1955, the *People's Daily* disseminated an article, "Opposing Waste Phenomena in Architecture," in which the criticisms were directed at Liang and the Architectural Journal's endorsement of the "National Form." ²⁶⁵ This scrutiny compelled the ASC to delay the publication of the first issue of the Architectural Journal for 1955.

The revised edition underwent a significant transformation, essentially taking the form of a Special Issue filled with numerous articles reproaching Liang and his championing of the National Form. Eminent scholars articulated their perspectives in these pieces. A salient critique emanated from Liu Dunzhen, a figure whose clout and standing in the ASC paralleled that of Liang's. Liu, an architect and pioneer in Chinese architectural education, posited that the construction of the "large roof" structure disregarded economic prudence, thereby contravening socialist principles. He contended that this architectural extravagance symbolized the materialistic inclinations associated with the bourgeoisie. ²⁶⁶ Similar critiques were delineated in other contributions, including those by Chen and Gao, as well as Niu, three

²⁶³ Khrushchev, N (1963) "On Wide-Scale Introduction of Industrial Methods, Improving the Quality and Reducing the Cost of Construction," Speech delivered on December 7 1954, in *Khrushchev Speaks: Selected Speeches, Articles and Press Conference, 1949-1961*, edited by Thomas Whitney, University of Michigan Press.

²⁶⁴ Xing, H. (2014) 'Issues of Opposing Architectural Waste and Criticizing "Formalism and Retroism" in Early New China [新中国初期反对建筑浪费和批判"形式主义、复古主义"问题]', CPC History Studies [中共党史研究], pp. 64-74, July 15. Beijing: Central Party History and Documentation Research Institute of the Communist Party of China [中共中央党史和文献研究院].

²⁶⁵ People's Daily Front-page Editorial (1955) 'Opposing the Phenomenon of Waste in Architecture [反对建筑中的浪费现象]', People's Daily (人民日报), front-page, March 28. Beijing: People's Daily Publishing House [人民日报出版社].

²⁶⁶ Liu, D. (1955) 'Criticism of Mr. Liang Sicheng's Idealistic Architectural Thought (批判梁思成先生的唯心主义建筑思想)', *Architectural Journal [建筑学报]*, (1), pp. 69-80. Beijing: Architecture and Engineering Press.

Chinese Architects.²⁶⁷ While the Architectural Journal was the primary platform for these discourses, other periodicals, such as New Architecture, also resonated with similar viewpoints.

The criticism directed at Liang had its boundaries, and it is precisely due to this restraint that the enthusiasm of scholars in the architectural community was not entirely extinguished regarding subsequent academic discussions. Notably, the Central Government, despite its theoretical critique of Liang, did not completely strip him of his tangible benefits. His position as the chief editor of the Architectural Journal remained intact. The critiques ended, at least temporarily, when Liang proffered a self-reflective article, "Review of the Large-roofed Buildings," on May 27, 1955. He later presented this piece at the National Committee of the Chinese People's Political Consultative Conference in February 1956. 268

The critique initiated by the Central Government against Liang revealed a multitude of inherent flaws. Primarily, the proceedings of this critique illustrated the Central Government's capacity to interfere with the freedom of academic research. Such interventions pose significant concerns for scholars within the architectural community. Specifically, the government's ability to manipulate public sentiment through official propaganda, intervene in academic publications, and direct professionals to critique their peers is alarmingly potent. Secondly, Liang symbolized the zenith of architectural inspiration for Chinese students during his era. The public criticism directed at him had a discouraging effect on many individuals' inclination to engage in discourses on political ideology within the realm of architectural design and urban planning. As the pioneer of architectural education in China, Liang established China's first-ever architecture department at Northeastern University in Liaoning Province, subsequent to his graduation from the University of Pennsylvania. While he is acknowledged as an architect, his actual architectural work is limited. It is his foundational contributions to architectural education in China that truly amplified his renown.

²⁶⁷ Chen, G. and Gao, H. (1955) 'Liang Sicheng's Basic Understanding of the Motherland's Architecture (梁 思成关于祖国建筑的基本认识)', Architectural Journal [建筑学报], (1), pp. 80-95.; Niu, M. (1956) 'How Mr. Liang Sicheng Distorted Architectural Art and National Form [梁思成先生是如何歪曲建筑艺术与民族形式的]'. Architectural Journal [建筑学报], (2), October, pp. 1-11. Beijing: Architecture and Engineering Press.

²⁶⁸ Wang, J. (2003) 'Review of the Rarge Roof [大屋顶检讨] [Unpublished Manuscript]', in City Notes [城 记], Beijing City Notes: Trilogy of Chinese Urban Development. Beijing: Life · Reading · New Knowledge Joint Publishing House, p. 160. ISBN: 9787108018168. Note: Article by Liang Sicheng, provided by his wife Lin 7hu

The architectural theory discourse, momentarily silenced following the critique of Liang Sicheng, was reignited in 1956 amidst Mao Zedong's Hundred Flowers Campaign advocating, "Let a hundred flowers bloom and a hundred schools of thought contend in artistic and academic endeavors." 269 Mao called upon scholars from various parties and sectors of society to openly express their opinions, fostering an environment that embraced the coexistence of multiple scholarly perspectives. At first glance, Mao's initiation of this campaign seemed well-intentioned, with the potential to promote the development of domestic science, culture, and art. Leveraging his position as editor-in-chief, Liang Sicheng initiated a discussion on the need for modernist architecture in China within this context. From the fifth issue of 1956 to the eighth issue of 1957, a total of 106 articles were published in the Architectural Journal. Among these articles, 21, almost one-fifth, were dedicated to the discourse around the design of modernist architecture in China and comments on the critique of the national form, as perceived by architects and scholars.

Among the most prominent contributions was a piece titled "We Want Modernist Architecture," penned by two undergraduate students from the Department of Architecture at Tsinghua University in 1956, Jiang Weihong and Jin Zhiqiang. While the article is succinct and might not even be classified as an academic paper, the piece's impassioned call from these young scholars—to "*re-evaluate and recognize certain excellent approaches within capitalist architecture*"—captured significant attention.²⁷⁰ This led to subsequent discussions in the following issues, such as "Opinions on the Article 'We Want Modernist Architecture'" and "Comments on the 'Opinions on 'We Want Modernist Architecture'". "^{271/272} Remarkably, there were even two articles introducing the works and thoughts of Mies van der Rohe and Gropius, with the intention of conveying the concepts of space in the modernist architecture.^{273/274} Given the political climate at the time, this was astonishing, as

²⁶⁹ Mao, Z. (1968) 'Speech at the Expanded Meeting of the Politburo [在中央政治局扩大会议上的发言], in Long Live Mao Zedong Thought, 1968 Wuhan Edition [1968年武汉版《毛泽东思想万岁》]'. Wuhan: Initially collected by Wang Chaoxing and distributed by the Second Bureau of Wuhan University as "internal material", p. 161. Original presentation: April 25, 1956.

²⁷⁰ Jiang, W. and Jin, Z., (1956). 'We Want Modern Architecture [我们要现代建筑]'. *Architectural Journal [建筑学报]*, (6), p.56.

²⁷¹ Wang, D., Zhang, S. and Ba, S., (1956) 'Opinions on the Article "We Want Modernist Architecture" [对"我们要现代建筑"一文的意见]'. Architectural Journal [建筑学报], (7), pp.54-55.

²⁷² Zhu, Y., (1957). Comments on the "Opinions on the Article 'We Want Modern Architecture'" [对"对'我们要现代建筑'一文意见"的意见]. Architectural Journal [建筑学报], (4), pp.55-56.

²⁷³ Luo, W. (1957) 'Mies van der Rohe (密氏·温德路)', *Architectural Journal (建筑学报)*, (5), pp. 52-60. Architectural Engineering Press.

²⁷⁴ Zhou, B. (1957) 'Walter Gropius (華·格罗毕斯)', Architectural Journal (建筑学报), (7), pp. 35-38. 'Walter Gropius (II) (華·格罗毕斯(续完))', Architectural Journal [建筑学报], (8), pp. 60-65. Architectural Engineering Press.

most of the previously introduced architectural exemplars were primarily from the Soviet Union and other socialist countries.

However, Mao Zedong had not anticipated that discussions initially confined to academic circles would eventually evolve into debates over the legitimacy of the Communist Party's ruling over architectural practices. Consequently, by the end of February 1957, he shifted his stance on the Hundred Flowers Campaign. Under the guise of an anti-rightist campaign, Mao initiated a purge within the scientific community with the intention of eliminating dissenting voices. As the editor-in-chief of the Architectural Journal, Liang Sicheng was not exempt from the influence of this political maelstrom. To circumvent political persecution and under the protection of the then Beijing Party Secretary, Peng Zhen, Liang resigned from his editor-in-chief position. He subsequently presented a self-critique at the National People's Congress titled "Why I Profoundly Love Our Party" as an apologetic contribution, a form of political atonement.²⁷⁵ It had an effect. Once this self-critique was published in the People's Daily, he was spared further political reprisals. However, other scholars who were engaged in discussions about the need for modern architecture were not as fortunate as Liang. Some were bluntly labeled as rightists and sent for re-education through labor in special institutional camps. For instance, Jiang Weihong, one of the authors of the article "We Want Modern Architecture," was labeled as an "extreme rightist" in 1957 and sent to Beidahuang for labor reeducation, even though he was only 25 years old at the time.²⁷⁶ Such an approach nearly obliterated academic discussions in the architectural community that touched upon political ideologies.

Therefore, it is unsurprising that upon Wang Jigi's ascension as the second editorin-chief, there was a notable alteration in the content profile of the Architectural Journal. Articles tended towards documentation of architectural designs. construction methods, and direct transcriptions of political commentaries from People's Daily and Red Flag magazine. A marked decline in scholarly articles introducing political discourse within the architectural design field or discussing international architectural movements can be observed. This pivot reflected Wang's more conservative posture compared to his predecessor Liang, a characteristic that may have resulted in the journal's muted involvement in "Learn from Daging in Industry." This reservation, in part, precipitated the journal's publication suspension

²⁷⁵ Liang, S. (1957) 'Why I Profoundly Love Our Party? - Liang Sicheng's Speech at the Fourth Session of the First National People's Congress [我为什么这样爱我们的党?——梁思成在第一届全国人民代表大会第四次会 议上的发言]', Architectural Journal [建筑学报], (7), pp. 1-2. Architectural Engineering Press.

²⁷⁶ Tsinghua University Alumni Association, 2023. An Everlasting Memory - Remembering Classmate Jiang Weihong [永远不能忘却的思念——怀念蒋维泓同学]. Available at: https://www.tsinghua.org.cn/ info/1954/15453.htm [Accessed on (August 26, 2023)].

in 1965. Notably, this was not an isolated incident of suspension for the journal. It had been mandated by the China Association for Science and Technology to suspend its operations for rectification three times due to political circumstances during the period from 1955 to 1965.

Following a one-year reorganization period, the *Architectural Journal* resumed publication activities in 1966. However, it exhibited significant disparities from its antecedent characteristics both in the frequency of issue releases and the thematic content of the featured articles. In 1966, it only published six volumes; the fourth and fifth of these were released as one special issue, covering the ASC annual conference that took place in Yan'an within that year. The year 1966 registered as the period with the sparsest number of *Architectural Journal* issues, excluding 1954 and 1955, when there were only two and three, respectively. Alongside this, the journal demonstrated a marked shift towards incorporating political undertones, at least superficially. Editorial Committee's Statement, the concluding article of the first issue, set the tone for the 1966 publications. In a section titled "To the Readers," the editors stated in the text that:

"Conversely, these publications displace discernable shortcomings and inaccuracies, namely, a disconnection from political discourse, societal reality, and the general public. In the previous year, the Architectural Journal has been populated with an array of articles endorsing the construction of skyscrapers, large-scale projects, and designs embodying traditional aesthetics. Certain sections even ventured into discussions on 'apolitical' architectural arts, while others championed exceedingly high architectural standards. Certain papers exhibited an uncritical full embrace of classical gardens and architecture, while others seemingly adopted foreign architectural designs without sufficient scrutiny. All these design themes, intellectual postulates, and academic viewpoints appearing inopportune are inconsistent with the overlying direction of socialist construction and the principles of self-reliance and economic nation-building." 277

As per the statement, the *Architectural Journal* was projected to devote the majority of its 1966 publications to political work, specifically championing the "Learn from Daqing in Industry" within the field of architectural design and urban planning. Throughout the year, the journal extensively reprinted governmental documents and prescriptive articles that had initially appeared in the *Red Flag magazine* and *People's Daily*. It has lost all its original stance. A portion of the articles bore no direct connection to architectural design or urban planning, as they were penned by

²⁷⁷ Editorial Department of Architectural Journal, (1966). 'To the Readers [致读者].' Architectural Journal [建筑学报], (1), pp.32.

secretaries responsible for ideological and propaganda matters, addressing issues of domestic politics and ideology. For instance, the inaugural article published in the Architectural Journal in 1966, entitled "Politics is the Supreme Commander and Soul," was a reprint of the New Year's Day editorial from Red Flag magazine in the same year. As denoted by the title, the primary thesis of this editorial was the necessity for every administrative entity, institution, and individual to prioritize political work, superseding economic, military, scientific research, and technical undertakings. The editorial board's intention in republishing this piece was unequivocal: this principle of political primacy was applicable to the ASC as well as the Architectural Journal. Regardless of the opinions of architects and urban planners, the editorial board was compelled to support this principle. They followed the directives that were given by the government. As a result, they responded to the republished article from the Red Flag magazine by featuring an article titled "Uphold the Red Flag of Chairman Mao's Profound Thought and Propel the Revolution of Architectural Academic Activities." This piece elucidated the methods and degree to which the ASC adhered to the rule of prioritizing political work and profiled itself as a mouthpiece of the government, consolidating the official governmental ruling.

7.3.2 The 1966 Architectural Journal, Issue 1-3: The Phantom of the Gandalei Dwelling

The first three issues of the *Architectural Journal* 1966 predominantly highlighted the cost-efficient building techniques of architectural walls and cost-effective, rapid construction of industrial structures. This content can be seen as a tribute to the construction efforts during the GPC, specifically referencing the Gandalei dwelling. The tribute is visibly embodied on the cover of the third issue, which exhibits a photograph of a Gandalei dwelling in the Daqing Oilfield, meticulously arranged along two parallel lines (Figure 7.3). For instance, the Sichuan Provincial Architectural Survey and Design Institute provided a comprehensive examination of five distinct wall-building techniques in their article titled "Investigation and Application of Five Wall-building Techniques in Sichuan Vernacular Architecture." Unifying these methods are their origins in traditional local wall construction practices and the use of locally sourced materials, which ensures cost-effective viability and permits rapid, large-scale construction. Furthermore, a publication from the Jiangsu Provincial Construction Department Survey and Design Institute, entitled "Accelerating the

278 Sichuan Architectural Survey and Design Institute, (1966). 'Investigation and Application of Five Wall-building Techniques in Sichuan Vernacular Architecture [四川民间五种墙体建筑技术的调查和应用]'. Architectural Journal [建筑学报], (1), pp.16-18.

Cost-efficient Construction of Small-Scale Fertilizer Factories," explains how, under the influence of Mao Zedong Thoughts, they managed to finalize designs for thirteen diverse fertilizer factories in just seven months.²⁷⁹ The authors underline their efforts to optimize the utilization of steel, wood, and cement, all while upholding the quality of construction. Although a detailed discourse on the architectural design, construction, and structure of the Gandalei dwelling is absent in the first three issues, its influence subtly permeates the thematic direction of other articles, akin to an unseen guiding force.

The editors of the *Architectural Journal* exhibited a degree of resistance to the prevailing intense political milieu at the time, which undoubtedly supported the widespread adoption of Gandalei dwelling's architectural design. Ingeniously, they reinterpreted the concept, advocating for an approach that considers regional specifications and promotes a rational reduction in residential construction costs. They contended that this cost-efficient house design principle simultaneously encapsulates the Yan'an Spirit embodied by the Gandalei dwelling, underscoring their astute interpretation. Therefore, it is imperative to emphasize that the advocated objective does not entail an absolute diminution in the expenses associated with building.

The editors curated a collection of diverse housing and dormitory designs from various provinces across the country, exemplifying this principle in a tangible way through the exhibition of 17 residential case studies within their article. These cases showed that the cost of constructing these houses was between 30 to 40 yuan per square meter, with each unit having a habitable area of roughly between 30-37 square meters. Conversely, the cost of a Gandalei dwelling was approximately 33.5 yuan per square meter, with Model 6502 Gandalei dwelling providing around 35 square meters of floor area. These cost were rather low.

²⁷⁹ Design Room of Jiangsu Province Light Industry Department, Survey and Design Institute of Jiangsu Province Construction Department, (1966). 'Accelerating the Cost-efficient Construction of Small-Scale Fertilizer Factories [多快好省地建设小型化肥厂].' Architectural Journal [建筑学报], (1), pp.8-10.

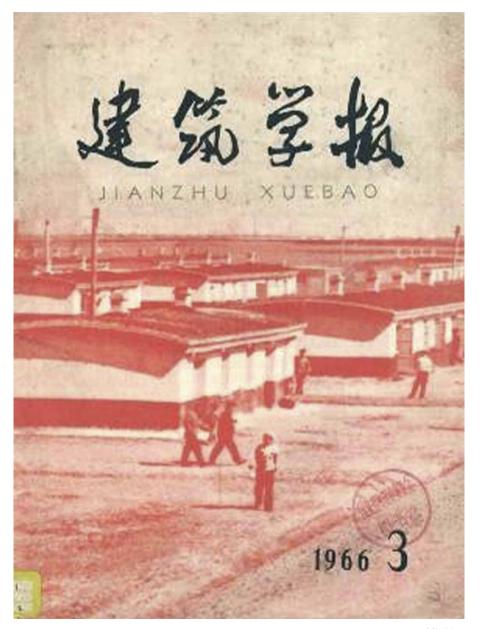


FIG. 7.3 Cover of the Third Issue of the Architectural Journal Year 1966. Source: Architectural Journal (建筑学报).

Intriguingly, these examples diverge considerably from the Gandalei dwelling in Daging. They consist of multi-story residences constructed from brick, with one such design from the Chongging Design Institute encompassing a four-story residential building. This contrasts sharply with the single-story Gandalei dwelling constructed mainly of mud. Considering the demand for cold resistance, the cost of brick-concrete houses in Daging stood at around 70 yuan per square meter, considerably higher than in other areas. This discrepancy is evident in the instance of employee housing in Hohhot, where the cost was only 53 yuan. ²⁸⁰ Although Hohhot is a city located in northern China, its winter temperatures are higher than those in the Daging area. Therefore, the required construction materials are relatively minimal, and the cost is comparatively low. The editors posit that these brick-concrete buildings are tangible exemplifications of the cost-effective architectural principle that Gandalei dwelling construction embodies. The editor's approach is unconvincing because, despite similar weather conditions in the Northeast allowing for the construction of Gandalei dwellings, Inner Mongolia directly adopted the design standards for such houses. It cannot be ruled out that this was intentional on the editor's part, subtly expressing another type of dwelling that might be more suitable for the northern climate.

The papers simultaneously provide a nuanced rebuttal against the indiscriminate lowering of architectural standards. A particularly emblematic article, "Architectural Practitioners Discuss Housing and Dormitory Standards," serves to encapsulate this counterpoint. Representatives from planning and design bureaus, architectural institutes, and housing departments from various provinces conveyed their interpretations of the emerging housing standards.²⁸¹ A delegate from Hangzhou City Planning Bureau argues that the mere introduction of new low-cost standards is insufficient for truly minimizing costs; there is a need for architects also to consider extant buildings, renovating or restoration them when necessary. A representative from the Hunan Provincial Construction Bureau advocates for preserving quality amidst the enactment of these novel standards. Both posit that to achieve this, architects should take in account local climatic conditions and demonstrate adaptability in the selection of construction materials. Through their advocacy for architectural quality, consideration of regional discrepancies, and the utilization of existing structures, these representatives from the two regions subtly yet rationally articulate their apprehensions concerning the national endorsement of the Gandalei dwelling from a technical standpoint.

280 Editorial Department of Architectural Journal, (1966). 'Implementing the "Gandalei" Spirit, Reducing the Cost of Non-productive Buildings - Compilation of Residential and Dormitory Designs [贯彻"干打垒"精神,降低 非生产性建筑造价——住宅、宿舍设计汇编].' Architectural Journal [建筑学报], (3), pp.2-13.

²⁸¹ Editorial Department of Architectural Journal, (1966). 'Architectural Workers Discuss the Standards of Residences and Dormitories [建筑工作者笔谈住宅和宿舍的标准问题].' Architectural Journal [建筑学报], (3), p.1.

This discourse suggests an alternative standpoint to the initial approach of the *Architectural Journal* towards engaging in national dialogues on the impact of "Learn from Daqing in Industry" within the realms of architecture and planning. It seems conceivable that a considerable number of scholars within the ASC nurtured substantial reservations about the nationwide propagation of the economic efficiency paradigm employed by the Ministry of Petroleum in Daqing, characterized by significant diminutions in both planning and architectural standards.

7.3.3 The Emergence of the Scientific Gandalei Dwelling

The positioning of the Scientific Gandalei dwelling in this chapter is in deference to the chronological progression of historical events. Although the initial three issues of the 1966 *Architectural Journal* make various references to Scientific Gandalei dwellings, such as the depiction of a series of Scientific Gandalei dwellings on the third issue's cover. None of the articles, however, provide an in-depth analysis of this specific wall-building technique. This could arise from the *Architectural Journal*'s decision to locate the articles on Scientific Gandalei dwelling within the special issue that captures the 1966 ASC Annual Conference, as featured in its fourth and fifth issues. In these articles, the term Gandalei dwelling is preferred over Scientific Gandalei dwelling. The primary focus of the articles and case studies is on an advanced variant of Gandalei dwelling, contrasting it with the original version promoted for expansive construction by Sun Jingwen, the Deputy Minister of the Ministry of Petroleum, in 1960. And it is necessary to clearly address the differences between these two types of Gandalei dwellings.

The Ministry of Petroleum and the SPCLG coined his advanced variant as Scientific Gandalei dwelling, effectively signaling its divergence from the traditional one. The distinctiveness of this approach is readily evident from its nomenclature, emphasizing the employment of scientific methods. The scientific characterization arises from architects and engineers utilizing their professional expertise to ameliorate the original Gandalei dwelling, enhance internal spaces, reinforce loadbearing structures, and refine construction techniques. The SPCLG viewed these advancements as manifestations of scientific principles. The inherent limitations of the traditional Gandalei dwelling can be characterized by its inferior construction quality, limited longevity, and inadequate natural light and air circulation. These deficiencies are primarily attributed to the construction material, clay, which is particularly prone to structural degradation and cracking caused by groundwater infiltration and to the climate fluctuations. To achieve necessary structural integrity, the clay walls require substantial thickness, which leads to compromised interior space and suboptimal indoor lighting and ventilation.

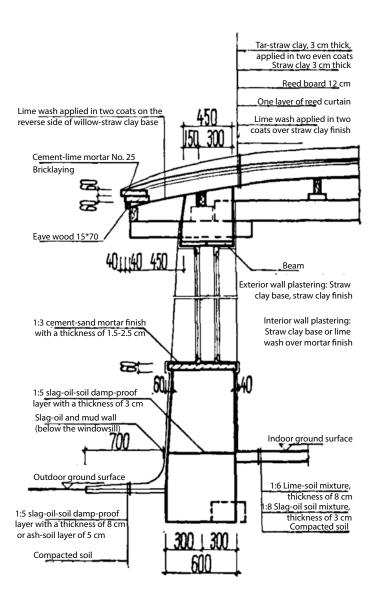


FIG. 7.4 Cross-Section Design of the 'Scientific Gandalei' Proposed by the Daqing Design Institute, Source: Architectural Journal (建筑学报), 1966 Special Issue (Issue 4-5), English Annotation: Penglin Zhu.

In the article titled "Design and Construction of Rammed Earth Houses," the Daqing Oilfield Construction Design Research Institute provided a detailed overview of the floor plan, structural system, and construction techniques for these Scientific

Gandalei dwellings.²⁸² Figure 7.4 illustrates the incorporation of several innovative construction techniques by the engineers to enhance the moisture resistance of the traditional Gandalei's clay walls. The initial approach comprised the inclusion of a 30cm deep ash-clay foundation designed to prevent groundwater from penetrating the walls. Repeated field testing had confirmed that this ash-clay foundation outperformed traditional Gandalei dwellings in terms of structural strength, water resistance, and frost resistance. Atop the ash-clay foundation, two supplementary layers were incorporated: a damp-proof layer of 1:5 coal slag clay, and a 1:3 coal slag clay floor. An extra waterproofing layer was also installed on the exterior of the clay walls to increase their resilience under local climatic conditions. Additionally, a new efficient drainage slope was established on the external wall surface. These were all measure that would improve the construction and extend the durability.

Simultaneously, with a view to substantially enhancing the residential experience in the traditional Gandalei Dwelling, particularly regarding air circulation and natural light, architects and engineers collaboratively endeavored to decrease the clay walls' thickness to the maximum extent possible without sacrificing structural integrity and thermal performance. This resulted in a departure from the traditional trapezoidal cross-section of Gandalei, which typically had a base width of 800-1000mm and a top width of 600-500mm. The revised design significantly diminished the wall thickness to 600mm at the bottom and 540mm at the top. This reduction in clay wall thickness transformed the traditionally hefty appearance of the Gandalei dwelling, making it appear relatively lightweight and visually appealing. The changes instilled great confidence in architects and engineers regarding the architectural quality of structures built using the scientific Gandalei method. They assert that these buildings will endure for a minimum of 20 years.

Architects introduced two distinct residential designs, labeled Model 6503 and Model 6502 (Figure 7.5). The former caters to a single-family household, while the latter had to accommodate two families. The living space allocated for a single family in Model 6503 surpasses that in Model 6502, with approximately 44 and 30 square meters available per family respectively. However, from an economic perspective, Model 6502 proves more cost-effective and necessitates a shorter construction period per family. Given these advantages, it is unsurprising that the SPCLG elected to promote Model 6502 in an effort to reduce building costs further. Despite this, the quality of life potentially offered by Model 6502 is notably inferior. At the time, a typical Chinese family consisted of six members: a petroleum worker and his spouse, their two children, and two elderly relatives. This demographic would essentially allocate a scant 5 square meters of space per individual.

²⁸² Daging Oilfield Construction Design Institute, (1966). 'Design and Construction of "Gandalei" Dwellings ["干打垒"房屋的设计与施工].' Architectural Journal [建筑学报], (Z1), pp.30-32.

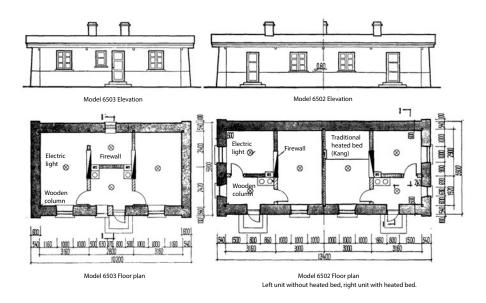


FIG. 7.5 Plan and Elevation Design of the 'Scientific Gandalei' Proposed by the Daqing Design Institute, Source: Architectural Journal (建筑学报), 1966 Special Issue (Issue 4-5), English Annotation: Penglin Zhu.

While the Scientific Gandalei dwelling presents targeted improvements in architectural structure, and technique, compared to traditional ones, its advancements and advantages are best understood through a comparison with the tradition Gandalei, rather than a comparison with other architectural styles. It remains, at its core, a Gandalei dwelling, and the technique inherently limits certain potential modifications. As such, the Scientific Gandalei dwelling only minimizes or delays the emergence of particular issues. For instance, the method specifically strengthens the load-bearing structure, adds waterproofing layers, and reduces wall thickness to optimize natural lighting, ventilation, and usable space. However, despite all these efforts, it still lacks the structural stability, material resilience, and comfort associated with brick or reinforced concrete houses. Moreover, the Scientific Gandalei dwellings still do not incorporate separate bathrooms and toilets. This lack can be highly inconvenient for inhabitants, compromising their privacy in these areas, and forcing them outside their own habitation for these conveniences.

7.3.4 The Special Issue 4-5: From the Spirit of Yan'an Spirit to the Spirit of the Gandalei Dwelling

The fourth and fifth issues of 1966, presented as one special edition, aimed to provide a broad forum in order to host the representative and prescriptive discourses articulated at the fourth ASC Conference. The publication of this edition followed closely on the heels of Mao Zedong launching the Cultural Revolution on May 16, 1966. 283 The political sway over the journal is unambiguously discernible already from glancing merely on the cover design, without necessitating an examination of the special issue's contents. The editors selected on purpose a comprehensive photograph of Yan'an, captured from the summit of Baota Mountain, for the cover (Figure 7.6). "Baota," in the Chinese vernacular, refers to a hallowed pagoda, conventionally perceived as the ultimate resting place for Buddhist monks post-demise. Despite the fact that the pagoda on the cover is a Buddhist structure, it no longer represents Buddhism or refers to this in any way. On the contrary, it signifies the Yan'an spirit, aligned with the Chinese Communist Party's fundamental philosophy of self-resilience and strenuous endeavor.

The cover image's composition manifests as a formidable political statement. Captured by photographer Du Zhiquo, the image was taken from a significant distance away from Yan'an Pagoda. It reveals the pagoda along with the village nestled beneath the mountain. The Pagoda, situated in the frame's lower left, undeniably functions as the visual nexus. Anchored at the golden section of the frame, it holds an authoritative visual magnitude, even though its physical size not being as grand as depicted in the image. The Pagoda is surrounded by the village constructed by the Communists at the mountain's base, including roads and rivers. Intriguingly, these spatial elements, in conjunction with the shadow of the Pagoda, appear to emanate from the Pagoda in a manner resembling light beams. This depiction is in no way a cryptic insinuation. Instead, it explicitly signifies the photographer's intended narrative, emphasizing that all urban planning and architectural design need to fall under the purview of the Yan'an Pagoda's radiance, conforming to the ideological principles of the Chinese Communist Party. The pagoda oversees the village and gives it its identity and its layout. All is oriented towards this center that is here presented as 'a-centrical'.

²⁸³ Central Committee of the Communist Party of China, (1966). 'Notification [通知].' *People's Daily* [人民日报], 17 May, Front Page Headlines, pp.1. Note: Commonly referred to as the "516 Notification".

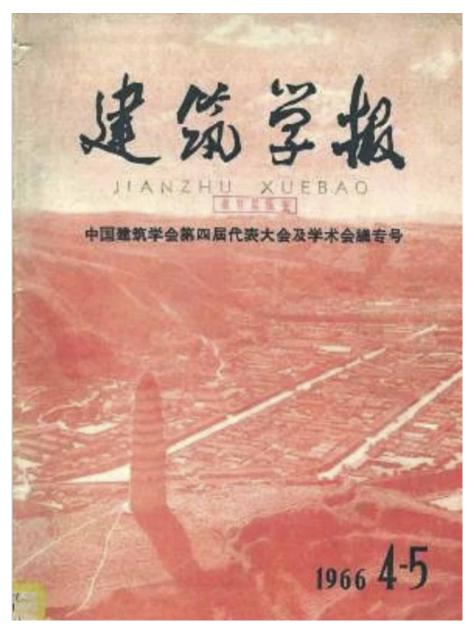


FIG. 7.6 Cover of the Special Issue (Issue 4-5z) of the Architectural Journal Year 1966.Source: Architectural Journal (建筑学报).

The decision to feature the Yan'an Pagoda as the cover for this edition of the journal was not primarily motivated by the fact that Yan'an hosted the ASC Annual Meeting in March of 1966. Rather, the editorial team intended to convey a clear narrative. This narrative revolved around the overarching theme of the conference discussions, which was rooted in the embodiment of the Yan'an Spirit. This encompassed the spatial organization of the Daging Oilfield, the architectural approach to Scientific Gandalei dwelling, and the fearless petroleum laborers of Daqing that these elements epitomize. The salience of political work was also underscored at the conference, as reflected in the genres of articles featured in this special issue. Divided, according to their degree of political incorporation, this issue disseminated speeches by regional ASC delegates from the 1966 conference to a nationwide audience via four distinct categories of articles.

The first classification includes articles of a purely political nature, reprinted from the Liberation Army Daily that officially advocated for a Cultural Revolution on a national scale. These pieces have no immediate relevance to the Daging Oilfield and the corresponding spatial practices therein. The second category encapsulates articles profoundly interwoven with prevailing political debates. For instance, the front-page headline from the People's Daily on April 2, 1966, "Daging's Evolution into a Pioneering Mining District which is the Integration of Workers and Farmers, Unity of Urban and Rural" as well as the summary report delivered by Yan Zixiang, the chairman of the ASC at the time, belong to this category. These articles have a profound connection with the initiative "Learn from Daging in Industry" affirming that a range of spatial practices in Daging represents a perpetuation of the spirit of Yan'an. Articles forming the third category are speeches delivered by delegates from the Daging Oilfield Design Institute and architectural associations from other provinces and cities. Compared to the second category, these articles are marginally less political, integrating more of their own work experiences, case studies, etc., elaborating on how to advance "Learn from Daging in Industry" in the realm of planning and architecture. Lastly, the fourth category is devoted to technical articles concerning the Scientific Gandalei dwelling and the employment of cost-effective wall construction techniques.

The arrangement of articles in this issue does not correspond to the chronological order of the conference's addresses. Instead, it emphasizes their political import. Consequently, the final summary by Chairman Yan, presented at the conference's conclusion, is placed as the initial article, aside from reprinted pieces from the Liberation Army Daily and People's Daily. In his comprehensive summary, Yan astutely cautions against the uninformed reduction of construction costs. He advocates that planners and architects must attentively consider diverse geographical, climatic, and social conditions across various regions when

implementing "Learn from Daqing in Industry". Rather than initially asserting this perspective, Yan deftly sets an intricate political groundwork, defining how to apply the spirit of "Learn from Daqing in Industry" within architecture and planning disciplines also in other parts of the country. He does not excessively extol the Scientific Gandalei method but instead underscores the unyielding spirit of self-resilience it symbolizes. Thus, he introduces the Spirit of Daqing Gandalei, to the nation arguing that it represents a continuation of the Yan'an spirit. He proclaims:

"Urban planning must begin with the consistent application of the planning principle of "Integration of Workers and Farmers, Unity of Urban and Rural". Our designs and plans should adapt to local circumstances and utilize local materials. Upholding the traditions of self-resilience and strenuous endeavor, we should motivate workers and their families to construct their own Gandalei. It is incumbent upon us to stay realistic, yet also cultivate an innovative spirit. The standards for construction should align with the living standards of local inhabitants." 284

Yan foregrounds the philosophical underpinnings of Daging's Gandalei as part of his broader appeal for architects nationwide to judiciously incorporate this ethos into their work. He posits that the building techniques of the Scientific Gandalei don't fully capture the essence of the Spirit of Daging Gandalei. There was a clear difference between the Daging Gandalei and the Spirit of the Daging Gandalei, being Gandalei refers to the clay houses built using the Gandalei construction techniques in Daqing, while the spirit of Gandale refers to the principle of minimizing housing costs as much as possible.. Consequently, he cautions against a straightforward replication of the Scientific Gandalei techniques on a national scale. From this standpoint, Yan articulates three distinct initiatives. Firstly, he underscores the propagation of the Spirit of Daqing Gandalei as opposed to its physical manifestation. Yan thoughtfully reasons that any attempt to replicate the Gandalei dwelling in Daging across the country reflects a misconstrued understanding of the intrinsic spirit, of the concept of genius loci. This misquided approach may have adverse consequences, misalignment with the national architectural policy, and resulting in unnecessary wastage.

In his second initiative, Yan urges architects to strike an optimal equilibrium between living standards, cost, and quality optimally. He explicitly warns against any impulsive lowering the housing design standards of various provinces and cities, which are suited to local climatic condition, in a bid to mimic Gandalei. He clarifies

²⁸⁴ Yan, Z., (1966). 'Summary Speech of the Fourth Representative Conference and Academic Meeting of the China Architectural Society [中国建筑学会第四届代表大会及学术会议总结发言].' Architectural Journal [建筑学报], Issue Z1, pp.21-23.

that the proposed reduction in housing standards applies predominantly to oil workers' dwellings and previously high-standard housing designs, and not to rural housing built under lower specifications. Yan also emphasizes the importance of ensuring that lowering housing standards does not negatively impact the durability of the dwellings, particularly in areas prone to earthquakes, extreme cold, heavy rainfall, or high humidity. Lastly, his third initiative encourages the increased use of local materials and their judicious deployment in order to drive down costs further.

Yan's concerns are grounded in substantial evidence. Two delegates from the Daqing Oilfield Design Institute vividly articulated their experiences of planning and designing the oilfield, employing markedly political rhetoric. The representatives comprised Hu, the director of the Daqing Oilfield Design Institute, and his junior colleague, Zha, a female architecture graduate from Tongji University with four years of professional experience. It is reasonable to postulate that Yan's concluding remark sought to counterbalance the unpredictable surge of Gandalei replication triggered by such stirring dialogues.

Hu's presentation, titled "The Construction Process of the Daging Mining Area as a Revolutionary Ideological Transformation for Designers," underpins his central argument.²⁸⁵ He describes in a detailed manner the ideological shift observed among numerous fresh architecture and planning graduates during their involvement in the construction of the Daqing Oilfield. Hu remarked that these novices initially opposed the spatial strategies proposed by the Ministry of Petroleum, instead desiring to plan the Daging Oilfield as a complex and extensive oil city with expansive roads, ample green parks, and shopping complexes. Hu attributed this perspective to the exposure to foreign architectural paradigms underpinned by capitalist and revisionist ideologies. He then asserted that Maoisms, particularly "On Contradiction" and "On Practice," promoted by Minister Yu Qiuli, played a crucial role in alerting these young professionals to their misconceptions and false ideas. These theories encouraged them to adopt an open mindset, gain knowledge from local farmers, and investigate local materials and housing designs. As a principal aide in Yu and Kang's efforts to plan and construct the Daqing Oilfield, Hu's discourse resonated strongly with the reports submitted by the two ministers.

The speech by the young female architect Zha, titled "Resolutely Unite with the Workers and Peasants, and Strive to Transform Thinking," can be viewed as a supplementary view to Hu's remarks. She narrated a dramatic account of her

²⁸⁵ Hu, X., (1966). 'The Construction Process of Daqing Mining Area as a Revolutionary Ideological Transformation for Designers [大庆矿区的建设过程是设计人员思想革命化的过程].' Architectural Journal [建筑学报], Issue Z1, pp.28-29.

transformation before and after embracing Mao Zedong Thoughts in her report. On her arrival in Daqing, she was disheartened by her inability to design a modern, comfortable, and convenient oil city. She even contemplated resigning and making a shift to farming after learning about her counterparts in major cities who were undertaking master plan designs in western ways. However, after immersing herself in Mao Zedong Thoughts, she gained a clearer understanding of her responsibility to design and plan with the working class in mind. The presentations delivered by these Daqing representatives were deeply imbued with political undertones. Their speeches echoed Kang and Yu's allegiance to national leaders yet displayed a conspicuous absence of critical reflection on professional issues.

7.3.5 **Issue 6: Right before the long hiatus of the Architecture Journal**

The sixth issue of the 1966 *Architectural Journal* presents a notable deviation, both in terms of its visual manifestation and more importantly, its substantive content. The cover of this issue uniquely showcases a frontal photograph of Mao, who served as China's preeminent leader during that period (Figure 7.7). This marked a singular occasion when the *Architectural Journal* deviated from its traditional approach of featuring architectural, urban planning, or landscape design illustrations and photographs, opting instead for a personal portrait. The pagoda has been substituted by the image of the supreme leader, but the goal is the same. It indicates who/what is in charge and emanating a total influence.

The image of Mao nearly consumes the entirety of the cover, with his figure occupying most of the frame, leaving marginal space around the edge. He is portrayed in a quintessential deep-grey Mao suit, capped with a hat embellished with a pentagram, which is a symbol associated with the Chinese Communist Party. In the image, Mao is depicted holding a partially smoked cigarette in his left hand while gesturing with his right. His countenance radiates with an aura of confidence, signifying his absolute command over the prevailing circumstances in China at that time.

286 Zha, B., (1966). 'Resolutely Combine with the Workers and Peasants to Strive to Transform Our Thinking [坚决和工农群众相结合,努力改造思想].' *Journal of Architecture* [建筑学报], Issue Z1, pp.33-34.

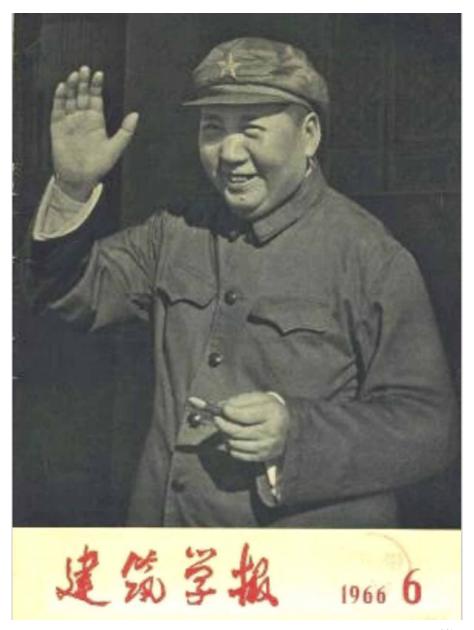


FIG. 7.7 Cover of the Sixth Issue of the Architectural Journal Year 1966.Source: Architectural Journal (建筑学报).

Within the contents of this issue, ten articles are published. Half of these are reprints from announcements and reports stemming from sessions of the National People's Congress, along with headlines from official central media organizations such as the People's Daily and Red Flag magazine. Each of these five articles, inclusive of a report by Lin Biao — who was then the Chinese Communist Party's second most influential figure — advocates for the initiation of the Cultural Revolution, the upheaval launched by Mao to renew the spirit of the Chinese Revolution in confront to that in other countries. The remaining articles present a stringent critique of Liu Xiufeng, the Minister of Construction at that time.

This publication was the final issue released in 1966 and it remained the most recent publication until 1973. Given the distinctive content of this issue, paired with the subsequent seven-year cessation in publication, it can be inferred that the Chinese Association for Science and Technology, the governing body of the journal, harbored dissatisfaction with the Architectural Society of China's reportage and methodological approach in their coverage of "Learn from Daging in Industry" in issues 4 and 5.

Chapter Summary 7.4

Between 1963 and 1966, Daging's planning heritage included both the Spatial Petroleumscape and the Representational Petroleumscape. This chapter delves into the "Learn from Daging in Industry" campaign initiated by Mao Zedong, which formalised the prioritization of cost-effectiveness in architectural design and urban planning. This process was driven top-down by the Central Government and further defined in professional domains. Given the involvement of both the Central Government and the Architectural Society of China, the formalising process can be categorized into two primary facets: the political dimension and the planning, architectural design, and technical dimension.

The political dimension began with a report titled "Report on the Situation of the Great Petroleum Campaign," submitted to the Central Committee of the Communist Party by the Ministry of Petroleum in mid-December 1963. Carefully orchestrated by Yu Qiuli and Kang Shi'en, this report aimed to address the instability in Mao's political standing following the "Great Leap Forward." Therefore, the report juxtaposed Mao's early enthusiasm for the "Anshan Constitution" with the nine significant construction

experiences of Daging, presenting them as a political tribute to Mao. Mao swiftly embraced this "tribute," subsequently disseminating the report as a Central Government document, endorsing the authoritative stature of the nine lessons from Daging across the nation.

Between 1964 and 1966, the People's Daily, through two front-page editorials, successfully disseminated Daging's spatial practices to the general public. The 1964 editorial, titled "The Spirit of Daging and the People of Daging," poignantly portrayed the Daging Spirit as a contemporary manifestation of the CCP's core values embodied in the Yan'an Spirit. Concurrently, it drew a close parallel between the images of "Daging People" and Yan'an People. Based on this narrative, the editorial actively advocated for the nationwide adoption and dissemination of Daging's practices, emphasizing the generalization of local architectural models and residents' lifestyles. The subsequent editorial, released in April 1966, titled "Daging's Evolution into a Pioneering Mining District which is the Integration of Workers and Farmers, Unity of Urban and Rural," accentuated how Daging's spatial practices effectively represented the Marxist theoretical vision of resolving the three major class contradictions. Furthermore, it was posited as a utopian manifestation of Mao Zedong's sinicization of Marxist ideology. This editorial not only laid a robust theoretical foundation for Daqing's spatial planning principles and architectural methods but, more significantly, endowed them with profound political legitimacy, ardently advocating for their nationwide promotion.

Between the mid-1950s and 1966, the political climate in China profoundly influenced the academic communities, including the fields of architecture and urban planning. During this period, politics significantly intervened with the Architectural Journal and its chief editor, Liang Sicheng. The critiques of the "large-roof" style and the call for "We Want Modernist Architecture", although ostensibly rooted in economic considerations and anti-capitalist sentiments, more poignantly unveiled the political calculations of the CCP's central leadership. The "national form" was originally a tenet of architectural theory during Stalin's era. In the Khrushchev era, the Soviet Union launched critiques against this theory, bearing far-reaching implications. Subsequently, China initiated a systematic criticism of domestic academic discourses and practices. This was not just an adjustment in economic principles and ideology but also a political reshaping of power and a contestation of discursive authority.

For the Central Government, launching the "Learn from Daging in Industry" campaign in the fields of urban planning and architectural design was instrumental in addressing the aforementioned issues. The spatial planning principles and architectural designs employed by the Ministry of Petroleum in the Daging oil fields were exemplified practices aimed at cost and time reduction. More crucially, since the Ministry of Petroleum's report submission in 1963, the construction modality and management methods of the Daqing oil fields have been propagated by the central government as a triumphant manifestation of Marxist principles and Mao Zedong Thoughts in practice.

At the Architectural Society of China's 1966 Yan'an annual conference, the construction experiences of the Daqing oil fields were the central focus of in-depth discussions, with the *Architectural Journal* serving as a medium for disseminating this agenda. During this conference, the chairman of the ASC, Yan Zixiang, specifically emphasized that the "Daqing Gandalei Spirit" should be highly valued and inherited, rather than merely replicating its Gandalei walling techniques. He contended that the architectural philosophy promoted nationwide should centralize around "cost-effectiveness." The aim should be to enhance the cost-performance ratio of residences instead of merely pursuing low standards. This suggests that, during that era, urban planning and architectural design transcended mere technical or economic activities and became endeavors deeply imbued with political objectives.

Within the framework of this study, this chapter particularly focuses on the fourth key time period in the evolution of both the Spatial and Representational Petroleumscape of the Daqing oilfield. The Central Government sought to apply the Daqing model to urban planning and architectural design, particularly attempting to promote the design and construction of "low-cost" housing. The eventual outcome deviated slightly, as the Architectural Society of China astutely redefined the notion of "low-cost" to encapsulate the concept of "cost-effectiveness." Concurrently, the Central Government formalized the regulation in design that reflected political and ideological orientations. Utilizing urban planning and architectural design to communicate and promote Mao Zedong Thoughts and socialist values emerged as a significant element of this process. Notably, a hallmark of this period is the promotion of local practices from Daqing into national guidelines, reinforcing local pathways through the establishment of nationwide norms.

8 Planning and Building a Communist Utopia

The Power of Representations of People, Infrastructure, and Facilities in the Petroleum Industry 1966-1978

This chapter seeks to explore the progression of the Cultural Revolution, a nationwide political movement initiated by Mao Zedong in 1966, and how Daqing, its associated practices, and the "Learn from Daqing in Industry" campaign, were levered as political instruments. The discussions in this paper will unfold in the following three sections: From Liu Shaoqi's Black Flag to Mao's Red Flag: The Daqing Model's Political Theatre; The Clarion Call from People's Daily: Shielding the Daqing Model, Upholding Mao's Red Flag and the General Line; Under Mao's Red Flag: The Surge of Artistic Creativity Inspired by Learning from Daqing in Industry. The structure of this argumentation is based on the chronological sequence of events.

8.1 From Liu Shaoqi's Black Flag to Mao's Red Flag: The Daqing Model's Political Theatre

In the aftermath of the Cultural Revolution's commencement in May 1966, intricate power dynamics emerged within the Chinese Communist Party. Evidently, through Mao's call to "Bombard the Headquarters – My Big-Character Poster," his primary aim for the Cultural Revolution was to dismantle the positions of high-ranking CCP members, most notably Liu Shaoqi and Deng Xiaoping. 287/288 The term "headquarters" alludes subtly to Liu and Deng, whom Mao sought to depict as a capitalist stronghold subtly working within the bounds of the Communist Party.²⁸⁹ The backdrop to Mao's strategic play was multifaceted. In 1961, amidst mounting internal party pressures arising from the national economic and food supply crisis a repercussion of his aggressive push for the Great Leap Forward – Mao delegated his authority over economic reconstruction to Liu.^{290/291} Responding to this crisis in 1962, Liu, with Deng's support, embarked on a series of economic reforms. These included transitioning to private farming, instituting free markets, promoting selffinancing, and inaugurating the household responsibility system. In stark contrast, Mao openly critiqued these measures. He castigated Liu and Deng for what he perceived as their wavering commitment to socialism and their evident capitalist inclinations. However, a deeper understanding of Mao's motivations suggests it was

287 Mao, Z. (1966). 'Bombard the Headquarters - My Big Character Poster [炮打司令部——我的一张大字报]. In *in Long Live Mao Zedong Thought, 1968 Wuhan Edition [1968年武汉版《毛泽东思想万岁》].*' Wuhan: Initially collected by Wang Chaoxing and distributed by the Second Bureau of Wuhan University as "internal material", p. 202.

288 Shen, Q. (1976). 'The Battle Proclamation of Bombarding the Bourgeoisie Headquarters: Commemorating the 10th Anniversary of Chairman Mao's "Bombard the Headquarters (My Big Character Poster)" [炮打资产阶级司令部的战斗檄文——纪念毛主席《炮打司令部(我的一张大字报)》发表十周年]'. Journal of Northeast Normal University: Philosophy and Social Sciences Edition, (4), pp. 4-8.

289 Schoenhals, M. and MacFarquhar, R., (2006). Dispatching Liu Shaoqi. In: *Mao's Last Revolution*. Belknap Press of Harvard University Press, pp.273-285. ISBN: 0-674-02332-3, 978-0-674-02332-1.

290 Jin, C. (1998). 'Directing the National Economic Adjustment [主持国民经济调整]', in *Biography of Liu Shaoqi* [刘少奇传]. pp. 743. Central Literature Publishing House. Beijing. ISBN 9787507326659.

291 Peng, H., (2008). 'How the "First Line and Second Line" System Was Formed Before the Cultural Revolution [文革前"一线二线"制度是如何形成的].' *Beijing Daily*, Theory Edition, 30 June. Available at:[https://news.ifeng.com/history/2/shidian/200806/0630_2666_624028.shtml]. Published by Beijing Daily Newspaper Group, Beijing.

not merely ideological differences that fuelled his actions.²⁹² His maneuvers were likely driven by the apprehension of his diminishing authority and a determination to regain his former preeminent status within the party.

The planning and architectural design practices within the Daging Oilfield played a pivotal role in Mao's process of reclaiming and consolidating his authority within the party and the country. The role was dynamic, shifting in response to the ebbs and flows of party internal political power struggles. At the onset of the Cultural Revolution, the Daging Oilfield, once lauded by Mao as a model of industrial construction worthy of national emulation just two years ago, had presently become a political weapon against Liu Shaoqi. This political theatre involved two other main alliances: the coalition between Mao's wife, Jiang Qing, and Lin Biao; and Premier Zhou Enlai operating independently. During the Cultural Revolution, the Jiang-Lin alliance metaphorically compared various practices in Daging to the black flag erected by Liu and a toxin for socialist industrial development.²⁹³ They denounced the development model of the Great Petroleum Campaign (GPC) and the Zhengqiheyi as manifestations of revisionism and the productive forces theory.²⁹⁴ The purpose of this critique was to undermine Liu and Deng's strategy to improve China's economic conditions by increasing productivity, in favor of enhancing their own factions' influence within the party and gaining more power.

The Jiang-Lin alliance tactically used the Daqing Exhibition in a rather farcical manner to politically tarnish Liu Shaoqi, aiming to overcome their competition. In October 1966, their followers launched a raid on the "Daqing Exhibition," an elaborate display orchestrated by the Ministry of Petroleum at the National Museum of China in Beijing, resulting in injuries to the management staff.²⁹⁵ Regarding this conflict, the Jiang-Lin alliance provided a justification that sounded "plausibly

²⁹² Shinn, R-S. and Worden, R.L., (1988). Historical Setting. In: Worden, R.L., Savada, A.M. and Dolan, R.E., eds. *China: a country study*. Washington, D.C.: Federal Research Division, Library of Congress: For sale by the Supt. of Docs., U.S. G.P.O., pp.47. Available at: https://www.loc.gov/item/87600493/.

²⁹³ Kang, S. (1990). 'Daqing Oilfield Imbued with Premier Zhou's Dedication - In Memory of the Beloved Comrade Zhou Enlai [大庆油田浸透了周总理的心血-怀念敬爱的周恩来同志]', in Tian, R., Zhu, Z., & Zhang, H. (eds.) Daqing Oil Campaign - Daqing Historical and Literary Materials Volume II [大庆石油会战——大庆文史资料第二辑]. pp. 15. China Literature and History Publishing House. Beijing. ISBN 5034-0130-3/k.094.

²⁹⁴ Chen, Q. (1994). 'The Complete Story of the Learn from Daqing in Industry Movement [工业学大庆运动始末]', in *Literature of Chinese Communist Party* [党的文献], (6), pp. 34-38. Central Party History and Documentation Research Institute, Central Archives. Beijing. ISSN 1005-1597.

²⁹⁵ Du, X. (1996). 'Overview of the Learn from Daqing in Industry Movement [工业学大庆运动概述]', in Century Bridge (formerly Longjiang Party History), (Z1), pp. 18-21. Heilongjiang Publishing Media Group Co., Ltd. Harbin, Heilongjiang. ISSN 1001-0475. Du, X. (2006). 'Brief History of the Learn from Daqing in Industry Movement [工业学大庆运动史略]', in Daqing Social Sciences [大庆社会科学], (2), pp. 52-55. Daqing City Social Sciences Association. Daqing. ISSN 1002-2341.

correct" – the size of the photographs of Liu Shaoqi displayed in the exhibition was marginally larger than those of Mao Zedong.²⁹⁶ They took advantage of this fact, spinning it into a discourse of the Daging practice glorifying Liu at the expense of Mao. Despite the exhibition's depiction of the arduous process of the GPC, the planning principle of the Daging Oilfield, working men alongside agriculturally engaged female family members, and the Gandalei Dwelling, it became a focal point of political contention between different factions. It can be argued that the imperatives of political strife swiftly altered the narrative tone of practices in the Daging Oilfield.

The rapid shift in narrative tone, initiated from top-down channels, effectively dismantled the meticulously established administrative system of the Petroleum Ministry in Daging. Specifically, under the leadership of Jiang Qing, the Central Cultural Revolution Group progressively amassed diverse administrative powers, signaling the transition of the political narrative towards the dismantling of Daging's developing and administration model, planning principle, and representations of the spatial construction achievements. The Central Cultural Revolution Group, which was formed in May 1966 and dissolved in 1969, served as the de facto leading authority during the initial years of the Cultural Revolution. During 1966, it facilitated the denouncement of 16 leaders out of the 17 that comprised the SPCLG, a process that led to the 1967 work suspension of Kang Shi'en among others.²⁹⁷ This sudden decline of the leadership structure by the Ministry of Petroleum precipitated a state of administrative disarray within the Daging Oilfield, with the construction of the oilfield being notably negatively affected.

Both production and living conditions in the Daging Oilfield were inevitably disrupted, inflicting a significant setback to both the local and national economies. In October 1966, due to the disruptions of the Cultural Revolution, the Underground Staff Department established in November 1964 for oilfield development was dissolved, and the majority of the geological technicians were relocated to the grassroots teams.²⁹⁸ In March 1967, the operations of the Design Institute came to a complete standstill subsequently, directly contributing to the discovery of a

²⁹⁶ Capital Red Guard Part of Secondary and Tertiary Schools Mao Zedong Thought Study Class (Contributor) (1967). 'Part Four: Reversing Direction (August 12, 1966 - End of the year) [第四部分 扭转 方向1966年8月12日 - 年底]' in: Tumultuous Changes: The Proletarian Cultural Revolution Events (1962.9-1967.10) [天翻地覆慨而慷: 无产阶级文化大革命大事记(1962.9-1967.10)], 'October 27', Capital Part of Tertiary Institutions, Secondary Professional Schools Mao Zedong Thought Study Class.

²⁹⁸ Office of the Daging Local Chronicles Compilation Committee. (1988). 'Oilfield Development [油田开发]'. In Daqing Gazetteer [大庆市志], (p. 214). Nanjing: Nanjing Publishing House.

cessation in the development of the Xingshugang Area in April 1967.²⁹⁹ Given the imminent threat posed by political unrest in Daqing to the oil industry, and, by extension, China's emerging economic revival, Premier Zhou Enlai intervened in this political powerplay.

Upon Zhou's intervention in the political tussle surrounding the Daging Oilfield, he swiftly realigned the political narrative concerning its construction and development. In an initial move, Zhou, during a central meeting in January 1967, declared: "Daging stands as a paradigm personally established by our esteemed leader, Chairman Mao... Should any complications transpire in Daging, we would be left without an explanation for Chairman Mao."300 Subsequently, upon ordering the institution of military control in the Daging Oilfield on March 23, 1967, he elaborated: "The Daging Oilfield is a red flag of our national industrial vanguard, cultivated under the expansive thought of the esteemed Mao Zedong... We ought to transform the Daging Oilfield into an illustrious institution of Mao Zedong Thought." 301 His strategy was characterized by its subtlety and moderation, abstaining from direct confrontation with the arguments presented by the Jiang-Lin alliance, and refraining from siding with the politically embattled Liu and Deng. Spurred by Zhou's interventions, the narrative surrounding the practices in Daqing underwent a transformation: from a symbol of Liu Shaoqi's perceived 'black flag', back to the 'red flag', emphasizing a model endorsed by Mao himself. This process illustrates how a narrative shaped by one political faction in a brief period can be rapidly reshaped by another faction according to its own vision and advantages within a similarly short time frame.

After altering the prevailing narrative surrounding Daqing, Zhou swiftly endeavored to restructure an administrative system capable of simultaneously stabilizing the local political situation and facilitating the development of the oilfield. He appointed his own straw men. However, he could only endorse military control locally, in response to apprehensions that the call of the Central Cultural Revolution Group for

²⁹⁹ Daqing Oilfield Development History Editorial Department (1984). 'Chapter 5: Overcoming Interference and Comprehensive Development (1964–1975)' in *A Brief History of Daqing Oilfield Development*. Daqing Oilfield Development History Editorial Department, Daqing. p. 91. Source: Daqing City Library, Local History Office.

³⁰⁰ Zhou, E. (1967). 'Speech by Zhou Enlai on January 8, 1967, when he met Iron Man Wang Jinxi and representatives from the national petroleum system'. In Kang, S. (1990). Daqing Oilfield Imbued with Premier Zhou's Dedication - In Memory of the Beloved Comrade Zhou Enlai [大庆油田浸透了周总理的心血-怀念敬爱的周恩来同志]', in Tian, R., Zhu, Z., & Zhang, H. (eds.) Daqing Oil Campaign - Daqing Historical and Literary Materials Volume II [大庆石油会战——大庆文史资料第二辑]. pp. 15. China Literature and History Publishing House. Beijing. ISBN 5034-0130-3/k.094.

³⁰¹ CPC Central Committee, State Council, and Central Military Commission (1967). 'Decision on the Implementation of Military Control in Daqing Oilfield [关于大庆油田实行军事管制的决定]'. Beijing, 23 March. Retrieved from the collections of the Daqing Oilfield Historical Exhibition Hall.

personnel from institutions nationwide to upend the incumbent faction could impair Daqing Oilfield's productivity. A new administrative entity, the Daqing Oilfield Military Control Committee, was thereby created and jointly overseen by the Shenyang Military Region and the Ministry of Petroleum. The decision clearly represented a compromise between the objective of establishing a stable local order and the goal of developing the oilfield. The enactment of military control effectively terminated the *Zhengqiheyi* Model that the Ministry of Petroleum had initiated at the Daqing Oilfield.

The distinctiveness of the local spatial structure limited the potential for the emerging local administration to exploit the area for the purpose of establishing any further power structures. In terms of the administrative system, the military control model diverged markedly from the prior *Zhengqiheyi*, especially considering the presence of the People's Liberation Army from the Shenyang Military Region to maintain local public order. To elaborate, the Shenyang Military Region deployed forces in Daqing and assigned military delegates of diverse ranks to multiple production command centers (worker towns), strategic units (central villages), and residential zones (settlements).³⁰² The new regulatory body had no choice but to arrange daily life in the oilfield under military control according to the spatial configuration of worker towns, central villages, and settlements.

The effects of military control were limited, leading to a decline in the daily crude oil production of the Daqing oilfield. In August 1967, due to railway transportation issues in the Daqing region, the daily external oil shipment from the Daqing oilfield experienced a sharp decline. From an average of 18 tanker trains per day, the number was reduced to a mere 2-3 trains. As a consequence, the daily external oil shipment plummeted from over 32,400 tons to between 3,000 and 4,500 tons. By the end of August, crude oil inventory had surged to 96,000 tons. This forced a production cut and led to the shutdown of 449 oil wells, reducing the daily crude oil output from 36,500 tons to just over 19,000 tons. As a cumulative effect of these challenges, the total crude oil production for 1967 fell to 10.3199 million tons, a 2.72% decrease from the 10.609 million tons recorded in 1966.³⁰³ The implementation of military control failed to resolve the issue, and the situation further deteriorated

³⁰² CPC Central Committee, State Council, and Central Military Commission (1967). 'Decision on the Implementation of Military Control in Daqing Oilfield [关于大庆油田实行军事管制的决定]'. Beijing, 23 March. Retrieved from the collections of the Daqing Oilfield Historical Exhibition Hall.

³⁰³ Shi. Y (1994). 'Ten Years of Cultural Revolution (1966-1976) [文化大革命"的十年1966-1976 年]' in A Brief History of Daqing [大庆简史]. Part of the series: Contemporary Heilongjiang Local History Series [当代黑龙江地方简史丛书系列]. Contemporary China Publishing House, Beijing. p. 95. ISBN: 7-80092-293-6/Z • 239.

Concurrently, the military control was insufficient as a new administration in entirely shielding the built environment from the destructive effects of the societal unrest born from the Cultural Revolution. Certain operational industrial infrastructure and facilities experienced severe incidents and disasters, which could be attributed to inadequate management and substandard operations. A case in point is the catastrophic explosion of the hydrogen cracking unit at the Daqing Oil Refinery on September 9, 1967, which destroyed over 4,000 square meters of industrial structure, causing a devastating loss of 45 lives and 58 injuries. ³⁰⁴ Additionally, the persisting armed conflicts between two opposing rebel factions associated with the Cultural Revolution within the region resulted in considerable damage to pre-existing facilities. In July of 1967, their conflicts led to the damaging of the local printing facility for the Daqing Oilfield newspaper, the "Battle Report," and a peripheral railway station. It might be argued that the military control did not achieve the intended purpose Zhou sought to advocate.

In May 1968, the Daqing City Revolutionary Committee was established, which resolved the armed conflicts between the two rebel factions. In April 1968, under the pretext of Mao's call for achieving a great revolutionary union, two rebel factions in Daqing, namely, the Daqing Red Rebel United Headquarters and the Daqing Worker Revolutionary Rebel General Command, reached a reconciliation agreement in Harbin. They agreed to establish the Daqing Revolutionary Committee under the leadership of the Military Management Committee. On May 31, the Daqing Revolutionary Committee was officially established, with Chun Chuanyu appointed as the director. 305 The committee consisted of 55 members, with 21 standing members, including various coming from the two rebel factions.

The Revolutionary Committee's composition concept, which aimed to adopt the *Zhengqiheyi* administration model, was overshadowed by the dominance of military personnel. Most military officers were unfamiliar with enterprise and local administrative work. Before 1969, only a very few original SPCLG leadership members had been exempted, released from their detention, and could participate in the management of the Revolutionary Committee. However, due to various political constraints, they also found it hard to play their due roles. Deep disagreements existed between some military officials and the leaders of the rebel factions about the policies that should be followed, causing both internal and external

³⁰⁴ Office of the Daqing Local Chronicles Compilation Committee. (1988). 'Chronicle of Major Events [大事记]'. In *Daqing Gazetteer* [大庆市志], (p. 25). Nanjing: Nanjing Publishing House.

³⁰⁵ Shi, Y. (1994). 'Ten Years of Cultural Revolution (1966-1976) [文化大革命"的十年1966-1976 年]' in A Brief History of Daqing [大庆简史]. Part of the series: Contemporary Heilongjiang Local History Series [当代黑龙江地方简史丛书系列]. Contemporary China Publishing House, Beijing. p. 97.

conflicts and adding to the unstable factors of the Revolutionary Committee. Many Revolutionary Committees could not operate normally amid the existing disputes. These committees centralized a significant amount of power, leading to a unified leadership system both politically and administratively. The anticipated restoration of the "Zhengqiheyi" model proved to be an illusion. This was undoubtedly a significant regression in the political system.

The adverse circumstances, however, provided Zhou with substantial leverage in political maneuvers to stabilize the situation in Daging. In February 1969, Kang Shi'en, who had previously been suspended, returned to his position in the Ministry of Petroleum. This signaled the beginning of the reinstatement of the leadership of the original SPCLG.³⁰⁶ On March 18, 1970, Zhou issued a directive emphasizing the need to protect the Daging oilfield and expedite the liberation of SPCLG's cadres. He particularly underscored that Daging should not forget its roots and should return to the foundational principles of "On Contradiction" and "On Practice." With the exception of those explicitly politically undermined, the majority of the SPCLG members resumed leadership positions, including Chen Liemin, the previous Deputy Commander of the SPCLG. In 1971, Chen formally undertook the position of director of the Revolutionary Committee. 307 It was only at this moment that the administrative model of the Daqing Oilfield once again reverted to the "Zhengqiheyi." The shift in administrative models once again articulated that military control mostly served as a means of stabilizing mechanisms and had limited impact on the promotion of oilfield development.

From the utopian practices informed by Mao Zedong Thought, to the black flag raised by Liu Shaoqi, and then to the red flag erected by Mao Zedong, the shifts in the discourse surrounding Daqing Oilfield practices between 1966 and 1967 highlight the fact that narratives about Daqing's practices held the potential to serve as powerful political instruments. The Jiang-Lin alliance strategically utilized the evolving discourse on Daqing's practices as a political weapon against their rival, Liu Shaoqi, while Zhou Enlai repurposed this discourse as a safeguard for the domestic economy. They could be wielded not just as tools of aggression against opponents but also as shields for the nation. Regardless of the manner in which the Daqing narrative was utilized, the practices of Daqing transformed from a national

³⁰⁶ Wen, H. (Comp.) (1998). 'Chapter Eleven: A Special Battle in a Special Era [特殊年代的一场特殊会战]' in *Biography of Kang Shi'en [康世恩传]*. Contemporary China Publishing House, Beijing. p. 263. ISBN: 7800927806, 9787800927805.

³⁰⁷ Daqing Revolutionary Committee (1971). 'Notice on the Appointment of Comrade Chen Liemin and Others [关于陈烈民等同志任职的通知]'. Government Notice. Daqing, 13 July. Retrieved from the the collections of the Daqing Oilfield Historical Exhibition Hall.

paradigm driven by the Central Government – representing a triumphant realization of communism in China – into a primary component of a political arsenal driven by various factions with the CCP battling for power and influence.

In the period from 1966, when Mao Zedong initiated the Cultural Revolution, until the early 1970s, this movement continued with great intensity. The enduring nature of the revolution reflects the ongoing political struggles among different factions within the Party. Topics with high plasticity and operability emerged as indispensable assets in these political confrontations. Such issues were frequently leveraged by involved factions, allowing for considerable shifts in entrenched structures of interest distribution with relatively minimal efforts. Against this backdrop, Daging naturally became a significant lever, especially considering its emblematic representation of the Chinese Communist Party's industrial achievements since its establishment. It can be posited that various practices in Daging, particularly in the planning and construction of the oilfield, as well as the later conceptualizations of the Daging Spirit, the Daging People, and even the "Learn from Daging in Industry" campaign, served as potent political levers. Previous analyses have validated this assertion. Post-1967, political discourses on Daqing reverted to being framed as "a red flag erected by Mao Zedong." It seemingly evolved into a tool to aid Mao in reclaiming and consolidating his personal authority.

8.2 The Clarion Call from People's Daily: Shielding the Daqing Model, Upholding Mao's Red Flag and the General Line

By the 1970s, official media outlets representative of the newspaper *People's Daily*, which catered to the general Chinese populace, did not present a distinct instructive outline for the "Learn from Daqing in Industry" campaign. Due to two prior editorials and related propaganda, the Chinese public was already acquainted with the idea that Daqing was a practical extension of the Yan'an spirit and a communist utopia constructed based on the Mao Zedong Thoughts. Yet, the precise reasons and approaches for learning Daqing remained inadequately defined. With this in mind, on June 20, 1971, the *People's Daily* featured a front-page editorial titled "Learn from Daqing in Industry," once again sounding the clarion call to the entire Chinese

nation to emulate Daging.³⁰⁸ The theme of this editorial diverged from the previous two discussed. Firstly, it possessed a concise yet eye-catching headline. Secondly, the editorial did not carry any author's name, indicating that it was a manifestation of collective will, and of the party in particular. Moreover, while this article reiterated certain elements highlighted in previous editorials, such as the Daging spirit, the Daging people, and the construction of Daging's mining area, they were no longer the central points of discussion. Instead, the primary focus gravitated towards the rationale and approaches associated with the "Learn from Daging in Industry" campaign and the lessons that could be taken from these practices.

The structure of the article is inherently tailored to serve its ultimate objective: to call upon the entire nation to safeguard Mao's paramount leadership status. The article paves the way for this goal right from its inception, asserting, "Daging stands as a red flag championed by our great leader Chairman Mao, and 'Learn from Daging in Industry' represents Chairman Mao's grand summons to the entire Chinese populace." The editorial utilizes Daqing's experiences as an instance of industrial construction forged by Maoism. Delving deeper, the author posits that the Chinese working class has made remarkable strides in facilitating sustained and rapid industrial advancement. So there was tremendous progress, or at least, that was the message.

Subsequently, the editorial interprets Daging's success as a manifestation of the triumph of Mao Zedong's line over Liu Shaogi's in both political and economic battles. Specifically, the author declared: "The Daging trajectory aligns with Chairman Mao's proletarian revolutionary paradigm for industrial growth. The path to be chosen for industrial advancement presents a fresh challenge for the proletariat post the acquisition of power. A continual contention exists between the Marxist and the opportunist schools of thought." Herein, the term "Marxist school" pertains to Mao Zedong Thought, whereas the "opportunist school" references the national economic development policies endorsed by Liu. Even after Liu's political fall from grace and his isolated demise in 1969 amidst an ambiance of turmoil, critiques targeting his political legacy remained relentless. He clearly had been made in a scapegoat.

Following the aforementioned arguments, the editorial mentions that the victory in these ideological struggles can be attributed to the masses' capability to discern and counteract the destructive interference and consequences resulting from Liu's counter-revolutionary revisionist practices. Specifically, by underscoring that this

³⁰⁸ People's Daily Editorial (1971). 'Learn from Daging in Industry [工业学大庆]'. People's Daily, 20 June, p. 1. People's Daily Press, Beijing.

ability was not inherent but acquired through the study of Mao Zedong Thought, the editorial emphasizes the significance of engaging with Mao's theoretical contributions. Building on the stated arguments, the author of the editorial posits that China's acceleration of national industrialization could only be achieved through a constructive response to Mao's mandate to "Learn from Daqing in Industry." Based on this core argument, the editorial expressed its clear objective which was to inspire the Chinese population to firmly uphold the Daqing Red Flag, symbolically erected by Mao. Moreover, the author professes that every Chinese citizen must maintain alertness and make an effort to discern the appropriate individuals who need to be eliminated.

The editorial intentionally constructs a narrative that underscores the contradictions and conflicts between Mao and Liu. This strategy is in perfect harmony with the primary purpose of the editorial. Because without the existence of challengers and contradictions, there would be no imperative to defend Mao and implement his ideas. Simultaneously, in terms of rhetoric, accentuating these contradictions and tensions renders the argument more vivid and persuasive.

Having elucidated the significance of "Learning from Daqing in Industry," the editorial proceeds to detail the means and pathways to achieve this. The prescribed approach emphasizes that all endeavors should be rooted in Mao Zedong Thought. Specifically, the editorial contends that to emulate Daqing means to learn from the construction process of the Daqing Oilfield, where every aspect is based on the study of Mao's two works known as "On Contradiction" and "On Practice." Concurrently, the suggested pathway for such learning is to emulate the model of Wang Jinxi, also known as "Iron Man." To elaborate, the editorial presents Wang as an exemplary figure of the Daqing working class and an outstanding representative of its leadership. Renowned for his resilience in the face of adversity and commitment to Mao's revolutionary line, Wang, despite his elevation to the Central Committee, remained humble and industrious. The editorial urges leaders at all levels to look to Wang as a guiding light, enhancing their revolutionary consciousness and discarding complacency and conservative tendencies.

The fundamental aim of this discourse remains to fortify Mao's singular authority. An aura of absolute political correctness is bestowed upon this national campaign as the author situates the "Learn from Daqing in Industry" campaign within the paradigm of Mao's red flag, urging the entirety of the Chinese populace to safeguard this flag. The campaign evolves into a sacrosanct sanctuary within the political domain, with the contemporary political climate rendering no one willing or able to contest it. From this key period, the political campaign of "Learn from Daqing in Industry" assumes an amplified political connotation – that of the treasured red flag of Mao,

which adversaries seek to dismantle and destroy. In the interest of the nation and the ultimate goal of erecting a socialist China, the Chinese people must safeguard the Daqing model. This discourse is not devised to propagate the developmental model of the Daqing Oilfield or to publicize the dedication of the oil workers, but instead to exploit Daqing as a specific institution in service of political demands.

8.3 Under Mao's Red Flag: The Surge of Artistic Creativity Inspired by Learning from Daging in Industry

In 1971, the *People's Daily* proclaimed the Chinese people to support Mao's initiation of the Daqing Model. This instigation catalyzed a surge in culturally creative products, primarily focusing on the construction of the Daqing Oilfield and the working and living conditions of its labor force, springing up like mushrooms. The manifestations of these creations were diverse, with the principal forms being propaganda paintings, woodblock prints, and poetry. And the majority of them were visual representations. The images and propaganda posters discussed in this section are partly derived from data I collected during local fieldwork and partly from Chineseposters.Net, a Netherlands-based online platform showcasing a large collection of authentic Chinese propaganda posters (as well as some prints, papercuts, and other images). These works were primarily mass-produced for political propaganda and are political artworks with a certain artistic value. Some of these works were created by state-organized institutions, and thus only the names of these institutions can be found, while others were created by individuals.

Compared to paintings and photographs, film was not adopted as a means of propaganda and the primary medium for showcasing Daqing's industrial progress. One reason was that the Jiang-Lin alliance made persistent criticisms of Daqing's cinematic outputs. Films and other visual media that symbolized the achievements in Daqing's spatial construction were especially suppressed by Jiang Qin and her faction, widely known as "Guns of Four," under various pretexts. For instance, they issued directives prohibiting the public performances and screenings of three specific film productions, because they were not considered as productions in favour

of their cause.³⁰⁹ There were also rumors that Jiang Qing, who was a small-time star in Shanghai during the 1930s, harbored a dislike for Sun Weishi, the producer and actress who shone brightly in one of these films. These works – "The Newly Born Sun (初生的太阳)," a play thoughtfully composed by Sun Weishi in 1965, and "Daqing Battle Song (大庆战歌)," a film produced under the direction of Premier Zhou Enlai in 1966 – reflected the self-resilience of local inhabitants within scattered mining settlements and the Gandalei dwelling. Notably, "The Newly Born Sun" had just been public for a year, while "Daqing Battle Song" had yet to make its debut.

They also attempted to prevent the screening of 1974's Start-Up (创业) on the grounds, claiming it implicitly praised Liu Shaoqi in the film. Start-Up provides a narrative of the planning and developmental phases of the Daqing Oilfield, as seen through the lens of the protagonist "Iron Man" Wang Jinxi. What was presented in the movie in relation to Liu was negligible, to say the least. Even Mao declared that it lacked any significant inaccuracies to reach a conclusion like that after viewing the film, thereby authorizing its public release. ³¹⁰ Apart from the previously referenced films, additional films included 1971's Daqing Red Flag (大庆红旗), and 1976's Daqing People (大庆人). It can be argued that the allegations from the Jiang Qing faction against the film lacked substantiation and were primarily motivated by political maneuvering. However, this is not the sole reason for the sidelining of the film as an artistic and realistic representation.

The underlying reason is that the movie required the authorities to invest significant human and material resources in its meticulous production and manipulation in order that they aligned with their specific political narratives. While professional directors, cinematographers, and editors could collaborate earnestly, taking great care in setting up the scenes, manipulating spatial perspectives, and using montage techniques to alter the real status of the objects filmed, movies, as a distinct form of cultural product, generally exceed 60 minutes in length. Given that 24 frames per second are required to maintain the visual continuity perceptible to the human eye, a 60-minute film could contain up to 86,400 still frames. If modifications were made to every frame, depicting the actual built and un-built environments, as well as the lifestyles and work habits of the oil workers, such an endeavor would necessitate much time and extensive efforts and investments. Moreover, producing such a

³⁰⁹ Shanghai Film Studio "Daqing Battle Song" Production Team (1977). 'The Triumphal Song of Daqing Resounds Even More Brightly - Angrily Exposing the Crimes of the "Gang of Four" in Suppressing "Daqing Battle Song" [大庆凯歌更加嘹亮——愤怒揭发"四人帮"一伙扼杀《大庆战歌》的罪行],' *Peoples Daily*, 27 January, p. 4. People's Daily Publishing House. Beijing.

³¹⁰ Yu, Q. (1977). 'Mobilizing the Entire Party and the National Working Class to Strive for the Popularization of Daqing-Style Enterprises [全党、全国工人阶级动员起来 为普及大庆式企业而奋斗]'. Internal Government Work Report. Beijing, 4 May. Speech made on 8 May 1977. Retrieved from Xinhua News Agency, 8 May 1977.

meticulously crafted film would require a stable working environment, free from external disturbances which was a luxury scarcely attainable in the middle of the severe economic downturn and societal chaos instigated by the Cultural Revolution. As a result, this medium did not emerge as the primary method of promoting Daqing's oil industry. What became pervasive in the lives of the general populace were graphics symbolizing Daqing's industry, predominantly in the form of colourful political propaganda posters, supplemented with a few photographs.

Similarly, notwithstanding the relative simplicity of modifying single-frame photographs as compared to movies, authorities demonstrated a preference for the dissemination of the theme "Learn from Daqing in Industry" via paintings, carefully crafted by artists. Photographs, akin to films, exhibit a superior capability to represent both built and unbuilt environments, a capacity surpassing that of paintings. Nonetheless, to adhere to the directives of those in power, photography required comprehensive pre- and post-production undertakings, especially considering the limited accessibility of color film in China during this period. To portray scenes in color, the authorities either had to equip photographers with the costlier color film or engage post-production specialists to impart color to black-and-white photographs.

Contrastingly, the utilization of painting as a medium facilitated the avoidance of these challenges. Artists were given the latitude to create scenes aligning with the political objectives dictated by the authorities, with fewer constraints emanating from the realities of the actual scenes. Simultaneously, by employing dramatic color contrasts, they were able to generate visually impactful scenes that catered to the demands for political provocation. These visual and textual representations also emerged in forms such as washbasins, teapots, thermoses, and even pillow covers, each embellished with prints of petroleum refineries and textual references endorsing industrial education in Daqing.

8.3.1 Wang Jinxi's Legacy: From the Celebrated Iron Man to the Silent Valor of Countless Iron Men and Iron Women

During the Cultural Revolution, Mao and his philosophical ideas were mythologized as guiding forces in the development of Daqing's urban planning and construction. Similarly, local oil workers, as depicted in photographs and paintings, are portrayed as the guardians of Mao's doctrines. This portrayal is supported by the red Chairman Mao badges they wear with pride and the Redbook, known as 'Quotations from Chairman Mao', that they carry on a daily basis (Figure 8.1). These prominent red

elements contrast starkly with their standardized grey uniforms, a product of the Ministry of Petroleum distributed to all field employees following the initiation of the GPC. While originating from real-life contexts, artists' emphasis on the diverse materials and functionalities of the oil workers' everyday attire still serves political imperatives. If red symbolizes revolutionary fervor, then grey represents the resilience and hardworking nature of the local populace.



FIG. 8.1 Two Female Oilfield Workers Holding Quotations from Chairman Mao and Wearing Chairman Mao Badges. Source: "Daqing," Shanghai People's Publishing House.



FIG. 8.2 A Petroleum Worker Wearing 'Daodaofu Uniform' and Chairman Mao Badge. Source: "Daqing." Shanghai People's Publishing House.

These easy to produce uniforms represent a particular aspect of local culture that is defined by austere simplicity and frugality. Due to very limited resources, the design of these clothes is rather basic and unpretentious, devoid of intricate decorations. As exhibited in Figure 8.2, these uniforms, designed for both winter and summer seasons, are a ubiquitous feature among the workforce. The man on the left is dressed in a thick cotton garment designed for winter warmth, while the woman on the right wears the lighter attire meant for spring and summer. The employees refer to the winter uniform as *Daodaofu* (道道服) colloquially (lined uniform in Chinese), alluding to its multiple reinforcing seams. Regardless of role or gender, every individual wears the same uniform, unchanged by position or gender differences, symbolizing equality among the oil workers. Such portrayal intentionally reflects an egalitarian atmosphere transcending class and gender distinctions, which the Ministry of Petroleum lists as one of its nine pillars of successful experience.

Within the context of uniformed individuals, a prominent figure that has to stand out is the iconic "Iron Man," Wang Jinxi. His image is a recurrent theme amongst a broad range of artistic practitioners. Figure 8.3 presents a semi-torso photographic portrayal of Wang. The photograph captures his deeply tanned complexion, robust posture, and the intricate handling of an oil drilling apparatus, all the while donned in his distinctive *Daodaofu*. The array of visual elements within the photograph aims to convey the essence of Wang's tenacious character, akin to the robustness of iron. A notable instance involves him ignoring his leg injury and voluntarily immersing himself in a mud pit to avert a good blowout. Specifically, Wang initiated the stirring of the mud with his body to mitigate the blowout (Figure 8.4). The objective of Wang's portrayals is to articulate his extraordinary resolve, which is highlighted through captivating personal anecdotes and to make him into a local and national hero.



FIG. 8.3 Portrayal of the "Iron Man" Wang Jinxi. Source: "Daqing," Shanghai People's Publishing House.



FIG. 8.4 Wang Jinxi is stirring of the mud of his body to mitigate the blowout. Source: "Daqing," Shanghai People's Publishing House.

Nevertheless, these photographs and artistic representations documenting Wang tend to underscore individual heroism in a particular way. Viewers can effortlessly distinguish Wang in these images, courtesy of unique visual attributes that differentiate him from his surroundings. Figure 8.5 and Figure 8.6 features two group images that showcase Wang engaging in work and dialogues with his colleagues. While his counterparts opt for heavy, wind-resistant headgear, Wang adopts the use

of a duck-billed cap; and while others dress in attire suited to spring, Wang persists in wearing his *Daodaofu*. These details lend credibility to the argument that these photographs are products of the photographers' strategic composition. They are potentially orchestrated, with the explicit goal of accentuating Wang's prominence amidst the group. Artistic representations have endeavored to mold Wang into an archetype of heroism within the petroleum industry, intended as an exemplary figure for other workers to follow. All of these intentional portrayals serve the purpose of advancing the political narratives of the communist party.



FIG. 8.5 Wang is working hand in hand with his fellow oil workers. Source: "Daqing," Shanghai People's Publishing House.



FIG. 8.6 Wang is communicating with petroleum workers. Source: "Daqing," Shanghai People's Publishing House.

These artistic expressions convey with clarity that Wang's iron-like resolve was not a natural endowment, but rather cultivated through the absorption of Mao Zedong Thought. Essentially, artists sought to utilize Wang's personal educational journey to deliver the message that only those equipped with Mao Zedong Thought could effectively demonstrate subjective initiative in societal development, ultimately leading to the attainment of Chinese modernization. An exemplar of such a theme is portrayed in Figure 8.7, where Wang is shown engrossed in the study of Mao's writings during his spare time, stationed beside an oil drilling site. Within proximity lies an oil well he has previously excavated, and he is situated on materials earmarked for the construction of the succeeding well. The space between Wang and the oil well is filled by the sight of a nascent red sun, emblematic of Mao. Obviously, every visual element in this image is created with a strong political connotation in mind.



FIG. 8.7 "Wang Jinxi Studying the Works of Mao Zedong During His Downtime, Created in 1977". Source: "Daqing Graphic Collection," Heilongjiang People's Publishing House.

While artists portray Wang as a role model, an unselfish character devoid of material pursuits, wholly devoted to the development of the petroleum industry, and adherent to Mao Zedong Thought, they consciously neglect Wang's political ambition as a mid-tier leader and his inherent human frailties. Yu Oiuli, the incumbent Minister of Petroleum in 1960, fashioned Wang into an "Iron Man" via extensive propaganda, attributing the label not merely to his bravery but also to his capacity to utter stirring speeches. Wang had once publicly exhorted his fellow workers at a pledge assembly, stating, "We'd rather live twenty years less if it means building the Daging Oilfield."311 However, Wang was not entirely indifferent to material possessions. He once justified the purchase of a motorcycle for personal use, financed by public funds, under the pretext of facilitating the management of multiple oil wells in his administrative area. This motorcycle, now preserved in his memorial museum, signified a decidedly extravagant expenditure during a period characterized by an acute shortage of public buses, necessitating the Ministry of Petroleum to resort to truck-based personnel transportation. However, in the interest of leveraging Wang's contributions to the construction of the Daging Oilfield to bolster Mao's authority, these issues were overlooked. And in any case, this kind of propriety had to enhance production and was thus in the benefit of the nation.

³¹¹ People's Daily Editorial (1972). 'Learn from Daqing, the Vanguard Soldier of the Chinese Working Class - Iron Man Wang Jinxi [工业学大庆中国工人阶级的先锋战士——铁人王进喜]'. *People's Daily*, 27 January, p. 1. People's Daily Press, Beijing.



FIG. 8.8 Learn from Daqing in Industry. Source: Chinese Propaganda Posters, Taschen.

In artistic works that depict groups, Wang Jinxi's image is often generalized, with artists creating a legion of variations that bear a striking resemblance to Wang. These variations are typically his colleagues in the oilfield. Characters such as Ma Deren, Duan Xinzhi, Xue Guobang, and Zhu Hongchang from the "Five Red Flags" on the petroleum battle zones have been set forth as paradigmatic figures conforming to the "Iron Man" archetype. These figures possess physical traits akin to Wang, encompassing their robust physique, prominent facial features, tanned skin tone, determined gaze, worn-out *Daodaofu*, and the red badge of Chairman Mao on their chest. Artwork, particularly paintings, extends this concept further, adopting amplified visual tactics to generalize Wang's image. All the male characters portrayed share resemblances to Wang. For instance, the young man depicted in Figure 8.8 exhibits several similarities to Wang, spanning attire, gestures, and tools as well as Mao's seminar works in his left pocket, even facial features and eyebrows bear a resemblance. Yet he is not Wang; his visage is distinctly more youthful. Consequently, the Iron Man Wang Jinxi has metamorphosed into a communal symbol of the Ironmen.



FIG. 8.9 An Iron Woman Working. Source: China Reconstructs magazine, June 1975.

These male laborers, modeled after and inspired by Wang, are portrayed by artists in contexts wherein they undertake identical tasks as Wang. They are perpetually stationed at their work duties with a focus on facilitating the growth of the petroleum industry. Their interpersonal dynamics are limited to professional interactions and exclude familial ties. Artists have intentionally muted the depiction of private and family scenes in order to accentuate the revolutionary spirit epitomized by the oil workers, which is manifested through the deliberate renunciation of individual interests in favor of national welfare.

In the portrayal of women working in oilfields, aptly referred to as the "Iron Women," the application of similar artistic techniques is observable. The depictions draw

their inspiration from a select group of female oilfield workers and family members. Figure 8.9 presents the cover of the June 1975 issue of *China Reconstructs* magazine, where the female figure clearly evolves from Wang, adopting a similar stance and gripping a control lever.³¹² The photographic intent was to illustrate that all of Daqing's workers, regardless of gender, consider Wang as an exemplary figure and collectively embody Wang's work ethic. Concurrently, artists have portrayed how these women support their male counterparts and ensure the sustainability of the GPC through their arduous labor in farming, with Xue Guifen serving as an example.

Regardless of whether they are female oil workers or family members, the physical representation remains consistent: apple-shaped faces, distinct eyebrows, broad shoulders, thick waists, tanned skin, and attire consisting of *Daodaofu* or work clothes. And they often carry a control lever or shouldering a shovel. Before, these visual elements, typically associated with the roughness and strength of males, were seldom utilized to represent the delicacy inherent in Chinese femininity. In traditional paintings, women are typically depicted as slender ladies, adorned with delicate makeup and dressed in exquisite attire. The variations in the portrayal of female figures, in terms of physique and makeup, cater to different thematic expressions.



FIG. 8.10 A Team of Iron Men Heading to Work. Source: "Daqing," Shanghai People's Publishing House.



FIG. 8.11 A Group of Iron Women Setting Out to Work. Source: "Daqing," Shanghai People's Publishing House.

This artistic choice was purposeful, intending to highlight the women's strength, thereby illustrating their fortitude parallel to that of men and their equal contribution to the GPC. Figure 8.10 and Figure 8.11 present a set of images delineating oil workers and female relatives. The composition of these two images is strikingly archetypical, each depicting a group portrait. Both males and females

³¹² The China Welfare Institute (Ed.) (1975). 'Special: Women of New China'. *China Reconstructs*, VOL. XXIV, NO.6, Cover. Beijing.

are portrayed wearing uniform attire, their faces exuding a bright and joyful expression, which serves as a reflection of the satisfaction they derive from their work. Only the contrast in their handheld implements signifies their distinctive construction endeavors.

This distinctive portrayal of women advances two fundamental objectives, both of which bolster Mao's overarching authority. Primarily, the provisions obtained through women's arduous agricultural endeavors facilitate the endurance of the GPC. This resonated with Mao's persistent endorsement of the concept of self-sufficiency, which has been prevalent since 1935.313 The abundant harvests effectively meet the needs of the oilfield inhabitants, thereby obviating the Ministry of Petroleum's dependence on sourcing grain from the Heilongjiang Province. Subsequently, upon assuming political dominance in 1949, Mao championed policies aimed at liberating the female for hard labor. He posited that the societal dynamics had transformed, thereby bridging the perceived gap between male and female competencies. He iterated, "What male comrades can do, female comrades can do as well."314 Regarding guidance for women's conduct, he recommended, "Chinese women harbor various ambitions, favoring arms over ornate attire."315 In the realm of identity recognition, he encouraged women to venture beyond the domestic sphere, to engage alongside men in societal construction, thereby integrating women into the labor force. In light of these aspects, artists consciously blurred the gender distinctions between the men and women of Daging by leveraging traditionally masculine visual elements in the representation of women.

In the process of artistic creation, a transformation is observed from the vividly distinctive figure of Iron Man Wang Jinxi to the innumerable and anonymous Iron Men and Women. This progression steadily abstracts personal identities, crafting a universal representation of the Daqing People, devoid of clearly recognizable gender and individual distinctions. Figure 8.12, titled "Embrace the Revolutionary Spirit of Daqing, Elevate the Grand Red Banner of Mao Zedong Thought, and Endeavor to Fulfill the Third Five-Year Plan!" illustrates a composite image of representatives spanning diverse sectors in China, namely industry, agriculture, military, and education. These figures stand before a substantial red banner, which, diverging from

³¹³ Mao, Z. (1935). 'On the Strategy Against Japanese Imperialism [论反对日本帝国主义的策略]'. In: Selected Works of Mao Zedong Volume I, (p. 161). People's Publishing House, 1952. Beijing.

³¹⁴ People's Daily Editorial (1965). 'Chairman Mao and Chairman Liu Enjoy Swimming in the Thirteen Tombs Reservoir [毛主席刘主席畅游十三陵水库]'. Citing Mao Zedong's talk in June 1964, *People's Daily*, 27 May, p. 1. People's Daily Press, Beijing.

³¹⁵ Mao, Z. (1961). 'Seven-character-quatrain: Dedicated to Female Militiamen [七绝·为女民兵题照]', in Chairman Mao's Poetry [毛主席诗词]. (pp. 38). People's Literature Publishing House. ISBN 10019.2346.

China's national flag, features Mao's portrait symbolizing his overarching strategy of the General Line. The Daqing People, representing industry, is a recurring central group in this illustration. This representation encapsulates every individual working in the Daqing Oilfield, including Wang. As artists persistently reproduced Wang's image, they incrementally generalized it, ultimately modeling it into the Daqing People – a figure embodying numerous men and women working and striving to develop the oilfield in service of national objectives.



FIG. 8.12 Learn from the Revolutionary Spirit of Daqing, Hold High the Great Red Flag of Mao Zedong Thought, and Strive to Realize the Third Five-Year Plan. Creation Date: Early 1960s. Source: Penglin Zhu (Collected during the fieldwork).

The purposeful blurring of individual identities in the creation of the Daqing People image caters to the grand narrative dictated by the state. Not the individual but the collective gets the attention. The Daqing People signifies a legion of nameless heroes dedicating their lives to the establishment and exploitation of the oilfield. In the name of serving national interests, the Central Government and the Ministry of Petroleum justifiably advocate for the disregarding, sacrificing, and even erasing of these individuals' identities, aspirations, and interests. To realize the Central Government's ambition of building an oil industry, and further facilitating China's

industrialization and modernization, both men and women are required to join the vanguard that practices and upholds Mao Zedong Thought. This artistic strategy, by lauding the virtues of collectivism, serves to fortify the supreme leader's dominance under the pretext of defending national interests.

8.3.2 To Fight but Not to live with Nature: The Resilience Path based on Mao Zedong Thought

Spatial elements, specifically the built and unbuilt environment of the Daging Oilfield, frequently appear in conjunction with the Daging People within carefully crafted artworks, serving to fortify Mao's authority and cultivate his personal character. The built environment of Daging encapsulates facilities and infrastructure associated with the petroleum industry, incorporating oil drilling rigs, excavation machines, oil storage, and refining plants. It also signifies the distinctive scattered spatial form, including farmlands nestled between the central villages and settlements, along with the Gandalei dwellings. The unbuilt environment, on the other hand, symbolizes the local natural surroundings, notably present during the extensive and harsh winter seasons. These spatial elements either serve as the backdrop of the art piece, illustrating the commendable resolve of the Daging People in their tireless efforts to develop the oil industry in the face of formidable natural circumstances, or they become the central theme of the artwork, underscoring the notable achievements facilitated by the Daging People. In essence, these elements contribute to the construct of a heroic national narrative: The Daging People tenaciously adhere to Mao's call to fight with nature, foster economic prosperity inside China, and facilitate its transition into an industrialized nation.

The heroic narrative presented here is a meticulously constructed piece of artwork that typically consists of four thematic scenes. These scenes include the Daqing People exhibiting resilience and perseverance within harsh natural environments; the same figure, beaming with pride over the modestly completed oilfield, role models for others to follow; a comparative scene juxtaposing the immense industrial structure with the tiny Gandalei dwelling; and an orderly expanse of the oilfield bathed in the glow of a red sun. These scenes sequentially depict the grand narrative of the process of the GPC, including its initiation, peak, and incremental achievements. The nuanced depictions of these scenarios aid artists in visually narrating the journey of the Daqing People's response to Mao's rallying cry to fight with nature and for a new society.

The Daqing People, represented by the most exemplary individuals, are usually the protagonists in the first scene, while the severe winter environment of the Daqing Oilfield serves as the backdrop, which sculpts the spirit of selfless sacrifice in these Ironmen. Figure 8.13 provides a representation of such a scenario, whereby a young Iron Man is steadfast in his energy consuming labor amidst the freezing cold and snowfall. Clad in a *Daodaofu*, embellished with Mao's badge, and donning a thick fur hat for protection against the cold, he is far from a lone warrior. Towards the right of the canvas, a legion of Daqing People, attired in a uniform manner akin to him, are engaged in a joint endeavor to erect a new oil well. The artist accentuates the local harsh winter climate by depicting snowflakes swirling in the air. Yet, the determined gaze of the Daqing People and their manipulation of tools, even when wearing thick gloves, exhibit their unfaltering bravery.



FIG. 8.13 "Learning from Daqing in Industry." Creation Date: 1971. Source: Penglin Zhu (Collected during the fieldwork).

On the left of the frame, the artist reveals a densely arranged group of oil wells, serving as a testament to the tireless struggle of this anonymous legion of Iron Men against the rigorous natural environment. The artist's ingenuity shines through the artwork, a narrative transition from right to left, illustratively portraying the

evolution of the petroleum industry from inception to completion. The placement of the Daqing People within this context serves as a visual link, underscoring the idea that the fearlessness of their defiant struggle against harsh natural conditions forms the bedrock of the petroleum industry's emergence. This entire narrative arc presented here is framed in response to the Daqing People adhering to Mao's call for a relentless fight with nature.

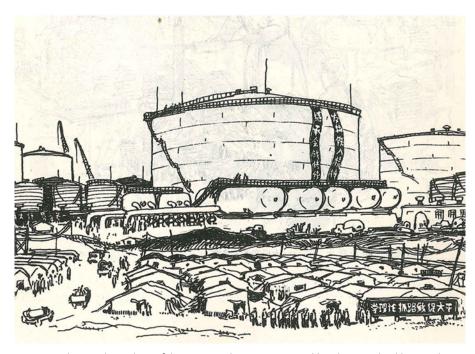


FIG. 8.14 Inheriting the Tradition of the Great Petroleum Campaign, Building the New Oil Field. Created in 1975. Artist: Editorial and Creative Team of People's Fine Arts Publishing House. Source: *Daqing Sketches* [大 庆速写], People's Fine Arts Publishing House.

In addition to portraying the severe challenges inherent in the natural environment, another technique for showcasing the Daqing People's selfless commitment and spirit of sacrifice involves accentuating the discrepancy in scale between the oil industry structure and the Gandalei dwellings. Figure 8.14 presents a sketch of the Western Oil Storage facility alongside its neighboring central village. Within this composition, there's a stark contrast between the massive newly established oil storage facility and the tiny Gandalei dwellings within the central village set in the foreground. The artist purposefully magnifies this scale disparity, rendering the oil storage – built by the Daqing People – larger than its actual dimensions, while the Gandalei dwellings, their

homes, are depicted as smaller than the true size. This intentional comparison of these two spatial elements seeks to highlight the imbalance between their monumental contributions and their relatively modest compensations. This meticulously composed disproportion serves to reinforce the depiction of the Daqing People's determination and their active surrender of personal gains in favor of national aspirations.



FIG. 8.15 Follow the Daqing Path, Persistently Advance Towards the Lofty Goals of Communism. Created in 1976. Source: Penglin Zhu (Collected during the fieldwork).

Nonetheless, the artist's depiction of the disparity between contributions and rewards does not advocate the Ministry of Petroleum's efforts to create a more comfortable local community that would be commensurate with the Daqing People's contributions. Instead, the objective is to facilitate specific political works through their artistic endeavors. When the artistic focus transitions to illustrating the phased achievements in the construction of the Daqing Oilfield, artists consciously abandon the use of spatial elements previously employed to convey the challenges and hardships of work and life. For instance, the theme of Figure 8.15 highlights the outcomes of construction guided by the planning principle of "Integration of workers and farmers, unity of urban and rural, facilitation of production, and convenience for living." This piece carries the title "Follow the Daqing Path, Persist in Advancing Towards the Great Communist Objective."

The depiction of varying seasons serves to accentuate different thematic expressions. While artists often use the chill of winter scenes to symbolize the challenges inherent in the construction process, the warmth of spring typically underpins illustrations celebrating the fruits of these labors. An analysis of Figure 8.15 reveals that the frigid winter of the oilfield has given way to spring. This is evidently indicated by the man and woman now adorned in lighter clothing instead of their heavy Daodaofu. Furthermore, the deliberate incorporation of the color green in the tableau also serves as a noticeable indicator of this seasonal change. The determined expressions previously noted during the howling cold wind and torrential snowfall have vanished from the faces of the Daqing People. They are replaced by radiant smiles of happiness, especially when the warm spring sunlight graces their face, which magnifies their delight. The presence of an optimistic ambiance serves to facilitate the establishment of this particular setting, which can be characterized as a moment of triumph where every individual residing on the oilfield is expected to display a substantial sense of satisfaction.

This particular ideological piece holds significant representational value as it incorporates a diverse range of graphic elements with the aim of encapsulating a comprehensive spectrum of political connotations. The most compelling element of the visual composition pertains to the central figures, a man, and a woman. The man, attired in a navy jacket and donning thick gloves, wields a large wrench in his right hand, whereas the woman, dressed in yellow, holds a shovel. The artist consciously portrays these disparate tools to signal their differing vocational roles. The man's hefty wrench, typically associated with the manipulation of drilling equipment or other heavy-duty industrial machinery, suggests his profession as an oil worker. Meanwhile, the woman's shovel signifies her role as a farmer. The utilization of sweatbands encircling their necks suggests a state of readiness for arduous physical exertion and profuse sweating.

While the pair's relationship status remains ambiguous, their joint representation embodies a facet of the planning principle known as Integration of workers and farmers, as their positioning next to each other communicates reciprocal support. Simultaneously, the painting underscores the equal necessity of women's empowerment and strength to men's in the construction of Daqing. The portrayals of the man and woman in this painting not only embody the archetypical male and female figures of Daging, but also those of broader China. This is intentionally communicated by the artist through the presence of a large crowd in the backdrop of the painting, especially evident in the lower left corner's truck filled with people and the lower right corner's gathered group.

The remaining part of Daqing's planning principle – "Unity of urban and rural" – is also discernible via an array of spatial elements carefully orchestrated by the artist within the composition. Deviating from a traditional oil city representation, the artist employs a broad green canvas to depict the agricultural lands and fishponds interspersed between the central village and the settlements. The depiction on the left side of the painting reveals a settlement consisting of eight grey Gandalei dwellings. Adjacent to the left of these residences, the viewer can identify six petroleum extraction facilities and a public building with a red roof. Northward from the settlement, the artist illustrates a significant collection of oil storage tanks. This representation encompasses the planning ethos of "facilitation of production, and convenience for living" by situating residential establishments in proximity to industrial infrastructure. Further westward from the oil storage tanks and the aforementioned settlement is another settlement, divided by a T-shaped, mud-laden pathway. On the right of the painting, several public buildings with red roofs are arranged in an east-west orientation, suggesting the depiction of a central village. These structures, along with the settlements, constitute a basic living foundation. The picture shows a balanced environment in which industry and agriculture happily go together.

While the built environment of Daqing is typically used as a context for its inhabitants, it also has the capacity to independently emerge as the central subject of artistic representations, notably as oilfields bathed in a red sun. The subsequent section delves into a more detailed analysis of this thematic scene, which will not be restated in this context.

The major creative thrust is channeled into the depiction of four scenes, aimed at illustrating how Mao's ideology of "fighting with nature" progressively facilitates the development of the Daging Oilfield. However, artists selectively omit a salient fact that the unspoiled natural environment and the industrialized mining zone exist in inherent opposition. The freedoms, health, and harsh weather conditions represented by the natural environment stand in contrast to the constraints, pollution, and structured order exemplified by man-made industrialized mining areas. Industrialization signifies a destructive restructuring of nature. This aspect, however, was not a concern for the Central Government, especially not for Mao himself. For them, mastering, transforming, and controlling nature were necessary steps to accumulate material wealth, and consequently, to achieve China's industrial modernization. Within this framework, the interests of humanity and the natural environment do not appear to be in mutual conflict. This harmonic confrontation was encouraged, with an emphasis placed on the importance of human agency in the construction of a socialist China.

The artworks discussed above deftly transform the binary opposition between the natural and the developed environments of the oilfield into a binary dialectical relationship, achieved through an emphasis on the four scenes illustrating Daging's planning and construction. Concurrently, these pieces strategically exhibit the accomplishments of oilfield construction, with a focus on local spatial order, while overlooking the reality of the overall disordered spatial form of the Daging Oilfield. Specifically, Although all the artworks participate in the propaganda narrative of Learn from Daging in Industry, artists succeed in generating contrasting depictions for different contexts. The dramatic shift in color tonality suggests a lack of a cohesive personal stance among the artists, demonstrating a shortfall in their critical engagement with the officially sanctioned heroic narrative. Their artistic ventures are entirely in service of the political objectives of the commissioner - the Chinese government and subjected to the dominating ideology. Such observations imply that these artworks essentially serve to justify the transformation of nature under collectivism, aligning with the grand narrative promulgated by the Chinese government. They disregard the multitude of negative aspects inherent in this transformation process and offer no critique or reflection on the prevailing national narrative.

8.3.3 Daqing in Red

Even though petroleum is naturally black and is commonly dubbed "black gold," red emerges as an essential visual component within these culturally creative artifacts that symbolize the petroleum industry in Daqing and the campaign "Learn from Daqing in Industry." The frequent use of red by these artists transcends the color's inherent capacity to attract attention and function as a visual warning, as demonstrated by its use in traffic signals. More crucially, red carries significant political connotations. On a global scale, red serves as an iconic visual representation of communism and socialism. Yet, the Chinese Communist Party (CCP) assigns even more profound symbolism to this hue. It embodies the CCP's established military force – the Workers' and Peasants' Red Army – and mirrors the color of the blood of the pioneers, thus symbolizing the spirit of sacrifice exhibited by the CCP in their endeavor to construct a new China. It can be argued that the political significance of the Daqing Oilfield has had an impact on the authentic portrayal of its hues in visual artistic creations.

In the era of the Cultural Revolution, the color red gained additional significance, becoming symbolic of the Red Sun – Mao Zedong. This symbolism also formed the basis for the naming of the Red Guards, Mao's adherents during the Cultural Revolution, regarded as the defenders of the Red Sun. Such diverse manifestations

of red can be found in creations centered around Daqing's petroleum industry, including red flags, red armbands, the "Quotations from Chairman Mao" known as the Little Red Book, Mao's red metallic badges, red slogans advocating "Learn from Daqing in Industry," and even petroleum industry equipment purposefully painted red. Among these items bearing red, some exist in the tangible world, while others stem from the artist's politically charged artistic expressions.

In the visual portrayal of Daqing Oilfield's built and unbuilt environments, as well as depictions of oil workers, red is a dominant feature in color photographs. Exploiting the inherently greater degree of realism presented by photographs over paintings, photographers and post-editing artists carefully orchestrate the colors in each frame to construct a seemingly "real" scene with underlying political intentions. As an illustration, Figures 8.13, 8.14, 8.15, and 8.16 are sourced from the 1974 Shanghai People's Publishing House edition of a historical photo compilation entitled "Daqing."³¹⁶ This publication stands as a rare example of its time, presenting the built environment of Daqing Oilfield and the lifestyle of its workers via photographs. Remarkably, of the 102 photographs included in this collection, a mere 36 are in color, which represents approximately one-third of the total. From this, it is evident that color photographs were not the predominant mode of representation in this photo collection, but for the time still a substantial amount.

The incorporation of the color red in these visuals is a deliberate strategy by photographers and painters, intended to reinforce Mao's personal authority. Figure 8.16 is the second image in this collection and the first to depict Daging Oilfield. It follows the opening image, which is a half-portrait of Mao. This specific photograph captures the essence of a morning in the oilfield. The photographer presents to the audience an array of offshore oil extraction facilities; these oil towers positioned on the water body are systematically arranged from right to left, adhering to the principles of two-point perspective, decreasing in size correspondingly. Through this illustrative arrangement, the photographer seeks to convey an impression of order, signaling the successful spatial planning implementation by the Ministry of Petroleum. The central focus of the image is the newly risen sun, its radiating light bathing the orderly arrangement of oil industry facilities. Without a doubt, the sun may be seen as a metaphor for Mao Zedong, since its radiant red beams symbolize the ideology of Mao Zedong Thought. This connection becomes especially significant given that this photograph directly succeeds the half-portrait of Mao. The intention of the author is clear: the organized layout of the oilfield construction is actualized under the directive of Mao Zedong Thoughts.

³¹⁶ Daqing Revolutionary Committee (Ed.) (1974). *Daqing*. Shanghai People's Publishing House, Shanghai. ISBN: 8171.651.



FIG. 8.16 "Morning in the Oilfield". Source: Daging, Shanghai People's Publishing House.

The incorporation of red elements within these photographs is relatively subdued, appearing either metaphorically through the depiction of the sun and light, or as smaller, features visual layout. Captioned as "Drilling Workers Studying Chairman Mao's Works," Figure 8.17 showcases a collective portrait of oil workers, attired in originally dark-blue uniforms that have faded to a pale shade due to repeated laundering. Their outfits are complemented by silver aluminium safety helmets. Each worker holds a book with a stark white cover and a conspicuously emblazoned title in striking red. The jubilant expressions of the oil workers indicate an enthusiastic discussion centered around the books they are holding. The two books, 'On Contradiction' and 'On Practice' authored by Mao, were recommended by Minister Yu Qiuli to all workers, with the aim of facilitating oilfield construction. In reality, the two books by Mao had minimal impact in guiding the development of the Daqing oilfield, especially in terms of their technical value. This can largely be understood as Yu's calculation for his own political future. However, for painters, this provided a rare opportunity to showcase the wisdom and might of the supreme leader.

The photographer has deliberately arranged two contrasting visual elements within the image, namely, the oil workers' bleached uniforms set against the vivid red titles of Mao's works held in their hands, and their oil-drenched, mud-encrusted attire and boots in stark contrast to the pristine white books they are holding. The photographer, through this juxtaposition of imagery, aims to articulate the workers' reverence and respect for Mao. Their clothing, though roughly handled, stained with oil, and faded from repeated necessary washing, does not concern them. However, they painstakingly preserve the integrity of Mao's works; even though they

themselves are soiled, they ensure the covers of Mao's books remain unblemished. In spite of daily handling for reading and studying, the book covers retain their cleanliness amidst the rough conditions and the constant use. In real-life contexts, such occurrences are rare, which further substantiates the argument that these scenarios are staged deliberately.

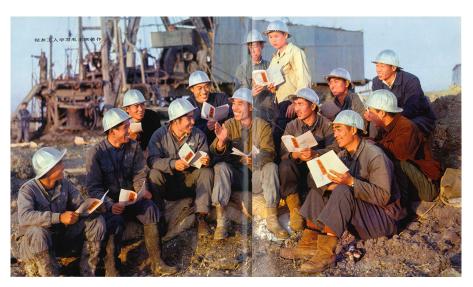


FIG. 8.17 Drilling Workers Studying Chairman Mao's Works. Source: *Daqing*, Shanghai People's Publishing House.

Concurrently, the photographer's meticulous scene composition emphasizes the repetition of red elements to underscore their political symbolism. Figure 8.18 showcases two drilling platforms situated on the Saertu Oilfield. The focal point of this photograph is the drilling tower at the lower right corner of the frame, adorned with a red flag and encircled by red flags evoking a floral display. These supplementary red flags, specifically arranged by the photographer for this composition, are a unique feature of this drilling platform; flags are typically only found atop towers at other sites. The conspicuous display of these flags reiterates the emphasis placed on political work by the Ministry of Petroleum. In both figures, the red elements manifest not as dominant festive features but as recurring motifs on a smaller scale. This relative understatement may be a result of the inherent constraints of the photographic medium, which can only represent objects in their authentic size within their real-world environment, although manipulation cannot be excluded.



FIG. 8.18 Expansive Daging Oilfield. Source: Daging, Shanghai People's Publishing House.

The recurrent use of the color red, primarily to underline political implications, could have been altered post-production due to unforeseen political developments. Figure 8.19 illustrates the Daqing Refinery located in the Longfeng area, wherein the depiction encompasses not only oil refining equipment but also a plethora of red political slogans of various dimensions. Some are painted on walls, while others are placed on refining towers. Notably, the red slogan on the leftmost side of the frame, situated atop a factory building, appears to have been modified in post-production. This can be deduced first from its hue disparity when compared to other red slogans in the frame, as it visually appears more saturated. Furthermore, other slogans in the image remain legible, especially the banner on the far-right tower proclaiming "Long Live Chairman Mao." Excluding deliberate obfuscation, it remains perplexing as to why one of two concurrently displayed sets of slogans would be rendered illegible. Given the photo's 1973 timestamp, it could be plausible that the concealed content might pertain to Lin Biao, who defected in September 1971 amidst political turmoil. He was long recognized as Mao Zedong's second heir following Liu Shaoqi. During the Cultural Revolution, his abrupt defection to the Soviet Union culminated in an unexplainable plane crash near the city of Ondorhaan in Mongolia. Intriguingly, while both are attributed to political dynamics, the variations in the red hue convey contrasting connotations.



FIG. 8.19 Daging Refinery. Source: Daging, Shanghai People's Publishing House.

While photographs and paintings differ in their artistic modes of expression, they share commonalities when representing the construction achievements of the Daqing Oilfield. Figure 8.20 portrays two vertical compositions that underscore the coherence of discrete spatial components within the oilfields. In Figure 8.16, the oil towers across the water body are arranged from right to left following the two-point perspective convention, diminishing in size. Conversely, on the left side of Figure 8.20, the composition of oil towers diverges from Figure 8.16. Rather than being disorderly, they alternate from left to right into the distance, interconnected by roads. Moreover, the artwork on the right side of Figure 8.20 similarly elucidates the spatial organization of farmlands and water injection stations. The emergence of spatial orderliness illuminates the entirety of the image under the luminescence of a red sun: the red banners and slogans atop lofty drilling platforms, the scattered settlements, and even the petroleum facilities such as storage tanks are cast in red, including the farmlands and fishponds nestled among residential clusters. It is fair to say that the color red is omnipresent in both of these artworks.

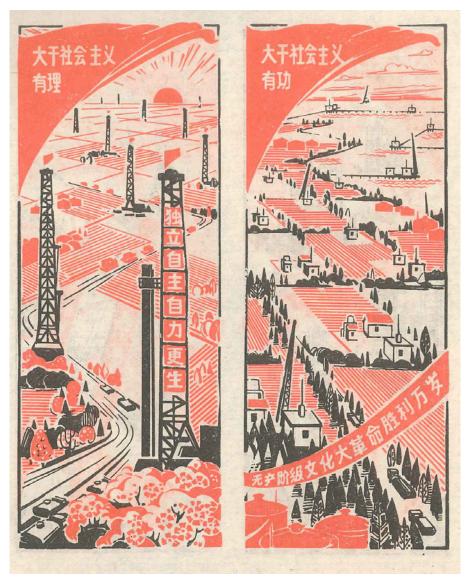


FIG. 8.20 The Red Daqing Oilfield. Left Title: "Wholeheartedly Upholding Socialism is Just"; Right Title: "Wholeheartedly Upholding Socialism is Meritorious". Created: 1977. Source: *Daqing Graphic Collection*, Heilongjiang People's Publishing House.

Artists have deliberately depicted this scenario: Under the radiant red sun, both industrial planning and spatial construction in Daqing emanate orderliness. The intended political message they aim to convey is readily apparent. The sense of order intrinsic to the planning and construction of the Daqing Oilfield stems from the red

sun – Mao and Mao Zedong Thought. Notwithstanding, this spatial order is exclusive to the artist's portrayal of the Daqing Oilfield. Contrarily, in reality, the spatial structure pursuant to the planning principle outlined by the Ministry of Petroleum is disorderly, being contingent upon the natural dispersion of oilfields. This selective spatial representation amounts to nothing more than the artist's reverential depiction of Mao's accomplishments, whether voluntarily or circumstantially driven.

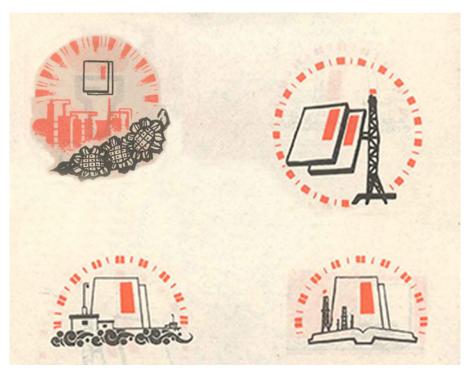


FIG. 8.21 Four Artistic Renditions of Mao's Seminal Works, 'On Contradiction' and 'On Practice' Source: Daqing Graphic Collection, Heilongjiang People's Publishing House.

The unconstrained nature of painting allows it to overcome the limitations previously mentioned. In these carefully designed artworks, the use of the color red is liberated from the bounds of reality, yielding impactful visual representation. As the artists, who, of course, remain unidentified, broach the themes of "On Contradiction" and "On Practice," their portrayal of Mao and Mao Zedong Thought as the cornerstone behind the successful erection of the Daqing Oilfield becomes increasingly unabashed and visually impactful. Figure 8.21 exhibits four artistic renditions of Mao's seminal works, 'On Contradiction' and 'On Practice'. Initially no larger than

an A5, these books, along with their striking red titles, are illustrated on a scale surpassing that of the petroleum infrastructure depicted in the same artworks. They either manifest metaphorically as the sun radiating a red aura engulfing the oil facilities, as seen in the top half of the frame, or appear as the very foundation upon which the oil facilities rest, as portrayed in the bottom half. The artist, through these depictions, aims to signify that Maoism was the bedrock of the Daing Oilfield's establishment.



FIG. 8.22 "Industry Learn from Daqing". Source: Penglin Zhu (Collected during the fieldwork).

The depiction mirrors religious iconography, with Mao and his works rendered in a mythic light, akin to saints or scriptures, floating in the sky and emitting light, encircled by their adherents. Figure 8.22 displays a propagandistic painting, constructed predominantly around the visual motifs of the red flag and Mao's works. The focal point of this frame is a cohort of oil workers departing to drill oil, holding aloft an oversized "Selected Works of Mao Zedong," framed by a profusion of red flags. The color red presides over the scene, ranging from the enormous red block forming the backdrop to the slogan "Learn Industry from Daqing" at the top, to the substantial red flag billowing in the middle, down to the multitude of red flags at the bottom. Nonetheless, this portrayal harbors a sense of irony, given Mao's explicit stance as an atheist.

In both photographic works and political propaganda art, the color red is an indispensable component of the visual composition. The aforementioned pieces demonstrate that creators adjust their techniques according to the distinct artistic medium, aiming to maximize the prominence of the color red in their depictions. Given the characteristics of photographic technology, artists typically employ two strategies. The first is by enveloping the entire scene under the glow of a red sun, and the second is by strategically placing recurrent small-scale singular red objects, such as flags or slogans, to amplify the color's dominance in the image. Political propaganda paintings, not bound by the constraints of real-world dimensions, allow artists to exaggerate the portrayal of red as the narrative demands. Moreover, it is worth noting that both photography and painting share a common thread. In order to underscore the magnificence of Mao Zedong Thoughts as the guiding principle for the construction of the Daging Oilfield, the creators usually emphasize spatial order and coherence against a red backdrop. Arguably, the color red emerges as the most representative element in the visual artistic representation of the Daging Oilfield. However, when the black of the oil is symbolized as the red of the Daqing Oilfield, one cannot help but recognize this as a maneuver to serve political needs.

8.4 Chapter Summary

Between 1966 and 1978, the most prominent aspect of the planning heritage in Daqing Oilfield was the propaganda - the Representational Petroleumscape. This chapter contends that the progression of the Cultural Revolution represents a process in which various practices associated with the Daqing Oilfield were leveraged as instruments for political representation and power play. This process was characteristically top-down, driven by the Chinese Communist Party Central Committee, and bolstered by state-owned media platforms such as the People's Daily, to further its implementation across society. In contrast the "Learn from Daqing in Industry" campaign discussed in previous chapters, a unique aspect of this process is that the higher echelons, before promoting nationwide practices, had previously engaged in political discourse challenges concerning Daqing and its related practices.

During this period, the political discourse pertaining to Daqing and its associated practices experienced significant fluctuations due to political influences. When the Central Cultural Revolution Group, led by Jiang Qing, portrayed Daqing as "Liu Shaoqi's black flag and poison," the Liu and Deng faction struggled to offer an effective rebuttal. This narrative surrounding Daqing significantly disrupted the oilfield's administrative system, subsequently hampering its developmental progress. To mitigate the potential economic repercussions of these developmental delays in the Daqing Oilfield, Zhou Enlai intervened in this political dispute, seeking to stabilize the situation by reshaping Daqing's political discourse as "Mao Zedong's red flag." Following this political turmoil, Daqing was redefined as Mao's political asset, establishing its political significance during the Cultural Revolution.

On June 20, 1971, the *People's Daily* officially commenced the political weaponization of Daqing with an editorial titled "Learn from Daqing in Industry." This editorial first underscored that Daqing's success was a manifestation of Mao's approach prevailing over Liu's. It attributed this victory to the masses' study and implementation of Mao Zedong Thought. Consequently, the editorial posited that responding to the call of "Learn from Daqing in Industry" was pivotal for nationwide industrialization and emphasized the significance of the Daqing spirit in tandem with Maoist thought. Concurrently, a nationwide artistic surge arose, themed around Daqing Oilfield, with a particular focus on photography and painting, mirroring the political climate and resource allocation of the time.

Within these propagandistic artworks, individual identities were intentionally minimized. From the "Iron Man" Wang Jinxi to a host of "Iron Men" and "Iron Women," creators presented a gender-neutral and individualistic-reduced portrayal of "Daqing People," aligning with the state's collectivist narrative and goals of industrial modernization. Simultaneously, among the four predominant scenes that elucidate the advancement of the Daqing Oilfield, grounded in Mao's concept of "fight with nature," the juxtaposition of pristine landscapes and industrialized mining areas was downplayed. The former symbolizes freedom, health, and harsh climates, while the latter embodies confinement, pollution, and orderliness. For the Central Government, transforming nature was pivotal for industrial modernization. Against this backdrop, the adversarial relationship between humans and nature was accentuated, highlighting its central role within socialist construction.

However, these artworks transitioned the inherent contradiction between nature and industry into a harmonious coexistence. They emphasized the achievements of the oilfield development and orderly spaces, while deliberately avoiding discussion of the overarching instability inherent to the Daqing Oilfield. While all artworks are nested within the narrative of "Learn from Daqing in Industry", they presented diverse visualizations, underscoring their alignment with governmental political objectives. On another note, Mao and his writings were profoundly sanctified within artistic creations. Paradoxically, this portrayal is somewhat ironic, given Mao's atheistic beliefs. These visual creations sought to rationalize the transformation of nature under collectivism, resonating with the official narrative, yet they lacked a critical stance on issues emerging from the transition and the official discourse.

Within the framework of this study, this chapter places a keen emphasis on the fifth key time period in the evolution of the Daqing's Petroleumscape. It contends that the Cultural Revolution marked a process where practices associated with Daqing were utilized as tools serving political struggles. A distinctive feature of this period is the emergence of a multitude of artistic works that depict both the built- and unbuilt environments of the Daqing Oilfield, the lifestyles and work methods of its local inhabitants, as well as the "Learn from Daqing in Industry" campaign. During this period, in shaping the local planning mechanisms of Daqing, stemmed predominantly from political influences. It rigorously entrenched discussions concerning any practices related to Daqing within the framework of political correctness. As these practices attained an untouchable and sacrosanct status, they effectively suppressed any potential alterations in local spatial practices.

9 Completing the Image of Daqing's Built Environment

Landscape, Urban Forms, and Housing Forms Ignored by the Political Propaganda 1962-1977

The reason of this chapter is to conduct an exploration of how local governments strategically expanded the applicability boundaries of local planning principles, as prompted by national political campaigns, between two key periods. The chapter is structured into two main sections. In the first section, the chapter delineates how, between 1964 and 1966, the two political campaigns, namely, Learn from Daqing in Industry and the Cultural Revolution shaped the planning principles in Daqing. It sheds light on how the Daqing authority, constrained by this institutionalization process, was unable to effectively control the continuous expansion of the Saertu Worker Town. The second section examines the timeframe that occurred after the Cultural Revolution and the subsequent key periods. These will be further elaborated in the next chapter. By delving into three practical spatial planning and architectural design cases, the section aims to illustrate that both the Daqing authority and local residents made efforts to broaden the usage scope and contexts of the existing spatial institutions. These endeavors were carried out without violating the existing principles, and by leveraging their definitional ambiguities.

9.1 Locked in the Limelight: The Local Planning Principle under the Shadow of Political Power

The actions taken by Premier Zhou Enlai subsequent to his 1962 visit to the Daqing Oilfield, notably, the promotion of the planning principle, the *Zhengqiheyi* Model, and Notice 65, marked the first key period in the construction of Daqing's spatial planning system, formalising the spatial practices of the Songliao Petroleum Campaign Leading Group (SPCLG) from an administrative and planning technical perspective via the enactment of regulations. Subsequently, Mao Zhedong's initiation of the "Learn from Daqing in Industry" campaign and the Cultural Revolutions in 1964 and 1966, respectively, emerged as the second and third important moments in the establishment of local planning principle. These initiatives gradually formalized the local spatial planning practices and the lifestyle they fostered, from a political standpoint.

The establishment process at hand begins with the Daging Spirit concept, as advanced by the party media outlet, the newspaper People's Daily. During the national campaign of Learn from Daging in Industry, *People's Daily* sequentially validated the spatial practices transpiring within the Daging Oilfield as ideal applications of Marxist principles, aimed at the eradication of class disparities. This perspective was articulated in two influential editorials, namely "The Daging Spirit and the People of Daging" and "Daging's Evolution into a Pioneering Mining District which is the Integration of Workers and Farmers, Unity of Urban and Rural," published in 1964 and 1966 respectively. The Daging Spirit constitutes an extension of the Yan'an Spirit into the arena of industrial construction. It refers to, in particular, the entrepreneurial drive exhibited by the SPCLG, oil workers, and their families throughout the period of the Great Petroleum Campaign (GPC). According to the editorial, this drive encompasses their spirit of self-reliance, perseverance, practical application of theories, unrelenting innovation, and the adoption of a pragmatic ideological stance. Significantly, these practices were depicted as the epitome of Mao Zedong Thought on constructing Chinese industry. Such narrative attribution conferred upon the spatial development approach, spatial structure, and living conditions within the Daging Oilfield a level of political legitimacy. The aim is to validate the spatial activities occurring within Daging through a prism of political appropriateness.

Following the political affirmation of spatial practices during the era of GPC, the Central Government initiated efforts to incorporate the Daging Spirit into architectural design and urban planning nationwide. In March 1966, the annual meeting of the Architectural Society of China, held in Yan'an, sparked several discussions about incorporating the Daging Spirit into architectural design and urban planning, under the slogan of prioritizing political work in design activities. The articles in the 1966 special edition of the Architectural Journal, particularly those indexed under 'Z', encapsulated the Architectural Society of China's discussions on implementing the Daging Spirit within the design field. During his concluding remarks at the conference, Yan Zixiang, chairman of the Architectural Society of China, proposed with enthusiasm to incorporate the Daging Spirit into urban planning and architectural design. The emphasis was placed on the strategies and approaches to promote the Scientific Gandalei nationwide, which involves the reduction of architectural standards for non-productive buildings to the greatest extent possible. Yan emphasized in his speech that the promotion of Gandalei must be carefully tailored to local conditions, thereby opposing the replication of Daging's scientific Gandalei Dwelling on a national scale. In pursuit of this objective, Yan deliberately identified the attributes associated with Gandalei that could be promoted on a national scale as the "Daqing Gandalei Spirit", in particular the use of local materials of low cost. In this discourse, we argue that the term "Daging Gandalei Spirit" encompasses the notion of "cost-effectiveness."

In light of the agitated domestic political climate, these arguments were presented in a straightforward manner and served as cautionary rebuttals on a technical level, articulating concerns about formalising the Daqing experience within the disciplines of urban planning and architectural design. This stance is a representation of the ASC's determined efforts to find a possible equilibrium between political pressure and professional expertise. The introduction of this concept marked the beginning of formalising the Daqing Spirit in these disciplines. Fundamentally, this process entailed the ruling authorities wielding political power in order to directly influence and determine the technical standards of professional disciplines based on economic considerations. Two academic and practical fields, namely, urban planning and architectural design were specifically motivated to reduce the design and construction standards of non-productive structures.

If the campaign of Learn from Daqing in Industry merely bestowed a high degree of political correctness on the spatial practices and lifestyle provided by Daqing, then the Cultural Revolution that began in May 1966 further elevated these aspects to a sacred status, based solely on the practical application of Mao Zedong Thoughts and the Daqing Red Flag that Mao himself established and dictated. Specifically, the 1971 *People's Daily* front-page editorial titled "Learn from Daqing in Industry"

stated that defending the practices of Daqing was equivalent to defending the supreme leader, Mao, against all kinds of threats. Therefore, any practices that occurred in the Daqing Oilfield, particularly local spatial practices and the lifestyle provided by local authorities, became irrefutable, resulting in a complete path "lock-in" at the political level. Not adhering to these principles could be considered treason.

This path "lock-in", which occurred top-down on a national scale, significantly limited the fundamental logic, methods, and strategies of spatial planning in Daging Oilfield set by the local authorities (the Songliao Petroleum Campaign Leading Group (SPCLG) and the Daging Revolutionary Committee, different titles used at different times) post-1966. The guidelines of "surface serves the subsurface," and "Production First, Livelihood Second" became the guidelines along which local spatial planning had to occur. This essentially translated into the austere and simple living model represented by the spirit of self-sufficiency exemplified by the principle of "Integration of Workers and Farmers, Unity of Urban and Rural" and the practice of constructing residential areas next to the infrastructure and facilities of the petroleum industry. These basic principles became constants that the Daging authorities and the Design Institute had to emphasize in any spatial planning post-1966 repeatedly. In other words, spatial planning and architectural design were deliberately conceived and constructed to serve as the carriers capable of providing a plain and simple lifestyle and to enhance the industrial production. They were consciously locked into a specific spatial form and a particular architectural technique.

During the early 1980s, these locked-in practices became severe constraints hindering the development of the built and unbuilt environments locally, leading to numerous problems with spatial planning, construction, and utilization. These issues were collectively referred to as "spatial contradictions" in the Design Institute's internal documents. These contradictions arose as a result of the inadequacy of the original spatial structure of the worker town, central village, and settlement to satisfy the needs of oilfield development in an optimal form. They were also influenced by the expanding desire of locals for improved public facilities and better living conditions. It is believed that during the years 1960–1963, in exchange for the Central Government's objective of constructing the petroleum industry, workers in Daqing Oilfield sacrificed their personal quality of life and health. The conditions were worsened due to the Great Famine. However, by the time, when the infrastructure and facilities of the petroleum industry had been considerably developed, and the annual output of Daqing Oilfield consistently had been increasing since 1966, contributing significantly to the national economy, especially in the early 1970s, oil

was produced in Daqing in sufficient quantities and began to be exported to Japan, bringing back substantial foreign exchange.³¹⁷ Local residents had valid reasons to demand better living conditions.

A further failure of spatial practice was exemplified by the Daging authorities' decision in 1973 to discontinue the use of various underground industrial facilities in which they had made significant investments since 1965. These underground industrial facilities, including oil depots, combined stations, and substations, were deliberately crafted in response to the weather conditions and the risk of war caused by the rupture of Sino-Soviet relations and the ensuing military confrontations between the two countries. Faced with war risks, the principles of "surface serves the subsurface," and "Production First, Livelihood Second" during the era of Learn from Daging in Industry and the Cultural Revolution dictated local authority's adoption of the spatial practice of constructing underground industrial facilities. This spatial model continued the consistent principle of the authorities to invest as many available materials and human resources as possible into the construction of industrial facilities. It ensured the annual production of petroleum and petrochemical products and the progression of the oil industry. However, the inherent risk of difficulty in personnel evacuation during emergencies in underground oil facilities prompted the Daging authority to forsake the use of these facilities. Several fires and explosions in the early 1970s caused by improper operations, that resulted in a substantial number of casualties were major factors in this decision.

9.1.1 The Unstoppable Expansion of the Saertu Worker Town

Between 1964 and 1977, the authority of the Daqing Oilfield struggled to effectively curb the expansion of Saertu Worker's Town through spatial planning tools. This situation did not arise due to a lack of competent planning teams able to provide the Daqing Oil Field authorities with prescient spatial planning. As early as December 1961, the Daqing Design Institute proposed the "160 km² Planning and Design of Saertu Oilfield," considering the abundant underground oil reserves mostly located in the Saertu region, as well as two other sites in Ranghulu and Lamadian. The Design Institute had previously acknowledged in the plan the crucial need to pose strict regulations on the construction of residential areas in and around

³¹⁷ Daqing Oilfield Development Brief History (Compiler) (1984). 'Chapter 1, Section 4: The economic status of the Daqing Oilfield in the national petroleum industry [第一章第四节 大庆油田在全国石油工业中的经济地位]' in: Daqing Oilfield Development Brief History [大庆油田发展简史]. Printed by Daqing Daily Printing Factory, Daqing, pp.19.

Saertu Town, with the aim of restricting its permanent population to a maximum of 20,000 inhabitants. However, when the proposed plan sought to establish Saertu Worker Town as the base for the SPCLG's headquarters and its subordinate administrative entities, such as the Commercial Bureau and Grain Bureau, it essentially designated this town as the command center for the entire oilfield. This, unfortunately, would not aid in population control and the number of inhabitants grew steadily.

Another significant aspect of the plan was the proposal to designate Ranghulu Worker Town as the entire oilfield's future development, construction, and production command center, including design institutes, research institutes, and related institutions within the town. Based on this plan, Ranghulu would become the largest worker town in the entire oilfield, intended to accommodate a permanent population of 50,000. Nevertheless, the SPCLG did not put this plan into action, nor did they articulate the reasons for non-implementation. This issue increasingly constrained the authority's ability to develop the oilfield further.

The rationale that the SPCLG could provide can be inferred from their official discourse given in 1964 when they rejected the plan of relocating the headquarters from Saertu Town to Ranghulu Town. In the autumn of 1963, the SPCLG planned to move its administrative organs from Saertu to Ranghulu. Accordingly, the Design Institute made the spatial planning and architectural designs, and the Infrastructure Department even constructed part of the planned offices within a short period. However, in early 1964, the leadership of the SPCLG unexpectedly halted this plan with the argument that, given the heavy production demands, keeping the headquarter and offices in Saertu, closer to the oilfield development area, would facilitate the SPCLG to resolve various issues swiftly. Although this response was entirely politically and administratively correct, it remained superficial, failing to dive into the motivations intimately connected to the SPCLG's entrenched interests.

The undisclosed interests preventing the relocation of the headquarters from Saertu to Ranghulu are undeniably significant and cannot be overlooked. One of these is political interest, requiring them to practically support the report submitted by the Ministry of Petroleum to the Central Government in December 1963. As argued in

³¹⁸ Petroleum Fifth Design Institute (1961). Construction Planning Design of 160 Square Kilometers in the Saertu Oilfield 「萨尔图油田一百六十平方公里建设规划设计]. Daging.

³¹⁹ Zhu, Y. (2017). [Interview]. Daqing City Planning and Architectural Design Research Institute. July 5. Location: No.4 Renmin West Road, Saertu District, Daqing City, Heilongjiang Province.

³²⁰ Office of the Daqing Local Chronicles Compilation Committee. (1988). 'Urban and Rural Construction [城乡建设]'. In *Daqing Gazetteer* [大庆市志], (p. 91). Nanjing: Nanjing Publishing House.

Section 6.1, this report might be seen as a political tribute from Yu and Kang to Mao. Its composition is founded upon the Anshan Constitution, a document that Mao held in great esteem. One standard emphasized in the Anshan Constitution is the participation of leading cadres in labor, a point which the report of the Ministry of Petroleum echoes and develops. The report attributes the success of the GPC to the fact that these high-level cadres have consistently worked and resided at the frontline of the oil industry, specifically in the Saertu Oilfield. If the SPCLG had decided to relocate its offices from Saertu Town to Ranghulu Town in the early months of 1964, it would have been interpreted as a strategic withdrawal of the cadres from their active involvement in frontline operations. This would be tantamount to contradicting their political declaration with actual actions and had to be prevented.

Another implicit incentive is likely derived from the completed public facilities in Saertu Town, which could provide enhanced lifestyle conveniences for the members of the SPCLG in comparison to other worker towns mostly inhabited only by ordinary workers. As the hub for materials distribution and public transportation for the entire oilfield. Saertu town had unique commercial and entertainment facilities. Even more significant was the installation of the Daging Oilfield Workers Hospital in Saertu. Funded by a special grant from the State Council in July 1961, it was the only comprehensive hospital in Daging at the time, and the only one capable of performing sterile surgeries. 321 It was even among the earliest to have a multistory building in Daging with a total of four floors. Given the fact that there was a lack of highways connecting Saertu and Ranghulu at the time, the transportation cost between the two worker towns would take at least an hour and a half. The headquarters being located in Ranghulu would undoubtedly increase the difficulty for the members of the SPCLG in accessing the aforementioned facilities, especially considering that many of them were older and had higher demands for better medical conditions. Therefore, Kang terminated the proposed course of action.

Despite Kang's opposition to relocating the headquarter and offices to Ranghulu, he had to depend on spatial planning tools in an effort to mitigate the risk of a sudden increase in population within Saertu Town. Consequently, the Design Institute repeatedly placed significant emphasis on the necessity to keep the scale of the worker towns to below 20,000 individuals in the First Phase Oilfield Construction

³²¹ CPC Central Committee (1961). Notice of the Central Committee of the Communist Party of China on the Establishment of the XX Oilfield Workers' Hospital. Beijing, July 23, 1961.

Cong, Z. (1990). 'Recollections on the Establishment of Daqing Workers' Hospital [忆大庆职工医院的建立]', in Tian, R., Zhu, Z., & Zhang, H. (eds.) *Daqing Oil Campaign - Daqing Historical and Literary Materials Volume II* [大庆石油会战——大庆文史资料第二辑]. pp. 350-356. China Literature and History Publishing House. Beijing. ISBN 5034-0130-3/k.094.

Plan, developed in June 1963, and the Daging Oilfield 1966-1970 Construction Plan, developed in September 1965. During the period from 1963 to 1970, a total of 47 subordinate enterprises established their production units, central villages, and settlements in or near Saertu town. 322 The subordinate enterprises, mirroring Kang's rationale, possessed a clear objective, which was to secure better access to resources necessary for sustenance while simultaneously meeting the demands of industrial production. It is unsurprising that these subordinate enterprises followed the precedent of refusal to relocate for the reason of ensuring petroleum development efficiency set by the SPCLG. Such an approach, however, not only failed to control the size of Sartu Town but also exacerbated the issue. By the end of 1970, the built-up area within the jurisdiction of Saertu Town had reached 8.6 square kilometers, accommodating a population of 196,000 individuals. The population exceeded the prescribed amount outlined in the 1961 and 1963 plans by an approximate factor of 10.323 It is evident that the SPCLG has seen a decline in its ability to regulate the expansion of Sartu Town and that other factors were in play beyond the control of the SPCLG.

The substantial aggregation of subsidiary enterprises within Saertu Town and its surrounding areas inevitably led to a disorder of spatial practice within this region. Given that such an aggregation occurred within the industrial development area atop Saertu Oilfield, their presence significantly impeded the local authority's objectives to accelerate oilfield development and augment crude oil output. The site allocated for oilfield development experienced encroachment by the residences of local residents. Simultaneously, the aggregation of production units and the associated central villages and settlements resulted in an increase in the population density of the area, leading to challenges to the quality of life for the employees of these enterprises. This inconvenience stemmed from the incapacity of existing public infrastructure within Saertu Town to satisfy the escalating demands brought about by the population growth, particularly exemplified by the rise in public transportation needs. Various official documents describe this disorder as a "contradiction between production and living." 324 This description accurately reflects the spatial planning and construction issues that existed in Saertu Town and its surrounding areas at the time. Although the authorities have consistently claimed that they would not build cities or city centers, the practice have exhibited issues similar to urban problems.

³²² Daqing City Saertu District Records Office. (1986). Administrative Divisions [区划]. In Saertu District Records (Vol. 1, Chapter 3, Section 2) [萨尔图区志 (第一编,第三章,第二节)]. Daqing: Internal Release.

³²³ Daqing City Saertu District Records Office. (1986). Population [人口]. In Saertu District Records (Vol.2, Chapter 3, Section 2) [萨尔图区志 (第二编,第三章,第二节)]. Daqing: Internal Release.

³²⁴ Zhu, Y. (2017). [Interview]. Daqing City Planning and Architectural Design Research Institute. July 5. Location: No.4 Renmin West Road, Saertu District, Daqing City, Heilongjiang Province.

In 1970, the Daqing Revolutionary Committee once again attempted to use a more targeted planning tool to resolve the "contradiction between production and living" in Saertu Town by commissioning the Daging Design Institute to make the "Red Flag Town Mining Area Construction Plan" to limit population growth and continuous expansion in Saertu Town. 325 Here, Red Flag Town refers to Saertu Town, which was renamed during the Cultural Revolution to symbolize the Daqing Oilfield as a red flag erected by Mao. This plan represents a significant milestone in the development of the Daging Oilfield mining area, as it marks the initiation of the Daging Revolutionary Committee's efforts to establish a comprehensive construction plan for worker towns within the oilfield. It is an effort to reorganize the disorganized spatial structure of the oilfield. In addition to proposing the construction of 77 new facilities for oil extraction, water and electricity supply, and other services, the plan also suggests strengthening the construction of public service facilities and infrastructure such as water, electricity, gas, and road networks in dispersed residential areas. The plan proposes strict control over the development of Red Flag Town, relocating units serving various oil extraction areas out of the town and dispersing them across different oil extraction areas. Simultaneously, it advocates that future construction within Red Flag Town should focus on adjustments and modifications while rigorously controlling the scale of the already-built units and the number of new units. It is evident that the Daging authorities aimed to effectively limit the expansion of Saertu Town through this spatial planning.

The efficacy of this spatial plan was nevertheless constrained by its alignment with the industrial plan. Despite being the first spatial plan targeting a specific worker town made by the local authority since the launch of the GPC, it did not conform to urban planning in the conventional sense. Specifically, the plan still adhered to the principle of "surface serves the subsurface" and failed to propose a comprehensive plan for the construction of commercial, food, cultural, educational, health, and sports systems. Concurrently, it did not change the existing arrangement whereby local utilities, including water, electricity, gas, and transportation networks, relied on corresponding industrial facilities. It continues to be totally an integral component of industrial planning, hence impeding the authorities from completely attaining their desired objectives.

In instances where spatial planning tools alone were insufficient in achieving the desired outcomes, the Daqing Revolutionary Committee turned to the establishment of a concurrent spatial planning regulatory administration. This was done with the aim of ensuring stricter control of Saertu Town's development, as outlined in the newly

³²⁵ Zhu, Y. (n.d.). History of Daqing Urban Planning [大庆城市规划史]. In [Unknown Book Title] (p. 632). Daqing. Reviewers: D. Han, J. Lei, C. Wan, J. Wang, & D. Liu. Audio-visual file provided by Zhu Yuncai, 2017.

formulated spatial plan. The administration that was established in 1971 is known as the Daqing Construction Bureau. In that same year, as part of the "Fourth Five-Year Plan (1971-1975)" of the mining area, the Daqing Design Institute mandated that every unit within the oilfield must obtain approval from the Daqing Construction Bureau for the construction of buildings and land use within the mining area. This management approach aimed to ensure the effective implementation of mining area plans and to regulate the population growth and scale expansion of the three worker towns.

Despite the simultaneous implementation of spatial planning tools and management approach by the Daqing Revolutionary Committee, their efforts to control the persistent population growth and scale expansion within Red Flag Town (Saertu), however, still proved to be ineffective. The failure can be attributed to the inability to effectively address the root cause of the aforementioned issues, which is the local authority's refusal to relocate its headquarters from Saertu to Ranghulu. Hence, regardless of the spatial planning tool and management approach employed by the local authority, their efforts in solving the problem were primarily focused on addressing the issue from a technical standpoint rather than adopting a systemic approach. Therefore, it could be argued that the deployment of the planning tools and the management approach can be fairly characterized as a form of compromise or, in a more negative light, as scapegoating. The failure of the Daqing Revolutionary Committee's desire to intervene in the expansion of the worker town's scale and population growth can be attributed to the inherent nature of this character.

9.2 Evolution in the Shadows: Changes Between the Two Key Moments

This objective of this section is to examine the approach for resolving the misalignment between local planning practice and the specific requirements of the residents within the planning principles, which were shaped by two major policy campaigns, namely, Learn from Daqing in Industry and the Cultural Revolution. Before any external factors could alter these established institutions for an extended period, the Daqing authorities had to seek strategies and solutions within the

326 Zhu, Y. (n.d.). History of Daqing Urban Planning [大庆城市规划史]. In [Unknown Book Title] (p. 633). Daqing. Reviewers: D. Han, J. Lei, C. Wan, J. Wang, & D. Liu. Audio-visual file provided by Zhu Yuncai, 2017.

confines of the current spatial planning principles. Evidently, from the late 1960s to the mid-1970s, these principles could no longer fully meet the strategic objectives of the Daqing Oilfield development and the growing expectations of the local populace for a better living environment. As a result, both the local authorities and the public attempted to embed their needs within the established principles or leverage the ambiguous definitions within them, broadening its implementation boundaries through layering or refining descriptions. The following section will delve into three actual cases to thoroughly analyze this strategic adjustment process in detail.

9.2.1 The Scientific Gandalei's New Clothes

The phenomenon of formalising spatial practices through political actions at the planning level was mirrored in a similar manner at the architectural design level. In the realm of architectural design, one cannot overlook the profound impact of an editorial that graced the pages of the People's Daily on April 2, 1966. This piece of literature sheds light upon the architectural layout and construction techniques employed in the creation of the Scientific Gandalei dwellings. It posits that this walling method, with its distinctive features, served as a remarkable and clear manifestation of the spirit and dedication of the laboring masses in communist China to their supreme leader. And they stood as a successful embodiment of Mao Zedong Thoughts. The launch of the Cultural Revolution in June of that year undoubtedly enhanced the political significance of the Scientific Gandalei dwellings. This was particularly evident in a 1971 front-page editorial in the *People's Daily*, which called on the Chinese people to safeguard Mao by upholding the Daging model. The emergence of the top-down national political campaigns had a profound impact on architectural design, namely in the Daqing Oilfield, where the architectural design pattern known as the Scientific Gandalei dwellings became prevalent.

Despite the Scientific Gandalei dwelling being a modification of the traditional Gandalei dwelling's walling techniques in response to numerous observed drawbacks, it does not fundamentally transcend the inherent challenges that persist within this walling method. In terms of architectural design, structure, and construction, the Scientific Gandalei dwelling is still a derivated form of Gandalei dwelling. While it inherits the cost-effective advantage of the traditional one, it does not entirely eliminate its drawbacks. For instance, due to their construction form and the materials used, traditional Gandalei dwelling suffers from a relatively short lifespan, poor natural lighting, ventilation, and often lack individual bathrooms or other hygienic facilities. In response to these issues, the Scientific Gandalei dwelling enhances load-bearing structures, incorporates waterproof construction layers, and

reduces the thickness of the clay walls to improve lighting, ventilation, and usable space. However, the advancements and merits of the Scientific Gandalei dwelling can only be observed when compared longitudinally with the traditional one, not in a horizontal comparison with other construction types. Specifically, it still lacks the structural stability and living comfort offered by brick or reinforced concrete structures. Therefore, the Scientific Gandalei dwelling serves primarily to mitigate the likelihood or delays the onset of these issues.

After 1966, the Scientific Gandalei dwelling began to fall short in meeting the increasing aspirations of the local workers for better housing that could offer superior living and working conditions. While the available official records may not explicitly document the local residents' advocacy for improved housing quality, instead, reports often glorify their pride in residing within these Gandalei dwellings. However, upon closer examination, their yearning for more comfortable built environments and residential forms is implicitly evident. Particularly, this pertains to the numerous oilfield workers, technicians, and their families who relocated from southern Chinese cities, typically characterized by relatively warm winters, to assist in the construction of Daqing's oil industry. An improved dwelling place offering slightly warmer, marginally more refined apartments, would undoubtedly alleviate their struggle with the region's harsh winter and the resultant homesickness. This desire for better living conditions is an intrinsic human trait, regardless of the prevailing social system or political ideology.

When the practice of the Scientific Gandalei dwelling was established as a result of consecutive political movements, there was no open and direct atmosphere within the authorities of the Daqing Oilfield to explore improved housing models. This did not, however, signify an absence of quiet, exploratory practices aimed at developing improved housing models locally. While there is a great lack of formal documentation, it becomes evident via the examination of several residential and office designs advocated by the Design Institute throughout the period from 1966 to 1976, that these designs primarily encompass new architectural structures and construction techniques, most of which have the potential to result in augmented expenses. Interestingly, the local authority neither publicized nor intentionally avoided publicity for these projects, which articulated that they were not politically suppressing local residents' aspirations for better living and working conditions. To maintain the oilfield's production levels, they had to turn a blind eye, to the efforts to improve housing technology for enhancing the quality of life. This decision was likely made to ensure local stability.

The local authority's tolerance did not extend to the blatant construction of a new housing model in the area, which was markedly different from the Scientific Gandalei

dwellings. These aforementioned conditions shaped the architectural manifestation of these new construction projects, making them mirror or closely resemble the appearance of the Scientific Gandalei dwelling. Specifically, even though the adoption of new construction techniques was meant to address the desire of local residents for improved living conditions, the Daqing authority aimed to incorporate these new-technique buildings while ensuring minimal deviation from the appearance of the Scientific Gandalei dwelling or their derivatives. Consequently, architects from the Design Institute were compelled to employ architectural design as a tool to mask the presence of these novel techniques. This masking was achieved by the deliberate emphasis on the presence of clay walls in the new designs, a hallmark architectural element of both traditional and Scientific Gandalei dwellings, particularly, the term Gandalei originates from a particular method of clay wall construction. Their objective was clear: to maintain the Spirit of Gandalei, or at least create the illusion of doing so.

The design modifications primarily target not so much the layout but the architectural structure and construction techniques employed in the Scientific Gandalei dwelling, with a specific emphasis on elements that are not easily observable from the outside. Engineers from the Design Institute revised the structure of this type of dwelling in 1966. This endeavor involved the incorporation of construction materials that possessed enhanced structural attributes, albeit at a higher expense. For instance, they enhanced the structure of the Scientific Gandalei dwelling by implementing modifications such as the replacement of wooden purlins with reinforced concrete and the substitution of wooden columns with brick counterparts. Despite the use of brick pillars, a large number of new houses still employed adobe techniques for the walls. The adaptation thus involved using an architectural structure of higher quality and cost while preserving the basic appearance of the Scientific Gandalei structure. This approach updated the architectural structure based on the Scientific Gandalei dwelling while maintaining the essential external design. This modification strategy is subtly astute as the improvements made to the building structure primarily focus on internal elements, rendering them less apparent when viewed from the exterior.

Under this framework, three major variations have emerged, distinguished by their wall forms. Figure 9.1 depicts the first variation. Despite adopting the aforementioned structure, it still retains the clay wall facade of the scientific Gandalei. It could be said that this is a structurally reinforced scientific Gandalei.

The recommended version proposed the integration of an additional red brick wall facade exterior to the clay walls. The historical documents of the Institute refer to this type of wall as "raw inside, cooked outside." This slogan terminology, used so often by the authorities, provides a vivid depiction distinguishing between the two building materials based on whether they undergo a high-temperature firing process: the un-fired clay wall situated indoors being "raw" and the fired red brick wall located outdoors being "cooked". Given the more stable material properties of red brick compared to clay walls, adding a red brick wall exterior to the clay wall enhances wall structural strength and better prevents clay wall collapse caused by moisture. This walling technique was widely employed from 1966 on in the engineering design of the Daqing Petroleum Institute, and was particularly used in the design of public buildings such as laboratories, restrooms, and classrooms. It was favored for its effectiveness in enhancing the structural integrity of the Scientific Gandalei dwelling's walls considerably.



FIG. 9.1 A Variation of Scientific Gandalei Using Brick Columns and Brick Door Frames. Souce: Penglin Zhu (Collected during the fieldwork).

327 Daqing Design Institute Chronicle Compilation Committee, (1987). Civil Construction and Roads [土建与道路]. In: *Design Institute Chronicle 1960-1985* [设计院志 1960-1985]. Daqing: Internal Document, p.70.

Whether the "raw inside, cooked outside" design could still be considered an iteration of the Scientific Gandalei dwelling is debatable when considered strictly from the perspective of wall construction form. However, from the standpoint of the building structure and construction functionality, it becomes considerably challenging to classify this form of walling technique as a continuation of the Scientific Gandalei dwelling. In addition to the internal clay wall, the current state of the building consists of brick columns, reinforced concrete purlins, and outer red brick walls, demonstrating a distinct departure from traditional and Scientific Gandalei dwellings. From a construction standpoint, the role of the internal clay wall is somewhat limited beyond providing better insulation during the colder seasons due to its relative thickness. It neither forms an integral part of the building structure nor does it enhance the moisture resistance of the brick wall. Furthermore, its presence as an interior wall surface is problematic; the gray color and the rough grain texture of the material do not contribute positively to the residents' aesthetic experience, particularly when compared to the more refined textures of conventional wall paint materials. It more closely resembled a brick house with features characteristic of the Scientific Gandalei dwelling.

In contrast to the "raw inside, cooked outside" technique, local residents humorously referred to another walling method that emerged during the same period as "cooked inside, raw outside". This term denotes a design where the interior walls of the house are made of red brick, which is then covered by an external clay wall surface. The reason of this covering is to hide the inferior quality of the bricks and to bring back to a certain degree the illusion of the traditional Gandalei dwelling. Figure 9.2 provides a clear illustration of this walling technique, taken from a local heritage site in the Longfeng District's Red Flag Village. Years of dereliction have caused the outer layer of the clay wall to peel away, revealing the red brick wall beneath. Based on an examination of official records, specifically those obtained from the Design Institute, there is a notable absence of any documented reports pertaining to the utilization of this walling method. Moreover, field studies have uncovered contradictory accounts from the senior personnel long employed in the Daging Oilfield. While there are assertions that the promotion of this walling method was attributed to the local authorities, others state it is a local residents' unofficial initiative. This conflicting information hinders this study's capacity to definitively determine whether the adoption of this wall construction method can be attributed to official promotion or private endeavors, based on firsthand historical data. The absence and contradictions within the data, however, do not obscure the fact that the "cooked inside, raw outside" walling method served to present brick houses as the Scientific Gandalei dwellings, particularly when considering the architecture and structural features of this method.



FIG. 9.2 A Variation of the Scientific Gandalei with "cooked inside, raw outside". Source: Gong Ge. Photo modified by Penglin Zhu to obscure individuals in the image.

When considering the potential categorization of the first new wall-building technique as an evolution of the Scientific Gandalei dwelling, it becomes evident that the second approach does not meet the criteria for being classed as a novel invention. Given the physical and chemical properties of the materials, clay wall surfaces are less stable than those made of red brick. From the perspective of optimizing the walling method of Scientific Gandalei dwelling, placing a clay wall surface on the outside of a red brick wall lacks practical significance. The primary objective of employing this technique is solely to create the visual illusion of a Scientific Gandalei dwelling for the brick house. Consequently, the essence of this construction method lies in its foundation as a brick pillar and brick wall structure, rather than as another iteration of the walling method of Scientific Gandalei dwelling.

It is somewhat ironic that both "cooked inside, raw outside" and "raw inside, cooked outside" techniques exist, especially when considering the particular emphasis laid by Yan Zixiang, the president of the Architectural Society of China, at the Yan'an Annual Meeting in March 1966. He specifically highlighted that the nationwide promotion of Daqing's Scientific Gandalei dwelling should not focus on its very building technology and form, but rather on residences built to align with

the Spirit of Gandalei. These residences should embody the spirit of perseverance and resilience through low construction costs and modest living standards. Yan underlined that materials like clay may not be suitable for the weather conditions of other regions. Hence, it is important to select materials that are appropriate for the specific local conditions, rather than only mimic the clay walls associated with the Scientific Gandalei attempting to declare adherence to the Spirit of Gandalei. Although the two walling methods that emerged in Daqing are suitable for local climatic conditions and may even represent improvements over previous techniques, both are attempts to emphasize their connection to the Scientific Gandalei and its spirit, by insisting on the preservation of the clay wall as a building element. This exemplifies how the dominant political ideology of local administrations brutally suppresses private endeavours to enhance living conditions.

The intent behind masquerading a brick wall as a Scientific Gandalei dwelling, regardless of whether the Daging authorities or private individuals drove the "cooked inside, raw outside" walling method, is apparently to be rooted in political objectives. It aims to serve political interests and to promote the Spirit of Gandalei as a manifestation of the communism ideology and Mao Zedong's Thoughts. In detail, if the local authorities were to endorse this walling method, it represents a compromise struck between responding to workers' demands for better living conditions and imperatively maintaining political correctness. Should the emergence of this construction technique originate from the local resident's enhancements, it equally represents a compromise as workers resort to their own solutions when their demands cannot be met by the authorities, yet not daring to break the political aura surrounding the Scientific Gandalei dwelling. It could be argued that regardless of who promoted this construction method, the Spirit of Gandalei endorsed by the political movement has imposed a restriction on walling methods, mandating the obligatory utilization of clay walls. This greatly constrains the development of architectural and structural possibilities available for the construction of local residents' houses.

9.2.2 A New Interpretation of the Planning Principle of Daging

The inability to effectively constrain the scale of Saertu Town (Hongqi), coupled with the local residents' desire for improved living conditions prompted the leaders within the Daqing Revolutionary Committee and Design Institute to reassess the applicability of the planning principle of *Integration of workers and farmers*, *unity of urban and rural*, *facilitation of production*, *and convenience for living*. They recognized the shortcomings associated with the absence of comprehensive urban

and rural planning, specifically in areas such as commercial, agricultural, cultural, educational, health, and sports sectors. Additionally, they found deficiencies in the planning of residential utilities such as water, electricity, gas, and road networks, as hindrances to the further development of oilfield production and enhancement of residents' living standards. It was also acknowledged by the local authority that the lack of detailed planning for worker towns such as Saertu Town resulted in an inability to control their scale in an organized way. Moreover, it was observed that the planning strategy of dispersed small residential areas posed certain drawbacks for coordinating residents' work and life. As a result, the Daging Revolutionary Committee and Design Institute put forth a proposition to explore more effective strategies for the implementation of this spatial planning principle that would also enhance the production of oil.

The prevailing political circumstances during that period rendered it impracticable for the Daging authorities and the Design Institute to fundamentally alter the principle of Integration of workers and farmers, unity of urban and rural, facilitation of production, and convenience for living. The individuals in question were left with no alternative but to identify strategies that carried reduced political risk in order to attain their objectives of restraining the expansion of Saertu Town and meeting the aspirations of the locals for better living standards. The approach involved augmenting the emphasis on the principle by incorporating additional explanatory annotations within various official planning documents. Specifically, the "1976-1980 Mining Area Construction Plan," "Daging Oilfield Surface Construction Plan (1977-1980)," and the "Mining Area Construction Fifth Five-Year Plan (1978-1980)," all reiterated the guiding thought of adhering to the planning principle. They all advocated for the dispersed spatial structure and discouraged the construction of a centralized oil city. By retaining the original planning principle in the planning texts, the local authority could ensure that they continuously received the benefits associated with political correctness. Following these statements, planning professionals would promptly point out that the spatial planning objectives under this principle were to construct balanced and dispersed industrial and agricultural sites, to control the construction in the three worker towns, and to enhance the completeness of facilities at all levels of residential areas.

The Daging Revolutionary Committee, along with the Design Institute, took advantage on the absence of explicit spatial structure definitions in the original planning principle. This gave them a little bit of room to move. Seeking to broaden the range of situations in which the original planning principle could be applied, they attempted to reinterpret the scope through subtle descriptions. In the added explanations, apart from maintaining Integration of workers and farmers, unity of urban and rural, the other parts seem similar to the original rule but contain nuanced but significative differences in interpretation. For instance, balanced and dispersed industrial and agricultural sites and the control of construction in the three worker towns were utilized to define the spatial structure represented by the *unity of urban and rural*. It is distinct from the entirely decentralized spatial structure previously advocated by the Petroleum Campaign Leading Group. Simultaneously, the proposed enhancement of the complete facilities in each level of residential areas was an attempt to redefine what constitutes *facilitation of production, convenience for living*. Previously, they referred to building residential areas next to industrial facilities in order to take advantage of water, electricity, and heating infrastructure. However, in this new context, they refer to installing the independent civilian infrastructure and facilities. The aforementioned endeavors indicate a prevailing aspiration among local authorities to introduce modifications to the established planning principles in order to cope with the problems that had occurred.

The supplementary discourses, however, present subtle variations that enriched the original spatial planning principle in a modest manner. They advocate for maintaining the decentralized spatial structure consisting of worker towns - central villages - settlements while increasing the scale of the central villages and residences to achieve controlled concentration regionally. The local authority expresses their aspirations that the expansion of central villages and residences could enhance the provision of comprehensive civilian amenities. One of their distinct objectives is to attract the units located in or near the worker towns to relocate to these larger and better-equipped central villages and residences. From the standpoint of adjusting spatial structures, these discourses exhibit a high degree of specificity. They are not proposed in opposition to the original principle, but rather as precise extensions or elaborations of it. This shows how little space they had to maneuver and to differ from the original quidelines provides under the leadership of the central government.

The proposed plans involved a reconceptualization of the scale of settlement, moving from the residential area of small production squads to larger production brigades. The local authority even renamed the newly designated settlement as a residential village in order to demonstrate the difference. The plans put forth three methods for addressing the construction requirements of newly residential villages and restructuring existing ones were suggested in these plans. Firstly, the plans stipulated the discontinuation of constructing settlements for new oil extraction squads, housing 200 residents. Instead, it was proposed that these settlements should be established within already existing central villages and settlements in the vicinity. Secondly, they proposed to merge the neighboring settlements of 200 people into residential villages. Finally, they required settlements built upon the oil extraction areas to be relocated in batches from the extraction area, and to be merged into nearby central villages and settlements. All these measures illustrate the will towards concentration.

Furthermore, these plans formalized the land use restrictions to facilitate the establishment of new central villages within the Daging Oilfield. They regulated that one central village should be established for every 120-250 Km² of oilfield's development area. For instance, the Lamadian and Xingshugang Oilfields constructed in 1975, along with the Putaohua Oilfield built in 1977, occupied areas of 100 Km², 300 Km², and 100 Km² respectively. The dimensions are not significantly divergent from the 160 km² Planning and Design of Saertu Oilfield with one central village. Specifically, the Daging Revolutionary Committee proposed the construction of one central village each on the Lamadian and Putaohua oilfields. along with two central villages and eight residential villages on the Xingshugang oilfield. Correspondingly, it is worth noting that the central villages established by the local authority on the three oilfields experienced an increase in size during the "Fifth Five-Year Plan" period (1976-1980), reaching a level comparable to that of worker towns. However, these modifications did not result in an elevation of the administrative hierarchy of these central villages, as they continued to retain their designation as central villages.

From the perspective of institutional change, this method of supplementing explanations mirrors what Mahony and Thelen describe as 'conversion.' That is, when institutional veto possibility is weak, and lacks the ability to dismantle an institution, they may exploit its inherent ambiguities to steer it towards more favorable functionalities and outcomes. Nevertheless, such alterations are by no means comprehensive; they are modest adjustments that do not contravene the principle of Integration of workers and farmers, unity of urban and rural, facilitation of production, and convenience for living. During the Learn from Daging in Industry Campaign and the Cultural Revolution, when Daging's spatial practices were elevated to practice Marxism and Mao Zedong Thoughts of communist utopia, the Daging spatial planning principle was further locked-in, which had already been institutionalized by Premier Zhou in 1962, at the political level. This 'lock-in' eliminated any possibility of fundamentally altering the principle. Consequently, even when the Daging Committee recognized in the early 1980s that this principle had started to hinder the progress of oilfield development, they lacked the ability to break from this path. There was thus little flexibility and adaptivity in their approaches.

329 Mahoney, J. and Thelen, K., (2010). A theory of gradual institutional change. *Explaining institutional change: Ambiguity, agency, and power*, 1, p.20.

9.2.3 Deep Beneath the Surface: Catastrophic Flames and Fury in Petroleum Facilities

In the early 1960s, as Sino-Soviet relations deteriorated and the risk of war increased, the authorities in Daging took proactive measures to promote a new industrial construction paradigm. This was done to prevent stagnation in the local petroleum industry operations in the event of a possible war. The actions undertaken by the authorities in Daging aligned with the "Third Front Construction" initiative, which was advocated by the Central Government in 1964. This initiative refers to a spatial strategy devised by the Central Government to mitigate the potential risks in light of the escalating Sino-Soviet tensions, the Vietnam War, and the military escalation by the United States in the South China Sea. It involved the relocation of industrial infrastructure and facilities from vulnerable areas prone to military strikes, such as Northeast China, Xinjiang, and the Southeastern coast, to the mountainous regions of Northwestern China. Cities were classified into different tiers, namely first-, second-, and third-line cities, by the Central Government based on their geographical proximity to coastal areas.³³⁰ In this classification, third-line cities were predominantly situated in the hinterlands of China, characterized by mountainous regions and other geographical features that facilitated the protection of industrial infrastructure.

Given that Daqing is less than 600 kilometers from the Sino-Soviet border, it would be categorized as a first-line city. However, considering the inherent immovability of underground petroleum reserves, the Daqing Revolutionary Committee had no choice but to treat this first-line city as if it were a third-line city. The aim was twofold: firstly, to minimize potential losses in case of a military strike, and secondly, to use the geographical conditions to the fullest extent possible to obscure petroleum facilities. This approach exhibited both benefits and drawbacks. On the positive side, the decentralized spatial layout adopted during the GPC coincidentally mitigated the risk of simultaneous destruction in the event of a potential attack. Conversely, a notable disadvantage was that the Songliao Plain, where Daqing is situated, lacks the large mountains that would naturally aid in concealing industrial facilities and construction progress. Thus, the local authority urged an innovative planning and building tactic.

330 Sun, D., (1995). The Major Transformation of China's Economic Construction Strategic Layout - A Brief Description of the Formation of the Third Front Construction Decision [我国经济建设战略布局的大转变 – 三线建设决策形成述略]. Party's Literature [党的文献], (3), 42-48.

As a result, the Daging Revolutionary Committee and the Design Institute put forth a novel architectural paradigm – the underground petroleum industrial facilities. Specifically, in 1965, they initiated the design and establishment of underground comprehensive stations, oil repositories, and transformer substations. 331 Notable projects in this regard include the South One, Two, and Three Oil Repositories, the West Two Oil Repository, and the newly constructed or renovated united stations, commencing from South Four Union. Building underground facilities associated with the oil industry was not an unprecedented occurrence globally. During the period of World War II, the German Government undertook the construction of underground petroleum facilities as a strategic measure to mitigate the risk of devastation resulting from aerial bombardments.³³² However, given the economic circumstances at the time, this decision might be seen as a daring step in the development of Daging.

The shift in the design paradigm of the facilities associated with the oil industry was inevitably fraught with difficulties in maintaining long-term practicality. The construction of petroleum industrial facilities underground leads to a substantial increase in construction costs. The increase is not solely due to the need for additional load-bearing structures and ventilation systems required for underground construction, but also originates from the increased financial and material investment needed to prevent potential industrial accidents. Surface petroleum facilities require effective management to avoid potential crude oil leaks, fires, or explosions during operation. However, the challenges posed by underground facilities, such as difficulties in personnel evacuation and firefighter and equipment access, necessitate even more detailed response strategies. Despite this, in October 1973, the North Two Underground United Station inevitably suffered a significant material and human casualty due to an unexpected explosion and fire. 333 The incident merely provided the local authority with a long-anticipated opportunity, furnishing them with a plausible excuse to halt such costly petroleum production facility construction methods.

The dominant factors that contributed to the discontinuation of underground petroleum facilities were the domestic political conflicts. Lin Biao, who advocated

³³¹ Chen, G., (2009). Planning and Design [规划与设计]. In: Daging Oilfield Chronicle 1959-2008 [大庆油田 志 1959-2008]. Harbin: Heilongjiang People's Publishing House, p.195. ISBN: 978-7-207-07642-7/K.872.

³³² Ford, T.J., (1946). Oil as a Factor in the German War Effort, 1933-1945. p.72, Offices of the Cabinet and Minister of Defence, S.W. 1.

³³³ Chen, G., (2009). Chronicle of Major Events from 1959 to 2008 [大事记1959-2008]. In: Daging Oilfield Chronicle 1959-2008 [大庆油田志 1959-2008]. Harbin: Heilongjiang People's Publishing House, p.22. ISBN: 978-7-207-07642-7/K.872.

for the "Third Front Construction" initiative, attempted to flee to the Soviet Union in an aircraft in September 1971. This endeavor resulted in an inexplicable crash in the Undurkhaan area of Mongolia. It marked the complete loss of Lin's political status and his followers, leading to the sidelining of his promoted spatial planning and construction strategies intended for war preparation by the Central Government. In line with this policy change, the Daqing Revolutionary Committee halted the construction of underground stations and storage facilities from October 1973 onwards, subsequently initiating a process of reconstruction to convert them into surface projects. Infrastructure corridors for oil, gas, water pipelines, electricity, and communication lines were established along the Saertu-Datong highway taking advantage of the easy accessibility. Crude oil storage facilities and warehouse projects were developed along the newly constructed Ranghulu-Tongliao railway which created a corridor for the outward transport of crude oil and material storage. 334 It is evident that the local authority continued to demonstrate a preference for the approach of constructing the facilities associated with the petroleum industry above ground.

It is noteworthy that the construction of underground petroleum facilities unintentionally enriched the principle of "surface serves the subsurface" in terms of facility usage. Workers who lived in the Gandalei Dwellings on the ground at night and worked in underground petroleum facilities during the day – could be considered as a practical manifestation of this principle. If the campaign of Learn from Daqing in Industry institutionalized the principle of "surface serves the subsurface", then the prosperity of the Third Front Construction gradually deepened the local path dependency on this institution in spatial practice.

³³⁴ Chen, G., (2009). Planning and Design [规划与设计]. In: *Daqing Oilfield Chronicle 1959-2008* [大庆油田志 1959-2008]. Harbin: Heilongjiang People's Publishing House, p.196. ISBN: 978-7-207-07642-7/K.872.

9.3 **Chapter Summary**

This chapter presents the planning disasters that occurred in the Daqing Oilfield between 1962 and 1977, characterized as aspects of the Spatial Petroleumscape. This chapter aims to explore the methods and means by which local authority expanded the scope of local planning principles that were established due to national political campaigns, particularly between two key periods. In Daqing, political campaigns such as Learn from Daqing in Industry, the Cultural Revolution, and the Third Front Construction had a significant role in the establishment and development of robust planning principles. This encompassed the solidification of temporary spatial practices of the Ministry of Petroleum, lending support to the highest leadership. As a result, the local authorities implicitly acknowledged and refrained from questioning the prevailing planning system. The interaction of these principles with other factors also posed challenges for local spatial practice.

In 1966, in response to residents' growing desire for an improved living environment, the Daqing authority initiated a modification project for the Scientific Gandalei dwellings. Against this backdrop, the Design Institute put out a proposition to augment the architectural structure, with a particular emphasis on the use of brick pillars and reinforced concrete beams. Although some buildings maintained the traditional clay wall structure, considering the physical properties of clay, the institute recommended a "raw inside, cooked outside" walling strategy. This new approach involved using external brick walls to enhance insulation. Notably, certain secondary principles and residents, with a focus on the quality of life, adopted the "cooked inside, raw outside" structure. This method disguised brick-and-concrete buildings as the Scientific Gandalei dwellings to circumvent potential policy or societal risks. The observed behavior reflects residents' strategic pursuit of enhancing living quality while revealing their compromises and balances between policy directives and actual needs.

In the mid-1970s, the Daqing authority demonstrated a novel approach to the interpretation and implementation of the existing planning principles. While adhering to the planning system, they skillfully exploited the vague boundaries of principle definitions and employed a layering description strategy. Consequently, the original "Worker Towns – Central Villages – Settlements" spatial structure underwent a transformation. The proposed approach involves modifying the scale and functions of spatial units, with a particular focus on shifting some inhabitants from worker towns to center villages. It aimed to successfully mitigate the demographic and spatial pressures experienced in the Saertu Worker Town. This procedure not only made the

planning system more adaptable to real-world challenges, but also demonstrated the local authority's balance and innovation between institutional frameworks and actual needs. This represents how, within a fixed planning system, one can deftly identify institutional gaps and adjust strategies flexibly to meet evolving practical demands.

Between 1965 and 1971, influenced by the Third Front Construction, underground oilfield facilities emerged as a strategic choice deemed to offer enhanced security against potential warfare. However, these facilities required substantial financial inputs for construction, maintenance, and operation. By 1971, with a shift in strategic direction, the numerous disadvantages of underground facilities became increasingly evident, leading to their gradual decline. While the rise and fall of underground oilfield facilities were not directly driven by two major national policies, namely, Learn from Daqing in Industry and the Cultural Revolution, their trajectory still reflected how local authorities, under a specific policy backdrop, seized opportunities between the key periods and strategically adjusted existing resources.

This chapter illustrates that local authority in Daqing, despite operating within an established and entrenched spatial planning system, still actively sought flexibility in spatial practices. The strategic actions can effectively be perceived as incremental changes set against the backdrop of planning path dependency.

10 Leveraging Daqing's Current Planning and Architectural Design

A Tool in the Struggle for the Right to Shape Its Future 1977-1978

This chapter aims to explore the power struggle between Hua Guofeng and Deng Xiaoping, two paramount figures in the Chinese Communist Party during the post-Mao Zedong era. It focuses on investigating how both built their respective political discourses and economic policies around the core issue of the Daqing Oilfield, subsequently orchestrating a reconstruction of Daqing's planning principles. The chapter is organized into three sections.

The first section predominantly delineates the 1977 National Conference of Learn from Daqing in Industry where Hua Guofeng, as Mao's appointed successor, played a pivotal role. A careful exploration of the key discussion points and representations during the conference will be undertaken. The objective is to analyze how Hua utilized the political legacy of "Learn from Daqing in Industry" as a tool to shape his economic and political directives aimed at consolidating his leadership position.

In the second section, the spotlight is cast on Deng Xiaoping, positioning him as a political adversary to Hua Guofeng, illustrating how, in 1978, Deng meticulously crafted his economic strategies and political discourse revolving around the Daqing Oilfield. This section, subdivided into two parts, firstly unveils how Deng, during his visit to Daqing, utilized the discrepancies between local living conditions and national contributions as strategic instruments, propelling the directive of "Building a Beautiful Daqing". Subsequently, it delves into how Deng triumphed over Hua at the Central Work Conference and the Third Plenum of the Eleventh Central Committee, ascending as China's de facto supreme leader, and how this triumph facilitated the crystallization of "Building a Beautiful Daqing" as the slogan of the new planning principle in Daqing.

The third section expounds on how local authorities and the Design Institute in Daqing executed and interpreted this revamped planning principle in spatial construction. Initially, it argues that the extensive multi-story residential projects they introduced epitomize a novel manifestation of "vertical layered" Scientific Gandalei dwellings. The argument is that Deng's directives somewhat constrained the local authorities and the Design Institute, limiting the potential comprehensive application of "Building a Beautiful Daqing" as the new planning principle, reducing it predominantly to a set of architectural design implementation standards.

This exploration aims to augment the intellectual discourse on the pivotal transitional period in China's political and economic landscape, providing intricate insights into the strategic recalibration of planning principles in Daqing.

10.1 Hua Guofeng's Daqing: Anointed by the Hand of Mao Zedong

With the demise of Mao Zedong on September 9, 1976, the decade-long Cultural Revolution was nearing its end. Nonetheless, the role of the Learn from Daqing in Industry as a political leverage, a prominently propagated symbol during the Cultural Revolution, the red flag erected by Mao, did not cease to exist but continued to have its effects. Prime Minister Hua Guofeng was the successor personally groomed and designated by Mao before his death. In designating Hua as his successor, Mao manifested a steadfast endorsement. However, this endorsement does not appear

to derive from Hua's capabilities or qualifications pertinent to the leadership role. Compared to Mao's nominal pre-successors, Liu Shaoqi and Lin Biao, Hua's track record and intraparty reputation are notably lacking. Before being appointed to a position in the Central Government in Beijing in 1971, Hua held prolonged roles in Hunan province, missing any experience within the Central Governmental echelons. Hence, Mao's partiality towards Hua most likely emanated from an anticipation that Hua would perpetuate his political trajectory rather than a holistic assessment of Hua's political prowess or leadership aptitude. This phenomenon accentuates that personal allegiance and the continuation of political doctrine often emerge as decisive determinants in the intricate dance of political succession.

Before his demise, Mao's declaration to Hua, "With You in Charge, I am at Ease," is ubiquitously cited as a potent testament and incontrovertible evidence of Hua's political legitimacy across both official narratives and grassroots documentation. This statement crystallized into a seminal symbol during the transfer of power to Hua, serving above all as the legal foundation and political safeguard for his ascension. While there remains academic contention over whether this statement genuinely encapsulated Mao's endorsement and trust of Hua, Hua and his proponents favored its amplification as a robust attestation to bolster his political standing.

Numerous political propagandas have encapsulated this sentiment. Notably, the political propaganda painting "With You in Charge, I am at Ease" by artist Li Yansheng in December 1976, epitomizes this genre (Figure 10.1). This artwork meticulously portrays the scenario wherein Mao, within his study at Zhongnanhai, inscribed this commentary for Hua. In the painting, Mao is depicted radiating vitality, his visage lit with a smile, and his right hand grasping a red pen, symbolizing ideological authority and power. In contrast, Hua clutches the inscribed paper with both hands, leaning slightly forward, manifesting profound reverence towards Mao. Although a hint of a smile graces his face, it's decidedly more restrained and humble, rendering him somewhat eclipsed by Mao's resplendence. Nevertheless, it is noteworthy that the artwork's artistic representation appears to be an embellished and exaggerated portrayal, particularly concerning Mao's apparent vitality, as his health at that time had unequivocally already deteriorated considerably. Such an artistic rendition was conceived to accentuate the seamless transition between the two leaders and underscore Hua's succession under Mao's blessing, underscoring its legitimacy and compliance.

³³⁵ Weatherley, R., (2010). *Mao's forgotten successor: the political career of Hua Guofeng.* Springer. P45, 113

³³⁶ Zhang, H., (1987). Old Matters, Residual Dreams [昨日旧事残梦]. In: Stepping Over the Thick Red Gate [跨过厚厚的大红门]. Beijing: Wenhui Press, p.280.



FIG. 10.1 With you in Charge, I am at ease. Source: Penglin Zhu (Collected during the fieldwork).

Hua possessed a keen understanding of the tenuous nature of his authority. Firstly, his ascension to power was designated by Mao, and subsequent to Mao's demise, he lost the safeguarding influence that had bestowed him with his position of power. Secondly, compared to other senior members of the Party, Hua's individual capabilities and political experience could be seen as inadequate, posing challenges in garnering broad admiration and authority. Following Mao's passing, Hua urgently sought a political event to consolidate both his political and military power and to elevate his prestige both within and outside the Party. His chosen method was to target and attack the "Gang of Four," headed by Mao's widow, Jiang Qing. Given Jiang's and her faction's extensive animosities with numerous senior Party members formed during the Cultural Revolution, Hua swiftly formed an anti-Jiang coalition, allying with leaders from other factions, most prominently with Marshal Ye Jianying.³³⁷ In October 1976, through coordinated efforts, the members of the "Gang of Four" were arrested.³³⁸ The legality of this arrest drew significant scrutiny, as it had bypassed standard review and legal protocols. This appeared more as a

³³⁷ Fontana, D.G., (1982). Background to the fall of Hua Guofeng. Asian Survey, 22(3), pp.237-260.

³³⁸ Wu, D., Liu, Z., & Zhu, Y., (2000). The Struggle to Smash the "Gang of Four" [关于粉碎"四人帮"的斗争]. Contemporary China History Studies [当代中国史研究], (October), pp.51-64.

meticulously orchestrated political maneuver by Hua, aiming to solidify his power. Seizing upon this event, Hua quickly fortified his power base and, to an extent, augmented his personal influence on the political stage. This event underscores the intricate nexus between power struggles and individual survival within the Chinese political framework.

Although after the arrest of the "Gang of Four," Hua endeavored to craft an image of himself as an astute and strong new leader through official media outlets like the *People's Daily*, he remained uncertain about the genuine solidity of his power. Notably, after having lost their shared adversary, the coalition he formed with many seasoned and influential Party members, might have been more nominal than substantive. 339 While no one overtly challenged his leadership at the time, in the wake of the common enemy's neutralization, Hua could not be certain of the continued loyalty of these allies. Consequently, he had to exert efforts in both political propaganda and tangible achievements to secure his leadership position.

In the early months of 1977, Hua employed the conventional party media outlets of the Chinese Communist Party (CCP), namely the *People's Daily, Liberation Army Daily*, and *Red Flag Magazine*, to systematically articulate his political discourses. On February 7, 1977, these media outlets concurrently published an editorial titled "Master the Documents, Grasp the Key Points." The article delineated, "*Mao emphasized that resolving the contradictions between socialism and capitalism is the principal theme (or guiding principle) and represents the overarching direction of all struggles and works. Currently, this contradiction is particularly manifest in the Party's struggle against the Gang of Four. Thus, intensively criticizing the Gang of Four has become the focal point and guiding principle of the present work. By firmly grasping this principle, all issues will find resolution." This discourse conveyed Hua's attempt to persist with Mao's narrative of class struggle, linking it directly to the fight against the Gang of Four and accentuating the central role of their criticism.*

Another salient perspective of the editorial was the introduction of the "Two Whatevers" principle, stipulating, "We will resolutely uphold whatever policy decisions Chairman Mao made, and unswervingly follow whatever instructions Chairman Mao gave." Literally interpreted, the "Two Whatevers" principle manifested Hua's staunch position in preserving Mao's preceding political decisions. It reflected an essence of power continuity and acceptance, underscoring Hua's stance on

³³⁹ Bonavia, D., (1981). "Exit Jiang Left-With Hua Not Far Behind," Far Eastern Economic Review, January 2, 1981, pp. 12-13.

³⁴⁰ People's Daily, Red Flag Magazine, PLA Daily Editorial Boards, (1977). Study the Documents Well and Grasp the Main Principles [学好文件抓住纲]. People's Daily, Red Flag Magazine, PLA Daily, 7 February, p.1.

inheriting Mao's political legacy. The editorial conveyed an unambiguous message, stating that Hua's appointment as successor was a choice made by Chairman Mao, and it was expected that everyone would support and approve of Hua's leadership.

Having solidified the foundation of his political discourses, Hua promptly embarked on elucidating his economic policies. This sequence—initially grounding in political rhetoric followed immediately by economic policy articulation—signaled that Hua would formulate economic strategies within the confines of his established political framework. Furthermore, it indicated that his economic tactics were to align with and be subservient to, his political advocacies. Leveraging the concept of "Grasping the Key Points," the *People's Daily* issued another front-page editorial titled "*Grasp* the Key Points, Govern the Nation, and Propel the New Leap Forward in the National Economy" on April 19th. 341 It officially put forth the concept of the "Great Leap" Forward" in the economy plan again, calling on governmental agencies at all levels to earnestly implement the Anshan Constitution, carry out mass movements to learn from Daging in industry and Dazhai in agriculture, and widely promote socialist labor competitions. Moreover, using Mao-era terminologies on the economic policy front, namely, "the Great Leap Forward," and "Learn from Daging in Industry, Learn from Dazhai in Agriculture," not only affirmed that Hua's economic policies were rooted in his political discourse but was also a deliberate maneuver, aimed at asserting Hua as the rightful and proper successor to Mao's leadership.

10.1.1 The 1977 National Conference of Learn from Daqing in Industry and the Prelude to a New Great Leap Forward

The Daqing Oilfield, being one of the crucial pillars of the nation's economy at that time, was accorded significant prominence in the new economic policy and was hailed as a model for the entire country. However, between 1966 and 1977, amidst the societal upheavals of the Cultural Revolution, the Daqing Oilfield faced many challenges. These challenges encompassed intermittent stagnation in production, impairment of production resources, and a highly chaotic social environment that necessitated the imposition of military control by the State Council in order to restore stability. Yet, even under such dire circumstances, Daqing Oilfield maintained a robust contribution to the national economy, with a solid and steady average

³⁴¹ Editorial of People's Daily, (1977). Grasp the Key Points, Govern the Nation, and Propel the New Leap Forward in the National Economy [抓纲治国推动国民经济新跃进]. *People's Daily*, 19 April, p.1.

annual growth rate.³⁴² This sturdy economic performance catered to Hua's needs in the formation of economic policies for that particular period. For him, it was not merely a responsibility assumed to revitalize an economy burdened by continuous social movements and upheaval; it also presented an opportunity to showcase his leadership abilities and political astuteness. As a result, Hua decided to repromote the Daqing model nationwide, with the aim of revitalizing the national economy, fortifying the state's strength, and further consolidating his political standing and influence.

Between April and May of 1977, Hua convened the National Conference of Learn from Daging in Industry in the name of the Central Committee of CCP. 343 The conference unfolded in two stages: it was first held in Daging from April 20th to 27th, then moved to Beijing from May 3rd to 13th. This procedure mandated that all participants, prior to the start of the conference, personally inspect the achievements of the Daging Oilfield construction and experience firsthand the working and living conditions of the local residents. The participants were instructed to tour several grassroots units, including oil extraction stations, drilling sites, and oilfield building places. Additionally, they were expected to engage with the local population by immersing themselves in the Scientific Gandalei dwellings in which the local inhabitants resided. 345 After this on-site experience, the participants initially summarized and discussed their observations at a designed venue in Daqing. They then proceeded to Beijing for a more in-depth deliberation. The phased and multilocation conference approach could be characterized as a highly organized method implemented by Hua. Through such a procedural setup, the objective was for participants to get a comprehensive, multi-faceted awareness and understanding of the Daging production model. Furthermore, it ensured that the meeting's objectives, direction, and anticipated outcomes could be more effectively aligned with the political and economic goals he aspired to achieve.

³⁴² Chen, G., (2009). Oil and Gas Field Development [油气田开发]. In: *Daqing Oilfield Chronicle 1959-2008* [大庆油田志 1959-2008]. Harbin: Heilongjiang People's Publishing House, p.259. ISBN: 978-7-207-07642-7/K.872.

³⁴³ Xinhua News Agency, (1977). The CPC Central Committee Issues a Notice to Convene a National Conference of Learn from Daqing in Industry [中共中央发出召开全国工业学大庆会议通知]. *People's Daily*, 27 January, p.1.

³⁴⁴ Xinhua News Agency, (1977). Under the Wise Leadership of Chairman Hua Personally Presiding, The National Conference of Learn from Daqing in Industry Solemnly Opened in Daqing Oilfield [在英明领袖华主席亲自主持下全国工业学大庆会议在大庆油田隆重开幕]. *People's Daily*, 23 April, p.1.

³⁴⁵ Xinhua News Agency, (1977). An Unprecedented Grand Meeting for Grasp the Key Points, Govern the Nation — Warmly Congratulating the Successful Opening of the National Conference of Learn from Daqing in Industry [抓纲治国的空前盛会——热烈祝贺全国工业学大庆会议胜利开幕]. People's Daily, 23 April, p.3.

According to a report from Xinhua News Agency, a prevailing sentiment was recognized among the delegates at the Daqing conference: the development of the industry should emulate the Daqing model. 346 Following the path of Daqing signifies adherence to the direction set by Mao for the nation's industrial development. The consensus reflected in this report aligns considerably with the recently articulated "Two Whatevers" principle. Hence, it can be reasonably inferred that the conference organizers could have intentionally guided the formation of this consensus. The primary objective for Hua in convening this meeting under the aegis of the Central Committee of the Chinese Communist Party was to cement his political discourses further.

Delving beyond the confines of this particular conference and examining it from a macroscopic perspective corroborates this hypothesis. This conference was closely sequenced by the National Conference of "Learn from Dazhai in Agriculture" which took place in December 1976 in Beijing. These conferences can be construed as episodes of a more extensive series, given that their thematic essence originates from Mao's 1964 proclamation: "Learn from Daqing in Industry, Learn from Dazhai in Agriculture, and Learn from the People's Liberation Army." Essentially, the motive behind the conference was not solely to promote the Daqing model but also to reinforce the doctrines and guidelines of Mao. Implicitly, this served to bolster Hua's political stature and influence.

Both in Daqing and Beijing, the conferences were convened in singular architectural structures with expansive spaces. In Daqing, the chosen venue was the newly constructed Daqing Sports Hall, located in the Saertu Worker Town. Meanwhile, in Beijing, the Great Hall of the People served as the venue. The choice of such large-scale structures for these conference venues had pragmatic reasons. On the one hand, their vastness was able to accommodate close to seven thousand attendees simultaneously, meeting the practical requirements of the conference. On the other hand, these expansive spaces granted ample room for the presenter to orchestrate the setting optimally for speeches and presentations to a large audience. Primarily, such broad spatial environments aided in crafting and amplifying the authoritative image of the speaker. Additionally, these venues offered the conference organizers abundant space that, through careful design and arrangement, could be tailored to serve the intentions and objectives of the hosting entity more effectively. The choice

³⁴⁶ Xinhua News Agency, (1977). Great Joy in Daqing [大庆大喜]. People's Daily, 23 April, p.3.

³⁴⁷ Mao, Z. (1964) 'Notes on the Spring Festival Conversation [春节谈话记要]', in *Long Live Mao Zedong Thought, 1968 Wuhan Edition [1968年武汉版《毛泽东思想万岁》]*, Wuhan: Initially collected by Wang Chaoxing and distributed by the Second Bureau of Wuhan University as "internal material", p. 063. Original presentation: February 07, 1964.

and utilization of these venues, which evidently bore political undertones, provide a clear insight into the detailed considerations the conference undertook in conveying authority and guiding public opinion.



FIG. 10.2 National Conference on Learning from Daqing in Industry Venue. Source: Penglin Zhu (Collected during the fieldwork).

The visual presentation at the National Conference of Learn from Daqing in Industry articulates Hua's political aspirations. Upon entering the conference hall in Beijing, attendees were first captivated by the prominent presence of a sizeable portrait of Mao hanging in the center of the hall. Above the portrait, the words "National Conference of Learn from Daqing in Industry" were boldly showcased on a red backdrop with white letters, flanked by five red flags on each side. This stage setting bore a striking resemblance to the state meetings conducted throughout the Cultural Revolution era. However, Mao's portrait was not the sole focus here as an equally large portrait of Hua was suspended to its right (Figure 10.2). By employing photographs of the same scale, Hua intended to convey that he held a political stature equivalent to Mao at the time. This technique of representing differences in power dynamics through the size of photographs was not arbitrary but rather was rooted in historical precedents. As early as 1959, during the celebration of the tenth National Day, although both Mao and Liu both held the title of "Chairman," the *People's Daily* deliberately reduced the size of Liu's photograph on its front page

(Figure 10.3). Although the size difference between the two photographs is minimal, the intent behind this action was unambiguous— to signify a disparity in their political power and to emphasize Mao's preeminent status.



FIG. 10.3 Front Page of People's Daily, October 1, 1959, Featuring Photos of Mao Zedong and Liu Shaoqi. Source: People's Daily.



FIG. 10.4 "Mao Zedong and Liu Shaoqi Standing on the Tiananmen Rostrum". Source: Penglin Zhu (Collected during the fieldwork).

In the visual representation of the photographs, Hua appears in an image almost identical to that of Mao. In his portrait, Hua is seen wearing a suit that closely resembles Mao's iconic attire, both in style and color, which is often referred to as the Mao Suit. He has a hairstyle resembling Mao's, and his demeanor and facial expression mirror Mao's very closely. Specifically, their head sizes and facial proportions are depicted nearly identically, going to such lengths as ensuring they both have identical nasolabial folds under the play of light and shadow. It is noteworthy that the facial scale of Liu on the right is evidently smaller than that of Mao on the left, although there is a slight disparity in the frame size of the two individuals in Figure 10.4. From photographs taken of their joint public appearances during the same period, it becomes evident that there is not much difference in the actual size of their faces. In fact, it can be observed that Liu's facial length seems slightly longer than that of Mao. Further comparison of the size of their collars reveals that Mao's is considerably larger than Liu's. Such visual distinctions vividly convey Mao's superior and authoritative status over Liu. This representational logic is similarly applied in the photographs of Hua and Mao. By showcasing facial proportion and clothing details nearly identical to Mao's, Hua not only portrays himself as Mao's legitimate successor but also implies he possesses power equivalent to Mao's. Through such visual representations, Hua crafts an image of himself as a second, almost a reborn, Mao.

The visual arrangement of the conference site subtly communicated Hua's political aims, while the speeches made by the invited keynote speakers served as a straightforward channel for his political assertions. These representatives were senior leaders of both the party and the state at the time. While it is challenging to verify if they genuinely supported Hua's leadership, their willingness to attend this conference and deliver speeches indicates, at that particular moment, that they cannot be considered as his political adversaries. Taking Li Xiannian, the then Vice Chairman of the CCP, as an example, he participated in parts of the Daging conference and delivered an opening address. The speech's content and structure centered around Hua's political discourses of "Grasp the Key Points, Govern the Nation."348 Li underscored that the conference had been called upon by the party's central leadership, undeniably signifying his support for Hua.

This backing was further evidenced in his subsequent remarks, where Li highlighted that the central leadership's decision to topple the "Gang of Four" epitomized the precise implementation of the Mao Zedong Thought. The aforementioned instruction gave rise to the significant strategy of "Learning from Daging in industry," which played a crucial role in initiating a new era of national economic progress. Consequently, he proposed that the Central Government's Fifth Five-Year Plan should prioritize economic advancement through the promotion of the dissemination of the Daging-style enterprise model. The content and structure of speeches by other participants, like Marshal Ye Jianying and Yu Qiuli, aligned with Li's narrative. The ideologies and economic frameworks they expounded undoubtedly aimed to deepen the attendees' understanding and endorsement of Hua's political discourses.

Given the circumstances of his ascent to political authority, Hua demonstrates a significant dependence on Mao's thoughts, policies, and even the nomenclature associated with these policies. At this conference, Hua officially put forth his economic policy discourse, referred to as the "New Great Leap Forward in National Economy." Despite its shared name, the content of this policy diverges significantly from Mao's Great Leap Forward. Hua's strategic initiative sought to expedite the growth of heavy industry and revitalize the economy by concentrating national financial resources on purchasing industrial equipment and technology from developed Western economies. 349 In contrast, Mao's policy relied on the selfproduction of the Chinese people. Hua prominently demonstrated the assertion to

³⁴⁸ Li, X, (1977). Opening Speech of the National Conference of Learn from Daqing in Industry by Li Xiannian, Member of the Central Political Bureau of the CPC, and Vice Premier of the State Council [全国工业学大庆会 议开幕词中共中央政治局委员、国务院副总理李先念]. People's Daily, 23 April, p.2.

³⁴⁹ Teiwes, F.C. and Sun, W., (2011). China's new economic policy under Hua Guofeng: party consensus and party myths. The China Journal, (66), pp.1-23.

be the rightful successor of Mao's economic strategies through deliberate utilization of Mao's economic policy terminology from the Great Leap Forward. This particular strategy encompassed the unique characteristics of his economic policies within the broader context of the political discourses.

Hua's policy orientation profoundly underscored the notion that political principles take precedence over economic policies. This implies that all his economic decisions were subordinated to his political principles and objectives. This perspective was prominently manifested in his admiration for the primacy of political work in the development of the Daging oilfield. On May 4, 1977, Yu Qiuli, then Deputy Prime Minister and former Minister of Petroleum, formally proposed the nationwide adoption of Daging-style enterprise standards on behalf of the Central Committee of the Communist Party at the Great Hall of the People in Beijing. 350 In reality, Hua was the primary architect behind these standards, with Yu merely serving as the spokesperson. The standards Yu introduced comprised six points, of which the first four were primarily oriented around political work. These standards emphasized the enterprise's commitment to socialist principles during its construction, the strengthening of party leadership, and the advocacy of the work ethic exhibited during the construction of the Daqing oilfield. In contrast, the last two points primarily emphasized technological innovation and the diversification of the economy. The heavy emphasis on political work within the established standards clearly reveals that Hua's political objectives dominated his overall strategy, with economic policies being perceived as means to achieve these political ends.

Within the purported "New Great Leap Forward" initiative proposed ambitiously carried out by Hua, the enhancement of workers' living conditions and social welfare was not included as a priority. This economic policy, presented during the National Conference of Learn from Daqing in Industry, continues the grand narrative of "heroism" from the Mao era. It underscores individual dedication and sacrifice as a means to the revitalization of the national economy. The rudimentary and outdated living conditions in Daqing were highlighted, as evidenced by the arrangement for delegates to reside in Daqing's makeshift dwellings. In this context, the realization of individual value and personal welfare pursuits are wholly aligned with national interests, subordinating individual well-being and worth to the objectives and aspirations of the state.

350 Yu, Q., (1977). Mobilizing the Entire Party and the Working Class Nationwide to Strive for the Popularization of Daqing-Style Enterprises (Report at the National Conference of Learn from Daqing in Industry on May 4, 1977) [全党、全国工人阶级动员起来为普及大庆式企业而奋斗 (一九七七年五月四日在全国工业学大庆会议上的报告)]. People's Daily, 8 May, p.1.

The decision to adopt the Daqing enterprise as a national model can be interpreted as a strategic choice with the objective of enhancing political legitimacy and cohesion. Nevertheless, the prioritization of political principles may have hindered Hua's endeavors in achieving the goals of national economic planning. Specifically, In July 1977, the State Planning Commission proposed a plan to import \$6.5 billion worth of foreign equipment and technology. 351 In February 1978, under Hua's influence, the National People's Congress passed the "Outline for the Development of the National Economy for the Ten Years 1976-1985," which was formulated by the Central Committee of the Chinese Communist Party. 352 The outline delineated a series of ambitious construction plans, such as aiming for an annual oil output of 250 million tons by 1985 and the establishment of ten large oilfields. To achieve these goals, the Central Government needed to invest a total of 70 billion yuan from 1978 to 1985, which corresponds to the entirety of the investment made by the Central Government from 1949 to 1977. It is fair to interpret this economic policy as an additional endeavor by Hua to defend his authority, with the aim of achieving results that would demonstrate his governing capabilities.

In the balance between political principles and economic benefits, there is an inherent tension between the two. Over-prioritizing political orientations might dampen the vigor and innovation of economic development, posing potential barriers to comprehensive economic recovery. Crucially, the prevailing economic development model of the "New Great Leap Forward" appears to be predicated upon maintaining low wages and living standards for workers, with significant government investment leaning predominantly towards industrial development and expansion. While this model may drive economic growth, it could also, to a degree, overlook and sacrifice the well-being of local inhabitants and social welfare, undeniably posing latent risks to sustained and stable progress. The economy was prioritized and seen as a future motor for enhancing living conditions.

³⁵¹ Chen, D. (2004). China's foreign economic introduction in the 1950s-1970s [20世纪50-70年代中国的对外经济引进], *Journal of Shanghai Administration Institute*, December, pp. 69-80, Shanghai Administration Institute.

³⁵² National People's Congress, 5th session, (1978). Resolution on the Ten-Year National Economic Development Plan Outline 1976-1985 [1976年到1985年发展国民经济十年规划纲要], announced 5 March, Beijing.

10.1.2 The Twin Pillars of Daqing: The Protagonists in the Spatial Representation

Following the "Learn from Daqing in Industry" conference, there was an emergence of political propaganda art that showcased Hua and the notable accomplishments associated with the building of the Daqing Oilfield. Hua not only continued Mao's political frameworks but also embraced the propaganda tools commonly used during Mao's era, with propaganda art being particularly prominent. These artworks perpetuated the Maoist tradition of reinforcing the authority of the sitting top leader, displaying many similar visual elements and themes, such as the red sun, red flags, and red slogans. These are frequently seen symbols in the socialist and communist visual language, symbolizing revolution, passion, and power. However, in depicting the power and personal charisma of Hua in comparison to Mao, given the actual differences between the two leaders, artists tended to employ different themes and visual elements to satisfy both political propaganda requirements and aesthetic considerations.



FIG. 10.5 Defeat the 'Gang of Four', Triumph in Production, A depiction of the achievements in the petroleum industry at the beginning of Hua Guofeng's administration. Source: Penglin Zhu (Collected during the fieldwork)

Figure 10.5 depicts a propaganda artwork emphasizing the construction of the Daging oil field, titled "Defeat the 'Gang of Four', Triumph in Production!" This piece was crafted by artists Deng Changyu and Chen Changgi in October 1977. Within this image, several visual elements inherited from the Mao era are evident. Central to the painting are three figures representative of the Daging People. Among them, two male figures are identifiable as oil workers by their silver helmets, a style previously featured in images portraying the Iron Man Wang Jinxi. The duo proudly holds a framed report clothed in red. The utilization of this red textile embellishment serves to enhance the importance of the document, thereby communicating a feeling of grandeur and triumph. The paper highlights the successful extraction of premiumgrade oil in the oil field subsequent to the ousting of the Gang of Four under Hua's leadership. Adjacent to the two men, a female figure showcases a glass bottle filled with high-quality black petroleum, adorned similarly with red fabric flowers. This presentation of the oil is juxtaposed against the report to the left, both highlighting the remarkable achievements of the Daging Oilfield. The female figure, dressed in light-colored work attire, exhibits a tan and robust physique. Her arm, lifting the bottle, is notably muscular, nearly matching the girth of the male figure's arm holding the framed report to the left. These artistic choices are not novel but are continuations of visual communication techniques from the Mao era.

One notable distinction between the political propaganda illustrations between Hua's era and Mao's era is in their thematic portrayal, particularly with regard to the accomplishments related to the development and production of the Daging Oilfield. This difference in thematic portrayal offers a direct and visual illustration of the distinctive approaches and priorities of the two leadership periods. The title of this artwork resonates with Hua's proclamation of the Grasp the Key Points, Govern the Nation, emphasizing the prevailing class contradiction between the Gang of Four and the Party. The artwork vividly illustrates the exceptional accomplishments of the Daging Oilfield after the downfall of the "Gang of Four." This painting not only unveils the political transition of the era but also serves to underscore Hua's economic policies presented during the "Learn from Daqing in Industry" conference. Specifically, within the Fifth Five-Year Plan, the aspiration was to leverage the Daqing experience to instigate ten analogous oilfields nationwide, fuelling the momentum for the "New Great Leap Forward." Thus, the artwork does not solely concentrate on the construction triumphs of the Daging Oilfield. Instead, it symbolizes the national promotion of the Daging model, thereby offering visual endorsement for Hua's advocated economic development strategy.

Consequently, during this period, propaganda art reflecting oil workers laboring in extreme conditions became less prevalent. The emphasis shifted towards showcasing the nationwide expansion and application of the Daqing model, and

its pivotal role in achieving national economic objectives. This aimed to bolster the value and feasibility of the Daging experience on a national scale, further solidifying and propagating Hua's political and economic philosophies. The oil industry infrastructure of Daqing consistently serves as the primary backdrop in these propaganda drawings. In Figure 10.6, titled "Hua Guofeng and Mao Zedong," the portrayal of the two leaders is seamlessly integrated with the backdrop of the Daging Oilfield, emphasizing the built environment. This image employs a myriad of visually rich and symbolically profound elements, suggesting Hua's intention to promote the Daging model and continue Mao's policies. The achievements of the Daging Oilfield construction are vividly illustrated in the painting, especially with the refinery positioned on the left-center, the iconic oil wells standing in the middle, and the oil infrastructure situated on the bottom right. Notably absent, however, are the Gandalei dwellings – symbolic of hard work and perseverance. This absence aligns with the themes emphasized in the "Learn from Daging in Industry" conference, which prioritized the industrial value of Daging over enhancing the living standards of its residents. Only the achievements of the Daqing Oilfield provide the setting that underscores the legacy and continuity between the two leaders.



FIG. 10.6 Hua Guofeng and Mao Zedong. Source: Yu Shengli

The deliberate positioning of figures and their symbolic implications in the image demonstrate the artist's thorough consideration of political undertones. At the heart of the composition, portraits of Hua and Mao are positioned in close proximity. This

arrangement serves to symbolize a seamless transition and unity in ideology and policy, underscoring their interconnected leadership. Following them, three youths represent trust and endorsement from various strata of Chinese society towards Hua's leadership. The wheat stalks, steamships, and spectacles they hold symbolize China's agriculture, industry, and intellectuals respectively. Beyond highlighting their societal roles and symbolic implications, the arrangement of these figures reinforces a lineage of leadership and followership – starting from Mao, extending through Hua, and ultimately to the people. This signifies that under the guidance of Mao's legacy, Hua could command the support and endorsement of all segments of the nation. The artistic techniques employed in this depiction echo the conventions traditionally used to emphasize Mao's paramount leadership stature.

A distinguishing feature of this propaganda creation lies in the portrayal of Mao's lifelike likeness against the backdrop of the Daqing Oilfields. Within this composition, the representation of Mao takes the shape of a bust, hovering above the scene. The ethereal treatment around his chest implies he does not exist tangibly within this setting but emerges as an abstract, spiritual representation that symbolizes the enduring and all-encompassing nature of Mao Zedong Thought. The scale of his portrait dominates the composition, being nearly twice the size of Hua's depiction. Authentic depictions of Mao in artistic endeavors pertaining to the Mao era are exceptionally rare. Artists typically resort to various symbols, patterns, and colors to represent Mao, such as the red sun, the covers of "On Contradiction" and "On Practice," the red flag, the Little Red Book, and badges worn by the oil workers, among other examples.

The selection of this aesthetic approach is not without purpose. Based on an analysis of historical data, it can be deduced that there are two primary factors that may be identified as contributing to this phenomenon. Firstly, Mao never actually visited Daqing. Therefore, placing his real image directly within the Daqing Oilfield's scene would seem historically inaccurate, potentially drawing criticism for fabricating the supreme leader's trajectory. Secondly, considering the deeply entrenched charisma and unparalleled authority Mao held in China at the time, there was no compelling need for artists to depict his actual likeness. Simple symbolic elements were sufficient to evoke resonance.

In the paintings that feature the Daqing Oilfield as the backdrop, Hua does not appear as an independent or complete narrative subject. Instead, his portrayal heavily relies on the profound presence of Mao. This dependence is evident in the composition of the painting. Although Hua is the subject of the artwork, he is not the centerpiece or the focal point of the canvas. Instead, to emphasize his political position and persona, Mao's lifelike image becomes the nucleus of the composition,

serving as the pivotal element anchoring the painting's narrative. This undeniably alludes to the perceived inadequacies in Hua's political authority and charisma and his dependency on the image of Mao. Moreover, rather than adopting traditional symbolic representations of Mao's image in the painting, a more realistic and vivid portrayal is chosen. This implies that artifacts, symbols, and colors associated with Mao were no longer adequate to bolster Hua's political stature; therefore, a more direct and pronounced representation of Mao was required for reinforcement. Furthermore, I argue that the enlarged depiction of Mao's likeness serves to compensate for the perceived lack of authority in Hua's leadership. Both the visual imbalance and the narrative asymmetry highlight the power disparity between Hua and Mao.

Artists simultaneously felt compelled to continually emphasize Mao's presence in works centered on Hua. This is demonstrated by the inclusion of a red flag in the top left corner and the red sun illuminating the oilfield mining area in the top right corner of this painting. The elements present in the composition continue to allude to Mao, as his figure is positioned at the focal point between the two aforementioned elements in the image, rather than Hua. Only by positioning Mao in such a prominent and commanding location could Hua maintain a firm footing within this narrative framework, ensuring that he was not marginalized. This artistic choice mirrors the political reality of the time, during the early stages of Hua's leadership, when his authority was not entirely established. To solidify his position, he had to lean on the immense reverence and prestige associated with Mao. This shares the same underlying logic as the layout of the National Conference of Learn from Daqing in Industry.

Hua's excessive dependence on Mao's political legacy, even to the extent of cloaking his distinctly different economic policies using the terminology of Mao's era, inevitably led him into a pitfall - inheriting the failed aspects of Mao's legacy. This, in turn, incited resentment from many party elders who had endured political persecution during Mao's time. They had largely been silent out of necessity during Mao's era, however, Mao was now deceased and they could alter their attitude. Hence, when Hua proposed a new Great Leap Forward, it unavoidably evoked memories of the Great Famine and economic collapse caused by the failure of the original Great Leap Forward among the party's upper echelons and the public. This assertion holds particular validity in light of the recent end of the Cultural Revolution and the burden the 1976 Tangshan earthquake imposed on the national economy. Hua's plan to purchase foreign technology and equipment with the full

³⁵³ Fontana, D.G., (1982). Background to the fall of Hua Guofeng. Asian Survey, 22(3), pp.237-260.

might of the country exceeded practical possibilities and violated fundamental economic regulations. This unquestionably heightened the skepticism of these individuals and could spark severe criticism.

It is worth mentioning that there exists a relatively restricted quantity of political propaganda artworks that revolve around the themes of Hua and Daqing. The primary reason for the low number of large artworks dedicated to Hua's era as the paramount leader of China is the brevity of his time in power, which imposed constraints on artists' ability to make such works. In current official Chinese material, Hua is frequently depicted as a leader who played a transitional role in the political landscape. Deng Xiaoping, the subsequent leader, had the belief that the policies put out by Hua lacked the necessary strength to firmly establish him as a separate and distinctive leader of his time.

10.2 Deng Xiaoping's Daqing: A Pledge to Unveil Its Beauty

After the "Learn from Daqing in Industry" conference in 1977, Deng Xiaoping, devoid of any administrative positions, emerged as a potential contender for Hua Guofeng's leadership. In 1976, Mao revoked all of Deng's intra-party and governmental roles, leaving him with just his party membership. Both Hua and Deng were elected as Deputy Prime Ministers at the Fourth National People's Congress on January 17, 1975. Notably, Deng ranked higher than Hua, standing first among the deputy premiers, just below Premier Zhou Enlai. 354 Deng had a more distinguished track record within the party compared to Hua, above all being a member of the Central Politburo Standing Committee of the Chinese Communist Party before the Cultural Revolution. By 1977, Deng was one of only two surviving first-generation members of the Politburo Standing Committee since the establishment of the People's Republic of China, the other being Chen Yun. Also this made him stand out. In terms of political experience, factional influence, and personal prestige, Hua was unmatched when compared to Deng. Consequently, Deng's potential return posed a substantial threat to Hua's ambition to consolidate his leadership position.

354 Lelyveld, J., (1976). Shifting in Peking Seems to Make Hua the Heir Apparent to Mao, *The New York Times*, April 8.

Following Mao's death, China's political landscape witnessed a series of reforms and power struggles. Deng's resurgence became a pivotal turning point in the subsequent political climate. Narratives surrounding the internal negotiations of his return are manifold, leading to varied historical interpretations. On the one hand, some contend that Hua, then central to the party leadership, initially adhered to the "Two Whatevers," aligning with Mao's decision on Deng and expressing reservations about Deng's reinstatement. 355/356 It was only under intra-party pressure, especially from party veterans like Chen Yun, that Hua began to reconsider his views. 357/358 According to this perspective, Deng, in his bid to return to the political epicenter. acquiesced to Hua's leadership, assuring no future attempts to redress his own political past. Contrastingly, a dissenting viewpoint suggests that Hua did not truly impede Deng's political comeback. Proponents of this stance argue that during the subsequent power tussle between Deng and Hua, narratives discrediting Hua were amplified to morally ground Deng's ascension to power.³⁵⁹ Despite the numerous interpretations surrounding this historical juncture, the absence of an exhaustive official account renders discerning an absolute truth challenging. All narratives might offer varying vantage points to the same fact. Indisputably, however, Deng's reemergence triggered a novel round of political power struggles. This conflict extended beyond mere power and resource allocation, delving into broader debates on China's future economic trajectory and political system.

On July 21, 1977, the third plenary session of the 10th Central Committee of the Communist Party of China reinstated Deng's positions within the Party, government, and military, marking his reemergence as a pivotal figure within the power echelons of the Communist Party. Deng refrained from directly challenging Hua's leadership. opting instead for a more cautious and observant strategy. Notably, when Hua proposed relying on foreign technology and equipment imports to drive economic development, Deng chose to support rather than oppose. This stance mirrored his 1975 policy proposals, hinting at his inclination towards more openness and collaboration. The Japanese magazine Nikkei, in its July 23, 1977 article, offered a positive assessment of Deng's decision, speculating that with his return, China

³⁵⁵ Cheng, Z., (2009). The process of Deng Xiaoping's third comeback [邓小平第三次复出经过], Bai Nian Chao [百年潮], (5), pp. 45-48.

³⁵⁶ Teiwes, F.C. and Sun, W., (2019). Hua Guofeng, Deng Xiaoping, and reversing the Verdict on the 1976 "Tiananmen incident". China Review, 19(4), pp.85-124.

³⁵⁷ Xiong, L., (2015). Chen Yun at the historic turning point of the Third Plenary Session of the Eleventh Central Committee [陈云在十一届三中全会的历史转折关头], Century Style [世纪风采], (1), pp. 3-9.

³⁵⁸ Bachman, D.M., (1985). II. Chen Yun, 1949-1984, in. Chen Yun and the Chinese political system, pp 81-

³⁵⁹ Han, G., (2011). Where Does the Controversy Over Hua Guofeng Come From [对华国锋的争议从何而来], Wen Shi Can Kao [文史参考], (15).

might place increased emphasis on technological collaboration and exchanges with the external world.³⁶⁰ At this juncture, Deng was undoubtedly seeking an opportune moment to challenge and reshape Hua's leadership in his own terms and narrative. This approach could be likened to that of a seasoned lion on the hunt: not immediately launching an attack but quietly tailing its prey, watching, and waiting for the optimal moment to strike. He was acutely aware of the importance of timing and strategy selection in the intricate game of political maneuvering in China at that moment.

Envisioning a New Horizon: Deng Xiaoping's 1978 Visit to 10.2.1 Daging and the Ouest for a Beautiful Daging

The very political rhetoric Deng used to challenge Hua could be traced back to some of the content from the National Conference of "Learn from Daging in Industry" campaign. Starting in 1978, Deng meaningfully began to question Hua's "Two Whatevers" principle by engaging in discreet conversations with high-ranking members of the Party. He astutely argued that Hua's political narratives contradicted the fundamental principles of Mao Zedong Thought, which is "seeking truth from facts." Deng chose to employ the central tenets from Mao's essay "On Practice" to critique and debate Hua's positions. The strategic brilliance of Deng's approach lay not in directly opposing Hua or his political narratives, but by referencing Mao's classic writings to underscore the importance of practical experience and the principle of "seeking truth from facts." This served to craftily provide a theoretical foundation for his own political narrative. What makes this even more intriguing is that the central argument of the challenge – "practice is the sole criterion for testing truth" - was rooted in the theory of Mao's "On Practice". Precisely based on the philosophy of this book, the development of the Daqing Oilfield was regarded as a successful practical implementation.

In May 1978, a special commentary titled "Practice Is the Sole Criterion for Testing Truth" was published in the Guangming Daily. Since 1956, Guangming Daily had functioned as a government-controlled official media outlet. Despite its status being secondary to People's Daily, both publications served the political objectives of the Party and state. This article has been authored by Hu Fuming, a distinguished faculty member from the Department of Politics and Education at Nanjing University. The core argument made in this article asserted that "social practice is the standard

³⁶⁰ Reference News Editors. (1977), Japan Economic News Reports: "China, Due to Deng Xiaoping's Return to Office, Will Keenly Focus on Foreign Technology" [《日本经济新闻》报道:《中国由于邓小平复职,将热切 注视国外技术》], Reference News, August 3, p. 4. Beijing.

for testing truth; from Marx, Engels, Lenin to Mao, their theories have all withstood the test of social practice, thus all theories should continuously undergo practical testing." It is discernible that, despite not explicitly contesting the "Two Whatevers" doctrine, the arguments propounded within the article invariably and systematically critique this theory.

There exist conflicting accounts concerning the precise origins of this article. The official narrative is epitomized by a commentary published in the *People's Daily* on May 4, 1988, titled "A Great Transition, A Brilliant Prelude." This viewpoint underscores the concerted efforts and intimate collaboration among relevant comrades, supported and organized by the central leadership, in the composition and revision of the article "Practice is the Sole Criterion for Testing Truth." Such a portrayal posits Deng as the pivotal figure orchestrating the conceptual direction of the piece. Conversely, Ma Peiwen, the former Deputy Editor-in-chief and Director of the Theory Department of the Guangming Daily, proffered a contrary assertion in a 2015 contribution to the Yanhuang Chungiu magazine. 362 Ma disassociated the article from a direct linkage with the central leadership figure of the time, Deng. Regardless of the presence or absence of Deng's influential shadow in the backdrop of the article, it later manifested itself as a leverage instrument ably wielded by Deng. It marked the moment when Deng commenced expressing challenges concerning the legitimacy of Hua's leadership. The complex historical juxtaposition shown here serves to demonstrate the nuanced relationship between authorship and purposeful political utilization that is inherent in the legacy of the piece.

Daging, meticulously chosen by Hua Guofeng as the exemplar of his political and economic policies, emerged as the arena upon which Deng Xiaoping launched his pointed challenge to Hua's leadership status. Leveraging the well-known topic of Daging, Deng aimed to demonstrate the uniqueness of his political and economic policies. From February 23rd to March 20th, 1978, Deng undertook a series of inspections in significant industrial cities in Northern and Northeastern China: Benxi, Daqing, Harbin, Changchun, Shenyang, Anshan, Tangshan, and Tianjin. 363 He deliberately chose these cities and regions, with a particular attention to Daging,

³⁶¹ Commentator. (1988). A Great Turning Point, A Brilliant Prelude: Commemorating the Tenth Anniversary of the Discussion on the Criterion of Truth [伟大的转折 辉煌的序曲——纪念关于真理标准问题讨论十周年], People's Daily, May 4, p. 1. Beijing.

³⁶² Ma, P. (2015). A Major Historical Fact That Must Be Clarified [必得澄清的一桩重大史实]. Yanhuang Chunqiu [炎黄春秋], (1), pp.22-23.

³⁶³ CPC Daging Municipal Committee Party History Research Office. (2010). Deng Xiaoping's Inspection of Daging and His Northern Tour [邓小平视察大庆及北方之行], In: Daging Reform and Opening Up History (1978-2009) [大庆改革开放史(1978-2009)], Beijing: CPC Party History Publishing House, pp. 16-20. ISBN: 978-7-80199-726-6.

as tangible examples to refute the political theories and economic policies put forth by Hua, through an examination of their administration, urban development, and the living conditions of the residents. Settling Daging as the arena, served Deng's purpose to translate his theoretical critique of Hua's policies into practical examples.

The traditional industrial cities or regions, represented by Daging, were precisely chosen by Deng based on a careful assessment of the disparity between the living conditions of their residents and their respective contributions to the nation. For instance, despite providing enormous economic benefits to the nation, the residents of Daging still struggled with substandard living conditions. Similarly, Tangshan was still in the process of reconstruction, having not yet recovered from the devastation caused by the 7.8 magnitude earthquake on July 28th, 1976. They symbolize the cities that made significant contributions to maintaining relative economic stability throughout the Cultural Revolution, even though the living conditions of their residents did not match their contributions.

Deng's potential to leverage the visit to Daging to articulate persuasive political discourses and economic policies that diverged from Hua's would significantly impact his capacity to challenge Hua's status as the supreme leader at the upcoming CCP Central Work Conference scheduled for November. Although not yet holding the actual highest leadership position in China, Deng, in his capacity as the Vice Chairman of the CCP Central Committee, had begun to take the initiative in his power struggle with Hua, the ruling premier and top-ranking party official. This was particularly evident after the publication of the commentary "Practice Is the Sole Criterion for Testing Truth" in the Guangming Daily, which destabilized the political foundation of Hua's rule—adhering to "Grasp the Key Points, Govern the Nation" and the "Two Whatevers".

Consequently, it is indisputable that Daging held significant importance as a pivotal destination on Deng's inspection tour, a fact underscored by his local visit itinerary. Upon arriving in Daging on September 14th, Deng immediately made his way to the geological exhibition room of the Daging Oilfield Scientific Research Institute to familiarize himself with drilling, exploration, and comprehensive utilization practices. In light of a substantial technological disparity observed between different leading foreign countries, he emphasized, "If Romanian drilling rigs are not good, you can buy American ones; you need to act quickly." Regarding industrial development, there existed a notable similarity between the stances of Deng and Hua. Both leaders emphasized the imperative of economic revitalization through the introduction of foreign appliances and techniques. Thus, this argument was not Deng's "ace in the hole" against Hua.

The divergences in economic policies between Deng and Hua stemmed from the question of whether and how to improve the working conditions and living standards of state-owned enterprise employees. The presence of "spatial contradictions" in the Daqing Oilfield provided Deng with an excellent opportunity to further his arguments, particularly in light of the irrepressible spatial chaos observed in the Saertu Worker Town and the proliferation of the Scientific Gandalei dwellings decked in "new clothes." Deng explicitly conveyed to the then-top Daqing Oilfield leader, Chen Liemin, his concern regarding the substantial contribution, while highlighting the inadequacy of workers' wages and emphasizing the necessity for their augmentation, "Daqing contributes significantly, but the workers' wages are too low; they should be increased. Housing should be improved; build multi-story buildings, and invest in construction materials. Otherwise, workers will not be able to work in peace. Daqing should be built into a beautiful oilfield." Deng's discourse conveyed not only his dissatisfaction with the spatial construction of Daqing but, more importantly, his steadfast support for improving the living conditions of the local residents.

Deng's serious concern for improving the local built environment necessitated a requisite alteration in the spatial policies and practices of the Daqing Oilfield leaders. Notably, Chen Liemin harbored a strong dislike towards multi-story buildings. In early 1977, at a local middle-level cadre meeting, he made a commitment that multi-story structures would not be allowed in Daqing during his tenure. However, after Deng's inspection visit, Chen promptly initiated a massive construction project of multi-story brick dwellings, thereby deviating from his initial commitment. During a local meeting, attendees posed a deliberate question to Chen regarding his stance on prohibiting building multi-story structures. In response, Chen skilfully contended that he never explicitly stated that building multi-story structures was prohibited in Daqing. Rather, he clarified that his personal choice was to abstain from residing in such structures. ³⁶⁵ Irrespective of Chen's underlying motives, it was Deng's visit that precipitated the transformation of the top local official's previous views on Daqing's architectural style.

Deng's pronouncement in Daqing regarding the enhancement of working conditions and living standards for workers in state-owned enterprises, which have made significant contributions, served as the foundation for further elaboration of his political discourses and economic policy. During the inspection visit in Harbin on September 30th, Deng put forth the proposition that remuneration should be primarily contingent upon the extent of an enterprise's contribution to the nation.

³⁶⁴ Ibid

³⁶⁵ Zhu, P. (2017). Research data collected through interviews with Gong Ge & Chen Wenlong, conducted in August. Daqing.

He thereby advocated for a system of merit-based distribution, while expressing opposition towards egalitarianism, which was found in Hua's policies. He maintained the conviction that implementing such an approach would effectively stimulate employees to enhance their technical skills and motivate management to elevate their level of administration. Simultaneously, he repeatedly emphasized to provincial and local leaders and staff that "We are too poor, too backward; frankly, we owe it to the people. We must now develop productivity and improve people's living conditions." ³⁶⁶ In contrast to Hua's perpetuation of the terminology associated with unsuccessful policies from the Mao era, such as the Great Leap Forward in the industry sector, Deng's policies were designed to swiftly resonate with the inhabitants of these traditional heavy-industrial regions, gaining their undivided support.

Upon formulating his economic policies, Deng strategically employed the Daging Oilfield as a leverage point to initiate political discourses that countered those of Hua. He first refuted Hua's policy of "Grasp the Key Points, Govern the Nation", especially dismissing Hua's suggestion to persist in prioritizing class struggle as the central focus of policy. He made a claim that the "Two whatevers" was not the essence of Mao Zedong's thought. Subsequently, Deng extended his criticism of Hua's discourses from a political-ideological perspective. He contended that any policy not centered on developing productivity and improving people's living conditions was inherently contradictory to the principles of Marxism. In his arguments, Deng underscored the imperative to recognize that an uncritical endorsement of the Daging experience is incongruous with the Chinese Communist Party's professed commitment to ascertaining truth through empirical analysis. He further asserted that such an approach would be inadequate in effectively resolving practical challenges in the real world. By this point, Deng had articulated his political discourse and economic policies through his visit to Daging, steadily preparing for a showdown with Hua at the Central Work Conference in November.

10.2.2 Forty Days, Two Meetings, and the Rise of Building a Beautiful Daqing

The Daqing Oilfield holds significant political and economic importance, serving as an arena for Hua Guofeng and Deng Xiaoping to articulate their political discourses and economic policies through disparate themes and approaches. Hua initiated with a particular emphasis on Mao's policy of "Learn from Daqing in Industry," organizing

366 Ibid

a national party conference around this focal point. This conference was designed to serve his political claims – asserting that he was the legitimate heir appointed by Mao Zedong, and representing Mao. The conference then supports his proposed new "Great Leap Forward in Industry." His intentional use of the Great Leap Forward, a terminology specifically associated with Mao's economic policy from 1958, which was also aimed at underscoring his status as Mao's legitimate successor. Diverged from Mao's policy, Hua's proposition was based on importing advanced technologies and equipment from abroad rather than solely depending on China's own resources. However, Hua continued Mao's approach of mobilizing the national resources for industrial development. It is noteworthy that Hua initially developed his political discourse, which served as the foundation for the subsequent formulation of his economic strategy.

Deng Xiaoping, the main challenger to Hua, took a different approach to the articulation of his political discourses and economic policies that were therefore diametrically opposite to Hua's. Instead of initiating economic policies based on political discourses as Hua did, Deng's approach was grounded in the practical circumstances of Daqing. From this ground, he then developed it into narratives of wider applicability. And finally, Deng put forth political discourses which served the realization of these economic policies. Initially, during the field inspection in Daging, he proposed the need to construct apartment buildings for local residents, improve living standards, and ultimately create a beautiful Daging. Subsequently, during the inspection visit in Harbin, Deng opposed the idea of egalitarianism and the disregard for improving workers' living standards, attributing it to the disproportionate allocation of resources on industrial development. Finally, during his inspections of other cities, he explicitly opposed the political discourses of "Grasp the Key Points, Govern the Nation," opposed the continuation of class struggle, and emphasized making economic development the central task of the entire party's work. It could be said that Deng first proposed economic policies and then put forth corresponding political and ideological discourses.

The head-to-head confrontation between Hua and Deng, which revolved around political discourses and economic policies represented by the management model, spatial planning, and construction of the Daqing Oilfield, occurred at the annual Central Work Conference of the CCP on November 10, 1978, in Beijing. In accordance with established administrative protocols, the CCP Central Committee conducts an annual conference lasting three to four days at the conclusion of each calendar year. The primary objective of this conference is to deliberate upon and formulate the economic plan for the forthcoming year or two. However, this time the duration of the conference spanned a total of 36 days, as it was marked by the political tussle between Hua and Deng. Particularly, the meeting began to deviate

from its initial agenda when party veteran Chen Yun proposed on November 12 to thoroughly address various issues exposed during the criticism of the Cultural Revolution and the Gang of Four. 367/368 Subsequently, the conference transformed into a platform for high-level party officials who supported Deng to criticize Hua's political discourses and economic policies. The struggle culminated with Hua's selfcriticism at the conference on December 15, signaling the failure of the new Great Leap Forward plan that Hua advocated.

Deng's triumph holds significant implications for the spatial planning of the Daging Oilfield and the allocations of employee benefits, as it signals the end of the previously dominant egalitarian practices. Following Hua's self-criticism, Deng, the winner of this power play, made the concluding speech of the conference entitled "Liberate the Mind, Seek Truth from Facts, and Unite as One in Looking Forward."³⁶⁹ In his speech, Deng placed particular emphasis on the importance of fostering independent thinking, adhering to objective reality, and grounding all actions in facts. This stance was presented as a rebuttal to Hua's attempt to promote a new Great Leap Forward, a plan Deng arqued to be incompatible with reality. Simultaneously, Deng urged the "appropriate restructuring of the superstructure and production relations that fail to align with the swift advancement of the productive forces," employing concise political terminology. 370 This phrase originates from the Marxist division of the economic base and superstructure. 371 In this discourse, Deng contended that the emphasis on egalitarianism in China's production relations at the time, especially in practices of state-owned enterprises like Daging Oilfield, could not stimulate the desired level of motivation among workers. Therefore, this approach proved inadequate in terms of enhancing productivity, achieving industrialization, and ultimately revitalizing the Chinese economy. The "constraint of the superstructure" in this sentence refers to Hua's advocacy for the political discourse of "Grasp the Key Points, Govern the Nation." Deng's speech ultimately became the consensus of this conference.

³⁶⁷ Bachman, D.M., (1985). II. Chen Yun, 1949-1984, in. Chen Yun and the Chinese political system, pp 81-

³⁶⁸ Zhang, J. (2012). Another Important Speech by Chen Yun in the 1978 Central Working Conference [陈云 在 1978 年中央工作会议上的另一次重要发言]. Shanghai Chen Yun Research [上海陈云研究], (0). pp,. 50-61

³⁶⁹ Deng, X. (1994). Liberate the Mind, Seek Truth from Facts, and Unite as One in Looking Forward [解放思 想,实事求是,团结一致向前看]. In: Selected Works of Deng Xiaoping (Volume II) [邓小平文选 (第二卷)]. Original Speech delivered on December 13, 1978, Beijing: People's Publishing House, pp.140-153.

³⁷¹ Marx, K., (1859). Preface to a Contribution to the Critique of Political Economy. The Marx-Engels Reader, 2, pp.3-6.

The essence of the Third Plenary Session of the Eleventh Central Committee, which took place in Beijing from December 18th to 22nd, was to institutionalize, through a nationwide conference, the consensus reached during the Central Work Conference. This consensus encompassed the political discourses and economic policies put forth by Deng. Specifically, in both conference form and content, the Third Plenary Session officially declared the failure of Hua's "Grasp the Key Points, Govern the Nation," and the new Great Leap Forward. The adoption of Deng's ideology, which emphasized economic development and the cessation of class struggle, emerged as the prevailing agenda of the Chinese Communist Party and the overarching national strategy of China. Notably, the plenary session incorporated Deng's summary report from the Central Work Conference as the thematic report, urging a redirection in the entire party's work focus toward the construction of socialist modernization.

The Third Plenary Session did not specifically address issues concerning Daging, the proceedings and outcomes of the meeting, however, literally institutionalized Deng's vision of "Building a Beautiful Daging" into a guiding principle for Daging's new spatial planning. As an epitome of Deng's political discourse and economic policies, "Building a Beautiful Daging" automatically acquired political and legal efficacy as the Central Committee of the CCP established Deng's policies as the new doctrine. During a critical timeframe of only 40 days, two pivotal conferences played a significant role in formalising Deng's visionary political discourses and economic policies. The intricacies of these conferences and their cumulative influence on Daging's urban development and planning principles present a top-down instance of the formalization process, whereby the winning political leader's vision is translated into tangible policy measures.

However, it is noteworthy that the Third Plenary Session did not alter the prevalent heroic narrative that represented Daging's spatial planning and construction practices. While Deng's economic policies evolved into a new party consensus Hua lost his capacity to dictate any crucial economic strategies. This ultimately led to Hua's voluntary departure from the position of Prime Minister during the third session of the Fifth National People's Congress on September 10, 1980. Despite experiencing a significant decline in authority, Hua managed to maintain his position as the president of the Chinese Communist Party (CCP), thereby continuing to have considerable influence over party-related matters. Nevertheless, the preservation of the heroic representation embedded in the Daging spatial narrative cannot be solely attributed to Hua's continuing tenure. The primary factor was the session's lack of in-depth engagement with the challenge of navigating the diverse political legacies bequeathed by Mao. This implies that Deng and his ally Chen Yun, upon regaining power, had not yet completely deliberated on the appropriate approach to handle the political legacy of the Supreme Leader, or they may have been anticipating a more favorable timing.

10.3 **Given by Deng: The New Planning Principle of Building a Beautiful Daqing**

By the end of 1978, following Deng's political triumph, his vision of "Building a Beautiful Daqing" became the foundation and leading principle guiding local urban planning, policy formulation, and architectural design. His directive of "Housing should be improved; build multi-story buildings, and invest in construction materials," was promptly integrated into the local architectural and construction principle. Yet, an examination of the extensive multi-story brick and concrete residential projects spearheaded by the local government at the end of 1978 suggests that local urban developers and architects may have failed to comprehend fully the profound implications and standards embodied by the "Building a Beautiful Daqing" vision. In their practical approach, local elites and architects from the Daqing Design Institute endeavored to directly transpose Deng's directive into their architectural designs and endeavors. Yet, such a literal and narrow interpretation potentially stymied local architects from adopting a professional perspective, which would have allowed them to tailor-make innovative systems and solutions suited to local conditions and needs.

10.3.1 Building a Beautiful Daging as an Architectural Design code

Clear evidence of this is provided in the internal documentation titled "Residential Dormitories, Single Index Album I & II," compiled by the Daqing Oilfield Construction Design Institute in 1984. This document set was intended to serve as a reference for the relevant professionals within the Design Institute during their residential designing process. Although the blueprints provided in this documentation are not the official drawings used for construction purposes, they serve as a helpful design aid tool for internal professional staff. Despite their simplified nature, these blueprints still contain sufficient architectural design details to support the intended perspective.

372 Daqing Oilfield Construction Design Research Institute (Editor). (1984). Residential Dormitories, Single Index Album I & II [住宅宿舍,单体索引图 上,下]. Daqing: Internal Materials. Material Number: Build-4870.

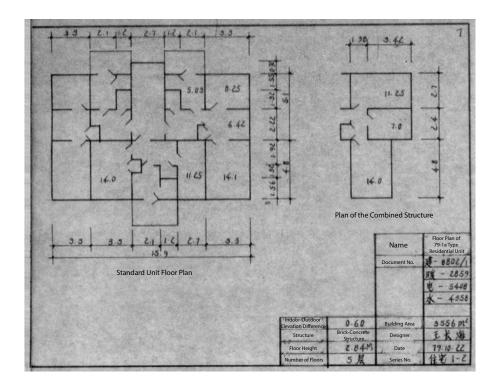


FIG. 10.7 Floor Plan 79-1a Type Residential Unit. Designer: Wang Changhai. Source: Hou Li. English Annotation: Penglin Zhu.

The numerous architectural designs presented in this booklet clearly illustrate the local authority and Design Institute's interpretation of the "Housing should be improved; build multi-story buildings, and invest in construction materials," architectural directive. Although these plans were independently conceived by different architects, they all evidently adhere to a unified design standard. Specifically, the designs employ a similar brick-concrete construction, typically spanning 4 or 5 floors, with the per capita floor space across the designs being quite consistent. For instance, considering designs 79-1a, 79-2a, and 79-3a crafted by architects Wang Changhai, Lv Shumin, and Shi Caixia respectively (Figure 10.7), each unit in these three designs covers an area of about 59 square meters. Given that an average Chinese family at the time comprised 4-5 members, this implies a per capita floor space would amount to around 12-15 square meters per person. Meanwhile, in the 82 1.2 model for single-worker dormitories, each dormitory spans about 15 square meters. This consistency underscores that the designs in this compilation all followed the same architectural standards.

It can be said that the authorities and the design institute have already incorporated the architectural usable area per household into one of the core indicators of Deng's directive. Taking the brick-concrete residential designs of 79-1a, 79-2a, and 79-3a as examples, each unit has an architectural area of 59 square meters. This is about 1.7 times the 35 square meters of the "Model 6502" type Scientific Gandalei. In the Model 6502, its unit layout consists of three rooms, including a kitchen. In contrast, the aforementioned brick-concrete residential design for each unit not only provides a kitchen but also an additional 4 to 5 rooms. This increase in the number of rooms brings evident convenience to a family of four, especially when family members can have separate bedrooms, avoiding mutual disturbance. Clearly, increasing the usable architectural area is a direct and effective way to improve the living quality of each household.

The augmentation in floor area allocated to each residential unit has afforded architects greater flexibility, thereby enabling the incorporation of features absent in the earlier Scientific Gandalei designs, which significantly enhance user experience. A salient illustration of this is the widespread adoption of individual restrooms within these designs. While the plans denoted as 79-1a, 79-2a, and 79-3a all feature individual restrooms for each unit type, such a provision was not standard in residential designs of that era. There still existed designs wherein two or three households shared a single restroom facility. Compared to the Scientific Gandalei, in which residents were relegated to using centralized communal restrooms, contemporary restroom designs evidently prioritize improved sanitary conditions and the privacy of inhabitants.

The new residential designs predominantly utilize a brick-concrete construction methodology, granting architects enhanced flexibility in floor planning. In contrast to the architectural design of the Scientific Gandalei dwelling typified by Model 6502. which commonly exhibits a linear layout akin to a rectangular box due to constraints in structural integrity and material durability, brick-concrete structures could provide a wider array of design possibilities. This construction method is characterized by its vertical load-bearing walls made of brick or masonry blocks, while horizontal load-bearing components like beams, floor slabs, and roofing panels are fabricated using reinforced concrete. Hence, in the aforementioned three design schemes, it is evident that architects have innovated in their floor planning approach, offering a more diverse and strategically sequenced room layout. Such designs not only enrich spatial configurations – for instance, second-floor balconies with distinctive designs afford optimal views – but also enhance the visual depth and layering of the architectural façade.

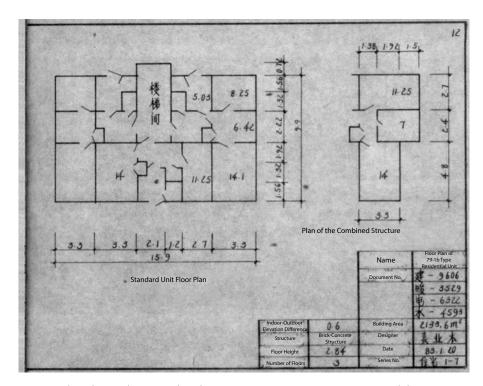


FIG. 10.8 Floor Plan 79-1b Type Residential Unit. Designer: Yuan Yemu. Source: Hou Li. English Annotation: Penglin Zhu.

The introduction of the new structural design serves to accommodate a larger population within a confined area by utilizing combinations of modular units. From a planimetric design perspective, it is noteworthy that two out of the three floor plans employ distinctly a modular approach. This design approach involves the linear repetition of units to form the residential layout, as illustrated in Figure 10.8. Both 79-1a and 79-2a adopt this format, with the former comprising four replicated modular units and the latter encompassing three. Furthermore, all three design schemes adopt a T-shaped modular spatial configuration. The staircase is strategically positioned at the juncture of the T-shape, serving as the pivotal point for both horizontal and vertical planes. It not only functions as the main circulation hub for each module unit but also constitutes the structural core. Architects have arranged three to four households at the three extremities of the T-shape. Specifically, both 79-1a and 79-2a could house three families per floor, whereas 79-3a accommodates 4. In all three plans, a household is positioned on either side of the staircase. However, in 79-3a, two households are situated directly opposite the staircase's entrance. Given that 79-3a does not resort to linear repetition of

units, there is a deliberate architectural intent to maximize the number of residential modules within the constraints of the structure's load-bearing capacity, thereby housing an increased number of people or families.

The directive delineated by Deng, which advocates for enhanced housing standards through the construction of multi-story buildings and the utilization of novel building materials, has been assiduously implemented by the architects of the Design Institute in their designs. Concurrently, the elevation of architectural standards bestowed upon them an expanded spectrum and augmented flexibility of design possibilities. They further interpreted the enhancement of housing standards as an increment in housing space and diversification of functionalities. These interpretations were orchestrated based on a cohesive new set of design criteria. which embodies the institutional endeavors by local authorities and the Design Institute to materialize Deng's directives.

New Multi-Story Brick Edifices: Aren't They Just Vertical 10.3.2 Manifestations of Gandalei?

It is important to note that despite the advancements brought about by the brickconcrete multi-story residences compared to the Scientific Gandalei dwelling, they still exhibit numerous constraints. In the late 1970s to the early 1980s, these limitations were not overtly apparent. Especially given that multi-story brickconcrete residences markedly surpassed the Scientific Gandalei dwelling in many aspects, many users expressed satisfaction with this evident transformation. However, inherent limitations mark the brick-concrete residences for sustained future use. Firstly, their characteristic construction poses challenges for residents wishing to retrofit or remodel in the later stages. In brick-concrete structures, many walls bear the structural weight, thereby restricting their demolition or modification. Thus, even if inhabitants grow discontented with the existing spatial layout, their capacity to effectuate adjustments remains nearly stifled. Secondly, the span in brick-concrete residences is relatively limited, which is not conducive to designing spaces demanding larger spans, such as living rooms. Furthermore, the structural integrity and stability cap of this construction method mean that buildings employing this technique seldom exceed six stories. This aspect is counterproductive to the aim of accommodating more residents on finite land. Therefore, multi-story brick-concrete construction should be regarded more as a transitional phase in architectural evolution, akin to the Scientific Gandalei dwelling.

From a functional architectural perspective, there is no significant distinction between the brick-concrete structures and the Scientific Gandalei dwelling in terms of their overall functionality. Their primary objective is to cater to the basic everyday needs of households. Among the multiple design proposals indexed in this volume, many architects have not incorporated communal spaces that foster interaction and leisure activities amongst residents within individual housing units. Specifically, in terms of the overarching floor plan, two out of the three designs opted for a linear repetition of the "T-shaped" module as the residential layout, as depicted in Figure 10.8. Both 79-1a and 79-2a adopt this design strategy. While this structural approach boasts of its simplicity, efficiency, and replicability for mass construction, it may not fully address the need for social interactions and communal activities among residents. Hence, it can be posited that in terms of serving daily living needs, this housing model is essentially a more spacious and structurally robust evolution of the Scientific Gandalei dwelling.

From the vantage point of architectural aesthetic design, brick-concrete structured buildings bear a continuity in façade design with the Scientific Gandalei dwelling, seldom featuring in-depth façade treatments. Figure 10.9, captured in 1980, displays the scene post the completion of the new residential buildings. The photographer employed a compositional tactic, visually bisecting the frame with a roadway: on the left stands the Scientific Gandalei dwelling, and to the right are the newly erected brick-concrete structures. The billowing smoke from chimneys indicates that these edifices are now in use. Notably, these constructions appear as vertically stacked iterations of the Scientific Gandalei dwellings, despite their vastly contrasting construction principles. The facades of these edifices present an overt flatness, devoid of depth and layering. This seems to be an outcome of an automatically generated architectural layout, with an apparent absence of design elements aimed at enhancing facade depth—let alone the employment of installations to potentially craft light and shadow interplays. Furthermore, a pronounced uniformity characterizes these buildings in their external manifestation. Excessive homogenization might pose challenges for residents attempting to locate addresses based solely on building exteriors. All individual expression is missing and collectivity is emphasized. It appears that architects did not sufficiently address and redress the prevailing issues intrinsic to these Scientific Gandalei dwellings.

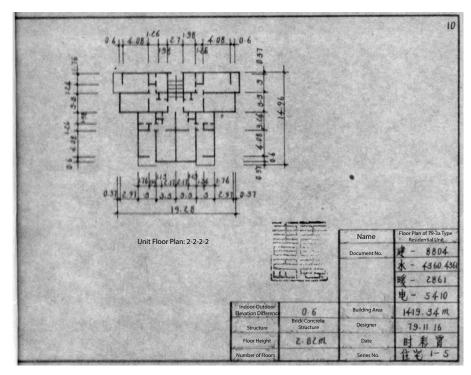


FIG. 10.9 Floor Plan 79-3a Type Residential Unit. Designer: Shi Caixia. Source: Hou Li. English Annotation: Penglin Zhu.

It is noteworthy that the standard of drawings presented in this atlas exhibits inconsistencies, failing to clearly manifest the advantages of brick-concrete residences in comparison to the Scientific Gandalei dwellings. Within the atlas, both external and internal walls are delineated using uniformly thick, solid black lines. Such representation obstructs differentiation between the thicknesses of exterior and interior walls and does not accurately depict the dimensions and positioning of windows. Issues such as overly thick walls, restricted interior space, and ventilation problems have been longstanding in Scientific Gandalei designs, notably impacting the quality of life for residents. Brick-concrete structures inherently possess the potential to address these design issues associated with Scientific Gandalei dwellings. Similar shortcomings are evident in the lack of a standardized and uniform legend within the drawings, rendering it challenging for designers to swiftly identify new architectural features. These additions are pivotal as they can fundamentally alter the user experience. For instance, of the three proposals, only in Architect Lv's 79-2a is there explicit labeling of a separate restroom, thus informing users that this design addresses the lack of separate restrooms prominent within the Scientific

Gandalei dwellings. Although one could infer from basic judgments of architects that all three designs, 79-1a, 79-2a, and 79-3a, propose a separate restroom, the absence of key information underscores the atlas compilers' oversight. They might not have fully grasped the significance of separate restrooms in enhancing the quality of life for residents. The goal of the design institute in releasing this atlas was to furnish architectural designers with basic reference material, but it evidently falls short in articulating discernible distinctions.

The subpar quality of the architectural drawings can be attributed to various factors. While we cannot completely deny the detrimental impact of the Cultural Revolution on the architectural education system, which led to a decline in the professional standards of architects in the design institutes, a more profound issue may lie in the lack of deep reflection by local government and leadership of the design institute on the true essence of "Building Beautiful Daqing." Moreover, the atlas exclusively features floor plans, implying that aspects such as the height of individual buildings, their facades, and surrounding environments and landscapes were not accorded due importance. This suggests that the local authorities and the design institute confined their objectives merely to the construction of multi-story brick-concrete residences, thereby oversimplifying the genuine meaning behind "Building Beautiful Daqing." This practice conveys the notion that the local authorities and designers in the design institute have reduced the new vision of "Building Beautiful Daqing" to the mere act of constructing multi-story brick-concrete buildings.

10.3.3 Forging Ahead with a New Allocation System

Deng's triumphs at both the 1978 Central Working Conference and the Third Plenary Session of the Eleventh Central Committee spurred the authority of the Daqing Oilfield to expedite their endeavors in constructing the multi-story brick apartments. In September 1978, immediately after Deng's inspection tour of Daqing, Chen Liemin urged the Daqing Design Institute to initiate making plans for multi-story residential dwellings using new building materials. The Design Institute swiftly completed the design process and erected four five-story prototype dwellings, named Drilling Workers' Experimental Residential Buildings, in Chuangye Village. 373 One could argue that this naming convention underscores the exemplary role of this residential building.

373 Office of the Daqing Local Chronicles Compilation Committee. (1988). Part Three: Urban and Rural Construction, Chapter Three: Real Estate [第三篇 城乡建设 第三章 房地产]. In *Daqing Gazetteer* [大庆市志], p. 99. Nanjing: Nanjing Publishing House.

With a new mining area construction plan announced on December 20th, the local authority even intensified the efforts in promoting the construction of brick dwellings.³⁷⁴ This initiative was undertaken just two days following the Third Plenary Session, during which Deng's political discourses and economic policies had been institutionalized as the new national strategy. They resolved to construct the first batch of 400,000 square meter residential dwellings in 1979. The planned timeline for this project was to commence construction in either March or April, with the aim of completing it by the end of the year. The local authority instructed the Design Institute to distribute the residential dwellings within a geographical area spanning 130 kilometers from the southern Qingpu Village, located at Oil Extraction Factory 7, to the northern Qingxin Village, situated at Oil Extraction Factory 6, and 60 kilometers from Wolitun in the east to Ranghulu in the west. 375

The distribution rules for these new residences strictly adhered to Deng's directive during his visit, which emphasized distribution according to one's labor. Wang Sumin, the deputy secretary of the Daging Party Committee, established the criteria for prospective recipients, with a focus on individuals who made significant contributions to the development of the Daging Oilfield. Among them, older employees who participated in the GPC of 1960, labor models acknowledged by the Daqing Party Committee, senior scientific and technical personnel with significant contributions, teachers, and doctors were among the first batch of potential lucky recipients.³⁷⁶ It can be argued that Wang endeavored to avoid the pitfalls of egalitarianism as much as possible in the distribution of brick residences.

While official documents do not explicitly indicate whether the method of housing allocation resulted in societal discontent, two pieces of evidence hint at the presence of such dissatisfaction. First, the supply of newly constructed residences did not match the total population needs of the Daging Oilfield. In comparison to the total population of the oilfield, the brick-and-mortar residences constructed in 1979 had limited capacity, accommodating only 6,460 households. Based on an average size of four people per household, these residences could house only 25,840 individuals, representing a fraction (1.3/100) of the total population of Daqing at that time,

³⁷⁴ Office of the Daging Local Chronicles Compilation Committee. (1988). Chronicle of Major Events [大事 记]. In Daging Gazetteer [大庆市志], p. 32. Nanjing: Nanjing Publishing House.

³⁷⁵ Zhu, Y. (n.d.). History of Daqing Urban Planning [大庆城市规划史]. In [Unknown Book Title] (p. 632). Daqing. Reviewers: D. Han, J. Lei, C. Wan, J. Wang, & D. Liu. Audio-visual file provided by Zhu Yuncai, 2017.

³⁷⁶ Wang, S. (1979). Speech at Daging Party Committee's Study Meeting on the Discussion of the Criteria of Truth [王苏民在大庆党委学习真理标准问题讨论会上的讲话], September 26. Available at: Daging City Archives Collection

which was estimated to be around 190,000 citizens. Such a significant disparity between supply and demand could inherently lead to widespread dissatisfaction.

Secondly, Wang Sumin specifically advocated for the public display of the candidate lists prepared by various units, ensuring that these lists received approval from unit personnel. This underscores Wang's belief that a transparent allocation process could alleviate the public's discontent. His subsequent commitment, to increase the housing construction target to 80,000 square meters in 1980 and to establish seven new construction sites in places like Lixin Village, Qingxin Village, Jiefang Village, Red Satellite Village, Longgang Village, Chengfeng Farm, and Tiexi, further hints at his acute awareness to address this discontent. The aimed not only to meet the pressing housing needs of the public through these measures but also to enhance trust in the allocation process by ensuring transparency and fairness. In summary, even though official documents do not directly confirm discontent arising from the housing allocation method, the actual circumstances and Wang's responsive strategies provide ample reason to believe that the local populace harbored some level of dissatisfaction and concern about this supply-shortage mode of housing distribution.

Deng's criticism of egalitarianism, combined with his explicit guidelines, challenged the previously established principle in the oilfield, especially in terms of housing allocation and the distribution of other resources. In the report submitted by the Ministry of Petroleum in 1964, it was clearly stipulated that both leaders and grassroots workers should reside in the Scientific Gandalei dwellings, a principle that was heavily emphasized at the time. Although in Daging, there were already special accommodations such as "Courtyard No. 2" that differed from the living conditions of ordinary workers, such privileges were still in the minority. Specifically, they frequently operated in a clandestine manner, without the knowledge of the majority of workers. While there might have been discrepancies in actual implementation, the principle of equal distribution was respected and adhered to at the policy and institutional levels. In alignment with Deng's policy shift, this change not only enabled Daging's management to shed the constraints of egalitarianism in housing distribution but also suggested that they might abandon this principle in the redistribution of benefits in other sectors. Such a departure from the original institutions could undoubtedly lead to some degree of societal discontent and conflict.

377 Ibid

10.4 Chapter Summary

In the brief period from 1977 to 1978, the planning heritage of the Daqing Oilfield primarily consisted of the Spatial and Representational Petroleumscapes, characterized by a continuation of features from the Maoist era. This chapter delineates the assertion that the utilization of the Daqing Oilfield as a strategic arena for power contention in the post-Mao Zedong era was intrinsic to the process of reconstructing the local planning policies and regulations of Daqing. Both political figures, Mao's designated successor, Hua Guofeng, and the challenger, Deng Xiaoping utilized the Daqing Oilfield as a pivotal topic around which they formulated and promulgated their respective political discourses and economic policies. However, the discrepancies in their administrative positions and political prestige at the time wielded a decisive influence on their divergent approaches and operational modalities concerning this issue. This analytical exploration aims to dissect the intricate interplay of political maneuvering and strategic policy deployment by these two protagonists in shaping the trajectory of planning and development initiatives in the Daqing region.

Hua, as the Premier of the State Council, strategized policy formulation through a structured approach, initially establishing political discourse followed by the articulation of corresponding economic policies. In 1977, Hua promulgated the political ideology of "Master the Documents, Grasp the Key Points," emphatically sustaining Mao's policies on class struggle. He introduced the "Two Whatevers" principle as a tactic to bolster the legitimacy of his political standing. During the National Conference of Learn from Daging in Industry in the same year, Hua delineated his economic policies, advocating for a national economic leap forward through the widespread adoption of the Daging model. In articulating these policies, Hua accentuated the perpetuation of Mao's political legacy. However, there was no pronounced emphasis on ameliorating the living conditions in Daging; instead, there was a proclivity towards channeling resources into production and construction. This approach can be interpreted as a continuation of Mao-era egalitarianism and the ideology of individual subservience to state objectives. While certain facets of Hua's economic policies diverged from Mao's strategies, the overarching emphasis on inheriting Maoist ideologies inadvertently subdued the distinctive and innovative aspects of these new policies. The pronounced allegiance to Mao's doctrines consequently muted the nuanced evolutions and conceptual novelties encapsulated within Hua's strategic economic articulations.

Deng's strategy and approach in unfolding his political discourse and economic policies markedly differed from Hua's. In early 1978, Deng began to question Hua's "Two Whatevers" principle and the idea of a "New Great Leap Forward in the National Economy" as contrary to Mao's theory of practice in conversations with a select few high-ranking party members. Leveraging the fervent responses to the article "Practice is the Sole Criterion for Testing Truth" published in Guangming Daily, Deng embarked on an inspection tour of China's old industrial cities in mid-September of the same year, with Daging Oilfield being a pivotal stop. Through a direct appraisal of local conditions, Deng paid specific attention to the apparent disparity between the contributions of the Daging Oilfield workers and their living conditions. Driven by this observation, Deng carried out economic strategies centered on enhancing the living standards of the workers. He urged local leaders to "build a beautiful Daging," emphasizing the construction of multi-story buildings utilizing high-quality building materials. Upon establishing a clear economic strategy, Deng articulated corresponding political discourses in Harbin. He advocated for ceasing class struggle, emphasizing that policies focusing primarily on advancing productive forces and improving people's lives resonate more authentically with Marxist principles. Deng's policies and strategies, centered more profoundly on practical outcomes and the improvement of people's lives, manifest a more flexible and humane approach compared to Hua's egalitarian strategies.

Deng's victory at the Central Work Conference in November 1978 and the Third Plenary Session of the Eleventh Central Committee in December was a pivotal moment that marked his political discourses and economic policies as the new decision-making consensus of the Chinese Communist Party. Consequently, his vision of "Building a Beautiful Daging" emerged as the new planning regulation for the local authorities. Prompted by Deng's emphasis on the construction of multi-story buildings, the local government and design institutes swiftly produced an array of new multi-story brick-concrete residential buildings. These new structures represented a noticeable advancement compared to the previous Scientific Gandalei dwelling, exhibiting improvements in architectural structure, spatial layout, and material use. Deng's explicit demands for multi-story buildings and the utilization of new materials were directly integrated into the local design principles. This approach somewhat constrained the architects, limiting their ability to conceptualize innovative strategies from scratch that would offer a more nuanced interpretation of the "Building a Beautiful Daging". Due to a lack of emphasis on facade design and environmental considerations, and without substantial alterations to the internal spatial layouts, these new multi-story residential buildings could be perceived merely as vertical adaptations of the Scientific Gandalei dwelling. The design approach signifies a missed opportunity to cultivate a more adaptive, contextually resonant, and holistic architectural practice that truly encapsulates the essence of creating a beautiful and harmonious Daging.

This chapter illuminates the sixth key period in the evolution of the Daqing Oilfield's Petroleumscape, delineating the transformative impact of post-Mao era power transitions on urban and architectural planning. The power contestation between Deng and Hua unraveled as a process of disassembling the pre-existing spatial planning principles and meticulously reconstituting a new one. Throughout this evolutional process, Deng's advocacies for elevating architectural quality, embracing novel construction materials, and proliferating multi-story buildings indubitably acted as catalysts, fostering urban evolution and architectural rejuvenation in Daging. However, a critique arises due to the perhaps precipitous and unequivocal application of Deng's directives by the local authorities and the Design Institute, which ostensibly did not fully harness and actualize the intrinsic potentials of the "Building a Beautiful Daging" vision. Their practical implementations seem predominantly anchored in the realms of specific architectural design and construction, potentially overlooking a broader spectrum of innovation and enhancement in citywide and communal planning strategies. The "Building a Beautiful Daging" vision should not be circumscribed merely as an architectural design protocol; instead, it ought to epitomize a holistic urban planning principle. This entails a meticulous concoction of diverse urban elements, encapsulating considerations such as community ambiance, public spaces, transportation matrices, and greenery deployments. Thus, in embodying a new planning principle, a multidimensional approach that transcends the conventional architectural boundaries and aligns with a broader urban ecosystem is imperative.

11 The Formulation of the First Comprehensive Urban Plan of Daqing

The Genesis of Urban Rights, 1980-1989

In 1978, Deng Xiaoping's directive to "Build a Beautiful Daging" became a powerful external catalyst towards reforming both the Daging Oilfield administrative and urban planning regulation, following his victory over Hua Guofeng in the power struggle at the Eleventh Third Plenary Session. The establishment of the Daging Municipal People's Government in 1979, along with the 1983 reorganization of the petrochemical industry by the State Council, which led to the independence of the Daging Refinery from Daging's existing state-owned oil enterprises, contributed to the creation of a new administrative structure known as the "triple-partite". However, this new structure perpetuated the old power structures of the "Integration of Government and Enterprise" administrative system, with oil enterprises continuing to dominate local politics, economy, and culture, including urban planning authority. Against the backdrop of these systemic changes, a seemingly contradictory reality emerged: the establishment of the Daging Urban Planning Bureau symbolizing the strengthening of right to the city versus the industrial construction priority signified by the state-owned oil company's monopoly over local affairs. This contradiction prompts this chapter to explore whether the "Production First, Livelihood Second" urban planning guideline, born out of the "Integration of Government and Enterprise" system, would change and, if so, in what form.

Taking the initiation of Daqing's First Comprehensive Urban Planning by the Urban Planning Bureau in 1982 as a case study, this chapter addresses the following questions: Firstly, it examines the impact of the "Integration of Government and Enterprise" system reforms, advocated by both the Central Government and Daging authorities from the late 1970s to the early 1980s, on the right to the city and the urban planning policies. Secondly, it explores how, during the 1980s, Daging authorities and the local Urban Planning Bureau managed to execute the "Production First, Livelihood Second" planning guideline while simultaneously adhering to Deng's directive to "Build a Beautiful Daging"; whether this process facilitated a transformation in the planning policies and regulations, and if so, how this transformation occurred. Through historical analysis, this chapter argues that the process of the Daging authorities and the Daging Urban Planning Bureau creating the first Comprehensive Urban Plan of Daging City represents an incremental change of the "Production First, Livelihood Second" planning quideline under the influence of the directive to "Build a Beautiful Daqing." This process also signifies the genesis of the right to the city at the local level.

11.1 Path Dependence and Compromise: The Game over Local Administrative System Reform between the Central Government and Daqing Authorities

This section delves into how the Daqing authorities managed to retain the original "Integration of Government and Enterprise" system amidst negotiations on institutional reform with the Central Government. Starting with an in-depth look at the establishment of the Daqing Municipal Government and Urban Planning Bureau, alongside the inception of the "triple-partite" system—this analysis uncovers the local authorities' strategic balance between heeding the Central Government's demands for reform and safeguarding their established power dynamics. A historical examination of this period first sheds light on the distinct roles and impacts of both the Central Government and Daqing authorities in steering local administrative institution reforms. Furthermore, it addresses the impact of the establishment of the Daqing government and Urban Planning Bureau, the region's renaming, and the formulation of the "triple-partite" system.

11.1.1 The Rising Right to the City vs. The Continuation of the Integration of Government and Enterprise

Viewing Deng Xiaoping's new policies as an external force aimed at transforming the local "Integration of Government and Enterprise" system, the Daging authorities' reluctance to embrace these reforms highlights their "path dependence" on the established planning system. Initially, this local resistance took the form of local power elites attempting to propose alternative institutional reforms in response to the Central Government's demands for institutional reform. Specifically, on March 1, 1979, the Daging Committee issued a notice for the Abolition of Revolutionary Committees in Relevant Units."378 It mandates the disbandment of revolutionary committees across various subsidiary oilfield enterprises and the adoption of a factory director responsibility system under party committee oversight. This appeared to be a swift adaptation by local authorities to the central call for institutional reform. However, these reforms predominantly targeted the revolutionary committee system, a relic of the Cultural Revolution, without addressing the foundational governance system of "Integration of Government and Enterprise." The Daqing authorities essentially sidestepped the core issue, primarily due to their reluctance to alter the status quo.

In grappling with modifications to the "Integration of Government and Enterprise" system, the Daqing authorities exhibited a strategic, opportunistic stance. During the "Discussion Meeting on the Issue of the Truth Standard" held on September 26, 1979, Wang Sumin, then Mayor of Anda Special Region, put forward the concept of restructuring the administrative system of the Daqing Oilfield. 379 His proposal entailed the establishment of two independent entities under the Daqing Committee's supervision: the governmental entity, namely the Daqing Municipal People's Government, and the economic entity, the Daqing Petroleum Corporation. This proposal appeared to be a proactive answer to the Central Government's call for institutional reform of the state-owned enterprise, with the aim of delineating the state enterprises from administrative authorities within their structure. Yet significantly, during this meeting, Wang also highlighted the necessity of maintaining the "Integration of Government and Enterprise" system for the time being. This underscores that, despite outwardly proposing a reform, the Daqing authorities

³⁷⁸ Central Committee of the Communist Party of Daqing and Daqing Revolutionary Committee. (1979). Notification on the dissolution of the revolutionary committees of relevant units [关于撤销有关单位革命委员会的通知], March 1. Available from Daqing City Archives. Daqing.

³⁷⁹ Wang, S. (1979). Wang Sumin's speech at the Daqing Party Committee Study Meeting on the Discussion of the Criterion of Truth [王苏民在大庆党委学习真理标准问题讨论会上的讲话], September 26. Available from Daqing City Archives. Daqing.

harbored reservations regarding such changes and did not have immediate intentions to completely abandon such an system in the near future.

This contradictory stance highlights the Daqing authorities' endeavor to strike a balance between preserving the existing administrative system and enacting superficial reforms amidst pressures for change, representing an opportunistic strategy designed to safeguard the current power structure. Wang's proposal perpetuates the "one team of people, two plaques" approach that the Daqing authorities have employed since 1964. This approach allowed the same personnel to oversee analogous sectors within both the oil enterprise and the local government, which is fundamental to the "Integration of Government and Enterprise" system.³⁸⁰ While the proposal nominally sets up the government and the state-owned enterprise as separate entities, the creation of the Daqing Committee as a controlling body effectively curtails their independence. Notably, in his presentation, Wang left the management methods of these entities ambiguous, a move that could allow room for future policy adjustments in favor of local authorities. This maneuver aims to retain their dominance in Daqing's power and resource allocation while ostensibly embracing the Central Government's call for reforms.

The Daqing authorities navigated their roles as opportunists, balancing personal political aspirations with the national demands of institutional reform. They positioned themselves as reform advocates in alignment with Deng's visions, eyeing potential for future political elevation. Yet, they harbored concerns over the swift dissolution of the "Integration of Government and Enterprise" system, fearing it could spur local instability and impede oilfield development—outcomes that could tarnish their political trajectories. Particularly, the reluctance of employees overseen by the Petroleum Administration Bureau to transition to the Daqing Municipal Government, motivated by disparities in compensation and benefits, underscored these apprehensions. Bemployee morale is crucial to oilfield productivity, a metric central to the Central Government's evaluation of the Daqing authorities. Thus, navigating these intricate dynamics, the Daqing authorities deliberated on adjusting the existing set-up, their strategies shaped by the interplay of embracing reform while managing the ramifications of such changes on their political standing and the local socio-economic landscape.

³⁸⁰ State Council. (1964). Approval on the establishment of the Anda Special District People's Committee [关于设立安达特区人民委员会的批复], June 23. Beijing. Document No. Zhong Fa (64) No. 358.

³⁸¹ Gong, G. (2018). Personal interview regarding employment preferences at Daqing Oilfield. [July 20, 2018]. Daqing. "During field research, a retired mid-level official from Daqing mentioned that, due to the state-owned Daqing Oilfield's ability to offer salaries and benefits far superior to those provided by local governments, the vast majority of employees were unwilling to transfer their employment from Daqing Oilfield to local government positions."

By the end of 1979, the Daqing authorities successfully maneuvered a course of compromise, with the Central Government tacitly allowing the continuation of the "Integration of Government and Enterprise" system locally. Following extensive discussions, the Ministry of Petroleum and the Heilongjiang Provincial Committee presented a proposal to the Central Government aimed at preserving the institution in two regions within Heilongjiang Province. This proposal encompassed two key suggestions: first, the dissolution of Yichun District in favor of reinstating Yichun City under direct provincial governance, all the while upholding the "Integration of Government and Enterprise"; second, the recommendation to rename Anda City as Daqing City. Yichun District serves as another state-owned enterprise mining area within the province, with its primary focus on forestry. The transition from Yichun District to Yichun City sought to bolster the image of local governmental authority, maintaining the integration system and thereby preserving the actual power of state-owned enterprises at the local level. The submission from Heilongjiang Province aimed to signal a commitment to reform to the Central Government.

The decision to rename Anda City to Daging City transcended a mere change of nomenclature, conveying the new supreme leader's intention to undertake institutional reform. First, this renaming sought to officially bestow city status upon the Daging Oilfield, underlining its urban identity—a move that highlighted the necessity to reconcile the spatial contradictions between the developmental needs of the oilfield and the living requirements of the local residents. Furthermore, this move by the Central Government to openly acknowledge the precise location of the Daging Oilfield signified a paradigm shift in the priority given to protecting national strategic security from 1979 onwards. The formal adoption of the name Daging not only unified the field's internal and external representation but also marked its inaugural precise delineation on the new Heilongjiang Province map, a region that was previously broadly indicated as Saertu and Anda. It indicated an openness to reduce defensive postures against external powers and to seek international cooperation, in line with the then-current policies aimed at attracting foreign investment to promote industrialization, urbanization, and thereby, modernization. This act of branding was intended to capitalize on the already established recognition of the name while demonstrating a readiness and direction toward reform.

In the same document, the Central Government's endorsement of maintaining the "Integration of Government and Enterprise" system in Yichun City served as a precedent for Daqing authorities to retain a similar arrangement. The narrative

³⁸² State Council of the People's Republic of China. (1979). Approval on the restoration of Yichun city and the renaming of Anda city in Heilongjiang Province [国务院关于黑龙江省恢复伊春市和变更安达市名称的批复], December 14. Beijing. Document No. Guo Fa [1979] No. 288. Available from Daqing City Archives.

surrounding the institutional setup for the Daqing Oilfield in the document is intentionally more abbreviated than that provided for Yichun. It merely states the decision to rename Anda City to Daqing City, omitting an in-depth discourse on the adjustments to its institutional structure. Given that Yichun's forestry sector played a crucial role in national construction but had a comparatively minor impact on the national economy compared to the petroleum sector, its institutional reform was perceived as an experimental ground for Daqing. This positioning implies a strategy by the Ministry of Petroleum and the Heilongjiang Provincial Government to utilize the Yichun model as a pilot, aimed at fostering a deeper consensus on the institutional reforms necessary in Daqing.

In early 1980, the reform plan announced by the Ministry of Petroleum essentially put into practice Mayor Wang's proposal, thus preserving the "Integration of Government and Enterprise" system. With the approval of both the Heilongjiang Provincial Committee and the Ministry of Petroleum, the Chinese Communist Party (CCP) Daging Municipal Committee was officially established on February 26, 1980.³⁸³ This entity performed both the functions of the Daging Municipal Committee and the role of the Party Committee of the Daging Petroleum Administration, with Chen Liemin, the Deputy Minister of the Ministry of Petroleum, serving as the secretary. Subsequently, the Daging Municipal Government and the Daging Petroleum Administration Bureau were established on April 25, 1980, and February 26, 1981. At the Second People's Congress of Daging City on April 25, 1980, the Daging Revolutionary Committee was renamed the Daging Municipal People's Government through a vote, with Wang Sumin, the deputy secretary of the Municipal Committee, elected as mayor. 384 By February 26, 1981, the Daging Petroleum Administration Bureau was formally established, with Wang Sumin serving concurrently as mayor and bureau director.³⁸⁵ Under the leadership of the Daging Party Committee, two organizational structures with interconnected personnel were formed: the Daging Municipal Government was primarily responsible for political administration, while the Daging Petroleum Administration Bureau handled the management and operation of economic activities. This establishment and evolution of organizational structures vividly embody the reform vision initially suggested by Wang.

³⁸³ Office of the Daqing Local Chronicles Compilation Committee. (1988). 'Evolution of Government and Enterprise [政企演变]'. In *Daqing Gazetteer [大庆市志]*, (p. 53). Nanjing: Nanjing Publishing House.

³⁸⁴ CPC Daqing Municipal Committee Party History Research Office. (2010). Attempts at Political System Reform [政治体制改革的尝试], In: *Daqing Reform and Opening Up History (1978-2009)* [大庆改革开放史 (1978-2009)], Beijing: CPC Party History Publishing House, (p. 46). ISBN: 978-7-80199-726-6.

³⁸⁵ Ibid

Although the "Integration of Government and Enterprise" system continued under the dominance of state-owned enterprises, the establishment of the municipal government played an active role in improving local livelihood, notably in urban development. A prime example is the establishment of the Daqing Urban Planning Bureau on April 27, 1981. During the 1960s and 1970s, there was a lack of an independent agency in the Daqing Oilfield dedicated to urban planning compilation and management. Thus, urban planning tasks, resembling spatial construction planning, were not independently initiated as projects but were mainly undertaken by the Civil and Industrial Construction Group under the Daqing Design Institute. The establishment of the Urban Planning Bureau not only marked an upgrade in the bureaucratic status of the body overseeing urban planning but also endowed it with greater authority to utilize administrative resources. This transformation made urban planning an independent planning field, no longer just an adjunct to oilfield construction, marking higher regard and independence for urban planning within the Daqing Oilfield administrative system.

The establishment of the Urban Planning Bureau literally broke through the limitations of the "one team of people, two plaques" model, yielding additional enhancements for the local community's welfare. The Daging authorities established this bureau under the pretext of strengthening urban planning management and incorporated it into the administrative hierarchy of the Daging Construction Commission. Concurrently, within the oil enterprises, a distinct department for mining area planning was established, tasked specifically with urban planning affairs. Although on the surface, these two administration set-ups seemed to still follow the traditional "one team of people, two plaques" model, in reality, when facing complex and long-term planning and design projects, the personnel configurations of these two agencies began to diverge. The core team of the Planning Bureau was initially drawn from employees from the oil enterprise's subsidiary design institute who were responsible for surface construction and gradually introduced new members in later operations, thus progressively refining its organizational structure. 386 Therefore, the newly established Planning Bureau can be seen as a novel entity without a corresponding similar function within the sub-organizations of the original oil enterprise.

The positive effects brought about by the establishment of the Urban Planning Bureau, however, are limited. Within the overarching framework of the "Integration of Government and Enterprise" system, the development of urban planning remains

³⁸⁶ Zhu, Y. (n.d.). Enhance Planning and Management Institutions to Improve Planning, Design, and Management Levels [健全规划管理机构,提高规划设计和管理水平].History of Daqing Urban Planning [大庆城市规划史]. In [Unknown Book Title] (p. 643). Daqing. Reviewers: D. Han, J. Lei, C. Wan, J. Wang, & D. Liu. Audio-visual file provided by Zhu Yuncai, 2017.

constrained. The entrenched planning guideline of "*Production First, Livelihood Second*" prevails, impinging upon the advancement and ingenuity in urban planning endeavors. Therefore, although the establishment of the Urban Planning Bureau represents significant progress, its capacity to foster a holistic and equilibrated urban development remains incompletely tapped.

11.1.2 The Crafting of the "Triple-partite" vs. The Limitation of Right to the City by the Petroleum Enterprises

The Eleventh Central Committee of the Communist Party of China's Sixth Plenary Session, held from June 27 to 29, 1981, marked a key period in the progression of political reform in the Daqing Oilfield. At this meeting, Deng Xiaoping and his faction seized control over China's political and economic realms. Hua Guofeng stepped down from his positions as Chairman of the CCP Central Committee and Chairman of the Central Military Commission, paving the way for Deng Xiaoping to be elected as Chairman of the Central Military Commission. Furthermore, Hu Yaobang ascended to the party chairmanship, endorsing Deng's reform and opening-up policy, while Zhao Ziyang took over from Hua as the Premier of the State Council in August 1980. These shifts in crucial national and party leadership roles underscored the full consolidation of Deng's faction's influence across party, military, and economic policymaking, with their advocated reform and opening-up strategy emerging as the party's principal course of action.

In this context, Deng's directive for "Build a Beautiful Daqing" emerged as a novel planning regulation for local development, notably in urban planning and construction. During his visit to the Daqing Oilfield on August 18, 1982, Hu Yaobang, the then Chairman, outlined three primary tasks: firstly, ensuring sustained, significant contributions to the nation; secondly, promoting the spirit of Daqing, enhancing consciousness and technological standards, and reinforcing organizational discipline and high aspirations; and thirdly, progressively establishing an industrial base characterized by a beautiful environment and convenient living conditions, as well as achieving rapid income growth for workers.³⁸⁷ Hu's remarks were aimed at locally formalising Deng's vision of "Build a Beautiful Daqing," with a particular focus on enhancing environmental quality and living conditions

³⁸⁷ Editorial. (1986). The entire oilfield has gradually formed a three-level urban layout system - earnestly implementing the principle of "Integration of workers and farmers, unity of urban and rural, facilitation of production, and convenience for living." *Daqing Daily*, 23 August. Daqing. Available from Heilongjiang Provincial Library.

for workers, rather than solely focusing on productivity enhancement. The tasks proposed by Hu within Deng's overall policy framework did not exceed the scope of his speech but had a more substantial driving effect.

The restructuring of the petroleum industry administrative system, spearheaded by Premier Zhao Ziyang and the State Council, served as a powerful external catalyst for administrative reform in the Daqing Oilfield, employing a top-down strategy. On February 19, 1983, the State Council's decision to form the China Petrochemical Corporation aimed to consolidate the management of chemical enterprises previously spread across the Ministry of Petroleum, the Ministry of Chemical Industry, and the Ministry of Textiles under one corporation. Consequently, the Daqing Refinery, initially under the Petroleum Administration Bureau's management, was slated to become an independent local entity. While the reform ostensibly sought to bolster the petroleum industry's development, Zhao's initiative could also be seen as a maneuver in his broader strategic engagements against the so-called "Petroleum Faction," historically led by former Petroleum Ministers Yu Qiuli and Kang Shien, who had played a significant role in shaping China's economic policy before Zhao. The distinction made between the petrochemical and petroleum industries was among the most notable outcomes of this restructuring effort.

The Central Government's reclassification of the petroleum industry administration system altered the power structure in Daqing. Particularly, on September 14, 1983, the State Council's decision to bring the Daqing Petrochemical General Factory in Longfeng District under the China National Petroleum Corporation's purview marked the evolution of Daqing's administration structure from a binary system — comprising the Ministry of Petroleum Industry's Daqing Petroleum Administration Bureau and the Heilongjiang Provincial Government's Daqing Municipal Government — to a tripartite local political framework. 389 This framework introduced the Daqing Petrochemical General Factory as a new stakeholder, having separated from the Petroleum Administration Bureau and come under the China National Petrochemical Corporation's jurisdiction. This intricate local political setup, tasked with overseeing municipal, petroleum production, and petrochemical operations, necessitated not only the effective integration of resources but also the resolution of overlaps and enhancement of cooperation among various sectors, thereby ushering in both new challenges and opportunities for Daqing's governance.

³⁸⁸ Office of the Daqing Local Chronicles Compilation Committee. (1988). 'Evolution of Government and Enterprise [政企演变]'. In *Daqing Gazetteer* [大庆市志], (p. 53). Nanjing: Nanjing Publishing House.

³⁸⁹ CPC Daqing Municipal Committee Party History Research Office. (2010). Implementing the Separation of Government and Enterprises [实行政企分开], In: Daqing Reform and Opening Up History (1978-2009) [大庆改革开放史(1978-2009)], Beijing: CPC Party History Publishing House, (p. 63). ISBN: 978-7-80199-726-6.

Under the joint influence of central and local policies, Daging authorities constructed a new administrative System termed the "triple-partite." Specifically, on June 23, 1983, the Heilongjiang Provincial Committee issued a notification regarding the leadership configuration of the CCP Daging Petroleum Administration Bureau Committee, officially announcing Chen Liemin as the Secretary of the Daging Petroleum Administration Bureau Party Committee, and appointing Li Yugeng, Yang Wanli, and Zheng Yaoshun as Deputy Secretaries. 390 On that same day, the Party Group of the Ministry of Petroleum Chemical Industry nominated Li Yugeng for the position of Director of the Daging Petroleum Administration Bureau, a nomination formally approved by the State Council on August 29. Subsequently, at the Daqing Municipal People's Congress held from July 16 to 19, 1983, Chen Liemin was elected as the Municipal Party Secretary, and Zheng Yaoshun was elected as Mayor. Additionally, the Party Secretary of the Petrochemical General Factory concurrently held the position of Deputy Secretary or a member of the Standing Committee of the Daging Municipal Committee.³⁹¹ By September 30, the proposal for the separation of government and enterprise and the municipal bureau reform, submitted by the CCP Daging Municipal Committee, underwent multiple rounds of consultations between the Party Group of the Ministry of Petroleum Industry and the Heilongjiang Provincial Committee. This proposal ultimately received approval from the State Council on December 22.392 This structure, by facilitating cross-appointments among the leadership of the Daging Municipal Committee, Petroleum Administration Bureau, and Petrochemical General Factory, superficially established a divide between stateowned enterprises and the local municipal government. The roles of the Director of the Petroleum Administration Bureau and the Mayor of Daging City were no longer consolidated under a single individual but were split between two, demonstrating the Daging authorities' intent to emphasize local power. Simultaneously, the inclusion of the Petrochemical Factory's leadership in the local leadership indicated their openness to power decentralization.

Within these three entities, the Daqing Petroleum Administration Bureau stands as the paramount authority, commanding a vice-ministerial level that significantly surpasses the Daqing Municipal Government and the Daqing Petrochemical General Factory in rank. This hierarchical disparity is manifest in the administration structure, where the Party Secretary of the Administration Bureau, Chen Liemin, doubles as the Deputy Minister of the Ministry of Petroleum and the Secretary of the Daqing Municipal Committee. Concurrently, the Bureau's Deputy Secretaries assume the

³⁹⁰ Ibid

³⁹¹ Ibid.

³⁹² Office of the Daqing Local Chronicles Compilation Committee. (1988). 'Evolution of Government and Enterprise [政企演变]'. In *Daqing Gazetteer* [大庆市志], (p. 53). Nanjing: Nanjing Publishing House.

roles of Director and Mayor. In the hierarchy of China's government operations, the Party Secretary's status generally exceeds that of the executive branch. Hence, in Daqing's leadership, the pivotal roles of Municipal Party Secretary and Party Secretary of the Administration Bureau, both occupied by Chen Liemin, signify his comprehensive dominion over local affairs. Among these administrations, the Petrochemical General Factory emerges as the least influential, with its Party Secretary holding a position as the Deputy Secretary of the Daqing Municipal Committee, thereby wielding limited sway over local matters and essentially being overshadowed by the Petroleum Administration Bureau. Despite the three bodies operating under distinct supervisory echelons, they are practically melded into a cohesive administrative framework. This arrangement accentuates the principle of unity, suggesting that the outward facade of separation between government and enterprise in the "triple-partite" system merely extends the "Integration of Government and Enterprise" model with nominal structural modifications.

Through the enactment of the "triple-partite" system, some subordinate agencies underwent significant reforms, especially in the field of urban planning. In December 1984, the Daqing Municipal Government consolidated pertinent departments, phasing out the Construction Committee responsible for urban planning oversight. Concurrently, the Urban Planning Bureau, Urban Construction Bureau, Environmental Protection Bureau, and Gardens Bureau were unified into the Urban and Rural Construction and Environmental Protection Bureau. ³⁹³ This reorganization not only centralized various powers relevant to urban planning but also established a multifaceted platform tasked with the operational mandates of urban planning, landscape planning, urban construction, and environmental protection. This initiative sought to forge a more integrated service system for urban planning and construction endeavors. The restructured entity signified a consolidation of urban planning-related authorities, with the addition of predominantly technical competencies, focused on enhancing the development and execution of urban planning strategies.

However, the "triple-partite" system inherently restricted the scope for profound urban planning reforms on an institutional level, primarily propped by two foundational factors: the financial system of the oilfield, dubbed Notice 65, and the land requisition mechanism managed by the Ministry of Petroleum, both of which remained unchanged fundamentally. Within this framework, the Daqing Municipal Government was devoid of an independent financial system and tax

³⁹³ Zhu, Y. (n.d.). Enhance Planning and Management Institutions to Improve Planning, Design, and Management Levels [健全规划管理机构,提高规划设计和管理水平]. History of Daqing Urban Planning [大庆城市规划史]. In [Unknown Book Title] (p. 643). Daqing.

mechanism, leaving vital economic and fiscal roles still under the purview of the Petroleum Administration Bureau. Consequently, the financial underpinnings for urban planning, governance, and municipal infrastructure projects were tightly controlled by the Petroleum Administration Bureau. Furthermore, the preservation of existing regulations on oilfield land use with the establishment of the "triple-partite" system meant that the authority to expropriate land in the Daqing region remained centralized within the Petroleum Administration Bureau. This continued concentration of power further constrained the Daqing Municipal Government's autonomy in aspects of urban planning and land management.

Although the Urban Planning Bureau received enhancements in technical capabilities and tools, its substantial influence within the wider political and administrative framework remained significantly constrained by the petroleum management system. Specifically, until March 1996, the ongoing application of the "triple-partite" system signified that the Daqing Petroleum Administration Bureau, primarily influenced by the Ministry of Petroleum's delegates, continued to have a significant impact on the local urban planning system. ³⁹⁴ Within this arrangement, efforts were made to preserve the "*Integration of Government and Enterprise*" system as much as possible within the new one. This setup, to some extent, restricted the local municipal government's power and capacity concerning autonomous finance, land management, and urban planning. It mirrors the intricate interplay of power and the balance of interests between central and local authorities, as well as between governmental bodies and enterprises.

394 CPC Daqing Municipal Committee Party History Research Office. (2010). Implementing the Separation of Government and Enterprises [实行政企分开], In: Daqing Reform and Opening Up History (1978-2009) [大庆改革开放史(1978-2009)], Beijing: CPC Party History Publishing House, (p. 63). ISBN: 978-7-80199-726-6.

11.2 Urban Planning as the Planning of Institutional Change

This section advocates for understanding Daqing's First Comprehensive Urban Planning not merely as a singular project produced by the Daqing Urban Planning Bureau in 1982 but as a comprehensive endeavor composed of multiple planning stages: preparatory planning, official planning, and supplementary planning. It is structured into three subsections to scrutinize various facets: first, it probes how the Urban Planning Bureau's lack of authority to interpret urban planning principles shaped their approach to devising spatial strategies; second, it investigates the methods through which the Daqing authorities endowed the Planning Bureau with interpretive authority over urban planning principles; it also examines how the Bureau, upon being empowered, formulated new planning principles. Lastly, this section delves into potential methodological and procedural flaws encountered during the formulation of Daqing's First Comprehensive Urban Planning and the strategies employed by both the Daqing authorities and the Planning Bureau to mitigate the resultant planning constraints.

Less Than the Sum: the overlaying of Contradictory Urban Planning Policies and Regulations

Since its establishment in April 1981, the Daqing Urban Planning Bureau has taken on the task of planning and developing the First Comprehensive Urban Planning for the locality. Their mission was to operationalize the directives of the Daqing leadership into actionable plans through technical methods, including planning and architectural design. This endeavor was far from simple, particularly given their lack of interpretive capacity regarding the planning agencies, coupled with staff shortages, and the significant increase in workload due to the inclusion of neighboring territories into the Daqing Municipal Government. These preliminary challenges underscored that the Daqing Urban Planning Bureau could not adopt traditional planning approaches to produce the urban plan. Consequently, an innovative approach was necessitated to effectively navigate and tackle these challenges.

The primary challenge for the Urban Planning Bureau lay in reconciling the distinct planning principles of "*Production First, Livelihood Second*" with "*Building a Beautiful Daqing*," integrating them into a unified urban planning principle. These two sets of

urban planning principles from different periods are largely contradictory, especially considering that Deng Xiaoping proposed the "Building a Beautiful Daqing" due to his dissatisfaction with the living environment created under the "Production First, Livelihood Second." Traditionally, it is customary for the Urban Planning Bureau to choose a singular planning principle and subsequently formulate its development. Nevertheless, at this juncture, due to the absence of direct involvement of the Daqing Municipality in the urban planning process, the Planning Bureau was devoid of the required authority to interpret the aforementioned principles, effectively rendering it powerless to favor one over the other in its planning efforts. In order to ensure the continued importance of the oil industry as the pillar of the regional economy and to integrate improvements to residents' quality of life, it was necessary to incorporate a comprehensive understanding of both principles into the planning process. Thus, the bureau needed to figure out a judicious approach to express these two contradictory planning quildlines in the forthcoming urban planning simultaneously.

However, the Urban Planning Bureau faced increased difficulties in urban planning due to both a shortage of personnel and the expansion of its jurisdiction following the establishment of the Daqing Municipal Government. Specifically, as a newly established agency, the Planning Bureau lacked sufficient skilled professionals to effectively address the aforementioned challenges. They were in immediate need of additional professionals and recent university graduates to augment team cohesion and enhance job productivity. Simultaneously, the inclusion of Datong Town, Gaotaizi Town, and their surrounding 10 production brigades into the newly established jurisdiction of Daqing Municipality significantly expanded the geographical scope of urban planning, thereby greatly increasing the complexity and workload of planning tasks. 395 For the Planning Bureau, which was already experiencing a shortage of human resources, this undoubtedly exacerbated the difficulty. These compounding factors made the process of urban planning formulation and implementation more intricate and demanding, prompting the Planning Bureau to seek alternatives to the traditional urban planning approach to overcome these.

Instead of directly creating the First Comprehensive Urban Planning, the Planning Bureau initiated multiple short-term urban planning and construction projects, leveraging them as laboratories for shaping the first general urban plan. This approach indicates their endeavor to keep the potential costs of failure within a relatively controllable range. Between 1981 and 1984, they compiled a series of planning schemes with short-term validity. This included the "1981 to 1985 Municipal Construction Planning," "Daqing City Urban Construction

395 Office of the Daqing Local Chronicles Compilation Committee. (1988). 'Overview of Districts and Towns [区镇概况]'. In *Daqing Gazetteer* [大庆市志], (p. 53). Nanjing: Nanjing Publishing House.

Planning and 1982 Construction Arrangement Opinions," "Daqing City Mining Area Construction Planning Outline (1983-1990)," and "Report on the 1983 Mining Area Construction Planning Arrangement Opinions." Compared to the traditional urban planning cycle of 15 to 20 years, these projects had significantly shorter planning cycles, with the longest not exceeding seven years. Such short-term planning cycles not only reduced the risk of experimental projects but also provided the planning team with greater flexibility and efficiency. This enabled experimental attempts and timely adjustments, accumulating valuable planning experience for long-term development and improving residents' quality of life.

Determining the form of provision for independent civil infrastructure (such as water supply, electricity, and heating systems) became a focus of exploration in these short-term plans, as planning and constructing separate civilian facilities have the potential to fundamentally change the local spatial structure. Specifically, new residential areas no longer needed to be confined within 1.5 km of industrial facilities since there was no longer a necessity to use industrial infrastructure. Furthermore, the spatial structure of low-rise, low-density residential areas represented by the "Scientific Gandalei" construction method would also be altered, in conjunction with the large-scale construction of multi-story residential housing projects initiated since 1979. Moreover, considering that these new housing projects were not only more complex in architectural structure but also equipped with independent kitchens and relatively private sanitation facilities, this marked a gradual departure from the centralized public amenities (such as public toilets and baths) that emerged in the 1960s. These factors all indicate that in restructuring the spatial structure of the Daging Oilfield, the Urban Planning Bureau faced many possibilities.

However, the local authorities' path dependence on the "Integration of Government and Enterprise" system and its representative urban planning principles limited the Urban Planning Bureau's ability to explore a broader range of possibilities. Theoretically, concentrating the settlements scattered throughout the oilfield and managing them in a unified manner while providing complete public facilities appeared to be a clear-cut strategy. Yet, such a strategy was overly idealistic, facing many practical infeasibilities, especially considering the authorities' economic capacity to handle the substantial financial investments required to construct numerous residential sites. Given these institutional and material constraints, planners were forced to operate within the realm of what was realistically feasible, making moderate adjustments to the existing spatial structure to achieve predetermined goals. Although this approach could not fully realize the ideal

³⁹⁶ Daqing Committee (1976). Daqing Mining Area's Fifth Five-Year Construction Plan. [大庆矿区建设"五五"规划].

planning concepts, it enabled the optimization of spatial layout and infrastructure configuration under the current conditions. The Urban Planning Bureau attempted to find a feasible balance between idealism and pragmatism.

In response, the Planning Bureau proposed an integration solution, which involved consolidating scattered low-level settlements within specific areas into fewer, higherlevel settlements, as well as equipping them with independent civil infrastructure. According to the planning standards of the mid-1960s, a worker town typically housed about 20,000 inhabitants (exceptions existed, such as Saertu, with a population of 42,000), each central village supported up to 5,000 individuals, and the population cap for each residential site was 1,000 people. By 1981, the population ratio of the 3 worker towns, 34 central villages, and 110 settlements was approximately 2.2:4.6:3.2, with about 78% of the population residing in relatively scattered central villages and settlements.³⁹⁷ According to the new planning strategy, the new three-tier spatial structure was expected to include 6 worker towns, 24 central villages, and 27 settlements, with an anticipated population ratio adjustment to 5:4:1.398 This approach anticipated doubling the number of larger worker towns, reducing the count of smaller residential sites to one-fourth of its initial figure, and trimming the number of central villages by nearly one-third, thereby aiming for a more consolidated and efficient urban structure.

The Planning Bureau's strategy of concentrating new residential areas into existing or newly planned higher-level settlements, while gradually eliminating the original medium and small settlements, underscores their commitment to realizing the planning principle of "Building a Beautiful Daging." A crucial aspect of this strategy involves relocating individuals associated with oil extraction and related infrastructures from scattered peripheral accommodations to consolidated residential quarters, aiming to elevate living standards and quality of life. Remarkably, the Daging Oilfield has not seen a decrease in population numbers; indeed, since the foundation of Daging City in 1978, there has been a consistent annual population increase of nearly twenty thousand. This context makes the expanded worker town count, alongside the reduction in central villages and settlements, a clear indication of the planners' focused efforts to centralize the populace within specific areas, thus enhancing spatial efficiency and living conditions.

³⁹⁷ Zhu, Y. (n.d.). Early Stages of Transition from Mining Area Construction Planning to Urban Planning [矿 区建设规划向城市规划转变初期的城市建设规划]. History of Daqing Urban Planning [大庆城市规划史]. In [Unknown Book Title] (p. 634). Daqing.

³⁹⁸ Ibid, (p.635)

In response to population increases in areas with over twenty thousand inhabitants, the Planning Bureau undertook to redefine and establish new worker towns. For instance, Wolitun Town, located 19 kilometres east of Longfeng Worker Town, emerged in reaction to substantial population growth driven by new industrial initiatives. The initiation of a 300,000-ton ethylene plant in 1979 catalyzed rapid development in the Wolitun area. Despite a hiatus from November 1980 to March 1982 due to the Central Government's economic adjustments policy, the project's recommencement swiftly drew nearly 20,000 people to the vicinity.³⁹⁹ Given Wolitun's population, the Planning Bureau elected to classify it as a nationallevel large comprehensive petrochemical base, thus distinguishing it from Longfeng Town. Conversely, Honggang Town developed from the expansion of a previously larger central village, situated 40 kilometers south of Saertu Town on the Daging Placanticline structure—a principal oil structure extending north to south. Furthermore, Datong Town was established through the amalgamation of Gaotaizi, the original Datong Town, and ten surrounding people's communes, creating a new jurisdiction. The creation of new worker towns not only mirrors the Planning Bureau's approach to addressing industrial expansion and demographic growth but also illustrates its efforts to optimize the spatial structure and enhance regional administrative efficacy.

Both the established and newly formed worker towns play a pivotal role in the new spatial structure adjustment scheme envisioned by the Planning Bureau; they represent the continuation of the original spatial planning principles. The maintenance of sufficient spatial distance between these worker towns ensures their absolute dispersion in space, preserving the unique spatial form that the original planning principle of "Integration of workers and farmers, unity of urban and rural, facilitation of production, and convenience for living" was dedicated to shaping. For instance, with Saertu Town as a reference point, Ranghulu Town is located approximately 17 kilometers to its west, Longfeng Town about 17 kilometers to the east, Wolitun Town extends 18 kilometres east of Longfeng Town, Honggang Town is located 40 kilometres south of Saertu Town, and Datong Town about 70 kilometers to the southeast of Saertu Town. Additionally, the spatial scale of these worker towns, the social welfare, and the resident-required infrastructure they can provide far exceed those of the surrounding central villages. Their existence maintains the original spatial structure constructed of three different scales of residential areas: worker town - central village - and settlement.

399 Office of the Daqing Local Chronicles Compilation Committee. (1988). 'Overview of Districts and Towns [区镇概况]'. In *Daqing Gazetteer* [大庆市志], (p. 53). Nanjing: Nanjing Publishing House.

The Urban Planning Bureau summarized the aforementioned planning practice in a succinct phrase – "large dispersion, small concentration." 400 It encapsulates the Planning Bureau's approach to having to balance old and new planning principles in practice, compelled by its lack of interpretative authority over these approaches. By employing a pair of antithetical terms— 'large' versus 'small' and 'dispersion' versus 'concentration'—the Bureau succinctly conveyed the essence of its planning strategy. The "large dispersion" aspect of this strategy continues to facilitate the proximity of employees to oil industrial sites while leveraging the dispersed spatial arrangement for agricultural activities. Concurrently, the "small concentration" approach enables the Daging Municipal Government and the Urban Planning Bureau to develop and deliver independent civilian infrastructure more efficiently, illustrating a pragmatic balance between maintaining traditional spatial distribution and adapting to new urban planning demands.

"Large dispersion, small concentration" does not constitute a wholly new planning principle. In the urban planning of Daqing, the "small concentration" is essentially an overlay on the original "large dispersion" principle, serving as an effective adjustment approach under the unchangeable conditions of the existing principle. This strategy does not alter the overall dispersed spatial layout pattern formed by the old planning principle, maintaining the spatial structure of the worker town, central village, and residential site, as well as their dispersed layout throughout the oilfield. Therefore, it can be said that the Planning Bureau, while retaining the original planning principles, has effectively optimized and re-integrated the local spatial structure by introducing and integrating new protocols. This strategy represents a layering and expansion of the original planning principles, aimed at extending the scope and effectiveness of the original principles to meet the evolving urban development needs.

The inclination of the Urban Planning Bureau toward embedding the "Building a Beautiful Daging" principle into their projects was evident, especially when considering the prior focus on basic residential needs over a more enriched municipal and civil infrastructure. Before the 1980s, even the worker towns, which were better off in terms of amenities, offered limited facilities beyond healthcare, education, and some infrastructure, with a noticeable deficiency in commercial, cultural, and entertainment facilities. In drafting short-term planning projects, the Urban Planning Bureau embarked on several architectural initiatives aimed specifically at enhancing the residents' livelihood. These initiatives particularly

400 Zhu, Y. (n.d.). Early Stages of Transition from Mining Area Construction Planning to Urban Planning [矿 区建设规划向城市规划转变初期的城市建设规划]. History of Daqing Urban Planning [大庆城市规划史]. In [Unknown Book Title] (p. 635). Daqing.

emphasized public cultural and entertainment projects in Saertu Town, as outlined in projects like the "1983 Daqing City Team Spot Construction and New Residential Area Planning Key Points" and the "1983 Daqing City Partial Major Public Buildings Planning Implementation Plan." These projects included significant public cultural structures like the Youth Palace, libraries, swimming pools, and the Workers' Cultural Palace, alongside commercial entities such as the Daqing Department Store, Saertu Shopping Mall, Xinhua Bookstore, Post Office, and office buildings for key administrative organizations. ⁴⁰¹ These public buildings aimed not only to bridge the existing gap in commercial and entertainment amenities but also to elevate the functionality and image of local government and administrative organizations. While the completion of these projects might not have entirely shifted the local residents from their lower living standards, they significantly boosted the perception of local living environment enhancements within a relatively short span, demonstrating a tangible commitment to the "Building a Beautiful Daqing" principle.

The centralized approach to situating nearly all the new public facilities in Saertu Town, despite its potential to elevate the living standards of local residents significantly, had a constrained impact due to the perpetuation of an imbalance in the distribution of resources and facilities among the worker towns. This strategy, rooted in historical decisions dating back to the initial planning phase in 1962, reflects a long-standing disparity in the allocation of urban amenities. Initially, Ranghulu Town was proposed to serve as the developmental, constructional, and command center of the Daging Oilfield. 402 However, due to Saertu Town's proximity to major oil production areas and the pre-existence of essential civil infrastructure. it was ultimately chosen as the oilfield's production and command center, relegating Ranghulu Town to a secondary role focused on oil construction design and education, and Longfeng Town to oil refining. This early decision-making significantly influenced the uneven development and resource allocation across the worker towns. Consequently, the recent drive to enhance the living environment through the construction of new public buildings predominantly in Saertu Town, although well-intentioned, inadvertently exacerbated the disparities in access to urban facilities and services among the resident population. This outcome highlights the complexities and unintended consequences of urban planning decisions, underlining the importance of a more equitable and distributed approach to urban development to ensure all residents benefit from enhanced living conditions and access to public amenities.

⁴⁰¹ Editorial. (1984). Our city's urban construction is taking shape – Building a beautiful oil city and striving to improve the lives of workers. *Daqing Daily*, 30 August. Daqing.

⁴⁰² Daqing Committee (1966). Daqing Oilfield's Third Five-Year Construction Plan (1966-1970) [大庆油田"三五"建设规划(1966-1970)]. Daqing.

The Planning Bureau did not possess the authority to alter this uneven distribution of resources. As new public building projects continued to be concentrated in Saertu Town, this area remained the political, economic, and commercial center of Daging City. In stark contrast, the planning focus in Ranghulu Town was on industrial and agricultural facilities, such as large vegetable storage warehouses and flour mills, aiming to develop this region into the city's subsidiary food and grain processing center. In Longfeng Town the emphasis was on constructing industrial infrastructure, such as drainage facilities, to lessen the petrochemical industry's environmental footprint. In these two towns, planned public buildings primarily supported industrial development rather than providing commercial, cultural, or entertainment facilities aimed at enriching and improving residents' quality of life. This planning emphasis led to a relatively limited role and functionality for Ranghulu and Longfeng Towns within the overall urban planning, contrasting with Saertu Town's multifaceted development. At the same time, the three additional worker towns introduced in the planning were not allocated corresponding public buildings and facilities. further exacerbating the imbalance in resource and facility distribution among the worker towns. This situation underscores the challenge of achieving a balanced and equitable urban development that caters comprehensively to the residents' needs across different urban areas, particularly in cities with significant industrial foundations like Daging.

This planning strategy, which privileges Saertu Town as the focal point, could significantly intensify disparities in public infrastructure accessibility among it and other worker towns. Given the augmented transportation expenses between Ranghulu and Longfeng Towns vis-à-vis Saertu Town, such a condition might impede the inhabitants of these towns from fully benefiting from the newly constructed public edifices and amenities. Moreover, for the populace residing in the trio of newly inaugurated worker towns, situated at an even greater distance from Saertu Town, the challenges and financial outlay linked to accessing these novel public facilities proportionately escalate. This planning paradigm risks undermining the overarching aim of "Building a Beautiful Daging," as it falls short of guaranteeing a fair distribution of public utilities and services across diverse urban territories. This scenario not only impinges upon the living quality and convenience for the denizens but might also precipitate uneven development and social segmentation within the communities. Consequently, the efficacy of this planning methodology in stimulating equitable development and ameliorating the well-being of the denizens of Daging City undoubtedly necessitates further contemplation and discourse.

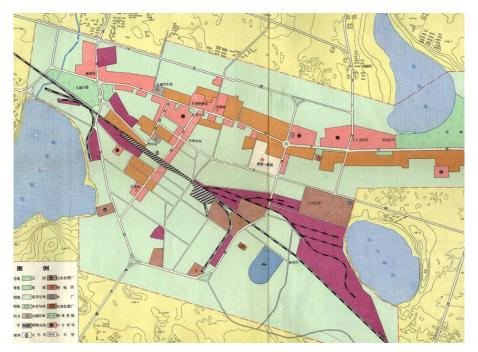


FIG. 11.1 Master Plan for Saertu Town 1982-2000, Source: Daqing Urban and Rural Planning Bureau.

The suggested spatial layout strategy in Saertu Town for the placement of newly constructed public buildings is a "T"-shaped design, which aims to enhance traffic flow and optimize the urban form. The proposed design involves the distribution of public buildings along a horizontal road and a vertical road, resulting in a structure that resembles the letter "T" (Figure 11.1). Specifically, the horizontal road is divided into two parts: the first section is Zhongqi Road, which commences from the western side of the Children's Park, passing through the Petroleum Administration, the Municipal Government, and the People's Congress Office Buildings, extending eastward past the Youth Palace, library, and swimming pool, ultimately connecting to the second part, Dongfeng Road. Concurrently, commercial buildings such as the Saertu Shopping Mall, Daqing Department Store, Xinhua Bookstore, etc., are planned along the vertical road, namely Hui Zhan Road. The Urban Planning Bureau, through rational planning of roads and buildings, seeks to optimize urban traffic and the utilization of public spaces.

The "T"-shaped spatial composition scheme also spatially highlights the leading role of state-owned oil enterprises in the construction of Daqing's authoritative power structure. In this composition, the new office building of the Petroleum Administration is strategically positioned at the intersection of the "T", thereby

becoming the core of the entire spatial configuration. The Municipal Government building is located to its east side, and the People's Congress is to the south, together forming the spatial power core of Daqing City. The choice of this composition is closely related to the "Integration of Government and Enterprise" or "triple-partite" administrative institutions. Under this system, personnel from the relevant agencies and departments often hold positions across multiple units. Thus, positioning these buildings in adjacent locations helps to optimize their daily work efficiency. The land area allocated to the Petroleum Administration building is significantly larger than that of the Municipal Government and People's Congress, further highlighting the Petroleum Administration's leadership position in the "triplepartite." This composition, beyond streamlining administrative operations, visibly and functionally asserts the Petroleum Administration's centrality. Through this spatial composition, the Planning Bureau not only reflects the emphasis on urban administrative and management functions but also spatially represents the power structure and organizational priorities within city management.

However, in terms of alleviating the "spatial contradictions" that emerged within Saertu Town since the mid-1970s, the effect of the "T"-shaped layout is akin to a drop in the bucket. The planning strategy of situating a large number of public facilities in Saertu Town, which has already seen its industrial lands extensively occupied by public buildings, may not only fail to resolve the existing spatial contradictions but could potentially exacerbate the issue. The rationale behind this phenomenon can be attributed to the continued encroachment upon lands that were initially earmarked for industrial development by these recently erected public structures. Such a change in land use could lead to intensified conflicts between industrial and civilian functions, thereby increasing the urban planning pressure on the municipality. The clustering of numerous public buildings in Saertu Town could accentuate the pre-existing contradictions in its spatial composition.

In short, during the 1981 to 1982 period, the Daqing Urban Planning Bureau leveraged multiple short-term planning projects as laboratories to explore the simultaneous implementation of the contradictory principles of "*Production First, Livelihood Second*" and "*Building a Beautiful Daqing*" in the first comprehensive urban plan for Daqing City. Overall, the planning process showed a moderate level of success. While accomplishing the task of constructing numerous multi-story brick buildings, the Planning Bureau also successfully evaluated spatial structure adjustment schemes that aligned with the requirements for enhancing civil infrastructure. Following the directives of the authorities, the Planning Bureau developed plans that included an array of public buildings, with the aim of providing local residents with improved civil services. However, there were notable deficiencies in the planning of these public buildings. The planning failed to address the spatial contradictions caused by the uncontrolled

expansion of Saertu Town since the mid-1970s. On the contrary, by clustering most public service buildings within this region, this approach might have further exacerbated spatial contradictions within the town. Given that Saertu Town is the area with the highest degree of spatial access in the city, this makes residents more inclined to remain in the town, thereby intensifying the challenges faced by urban planning.

This scenario exemplifies the constrained authority of the Planning Bureau in interpreting the old and new urban planning principles, leading to these exploratory projects having both successful and unsuccessful aspects. Within this framework, their task becomes more complex. They are required not only to maintain the dispersed spatial structure of the entire oilfield but also to explore effective methods to enhance residents' living standards. This demands that they focus on and improve living conditions for residents while maintaining the industrial development. The Planning Bureau could only explore options based on retaining the existing two planning mechanisms, which essentially represents a compromise. Therefore, while these projects aimed to achieve the overall planning objectives, they also exposed the limitations of urban planning in facing urban development challenges. This situation underscores the importance of reflecting on and adjusting existing planning mechanisms in the urban planning process, as well as the necessity of continuous efforts to achieve balanced urban development and enhance residents' welfare.

From the perspective of institutional change, the "large dispersion, small concentration" proposed by the Daging Urban Planning Bureau is effectively a result of layering "small concentration" onto the encouraged "large dispersion" within the existing planning principle of "Integration of workers and farmers, unity of urban and rural, facilitation of production, and convenience for living". Due to the path dependency, local authorities did not provide sufficient space for the Planning Bureau to reinterpret or alter the original urban planning principle. In this restrictive context, the Planning Bureau could only innovate within the framework of the existing planning principle. They expanded the application scope of the original principle to meet new era demands and spatial construction objectives through what is known as a "layering" approach—adding new elements and discourses on top of the existing principle. This approach represents both a compromise and an effort to seek innovation and progress within the existing institutional framework as much as possible. In this way, the Planning Bureau attempts to introduce new planning concepts and methods without altering the original principle, addressing the growing needs for urban development and resident welfare. This practice highlights the importance of maintaining flexibility and innovation in institutional change and points out the challenges of balancing traditional planning principles with modern urban demands. But it also led to dissatisfaction as the new urban planning failed to address the spatial contradictions in the Saertu Worker Town.

11.2.2 The New Urban Planning Principle as a Blend of Layering and Conversion Modes

The dissatisfaction expressed by the municipal government and the Petroleum Administration Bureau with the General Urban Construction Plan of Daging City led them to directly participate in the formulation and adjustment of Daging's urban planning. From 1981 to 1983, through a series of short-term planning projects, the Daging Urban Planning Bureau investigated the extent to which to build a spatial structure that embodies "large dispersion, small concentration" by layering new principles on the existing planning principles of *Integration of workers and farmers, unity of urban* and rural." During this exploration, the Planning Bureau completed the initial draft of the General Urban Construction Plan of Daging City in 1982 and submitted it to the municipal government for consultation. Yet, the draft faced a critical evaluation from local authorities, with both the leadership of the Petroleum Administration Bureau and the municipal government pinpointing its failure to effectively tackle the "spatial contradictions" in Saertu Town. 403 There were concerns that introducing numerous public buildings in the town might aggravate these issues. Despite the spatial contradictions in Saertu Town stemming from the spatial policies previously implemented by local authorities, they realized that if the urban planning issues in Saertu Town were not properly addressed and resolved, it could ultimately affect the future oil extraction progress of the Daging Oilfield. Therefore, the municipal government requested the Urban Planning Bureau to undertake a long-term, orderly adjustment of the urban form to ensure the stability of future crude oil production in the Daging Oilfield.

Although the Daqing authorities had the power to immediately abolish the old urban planning principle and establish a new one, they preferred to take a gradual approach to the transition of the local urban planning principle. In related discussions, the authorities explicitly expressed their concerns about the adverse effects that maintaining an absolute dispersion of the entire oilfield's spatial structure could have on industrial production and residents' living conditions. However, they lacked sufficient funds and confidence to deal with potential social unrest that might arise from major adjustments to the spatial structure. Therefore, they requested the Urban Planning Bureau to develop a plan to gradually change the dispersed spatial structure of the Daqing Oilfield and simultaneously meet the needs for industrial development and improvement of residents' quality of life. The authorities did not pursue rapid changes, as a gradual transition strategy was considered to have lower economic costs and to be more conducive to maintaining social stability. They feared upheaval.

403 Zhu, Y. (n.d.). Early Stages of Transition from Mining Area Construction Planning to Urban Planning [矿区建设规划向城市规划转变初期的城市建设规划]. History of Daqing Urban Planning [大庆城市规划史]. In [Unknown Book Title] (p. 636). Daqing.

The Daging authorities utilized the Daging Urban Planning Committee meeting as a platform for establishing a new urban planning system. On December 20, 1983, the Mayor of Daging City, Zheng Yaoshun, chaired the meeting, which brought together leaders from the Petroleum Administration Bureau, the mayor and other municipal leaders, Planning Committee members, and heads of planning departments for in-depth discussions. The function of this meeting was clear: to provide a platform for local leaders, heads of relevant disciplines, and professional elites to engage in thorough discussions, thereby building consensus and collectively formulating and adjusting the principles of urban construction planning in Daging City. Notably, the Daging Urban Planning Committee mentioned during the meeting is not a newly established entity but a new name acquired by the original Daging Urban Planning Bureau following a change in its supervising unit. This renaming occurred after the Daging Municipal Government decided to realign the Urban Planning Bureau from the Construction Committee to the Planning Committee in 1983. The adjustment of the Urban Planning Bureau's supervisory body also indirectly reflects the local authorities' emphasis on the function of urban planning; it is not merely about spatial construction but also serves as an essential infrastructure to facilitate local economic and other planning efforts.

Through this platform, the Daqing authorities essentially delegated the power to formulate and interpret planning principles to other participants of the meeting, especially the Urban Planning Committee. This allowed for more in-depth and targeted adjustments to the existing urban planning principles. Previously, the Urban Planning Bureau, lacking such authority, could only layer the principle of "small concentration" on top of the existing principles of "Integration of workers and farmers, unity of urban and rural, facilitation of production, and convenience for living." This limitation prevented them from reforming outdated urban planning principles that no longer met local development needs, resulting in initial planning drafts that failed to effectively address the spatial contradictions in Saertu Town. Now, by participating in the meeting, the Daqing authorities shared the interpretative power of the planning principle with the relevant urban planning expert team on specific occasions. Thus, it can be said that at this meeting, the Urban Planning Committee temporarily gained the authority to formulate and reinterpret the urban planning principle of Daqing City.

Under these conditions, the Daqing authorities and the Urban Planning Committee proposed adjusted planning principles based on the current urban planning principles, covering four key points. The primary principle is to implement the guidelines of "Integration of workers and farmers, unity of urban and rural, facilitation of production, and convenience for living," as well as the concept of

"Develop Small Towns." 404 This principle contains two parts: one is the inheritance of the existing planning principles, and the other introduces the new idea of "Develop" Small Towns." Here, "Develop Small Towns" refers to a clustered spatial layout concentrated around worker towns and central villages. As a politically correct concept, "Develop Small Towns" also responds to the call for the development of small towns in the "Minutes of the National Urban Planning Work Conference" circulated by the State Council, indicating its policy significance and guidance. 405 This concept undoubtedly evolved from the "large dispersion, small concentration" examined by the Urban Planning Bureau during the 1981 to 1983 period. However, the difference in naming already suggests that the authorities want to convey a clear distinction between them.

The shift in urban planning principles signals the Daging authorities' inclination towards a gradual transformation of the local urban planning principle, as evident in the nuanced language and structural composition employed. The concept of "Develop Small Towns" signifies a departure from the earlier strategy that promoted an entirely dispersed spatial structure across the vast Daging Oilfield. According to internal documents from the Urban Planning Bureau, "Develop Small Towns" is further clarified as "relatively dispersed, appropriately concentrated," moving away from the binary descriptions of "large" and "small." 406 This nuanced phrasing indicates a move away from absolute dispersion to relative dispersion, while "appropriately concentrated" suggests a break from the constraints of concentrating activities within a narrow scope. Thus, "Develop Small Towns" marks not only a departure from the "large dispersion, small concentration" model but also a fundamental shift from the erstwhile planning principles that championed absolute spatial dispersion.

Also, the shift in vocabulary actually provides urban planners with more leeway in operation, enabling them to gradually adjust the spatial layout of the area according to current demands and regional characteristics. The move away from absolute descriptors like "large" and "small" towards more adaptable and flexible terms such as "relative" and "appropriate" signifies more than just a change in language; it represents a strategic evolution in planning principle. This change is critical

⁴⁰⁴ Daging Municipal Government. (1985). General Urban Construction Planning of Daging City [大庆市城镇 总体规划]. Internal document, March 2. Daqing.

⁴⁰⁵ Central Committee of the Communist Party of China. (1978). Document No. 13 [Title of the Document if available]. Beijing. State Council of the People's Republic of China. (1980). Minutes of the National Urban Planning Work Conference [全国城市规划工作会议纪要]. Approved document No. 299, Beijing.

⁴⁰⁶ Daging Municipal Government. (1985). General Urban Construction Planning of Daging City [大庆市城镇 总体规划]. Internal document, March 2. Daging.

when considering the necessary modifications to Daqing's urban spatial structure, particularly the transition from its historically absolute dispersed structure. Such a transformation is inherently a long-term and intricate endeavor. Therefore, a planning principle that embodies sufficient adaptability and flexibility is exceptionally fitting for navigating the complexities of urban spatial restructuring in Daqing.

In addressing the planning guideline of "Production First, Livelihood Second," the Urban Planning Committee opted to retain the original expression of the guideline but reinterpret its content and application scenarios, subtly initiating a transformation of the guideline. Specifically, the Committee did not neglect the mantra of "Production First, Livelihood Second" in their textual description. They began by reaffirming that "urban planning should be subordinate to the needs of oil and petrochemical production." However, following this description, they skillfully integrated an additional statement "while striving to resolve the conflicts between oilfield development and urban construction in terms of land use." Although this statement begins within the framework of traditional spatial principles, it pivots to address current spatial challenges, particularly the issue of residential and living structures encroaching upon lands designated for industrial production in Saertu Town.

The Urban Planning Committee's introduction of the new additional planning principle "Clear the Main Path, Develop on Both Sides" effectively captures the essence of the spatial layout they propose. 408 "The Main Path" represents the Daqing Placanticline, an oil structure extending north to south, with both Saertu Town and Honggang Town situated atop this geological feature. The directive to "Clear the Main Path" involves the strategic relocation of residential zones from within the oil structure area, thereby preventing any potential interference with the development and operation of oil production infrastructure and facilities. It involves the repositioning of these residential zones to areas east and west of the Placanticline. Together, they ensure the continuity of oil production activities without disruption while also facilitating the sensible redistribution of living spaces. This approach marks the Planning Committee's innovative reinterpretation of the erstwhile principle of prioritizing "Production First, Livelihood Second," adapting it to meet contemporary urban planning and developmental needs.

⁴⁰⁷ Ibid

⁴⁰⁸ Ibid

The other two spatial planning principles formally institutionalize the concept of "Building a Beautiful Daging" within local planning documents. They involve the construction of independent civil infrastructure pipelines and the expansive development of multi-story brick-concrete structure housing. Specifically, the third principle is dedicated to the gradual enhancement of the urban energy structure, with a particular emphasis on advancing regional centralized systems for heating and power supply.⁴⁰⁹ This measure aims to boost energy efficiency and quarantee that residents have access to stable and dependable energy sources. Meanwhile, the fourth principle champions a dual approach that merges new construction with renovation efforts. This includes not only the ambitious erection of new multistory brick residential buildings but also the methodical refurbishment of existing traditional homes, such as Scientific Gandalei Dwellings and brick-pillar adobe constructions. 410 These initiatives were subjects of extensive investigations by the Urban Planning Bureau across a multitude of short-term planning and architectural design endeavors. By incorporating these practices into the updated urban planning principles, the past operational insights of the Daging Urban Planning Bureau are officially recognized and instituted. This approach not only celebrates the achievements of previous exploratory efforts but also lays down precise directives for the future urban development, facilitating the attainment of achieving long-term urban planning goals and continuous improvement.

The leadership of the Daqing authorities in developing new urban planning principles led to these principles gaining an advantage through the regulation making process. Merely 20 days following the conclusion of the Urban Planning Committee meeting, the Daqing authorities issued the "Minutes of the First Meeting of the Daqing City Construction Committee" on January 10, 1984. This event signified the Daqing authorities' finalization of the institutionalization process for the new urban planning principles. The document not only acts as a guideline for adjustments in urban planning within the area but also serves as regulatory, shaping and guiding future planning efforts. The prompt move by the Daqing authorities to formalize the urban planning principles underscores a definitive purpose: to establish the essential local regulations and framework that would support the Urban Planning Committee in revising the General Urban Construction Plan of Daqing City.

⁴⁰⁹ Daqing Municipal Government. (1985). General Urban Construction Planning of Daqing City [大庆市城镇 总体规划]. Internal document, March 2. Daqing.

⁴¹⁰ Ibid

⁴¹¹ Zhu, Y. (n.d.). Early Stages of Transition from Mining Area Construction Planning to Urban Planning [矿区建设规划向城市规划转变初期的城市建设规划]. History of Daqing Urban Planning [大庆城市规划史]. In [Unknown Book Title] (p. 636). Daqing.

The evolution of Daqing's urban planning principles demonstrates a nuanced transformation that integrates both the Layering and Conversion modes, as highlighted by the historical analysis. Initially, while upholding the foundational principles, the introduction of the "Develop Small Towns" concept aimed to shift away from the absolute dispersion favored previously. Furthermore, the redefinition of "Production First, Livelihood Second" to "Clear the Main Path, Develop on Both Sides" significantly modified its application context. The latter principles effectively formalized Deng Xiaoping's vision for enhancing the living conditions of the residents. In orchestrating this shift, the Urban Planning Committee expanded the influence and relevance of the original planning guideline through a strategic reinterpretation and incorporation of innovative elements. This amalgamation of Layering and Conversion underscores a deliberate approach towards progressive reform and development within the urban planning strategy of Daging.

The nuanced role of the Daqing authorities in the evolution of the planning system may illuminate why traits of both Layering and Conversion are apparent in the transformation of urban planning guidelines. In this context, the Daqing authorities embody a complex, if seemingly paradoxical, role: they act as both challengers to and defenders of the prevailing urban planning guideline. This scenario originates from Deng's initiative to "Build a Beautiful Daqing," compelling the Daqing authorities to revise local urban planning guidelines. Nevertheless, their deep-rooted path dependency on the "Integration of Government and Enterprise" system precluded a complete departure from the entrenched guideline of "Production First, Livelihood Second," along with its foundational principles of "Integration of workers and farmers, unity of urban and rural, facilitation of production, and convenience for living." Thus, the Daqing authorities emerge as passive preservers in this dynamic, striving to uphold the existing institutional structure and its principles as much as possible amidst new guidelines and reformative pressures.

11.2.3 Drifting the Old Planning Policies: The Urban Planning Lack of Forward-thinking & the Planning Vision Lack of Institutional Constraints

The Urban Planning Committee, guided by the newly published Minutes of the First Meeting of the Daqing City Construction Committee and inspired by the directives to "Develop Small Towns" and "Clear the Main Path, Develop on Both Sides," made revisions to the initially submitted draft. In this revised proposal, the fundamental spatial structure comprising 6 worker towns, 24 central villages, and 27 settlements as initially envisioned was preserved. However, there was a notable change in the

makeup of the worker towns, with Chengfengzhuang, situated 13 kilometers south of Ranghulu Town, taking its place. This modification was propelled by two primary considerations. First, adhering to the "Clear the Main Path, Develop on Both Sides" principle meant refraining from establishing new large residential zones atop the oilfield structure, thus excluding the Honggang region, positioned on the Daqing Placanticline, from being a worker town in the new blueprint. Second, the strategic proximity between Chengfengzhuang and Ranghulu Town enabled the formation of a more substantial developmental cluster, fulfilling the "Develop Small Towns" principle's goal.

The Urban Planning Committee's approach to merging spatially neighboring worker towns into expansive clusters with akin functionalities underscores a key tactic in realizing the "Develop Small Towns". "Schematic Diagram of Daqing Urban Planning" (Figure 11.2) distinctly outlines the committee's ambition to segment Daging City into three developmental clusters, each pivoting around worker towns and classified into eastern, central, and western parts. In this configuration, Ranghulu and Chengfengzhuang compose the western cluster, primarily catering to the oil extraction service industry; the east is earmarked as the petrochemical industry zone, embodied by Longfeng Town and the newly incorporated Wolitun Town. The central sector is identified as the hub for administration and light industry, featuring Saertu Town and an envisaged textile light industry sector positioned between Saertu and Longfeng, inclusive of entities like the Daging Blanket Factory. Intriguingly, the proximity of Saertu Town's light industrial area to Longfeng Town hints at the feasibility of amalgamating these areas into an even larger entity. This strategic amalgamation of worker towns and central villages, sharing industrial characteristics and proximal locales, culminates in the emergence of cohesive clusters within the urban fabric. The development of clusters signifies an advancement from the Urban Planning Committee's earlier approach of "Develop Small Towns" principle, moving from a focus on localized areas to promoting concentrated development across a wider region.

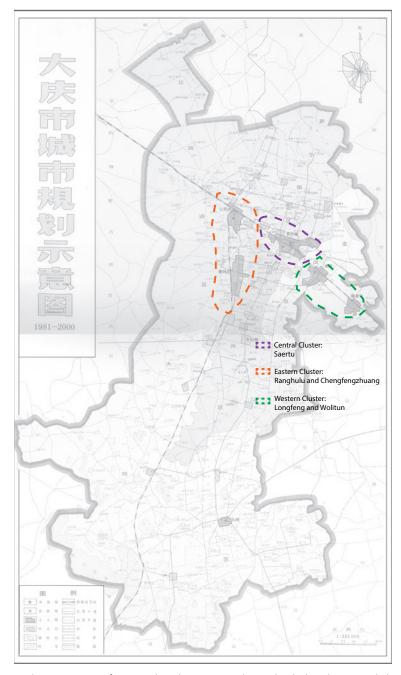


FIG. 11.2 Schematic Diagram of Daqing Urban Planning. Drawn by Penglin Zhu based on research data, using the 1982 Master Plan as a base map. Source: Penglin Zhu.

In revising the plan, the Planning Committee encountered the challenge of applying the new "Clear the Main Path, Develop on Both Sides" principle to Saertu Town. Unlike the initial decision to eliminate the planned Honggang worker town, abandoning Saertu along with its newly established infrastructure was not an option. Such a move would represent a total negation of the Daqing authorities' urban planning initiatives from 1981 to 1983. Furthermore, the Daqing authorities would have to justify this failure, especially in light of the significant government investment in these public infrastructures. Therefore, their viable course of action was to maintain these recently constructed public amenities while seeking methods to relocate other non-industrial buildings encroaching on lands designated for oil development out of Saertu.

The relocation of residents within Saertu Town to the newly established Dongfeng New Village represents a practical implementation of the "Clear the Main Path, Develop on Both Sides" principle. The New Village is located on the eastern side of the horizontal road in the "T" layout of Saertu Town, 7.5 kilometers away from the Petroleum Administration Office building. By moving the population to an area 7.5 kilometers away from the core of oil production activities, this initiative effectively reduces the direct conflicts between residential living and industrial production. Figures 11.1 and 11.2 display the near-term planning for Saertu Town from 1981 to 1990 and from 1981 to 2000, respectively, as outlined in the General Urban Construction Plan of Daging City. The newly established Dongfeng New Village, named after the Dongfeng No.1 and No.2 Villages established in the early 1960s nearby, serves as a concentrated residential area, designed to accommodate about 30,000 residents in two major housing complexes. 412 This strategic move not only aligns with the goal of minimizing the impact on oil production but also aims to enhance the living conditions of the residents by providing them with new, planned, and centralized housing facilities.

The choice of Dongfeng New Village's location, especially its proximity to Saertu Town and the arrangement of its facilities, reflects a compromise by the Urban Planning Committee to continue using the public buildings and amenities within Saertu Town. In pursuit of sustaining elevated accessibility to Saertu Town's facilities, the committee designated the new residential district to be closely situated to Saertu. Furthermore, the New Village was conceptualized along the prolongation of the horizontal road in the "T" configuration of Saertu Town; a strategy intended to employ existing roadways to minimize the financial outlay for new transport

⁴¹² Zhu, Y. (n.d.). Urban Planning under the Guidance of Daqing Development Strategy Research [在大庆发展战略研究指导下的城市规划]. History of Daqing Urban Planning [大庆城市规划史]. In [Unknown Book Title] (p. 640). Daqing.

infrastructure while still ensuring commendably efficient transport services. Additionally, the Planning Committee earmarked merely a restricted assortment of public amenities within Dongfeng New Village, mindful of the utilization of facilities in Saertu Town. The initial omission of plans to erect supplementary public amenities in the new district culminated in a dearth of public facility provisions as Dongfeng New Village evolved. This planning concession underscores a deficiency in forward-thinking by the Urban Planning Committee in the formulation of the General Urban Construction Plan of Daging City.

The lack of forward-thinking led the Urban Planning Committee to continually modify their plans for Dongfeng New Village to meet new rising demands. Notably, in 1984, the Daging Municipal Government sought the Heilongjiang Provincial Committee's endorsement for the plan, securing formal approval and legal standing on March 2, 1985. 413 Nevertheless, by 1985, a mere year following the commencement of Dongfeng New Village's development, it was apparent that the original blueprint for two residential zones, projected to house merely 30,000 individuals, fell short for actualizing the "Clear the Main Path, Develop on Both Sides" guideline within Saertu Town. This shortfall compelled the municipal administration to revise plans, engaging the Heilongjiang Provincial Urban Planning and Survey Design Institute for comprehensive planning of a third and fourth residential sector to rehouse an additional 20,000 residents. ⁴¹⁴ This attempt still did not rectify the predicament. By 1988, three years later, the municipal leadership identified that the quartet of residential districts, despite their capacity for 50,000 inhabitants, did not adequately rectify the spatial dissonances within the town. This situation mandated another intervention in May of the same year, prompting a request for the Heilongjiang Provincial Urban Planning and Design Research Institute to forge the General Plan for the Sa-Long Area of Daging City and the General Urban Plan for Dongfeng Area of Daging. 415 As a result, an endeavor originally conceived as a definitive urban planning framework, already ratified, devolved into essentially an assortment of interim planning initiatives, a testament to the initial lack of forward-thinking.

⁴¹³ Heilongjiang Provincial Urban Planning Committee. (1985). Approval of the General Urban Planning of Daqing City [黑龙江省城市规划委员会文件: 关于大庆市城市总体规划的批复]. Internal document, Document No. Hei Cheng Gui Fa (1985) No. 4, March 2. Harbin.

⁴¹⁴ Zhu, Y. (n.d.). Early Stages of Transition from Mining Area Construction Planning to Urban Planning [矿区建设规划向城市规划转变初期的城市建设规划]. History of Daqing Urban Planning [大庆城市规划史]. In [Unknown Book Title] (p. 636). Daqing.

⁴¹⁵ Heilongjiang Provincial Urban Planning and Design Research Institute & Daqing Urban Planning Commission. (1988). General Planning of Sa-Long District [萨龙地区总体规划], General Urban Planning of Dongfeng in Daqing City [大庆市东风城市总体规划]. Internal document, December. Harbin.

The planning issues revealed by Dongfang New Village are not isolated but reflective of a broader lack of foresight within the entire General Urban Construction Plan of Daqing City. In 1984, the Daqing Municipal Government's submission, which included the overarching plan alongside suburban, and specialized plans for factories, mines, transportation, water resources, utilities, electricity, telecommunications, and environmental concerns, only developed sectional master plans for four out of six worker towns: Saertu, Ranghulu, Longfeng, and Wolitun, leaving Datong Town and Chengfengzhuang without plans. An internal document from the Urban Planning Bureau sheds light on this oversight:

"...The growth of Chengfengzhuang and Datong Town was swift. By June 1987, Chengfengzhuang's developed area had expanded to 19.5 square kilometers, housing a population of 43,400... To align with these areas' urban development necessities and guarantee the wholesome evolution of city construction, in 1987, the Daqing Municipal Government initiated new urban planning projects. It tasked the Daqing City Construction Committee with drafting the Datong Town Construction Plan, and in 1988, engaged both the Harbin Urban Planning and Design Institute and the Daqing City Construction Committee for the General Urban Construction Plan of Chengfengzhuang."416

This passage indicates that the lack of foresight concerning the rapid expansion expected within the next three years for these towns was the main reason behind the absence of plans in 1984. This forced the municipal government into introducing new projects to address the planning needs of these towns adequately. This scenario underscores a larger issue: the local authorities' inexperience in holistically conceptualizing the Daging Oilfield as a unified, modern industrial urban entity.

The failure of the entire planning process, due to a lack of foresight, has continuously prompted the Daqing authorities to formulate a long-term vision. Despite the General Urban Construction Plan of Daqing City and several supplementary specialized plans effectively enhancing the living conditions of local residents and beginning to address the oilfield's excessively dispersed spatial structure, the process has been relatively unsuccessful. By 1988, the Daqing Municipal Government had developed six larger towns, 27 central villages over 2,000 inhabitants, and 27 settlements, significantly

⁴¹⁶ Zhu, Y. (n.d.). Datong, Chengfengzhuang, Sa-Long, and Dongfeng Area Comprehensive Urban Planning [大同,乘风庄,萨龙及东风地区城市总体规划]. History of Daqing Urban Planning [大庆城市规划史]. In [Unknown Book Title] (p. 636). Daqing.

decreasing the number of settlements from approximately 300 in 1978 to 93.417 This marked a significant shift in spatial organization. However, the need for the Municipal Government to perpetually launch new planning initiatives to remedy or amend flaws in prior plans has not only inflated economic costs but also imposed political pressures on local leadership, underscoring their deficiencies in decision-making. Aware of this strain, both the Petroleum Administration Bureau and the Daqing Municipal Government felt compelled to invest in creating a specialized research group dedicated to exploring future development strategies for Daqing.

The organization of the research group and the substantial financial commitment from the Daging authorities manifest their intention for the research to yield a pragmatic and responsible long-term developmental vision. This vision aims to act as a cornerstone for Daqing's future urban planning efforts, ensuring avoidance of previous planning missteps. Specifically, in October 1986, the Daging authorities initiated the Daging Regional Development Strategy Study research group, predominantly comprising members from the Chinese Academy of Sciences, the Institute of Policy and Management Science and various Daging City entities. 418 The group welcomed a diverse array of stakeholders for its sub-projects, drawing experts and academics from institutions such as the Chinese Academy of Sciences, Chinese Academy of Social Sciences, State Planning Commission, State Economic Commission, alongside representatives from the Daqing Municipal Government, Daging Petroleum Administration Bureau, and Daging Petrochemical Corporation. This strategy of garnering consensus among varied stakeholders unquestionably enhanced the research outcomes' credibility. The Daging Municipal Government's generous four-year funding span for this research underscored their commitment. offering researchers a broad timeframe to thoroughly examine and consider Daging's prospective development strategies from numerous angles.

The final outcomes of this four-year research initiative advocated for three pivotal strategic transformations: transitioning from a single-industry to a multi-industry economic structure; shifting from a heavily directive product economy to one that combines the planned economy with market mechanisms; and shifting from a semi-isolated, inward-focused economy to an open economy that synergizes both domestic

⁴¹⁷ Office of the Daqing Local Chronicles Compilation Committee. (1988). 'Section Three: Urban and Rural Construction, Urban Planning; Chapter One: Urban Planning; Section One: Comprehensive Planning [第三篇:城乡建设,城市规划;第一章:城市规划;第一节:总体规划]'. In *Daqing Gazetteer [大庆市志]*, (p. 93). Nanjing: Nanjing Publishing House.

⁴¹⁸ Zhu, Y. (n.d.). Urban Planning under the Guidance of Daqing Development Strategy Research [在大庆发展战略研究指导下的城市规划]. History of Daqing Urban Planning [大庆城市规划史]. In [Unknown Book Title] (p. 640). Daqing.

and international dimensions. The outcomes were encapsulated in two seminal reports in 1990: "Study on the Strategic Position and Environment of Daging" and "Study on the Strategic Objectives, Thoughts, and Measures for the Development of Daging," respectively. 419 Specifically, the strategic recommendations advised maintaining oil extraction and petrochemicals as cornerstone industries, while ambitiously fostering a diversified industrial sector geared towards high-tech and innovative industries, including light manufacturing, food production, new materials, precision processing, applied electronics, and contemporary agricultural and livestock practices. These reports offered a thorough examination and scrutiny of Daging's industrial framework and urban developmental stance at the time, also delving into prospective challenges the city might face in its onward journey of development.

Although the outcomes of the study could potentially impact the Petroleum Administration Bureau's stakes in Daging, the investigation boldly addressed the challenges of local development. The recommendations posited by these reports suggest a pivotal transformation of Daging from a city heavily reliant on oil and chemical sectors into a regional hub buoyed by a trinity of industries: oil, petrochemicals, and advanced technologies. Such a diversification strategy would inevitably, though gradually, erode the dominance of oil governance locally. Moreover, the reports chart a divergent course for Daging's urban development and spatial planning, markedly distinct from the Petroleum Administration Bureau's perspective, which was to evolve Daging into a nascent mining and industrial city centered on oil, petrochemicals, agriculture, and local light industries. Ensuring Daging's economic sustainability mandates transitioning from a predominantly mining-based economy to a comprehensive urban economy. Although these insights deviate from the local authorities' developmental blueprint, they nonetheless present balanced recommendations, underscoring the study's merit.

The reports are straightforward, yet the presentation of their recommendations by the research group is subtle and gentle. This method was likely chosen to ease acceptance from both the Petroleum Administration Bureau and the Daging Municipal Government, particularly when proposing ideas that depart from previously established urban planning principles. For instance, the research group did not dismiss the former principles outright but preserved the phrasing of "Integration of workers and farmers, unity of urban and rural, facilitation of production, and convenience for living." However, the reports advocate for the development of new planning principles for Daging that realize the integration of industry and agriculture and the unity of urban and rural settings under new conditions. The phrase "new

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conditions" is pivotal, as it is where the research group innovatively reinterpreted these principles, subtly altering the essence of the urban planning principles.

The transformative content highlighted the concept of building satellite cities and garden cities in Daging, further advancing the practice of the planning principle of "Building a Beautiful Daging." Specifically, the research reports suggested adjusting the "General Urban Construction Plan of Daging City" to build a medium-sized central urban area within the Daging Oilfield. This would be a belt-shaped eastern district formed by Saertu, Dongfeng New Village, and Longfeng, while integrating the Ranghulu and Chengfengzhuang areas into a corresponding belt-shaped western district. These east and west belt-shaped districts, echoing each other, would form a garden-style city model with a hollow middle, promoting east-west development. Other worker towns would be developed to varying degrees into satellite cities. The concept of building a regional central city proposed in the reports undoubtedly represents a substantial subversion of the earliest principle of "Integration of workers and farmers, unity of urban and rural, facilitation of production, and convenience for living," because that principle was based on the spatial practices of the Petroleum Department during the Great Petroleum Campaign era - avoiding the construction of a spatially concentrated oil city.

Many of the recommendations and strategic actions proposed in the research reports garnered the attention of both the Petroleum Administration Bureau and the Daqing Municipal Government. These insights served as guiding principles for the development of Daqing's "Eighth Five-Year Plan," its "Ten-Year Plan", and Urban Construction Planning initiatives. ⁴²⁰ Influenced by these proposals, the Daqing Urban Planning Committee undertook the task of successively drafting the "Daqing City General Urban Planning Adjustment Scheme," the "Long-Gang Area General Urban Planning," and sectional general plans for various significant industrial and mining sites starting in 1988. ⁴²¹ The "Daqing City General Urban Planning Adjustment Scheme" was finalized in August 1989 and, following deliberation and approval at the eleventh session of the fourth Standing Committee of the Daqing People's Congress, was submitted for endorsement to the Heilongjiang Provincial

⁴²⁰ Zhu, Y. (n.d.). Urban Planning under the Guidance of Daqing Development Strategy Research [在大庆发展战略研究指导下的城市规划]. History of Daqing Urban Planning [大庆城市规划史]. In [Unknown Book Title] (p. 640). Daqing.

⁴²¹ Daqing Construction Committee. (1989). Adjustment Plan for the General Urban Planning of Daqing City [大庆市城市总体规划调整方案], General Urban Planning of Longgang District [龙岗地区城市总体规划]. Internal document. Daqing.

People's Government.⁴²² On December 30, 1989, this scheme received the provincial government's approval. The Daqing Regional Development Strategy Study suggested that Daqing should transition from a mining-based to an urban economy.⁴²³ This shift in the economic structure necessitated corresponding changes in the urban layout. Thus, the insights from these two reports laid the groundwork for redefining the local urban planning principles in Daqing and facilitated the creation of a new urban form.

The "Daging City General Urban Planning Adjustment Scheme" primarily addresses three key objectives that either were not successfully addressed or overlooked in the original "General Urban Construction Plan of Daging City." They include the establishment of a city center, adjusting the residential point system, and allocation of land for the tertiary and individual industries. The recommendation to evolve Daging's urban economy and position it as a regional hub necessitated the development of a central urban area equipped to support essential infrastructure and facilities, making it a foremost goal of the adjustment plan. Furthermore, to align with Deng Xiaoping's directive of rewarding greater contributors with better living standards, the plan recognized the need to upgrade the existing village-town residential framework and service provision to meet the diverse demands of an improving production landscape and lifestyle. Finally, the scheme aimed to strategize space allocation conducive to the burgeoning tertiary and individual sectors, which, despite their rapid growth from 1984 to 1986, were previously not accommodated in urban planning. These approaches indicate a shift towards a comprehensive urban structure that caters to the dynamic economic and social landscape of Daging.

To achieve these three aims, the Daqing Urban Planning Committee did not propose individual planning projects for each; rather, they perceived the reconfiguration of local spatial structures as a holistic strategy to meet the set goals. The adjustment scheme introduced a novel three-tier spatial structure: Daqing is envisioned to transform into a clustered city comprising three tiers of towns—first-level towns (city-level), second-level towns (district-level), and third-level towns (residential area-level). Former worker towns are expected to develop into urban centers and multifaceted towns; while former central villages and settlements are planned to be consolidated and relatively centralized according to planning requirements. Specifically, the scheme's long-term planning categorizes Daqing's urban form into three tiers: the central urban area of Daqing, a conglomerate consisting of Saertu,

⁴²² Zhu, Y. (n.d.). Urban Planning under the Guidance of Daqing Development Strategy Research [在大庆发展战略研究指导下的城市规划]. History of Daqing Urban Planning [大庆城市规划史]. In [Unknown Book Title] (p. 641). Daqing.

⁴²³ Ibid

Dongfeng New Village, and Longfeng, mirroring a medium-sized city and categorized as first-level towns. Main towns like Ranghulu, Chengfengzhuang, and Wolitun, akin to small cities and alongside first-level towns, form Daqing's core urban regions and are designated as second-level towns. Townships, independent industrial and mining zones, or conglomerates of several central villages and settlements are classified as third-level towns, featuring a population size and service center surpassing that of a residential community, equivalent to a small town.

Clustering adjacent and independent regions to form a relatively larger spatial entity is a primary planning method used by the Planning Committee in restructuring the spatial structure and urban form. This method is not limited to in the planning of first-level towns, which are composed of several worker towns and their surrounding areas, but extends to how second-level towns consist of worker towns and their vicinities, and third-level towns are made up of several central villages and settlements. The merits of adopting a clustering strategy in planning are apparent: it provides a region large enough to serve as a city center, offering ample space for essential public amenities for residents and facilitating tertiary sector growth. Furthermore, clustering offers the advantage of integrating scattered central villages and settlements, enabling the effective delivery of more comprehensive infrastructure. Specifically, in the adjustment plan, Saertu, Longfeng, and Dongfeng New Village are envisioned to form the urban center in the long-term planning. The Planning Committee also matched the overall layout of the central city with municipal engineering plans. For the planning of third-level towns, the Planning Committee reorganized 88 settlements, excluding the five larger worker towns, around 14 districts such as Oingxin, Yongjun, Wangjiaweizi, and Lamadian, and initially conducted functional zoning.

This clustering approach effectively brings to life the research reports' suggestion for constructing eastern and western belt-shaped districts. The adjustment plan introduces a scheme that divides Daqing City into five regions—east, west, south, north, and central—with Saertu at the core. The area surrounding Saertu and both sides of Sada Road, designated for oilfield development, constitutes the central region of Daqing City, focused primarily on petroleum extraction, reflecting the central hollow concept proposed in the reports. The eastern region, including Longfeng and Wolitun, is earmarked as the petrochemical zone, which will continue to develop deep processing projects and supporting services for the petrochemical industry. The area between Saertu, Dongfeng New Village, and Longfeng is identified as a key development area for Daqing City, where a city center is anticipated to gradually take shape through the comprehensive development of multiple industries.

While the adjustment plan designates the Saertu, Dongfeng, and Longfeng regions as the sole city center, it inadvertently establishes Ranghulu and its surrounding Chengfengzhuang as an unofficial second center by proposing five functional zones. Ranghulu Town, forming the western region of Daging, serves as a hub for oilfield auxiliary production units and a grain and food processing base. Recognized as a citywide research and education center, as well as the western region's transportation and service hub, Ranghulu influences various settlements and the development of alternative industries on the western side of the oilfield. Worker towns in the north and south of Daging are destined to become satellite towns to the urban areas in the east and west. The north and northwest of Daqing are vital forestry and pastoral production bases, planned for extensive grassland improvement, protective and timber forest planting, and the comprehensive utilization of forestry and pastoral resources. The south, including Datong Town, Gaotaizi Town, and eight townships, is marked as the primary agricultural zone and the foundation for Daging's grain and vegetable output, with plans to foster the integrated development of agriculture, animal husbandry, fishery, and processing industries.

The "Daqing City General Urban Planning Adjustment Scheme" essentially embodies a new paradigm of planning principles devised by Daqing's elite for local application. While it extends beyond the "General Urban Construction Plan of Daqing City" by not only presenting short-term adjustments for 1988-1995 and long-term adjustments for 1988-2010 but also specifically delineating a visionary plan up to 2050 to emphasize its progressive vision, it remains a guideline plan. It broadly sets out the growth scale and trajectory for each town without delving into detailed urban infrastructure and specialized plans. Despite its strategic importance for Daqing's urban development, it falls short of providing concrete directives for city building. Consequently, after receiving provincial government endorsement in 1989, a mandate was issued to progressively develop sectional general plans for towns across various tiers, tailored to its stipulated needs.

The substantial investment by the Daqing government to commission several leading domestic research agencies for a systematic study on the future development of Daqing also represents a significant process in the transformation of the "*Production First, Livelihood Second*" urban planning guideline, albeit not through directly sharing the power of institutional definition and interpretation. The identities of these guidelines are distinct from those of the Daqing authorities and the Urban Planning Bureau; although employed by the Daqing authorities, they are not beneficiaries of the "triple-partite" administration or the "Production First, Livelihood Second" administration. Their academic status grants them a broader scope to propose suggestions that subvert the original planning policies and regulations, advocating for

a transition from a singular industrial form to a diversified composite industrial model. Based on this, their proposed clustered spatial structure essentially overlooks the absolute dispersion encouraged by the original "*Production First, Livelihood Second*" guideline, indicating a drift from the doctrine. The Daqing Municipal Government institutionalized their urban planning concepts by adopting the reports they submitted.

11.3 Chapter Summary

This chapter argues that the making of Daqing's First Comprehensive Urban Planning in the 1980s marked the gradual progressive establishment of the right to the city. The characteristics exhibited by this process align with the Spatial Petroleumscape, particularly in its encompassment of administration, architecture, infrastructure, and the levels of state welfare. Amid efforts to retain the "Integration of Government and Enterprise" system, local authorities attempted to adjust the "Production First, Livelihood Second" guideline to align with Deng Xiaoping's directive to "Build a Beautiful Daqing," facilitating the progressive evolution of this planning policy.

Between 1980 and 1982, amidst discussions with the Central Government regarding institutional reforms at Daging Oilfield, local authorities masqueraded as reform advocates, effectively concealing their actual stance as preservers of the status quo. This maneuver enabled them to establish the "triple-partite" system under the pretext of advocating for the separation of party and government functions and the autonomy of the petrochemical industry, as commanded by the State Council, all the while retaining the power structure of the "Integration of Government and Enterprise" system. This transition from the "Integration of Government and Enterprise" to the "triple-partite" system determined the trajectory of local administration transformation, thereby dictating the evolution of local urban planning policies and regulations. The "triple-partite" system perpetuated the dominance of state-owned enterprises over local governance, economy, and cultural development—a hallmark of the "Integration of Government and Enterprise" system. This inheritance implied that the underlying logic of "Production First, Livelihood Second" quideline in planning, nurtured by the initial administration, would persist. Although state-owned petroleum enterprises continued to dominate the power organization of Daging Municipality, operating the oilfield with a "one team of people, two plagues" approach, the "triple-partite" system's allowance for the Daging Municipal Government and the Daging Petrochemical General Factory to operate

independently from the Petroleum Administration signaled political concessions to local power. The establishment of the Daqing Urban Planning Bureau and the autonomy of urban planning from industrial spatial construction projects represent a symbol of strengthened urban authority, indicating that the "*Production First*, *Livelihood Second*" planning guideline possesses a margin for minor modifications.

The historical analysis in this chapter demonstrates that the transformation of the "Production First, Livelihood Second" urban planning quideline cannot be simply understood as Layering, Conversion, or Drift, but as a complex path shaped by a mix of these modes of change. This complexity stems from the shifts in stakeholders driving the change and the evolution of their powers in shaping and interpreting the principle. Lacking the power to establish and interpret institutional norms in 1981, the Daging Urban Planning Bureau's proposal of a "large dispersion, small concentration" approach essentially layered onto the existing "Production First, Livelihood Second" quideline. When the Daging authorities directly participated in the creation of the First Comprehensive Urban Plan towards the end of 1983, through Urban Planning Committee meetings, their involvement implied sharing the power of institutional shaping and interpretation with the participating Daqing Urban Planning Bureau. Thus, the "developing small towns" and "Clear the Main Path, Develop on Both Sides" proposals introduced during these meetings represent a Conversion—maintaining the original planning policies while altering its influence. The Daqing authorities introduced the urban planning concepts of "clustering," which overlooked the essence of the "Production First, Livelihood Second" quideline, by adopting research reports from various academic institutions as guiding ideologies for the Eighth Five-Year plan, the ten-year plan, and the urban construction plan.

Therefore, in examining the evolution of Daqing's urban planning institution, the first Comprehensive Urban Planning of Daqing should be recognized as a series of projects spanning various phases, rather than solely as the "General Urban Construction Plan of Daqing City" created by the Daqing Urban Planning Committee between 1983 and 1985. The multi-project, multi-phase aspect refers to: the numerous short-term exploratory planning and architectural design projects produced by the Urban Planning Bureau between 1981 and 1982; the "General Urban Construction Plan of Daqing City" from 1983-1985; a series of supplementary plans compiled by the Heilongjiang Planning Institute at the request of the Daqing Municipal Government between 1985 and 1987; and the "Daqing City General Urban Planning Adjustment Scheme" created based on research reports published by several research institutions between 1986 and 1989. The objectives and production processes of these projects are key periods driven by the Daqing authorities and the Urban Planning Committee (Urban Planning Bureau) to evolve the original urban planning guideline of "Production First, Livelihood Second"; paving the path for transforming the "Production First, Living Second".

This chapter delineates the seventh period in the evolution of the Daqing Oilfield's petroleumscape, portraying how, throughout the 1980s, the Daqing authorities and the Daqing Urban Planning Bureau, through the development of the First Edition of the Comprehensive Urban Planning of Daqing, achieved a gradual reform of the local planning system. The evolution process represents the process of fortifying the right of the local residents to live in a place planned to be a city, gain access to more public facilities, to lead a life that would be approaching to normal.

12 Conclusion

12.1 The Scenarios of Using **Planning Heritage**

TABLE 12.1 The various scenarios of using Planning Heritage in International Scholarship. Source
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Definitions	Time	Scholars
Considering heritage conservation from the scale of urban planning	1889-1915	Sitte, Geddes
Advocating for planning as a tool for heritage conservation	1889	Sitte
Planning for the Garden City, not the heritage sites	1898	Howard
Using planning tools to leverage built heritage for political purposes	Early 1940s	Dictators
A "clean sweep" planning approach to address the negative urban legacy	1944	Abercrombie
Economic downturn preventing planning and heritage conservation from drifting further apart	Late 1940-1960	
Tourism-oriented planning became a driving force compelling urban planners to protect built heritage	1960s	Taylor
Preventing using urban renewal plans as a means to eliminate the heritage left behind by the previous planning legacy	1957 1961	Young & Willmott, Jacbos, Gans
Calling for urban planning practice to take into account heritage conservation from a grassroots perspective	1960s-1970s	Residents in UK, USA, Australia
Conserving the heritage/legacy of past planning practices through writing the planning history	1970s-	Cherry, Sutcliffe, Hall, etc
Planning Heritage as one unified term within heritage conservation frameworks	2000s-	Freestone, Marsden, & Garnaut
Analyzing the tangible and intangible planning heritage produced requires a long-term approach, emphasizing their "temporality".	2017	Hosagrahar
Using the Historical Institutionalist approach for comparatively study of planning legacy, specifically planning institutions	2010s-	Sorensen
The Global Petroleumscape as an analytical framework to study planning heritage and legacy associated with petroleum industry	2010s-	Hein

TABLE 12.2 The various scenarios of using Planning Heritage in Chinese Scholarship. Source: the author.

Definitions	Time	Scholars
"规划遗产" as Advocating for Planning as a Tool for Heritage Conservation.	since mid-1940s	Liang, Zheng, Chen,
"规划遗产" as Planning in the Name of Prioritizing Heritage Conservation.	1984	Zheng
"规划遗产"as Introducing Foreign Planning Experience to Conserving Heritage	2001	Zhou, Shao, Liu
"规划遗产" as the Planning Legacy of Industrialization	2005	State Council
"规划遗产" as The Lone Chinese Scholar Writing about Negative Planning Legacy Post-1949	Since 2017	Li
"规划遗产" as Surrendering the Authority to Document Planning History to Protect Planning Heritage and Planning Legacy	Since 2019	Ye, Wu, Li, He, Zhang

Tables 12.1 and 12.2 provide the Scenarios of using Planning Heritage in both international and Chinese scholarship. In China, the main forces driving the convergence of the concepts of planning and heritage have been urban planning theorists, practitioners, and a few heritage conservation scholars. Unlike their counterparts in the UK, the US, and Australia, Chinese sociologists and planning historians have not voiced their concerns as loudly. The absence of sociologists has had a notable downside: urban planning has largely ignored the protection of planning and architectural heritage associated with vulnerable groups. Following the reform and opening-up, the Chinese government's five-year plans have been oriented towards economic growth. As part of this overall strategy, urban planning has become synonymous with planning for growth, with real estate becoming a critical pillar supporting China's economic expansion. Despite differences in building quality, form, and construction periods from Victorian-era slums, old residential areas share a crucial characteristic with slums: they occupy prime city center locations. Facing the influx of capital into urban centers, many old neighborhoods in China have met the same fate as the slums of New York in the 1950s and Sydney in the 1970s, namely demolition. However, one of the key differences is that Chinese sociologists have not made concerted calls for equality, community spirit preservation, and other protections against urban investment projects resembling capitalist "gentrification." More seriously, the absence of critical sociologists has resulted in a planning heritage in China that lacks a framework advocating for the protection of planning and architectural heritage linked to vulnerable groups.

Urban planning theorists, urban planners, sociologists, journalists, and planning historians have played crucial roles at different stages in promoting the integration of the concepts of planning and heritage. In the late 19th century, urban planning theorists and practitioners such as Sitte and Geddes initiated the fusion of these two concepts. In the late 1950s and early 1960s, journalists and sociologists like Young & Willmott, Jacobs,

and Gans issued fierce and vocal calls against urban planning's neglect of heritage conservation, preventing the disintegration of the concepts of planning and conservation. From the 1970s onwards, planning historians like Cherry, Sutcliffe, and Hall used the writing of planning history papers as an effective tool for protecting planning heritage and planning legacy. Moving into the early 21st century, planning historians such as Freestone, Marsden, and Garnaut further advanced the integration of planning and heritage concepts by participating in the formulation of planning heritage conservation standards and lists. The involvement of individuals from different professions and disciplinary backgrounds in promoting the integration of planning and heritage not only brought diverse perspectives, enriching the scenarios for using planning and heritage, but more importantly, led to the continuous discussions, collisions, and compromises of various viewpoints helping to construct a solid foundation for planning heritage.

For Chinese planning historians, they were originally expected to shoulder greater responsibility, filling the gap left by the absence of sociologists in defining planning heritage or planning legacy with considerations for vulnerable groups. However, based on the analysis presented earlier, their efforts to promote the integration of planning and heritage conservation have been quite disappointing. Firstly, at the philosophical level, their definitions of planning heritage and planning legacy are not dialectical, particularly as their scope deliberately excludes negative planning heritage. This approach aims to restrict future discussions by Chinese urban planners to align with the ideology of the Chinese Communist Party.

Secondly, in terms of the development of the field, they treat planning heritage as a fixed academic term, losing the rich connotations involved in constructing planning and heritage. This includes the spirit of academic reflection, protection of the social underclass, and resistance to authoritarian power. They also fail to present the efforts and discussions by Chinese urban planners and heritage scholars over the past 70 years to integrate planning and heritage conservation, these scholars deliberately maintaining alignment with the Chinese Communist Party's ideology.

Thirdly, planning historians have not used writing as a weapon to protect both tangible and intangible planning heritage. Or more severely put, they have deliberately avoided this responsibility. Of course, it is not fair to generalize and consider the key scholars in the current China Urban Planning History and Theory Committee, who have formulated and promoted the China-specific version of Planning Heritage and Planning Legacy, as representative of all Chinese planning historians. However, these influential individuals who hold academic authority, surely represent Chinese planning historians to some extent. Therefore, I would say that for Chinese planning historians, planning heritage means "Surrendering the authority to document planning history to protect planning heritage and planning legacy."

12.2 Characteristics of the Petroleum Industry's Planning Heritage in Daqing, 1960s-1980s

The case analysis section (Chapters 4 – 11) demonstrates that Daqing's planning heritage consists of both the "Spatial Petroleumscape" and the "Representational Petroleumscape." Chapter 4 describes exploratory oil wells established to support the scale of the oilfield, classified under the Industrial layer.

Chapter 5 further examines the spatial and representational aspects of Daqing's planning heritage. The Spatial Petroleumscape includes features from the Industrial layer, such as oil wells, storage tanks, and refineries; the Ancillary layer, represented by tents, earth huts ("Dijiaozi"), and "Scientific Gandalei"; and the Administration layer, exemplified by facilities like the "No. 2 Courtyard." However, these housing units cannot be simply categorized under the Ancillary (oil-funded) or Philanthropy and State Welfare layers. I propose grouping them within a "Basic Shelter Layer," as they were provided not to enhance the well-being of oil industry workers but to ensure the sustainability of industrial production by offering the most fundamental living necessities. During this period, planning principles such as "Production First, Livelihood Second" and the "surface serves the subsurface" —embodied in the central village-settlement structure—reinforce the arguments presented above. It is also essential to emphasize that, since petroleum was not yet a commercial commodity, there were no spatial or representational layers dedicated to oil trade or promotion.

Chapter 6 illustrates a three-tiered spatial structure encompassing the "Worker Town–Central Village–Settlement" hierarchy, which reflects Premier Zhou Enlai's principle of "Integration of Workers and Farmers, Urban and Rural Areas, with a focus on Production and Convenience for Daily Life," along with the "Unified Management Model" prompted by the "Six-Five Notice." These elements are integral to the Spatial Petroleumscape, evolving from the Spatial and Representational Petroleumscapes outlined in Chapter 5, and further reveal the path-dependent nature of industrial and mining area planning.

Chapters 7 and 8 reveal that from 1963 to 1966, Daqing's petroleum planning heritage was heavily influenced by power struggles within the Chinese Communist Party's top leadership. During this period, the "Representational Petroleumscape" grew exceedingly prominent, nearly overshadowing the "Spatial Petroleumscape."

Representational elements from 1963 to 1966 included reports by Petroleum Minister Yu Qiuli on the construction of the Daging Oilfield and the Great Petroleum Campaign, editorials in People's Daily such as The Daging Spirit and the People of Dagingthe Town: Descendants of the Yan'an Spirit and Daging's Evolution into a Pioneering Mining District which is the Integration of Workers and Farmers, Unity of Urban and Rural, as well as discussions at the 1966 annual conference of the Architectural Society of China, where the "Gandalei and its spirit" were featured in Architectural Journal. From 1966 to 1977, these representational elements primarily consisted of heroic propaganda posters portraying petroleum hero Wang Jinxi, illustrations of the construction scenes of the Daging Oilfield, limited film footage documenting Daging's achievements, exhibitions on Daging's planning and construction damaged by the Red Guards in Beijing, and various materials promoting political ideology and personal worship.

Chapter 10 encompasses both the Spatial and Representational Petroleumscapes. illustrating how the political discourse and power struggle between Hua Guofeng and Deng Xiaoping around Daging's industrial planning and civil infrastructure contributed to shaping the planning legacy of this period. Hua Guofeng's proposal at the national "Learn from Daging in Industry" conference, advocating a "new Great Leap Forward" to build ten oilfields modeled after Daging, contrasted with Deng Xiaoping's "Build a Beautiful Daging" vision, which spurred extensive construction of multi-story brick and concrete housing and public facilities. This vision underscored the core of the Spatial Petroleumscape during this era, reflecting the new government's attention to local residents' welfare. At this stage, the classifications of "Ancillary" and "Philanthropy and State Welfare" within the Spatial Petroleumscape were more accurately aligned with the actual circumstances.

The Representational Petroleumscape during this period was primarily composed of political propaganda posters depicting Mao Zedong and Hua Guofeng's involvement in Daging Oilfield activities, continuing the Mao-era tradition of serving political agendas. However, this Representational Petroleumscape failed to effectively reflect the transformations and tangible changes occurring within the Spatial Petroleumscape at the time.

These chapters collectively illustrate that from the inception of the Daging Oilfield, the project was entirely an industrial planning initiative. To thoroughly study and understand the planning legacy of Daging during this period, a planning-based approach with an emphasis on planning scale is essential. Existing Chinese heritage preservation listings should prioritize the planning methods and scales of Daging's industrial legacy to more comprehensively capture its unique historical significance. Chapter 9, along with selected case studies from Chapters 4 to 10, unveils a significant component of Daqing's planning heritage—planning disasters. These include the unregulated expansion of Sartu Town, brick structures disguised as "Gandalei", the "conversion" of local planning policies and principles, and the destruction of public and civilian facilities by armed factions during the Cultural Revolution. Additionally, development focused around Sartu Town's "No. 2 Courtyard" and a limited number of public facilities (such as the area's only modern hospital), highlighting a stark contrast between the privileges afforded to leadership and the conditions experienced by ordinary residents. These practices offer tangible evidence of the substantial gap between the equality advocated by the Communist Party and the privileges reserved for its leadership.

Chapter 11 highlights the shifts in Daqing's urban planning policies and principles from 1979 to 1989, with the introduction of the city's first comprehensive urban plan marking a central feature of the planning heritage from this period. The Spatial Petroleumscape in this era includes the establishment of the Daqing Urban Planning Bureau, new planning guidelines such as "Clear the Main Path, Develop on Both Sides" and "Small Town Development," as well as supplementary plans. Key elements also include the "T-shaped" layout of Sartu Town, extensive public facility construction, and the growth of Dongfeng New Village. However, Daqing authorities did not fully implement the government system reforms mandated by the central government, retaining a petroleum-dominated local power structure that limited the development of a distinct urban planning authority. As a result, planning policies and principles remained unclear, leading to the coexistence of multiple, sometimes conflicting, planning directives. This was particularly evident in the planning of Sartu Town, where the lack of spatial regulation exacerbated internal spatial conflicts rather than mitigating them.

This chapter reveals that Daqing authorities demonstrated a stronger path dependence on planning principles than on specific planning schemes. Temporary planning guidelines, originally introduced due to budget constraints, evolved into local planning principles during subsequent political campaigns and were imbued with political symbolism. This not only kept the built environment and living standards of Daqing residents at a low level but also entrenched a political ideology of subordinating individual interests to collective will within local planning practices. Following the reforms of the 1980s, local government nominally adhered to central reform directives yet retained local governance and planning institutions. While multi-story housing and public facilities were added, these efforts underscored that shifting planning ideologies proved more challenging than altering spatial practices. Marking the reform era of the early 1980s as a turning point, the evolution of Daqing's Spatial Petroleumscape became more pronounced than changes in its Representational Petroleumscape.

These chapters collectively illustrate that, from the outset, the Daqing Oilfield project was entirely an industrial planning endeavor. To thoroughly research and comprehend Daqing's planning heritage during this period, it is essential to employ a planning-oriented approach that emphasizes planning scale. Existing heritage preservation registers in China should focus on Daqing's industrial heritage, specifically highlighting its planning methods and scale, to more comprehensively capture and present its distinctive historical value.

In summary, applying the GPP framework can significantly support planning historians in making breakthroughs in the study and exploration of Daqing's planning heritage, especially in areas of heritage that have been or may be suppressed in the future. A limitation of this thesis in using the GPP framework is the lack of a time-space coordinate system (such as GIS mapping), which prevents a comprehensive visualization of these integrated planning heritage petroleumscapes. This aspect will be a key focus of the next phase of research to further refine and visualize the cohesiveness of Daqing's planning heritage.

12.3 Writing Daqing's Planning History: A Means to Conserve Its Suppressed Planning Legacy

This thesis argues that writing planning history, particularly through the portrayal and discussion of planning disasters, offers a viable path for Chinese planning historians to safeguard planning heritage that may conflict with values upheld by an authoritarian government. Through a historical analysis of planning practices in Daqing from the 1960s to the 1980s, this research seeks to illustrate how uncovering such failures serves this purpose. Daqing's planning heritage holds numerous cases of planning disasters, some of which were suppressed for their misalignment with the Chinese Communist Party's ideology, while others may soon face the same fate. Uncovering these planning disasters from Daqing's history is critically important for both contemporary and future China. By addressing the nuances and complexities in these historical narratives, the research aims to emphasize the significance of a comprehensive view of planning history, one that includes both achievements and failures.

As discussed in the introduction, today's Chinese government, led by Xi Jinping, is investing heavily in advancing the new energy sector through policies and substantial financial support. State-backed new energy companies now play a role akin to that of the Daqing Oilfield in pioneering industrial growth. However, as shown here, the planning disasters in Daqing not only brought nationwide economic losses and environmental issues but also ideologically restricted the pursuit of better living standards. Today, China's global influence is significantly greater than it was six decades ago. With the Belt and Road Initiative expanding, Chinese new energy enterprises are beginning to establish overseas operations. Should planning disasters on the scale of Daqing's repeat themselves, the "rhyming" repercussions would extend far beyond a single city or nation, potentially impacting the broader international community.

However, documenting these historical traces—essentially, writing planning history—poses an enormous challenge for any planning historian in today's China. As Ian Johnson skillfully conveys with the term "Sparks" in the title of his book, these dissenting Chinese historians offer a bright yet small and perhaps fleeting light in the darkness. Johnson also uses the term "underground" to describe these historians, noting that their work can only be published and preserved in print outside mainland China, Hong Kong, and Macau, or quietly circulated in digital form back into mainland China. Hong Kong once served as a key hub for such publications, but this role has largely disappeared since 2019. I am acutely aware of these challenges, which now extend beyond publishing to archival access. Some key publications from the early years of the Chinese Communist Party, documenting major events, are no longer accessible to historians. For instance, after the closure of the Chinese Studies Service Center at the Chinese University of Hong Kong in 2021, access to the extensive "Internal Reference" collection—which contains crucial records on the development of the Daging Oilfield—has become limited. In such a political climate, exposing past planning failures demands ever-greater commitment from planning historians, with risks that may be increasingly difficult to bear.

In the face of growing challenges, planning historians not only need greater courage but also refined skills to reveal existing planning failures through their historical narratives. If, in the 1980s, Chinese urban planning researchers could at least acknowledge the impact of "leftist" ideology on Daqing's planning practices, today's planning historians require even more courage to achieve a similar level of honesty. Within academic discourse, Chinese planning historians could have leveraged the opportunity presented by the introduction of the concept of "planning heritage," encompassing both "planning wisdom" and "planning disasters" within this framework. Despite increasing constraints on academic freedom by the Chinese government, planning historians should adhere to fundamental academic principles and refrain from relinquishing their discursive space willingly.

This thesis calls on scholars interested in researching Daging's suppressed planning heritage to not censor their findings but courageously publish them. Given the fragmented nature of data on the suppressed planning heritage, creating a cohesive narrative is especially challenging. While the GPP framework effectively integrates many disparate data points into a coherent narrative, I have not been able to gather all relevant data. Greater involvement from planning historians and scholars from related fields would contribute richer data and interpretive perspectives to the study of Daging's suppressed planning heritage, advancing this area further. Additionally, the phenomenon of the suppressed planning heritage may not be limited to Daging but could extend to other regions in China and even to nations with similar political structures. Thus, the continued development of this research will rely on global and interdisciplinary collaboration grounded in shared methodologies. Chinese planning historians should aim to evolve from isolated "sparks" into a "flame," shining persistently through the darkness to provide enduring insights for future research and public awareness.

Last but not least, this thesis advocates for a thorough examination of Daging's planning history, with particular emphasis on documenting planning failures as a vital strategy for safeguarding the suppressed planning heritage. This approach not only engages with the diverse thematic integrations of "planning" and "heritage" or "legacy" as promoted by international urban planners, sociologists, and planning historians but also calls for a critical reassessment of the current thematic constraints within Chinese planning history scholarship. These calls are rooted in an extensive analysis of Daging's planning policies, path dependencies, and their evolution from the late 1950s through the 1990s. The analysis reflects a deep engagement with the philosophical foundations, theoretical frameworks, thematic discourse, and data representation in Chinese planning history research. The message is urgent and clear: Taking the Planning Disaster in Daging Seriously!

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