

ID 1495 | THE GAP BETWEEN PLANNING AND REALITY: THE EVALUATION OF COMMERCIAL LAND USE PLANNING IMPLEMENTATION IN KAOHSIUNG CITY, TAIWAN

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ABSTRACT: The urban planning system in Taiwan has followed the America and Japan systems aiming at controlling and directing private development rights. The statutory plan, the land use control measures as well as zoning ordinances are the main tools for the conformance-oriented plan. To make the conformity, the land development rights tend to be assigned in advanced along with the collective strategies of zoning plans. In most high-density cities in Taiwan, such land use control and management tools are considered highly important for better development orders and environmental quality. Nevertheless, the overall zoning ordinance implementation in Taiwan is considered weak for the two following main reasons. First, the actual urban development of Taiwan could date back to Qing dynasty and the modern urban planning system has been implemented from 1964. Second, to cope with the existing urban form and speedy population increase, mixed land use was widely adopted in the zoning ordinance. As a result, a variety of the types of land use seem to be acceptable in different zones. For instance, residential buildings are allowed to be in commercial districts as well as most service uses are allowed to be in residential districts. Furthermore, property markets, political influences, and citizens' expectations are three major factors on how developments are actually carried out. As a result, in reality, many land development events might, on one hand, comply with the zoning ordinance. Yet, the actual use afterwards fails to comply with the master plan and planning vision on the other hand. Take Kaohsiung city for an example, approximate 35% of commercial districts in the downtown area are occupied by pure high-end residential developments. It further indicates that the zoning plan in Taiwan has rather weak control power to the actual development.

KEYWORDS: conformance, statutory plan, commercial districts, zoning ordinance

1 INTRODUCTION

The history of Taiwanese planning system has been existed for about 100 years, which has been constantly influenced by two major countries, Japan and America, due to the historical events. According to some characters in planning, such as land use control measures, zoning ordinances as well as statutory plan etc., planning system in Taiwan is regarded as conformance-oriented plan.

However, although Taiwan has built the zoning ordinances, they are weak because of two main reasons. The first is that the existence of cities is longer than planning, and the second is that the land use control in Taiwan tend to be on negative listings, which means the specific land use would be forbidden to some explicit and strict degree. Hence, a variety of land use types are all permitted in different zones. Take the commercial districts in Kaohsiung city, for example, almost 35 per cent of them are high-end residential development with no commercial facilities, which is one of the most famous issues for legal non-conformance.

Owing to the lack of investigation, we cannot know actual land use activities. Therefore, I will focus on a commercial district and take Lingya District, which is located in the central part of Kaohsiung City, as a case study to figure out how the real land use is performed in Taiwanese city. After excluding the underdeveloped area (such as earlier buildings, vacant lands, parking lot, etc.), most of the legal non-conformance structures are religious buildings, churches, temples, for example, as well as the popular issue mentioned above: the high-end residential buildings. Through this study, I want to propose a chance to reexamine the land use system in Taiwan, and to respond to the future amendment of the zoning ordinance in Taiwan.

2 PLANNING IMPLEMENTATION: CONFORMANCE VERSUS PERFORMANCE

According to the concept advocated by Andreas Faludi in 1989, there are two types of plan, which are 'Project plans' and 'Strategic plans'. The former belongs to blue print, and the determinate effect must conform to the specifications. As for the latter, they belong to the projects that are coordinated by multitude actors. They should be allowed to have negotiations and the future vision always remains open (Andreas Faludi, 2000). With these two sorts of plan types, they separately reflect two major planning systems — Conformance and Performance-oriented planning— in contemporary planning mainstream.

In conforming planning, it matches the forms, manners, or characters to develop its project, whereas in performing planning, it shapes the claims, promises, or requests through the plan (Umberto Janin Rivolin, 2008). With the frontal description, project plans will connect to the conformance-oriented planning, and strategic plans prefer to link to the other, performance-oriented planning. However, performance plan cannot apply to planning systems themselves and to planning as a whole (Umberto Janin Rivolin, 2008), so performance plans will also involve some concepts of project plans to illustrate the plan.

3 THE HISTORY OF TAIWANESE PLANNING SYSTEM

The construct of Taiwanese urban planning system was basically produced during the era of Japanese reign, which is the year from 1895 to 1945. With the different goals the Japanese government wanted to approach, the history of Taiwanese urban planning could be divided into four episodes: (1) basic investigation and related rule announcement from 1895 to 1900 (2) the practice of the spatial plan in Taipei and Taichung cities as well as the innovation of Taiwanese planning framework (3) extension and correction of the planning areas and the production of the village-scaled plans before the World War Two (WWII) (4) constant revisions the existing plans until the end of the war (Shyh-Meng Huang, 1985).

In general, the plan produced in these years is called 'City renovating (市區改正計畫)', and it was focused on existing village as the boundary of the plan. With the lack of future vision and existing distribution of buildings, the plan in every town was revised again and again (See figure 1). The situation didn't stopped until the 1930s when the dominator realized the important of comprehensive plans.

After the WWII, Republic of China (ROC) got the sovereignty of Taiwan. As a newbie for ROC, Taiwan needed much more attention from ROC to reform the rules, which were handed down by Japan. However, the Chinese Civil War broke out right after the end of the WWII, and it made ROC have no idea to figure out the method to revise the land managing policy. Therefore, at the beginning of the ROC governance, Taiwan provincial government used the pre-existed rules formulated by Japanese (Chun-ping Chiu & Chyuan-Jenq Shiau, 2015).

Because of the failure of ROC, Chiang Kai-shek led the militaries and government to Taiwan and promulgated the Taiwan martial law. With the practice of the martial law, the territorial managing policies as well as the statutory plans were manipulated by the central government. With the industrialization and urban population soaring, urban planning in Taiwan was simplified as a population-oriented land use plan, and every relative rule was legislated by the government. What the planners did were to follow the rule step by step: proposing the need by the spatial and social-economic analysis, then arranging the land use distribution. During the period of the execution of the martial law, the planners were controlled by politicians and related investors, so most of the plans made by the planners suffered the political kidnapping (Tsu-Lung Chou, 2004).

With this sort of constraint, almost every plan was planned by these stakeholders, and what they wanted to achieve was to blueprint everywhere. Besides, what the stakeholders wanted was always focused on the benefits they might get, which was not the perfect idea for the planners. It made many statutory land use differ from what the planners initially expected.

After Taiwan canceled the martial law, the planning system has become more flexible than it used to be, and some NGOs or charities gradually get the right to participate the urban planning. However, every item about planning is still stuck in the related law, and the power of decision-making is also controlled by the government (Tsu-Lung Chou, 2004). Basically, the government would listen to every comment from every stakeholder, but their decisions only pay attention to the development of land use, ignoring the facts about

the real land use behavior as well as the population decrease. Hence, the power of decision-making about urban planning nowadays still not totally belongs to all citizens.

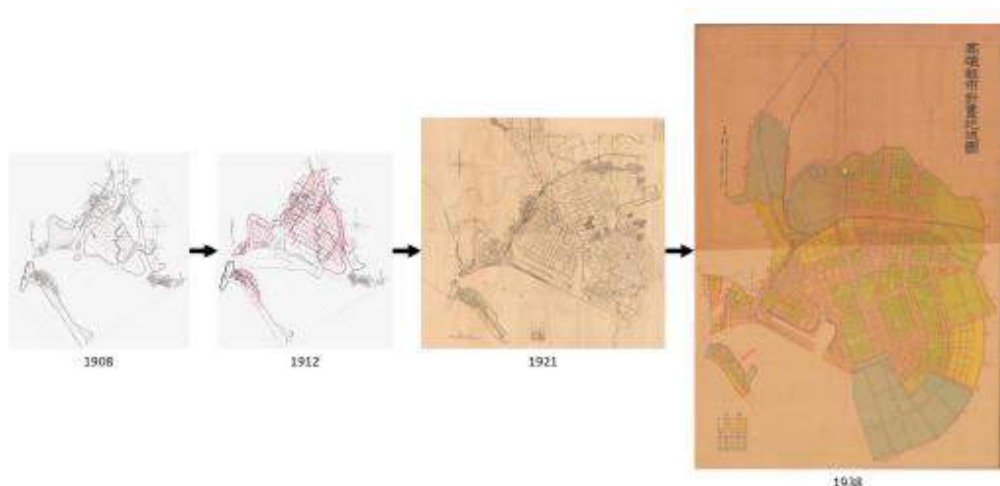


Figure 1-Boundary of Kaohsiung City during Japanese rule (1895~1945)

4 THE TENDENCY OF TAIWANESE PLANNING SYSTEM

Initially, there was no specific vision in Taiwanese spatial plans. However, they were then exhibited in the blueprint planning, and everything the planner made focuses on determinate goal — improving the public health. With the blueprint planning, it manipulated the inanimate objects in immobile environment, but the consequence we originally expect might not happen. According to the process of the evolution of Taiwanese spatial plans, it is clear to know the plans were revised and adopted continually (See Table 1). In this pattern, Taiwanese planning system was close to the conformance-oriented planning.

| Year | Location | Year | Location |
|------|---------------------------------|------|---|
| 1900 | Downtown of Taipei and Taichung | 1917 | Zhushan |
| 1905 | Extension of Taipei and Hsinchu | 1921 | Yuli, extension of Tainan, Chiayi, Kaohsiung, Keelung, and Taichung |
| 1906 | Changhua and Chiayi | 1922 | Xingang |
| 1907 | Keelung | 1924 | Dotlin |
| 1908 | Kaohsiung | 1929 | Extension of Tainan |
| 1910 | Hualien port | 1931 | Matou |

| Year | Location | Year | Location |
|------|---|------|---|
| 1911 | Extension of Tainan and Taichung | 1932 | Yilan, extension of Taipei |
| 1912 | Shoushan, Beidou, Nantou, Magong, Dax, extension of Kaohsiung | 1934 | Luodong, Dajia, extension of Hualien port (Milun) |
| 1913 | Pingtung, Beigang, Taitung, extension of Chiayi | 1935 | Lukang, Dounan, Caoshan, extension of Taichung |
| 1914 | Puli | 1936 | Yuanlin, extension of Kaohsiung and Beigang |
| 1915 | Fenglin | 1937 | Hsiluo, Ruifang, Yuanli, Tongxiao, Xinying, Yanshui, Jiali, Xnejia, extension of Pingtung and Keelung |
| 1916 | Extension of Hualien port, Puzi | 1938 | Qishan, Pan-Chiao, Zhongli, Gangshan, Fengshan, extension of Hsinchu, Changhua, Zhudong, Taidung, Kaohsiung, Hualien port |

Table 1-List of Taiwan city plan
Source: Shyh-Meng Huang, 1985, Study of the History of Taiwanese Urban Planning, 1895-1945

After the Japan lose the WWII, the ROC government used the previous planning system in the beginning because of the Chinese Civil War. The planning rule never changed until 1949, the time that Chiang Kai-shek moved to Taiwan, the government practiced the 'Urban Planning Law' in (Tsu-Lung Chou, 2004). With the American financial support, the development of Taiwanese planning system began to be influenced by the other nation, America. Combining the original context and the development after WWII, it is easy to figure out that the planning system in Taiwan now still belongs to conformance-oriented planning.

5 THE ZONING AND LAND USE CONTROL IN TAIWAN

The urban planning in Taiwan is constructed from rigorous zoning system, which contains general zoning constrain and land use density control for each kind of zoning. In general, zoning in each master plan includes residential districts, commercial districts, industrial districts, agricultural districts, etc., every zoning has its own rules for land use control whose images are described in article 32 to 41 of Urban Planning Law. Take the commercial districts for example, according to the article 35, Commercial districts should be "demarcated with promotion of business development taken into consideration. The use of land and buildings may not impede the business activities in such areas."

Based on these articles, every local government has the right to plan their own list to practice the actual land use in different zoning. In general, the lists in every administration can be separated into two systems: positive and negative listings. The former draw up every acceptable type of land use on the lists. That means when a specific type of land does not show up on that, this sort of land use is forbidden. As for the latter, it is totally contrary to the previous. They list the banned categories to avoid citizen developing. Overall, compared to each other, the former are stricter than the latter, and the former may help citizens to keep a high-quality life (Yi-jung Li, 2005).

However, most of the planning districts in Taiwan are negative listings. Only some special district or new town plans use positive one in order to control and limit land use for specific development. Hence, land use control in Taiwan is in accordance with the regulations but not the suitable development.

Except for the classification about the direction of land use, every district has their own subdivision in order to adapt to the local demand as well as achieve the goal of developing density and control (Nan-yuan, Huang, Fang-zi, He, 1979). The standard of these sorts varies from place to place; however, no matter how local government sets the criteria, it follows the unified rules formulated by central government, and population density, road width, area of public utilities, etc. are all included. (Nan-yuan Huang, Fang-zi He, 1979, Keh-Wann Tzou et al., 1990). In general, planners adjust the land use density in order to guide the trend of population growth, besides, the spatial arrangement will rely on the different road width: blocks next to wider roads would be allowed to have higher development density whereas those next to narrower roads has lower, in contrast. At the same time, in order to prevent citizens from using limited public utilities, the setting of land use density will be controlled by the supply of public spaces.

With these two kinds of rules, which includes zoning and density control, land use system would be regulated by not only developing form but also the suitable density. The former can define the direction of the land use while the latter can control the density, which depends on the condition of each block.

6 CLASSIFICATION OF NON-CONFORMANCE IN LAND USE

As the saying by Laurian et al. (2004), a methodology designed to be used by practitioners to evaluate their plans should be based on the way they use those plans. Therefore, the land use implementation in Taiwan should be checked by conformance evaluation. With the examination by evaluation, it is easier to not only figure out the degree of decisions handed down in land-use cases (Carolyn G. Loh, 2011) but also check the progress and the goal that the government sets for the city.

According to the paper from Carolyn G. Loh (2011), she separated the non-conformities into three types: (A) "land use is agriculture or a natural area, but the land is planned for a more intensive use", (B) "the presence of a 'grandfathered' use in an area planned for a different use", and (C) "land-use decisions have

been made, which directly contradicts the plan's future land-use vision". She thought the most disputed one is the last item which are in conflict with the master plan.

However, in the cases in Taiwan, the last type Loh figured out is not the most serious one, because it may get punished by government if they are willing to conduct the searching. Although the planning system in Taiwan is close to the conformance plan, it just means that the plans are blueprint and they are regulated by government with laws. The range of acceptable land use is very wide in every kind of land use, and most of them belong to 'Negative listings', which means that the government has set the forbidden land use for every urban planning division. As long as the project is not noted on this list, it is acceptable for the government.

Despite the categories set by Carolyn G. Loh, I will add one new type: land-use decisions have been made that conform the land-use, but contradict plan's future vision. According to the development in Taiwan, political power was extremely strong, and it interfered Taiwanese planning system in some degree.

Take industrial and residential districts for example, the government encouraged people to combine working to living in the 1970s, which led many legal factories located at residential district, at the same time, residences were also accepted in industrial district (Kuo-Jung Tang et al.,2011). With the strong demand of living space, many building cases focus on industrial districts for high-rise housing because of the higher floor area ratio (Kuo-Jung Tang et al.,2011). In this case, people who want to build firms always get obstacles and difficulty because the industrial districts are full of residences, and the ridiculous thing is that they are legitimate.

Therefore, I will adapt the concept of the former three categories discussed by Dr. Loh to reflect the real condition in Taiwan, and set a new type (Type D) to represent the condition I have mentioned above. In non-conformity (Type A), Loh's idea is basically acceptable in Taiwan, but in the catalog of land use, there are some additional land uses that are close to this concept, including barren land, vacant lot, parking lot, etc.. Therefore, I tend to transfer her explanation into 'land use is agriculture, natural area or some similar low-density use, but the land is planned for a more intensive use'. As for non-conformity (Type B), this type was considered to be an actual land use, but it is originated from ancestral construction, and it might not match contemporary zoning. Combine this concept with Taiwanese density control, I will consider some properties whose floor area ratio are quite lower than the regulation whether they have commercial activities or not. The type C, which is outright non-conformity, was thought of as 'land-use decisions have been made that directly contradict the plan's future land-use map', and I will use this concept directly. The last, the new type of non-conformity I add (Type D) was seen as 'land-use decisions conform to the rule of land-use, but does not match the picture of future land-use'. I will emphasize the actual influence on surrounding space caused by this kind of land use, trying to analysis the result the type D may lead to.

7 CASE STUDY: NON-CONFORMANCE IN THE COMMERCIAL LAND USE IN KAOHSIUNG CITY

According to the definition of commercial districts in Urban Planning Law that I have mentioned above, it informs everyone that as long as people use the land with no interference in commercial activity, it would be acceptable. Besides, based on the Enforcement Rules for the Urban Planning Rule (Kaohsiung), it lists negative listings for every kind of land use. On this list, commercial districts are forbidden to be developed as the industrial districts. Whatever on the list are about manufacturers, cleaning industry, polluting activities, firecrackers, etc., and all of them are widely known as impossible activities in commercial districts. With the rules that normal people would hardly break, their actual land use is always permitted legally.

Take Lingya District as an example, it is located in the downtown of Kaohsiung City, and about 25 per cent of land (the land use for road are excluded) belongs to commercial districts (See Figure 2). With the high percentage of commercial district, their actual use becomes relatively important. Once they do not conform, it also presents that the zoning in this administrative area is fail.

According to the Enforcement Rules for the Urban Planning Rule (Kaohsiung), the commercial districts are separated into different groups based on different floor area ratio (See Table 2). In the cases of Lingya District, most of the commercial districts along the main streets are category 3, 4 or 5 commercial districts

and the density decrease from category 4 commercial districts to 2 with the increase of the distance of the main road.

| Type | Building Coverage Ratio (%) | Floor Area Ratio (%) |
|--------------------------------|-----------------------------|-----------------------------------|
| Category 1 commercial district | 40 | 240 |
| Category 2 commercial district | 50 | 300 |
| Category 3 commercial district | 60 | 490 |
| Category 4 commercial district | 60 | 630 |
| Category 5 commercial district | 70 | 840 |
| Other commercial districts | 80 | Depends on the rules of each plan |

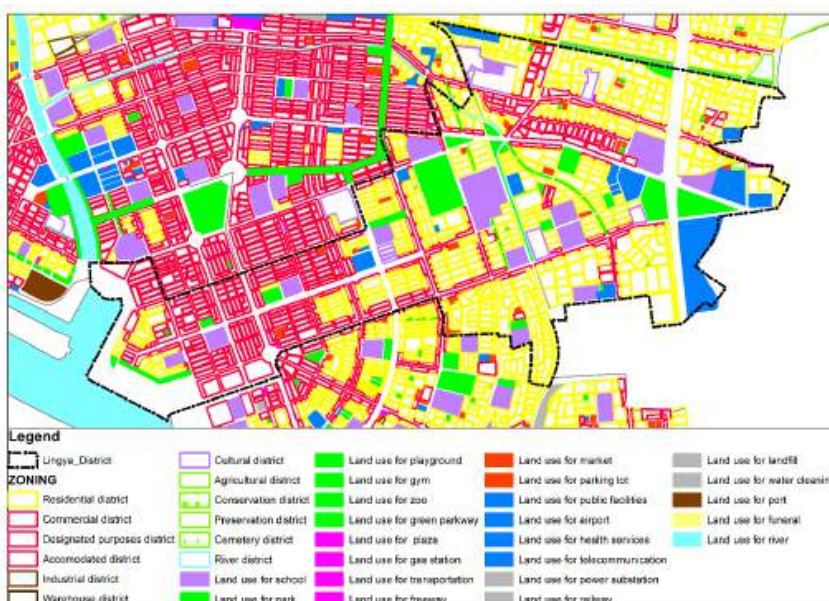
Table 2-List of building coverage and floor area ratio for commercial district in Kaohsiung City plan
 Source: Enforcement Rules for the Urban Planning Rule (Kaohsiung)

In general, type A in Lingya District is not a big problem. Most of them now are used for private parking lot. That kind of underdeveloped land use provides some space of infrastructure to sooth the demand of parking, which is helpful for the development of the commerce.

Based on the previous concept of the classification, type B gets the highest percentage. Most of them were constructed as housing, and some of them also serve as business facilities now. Their building type, in general, is a row house with about one to three floors. Besides, according to the observation of their actual construct area, they are not suitable for building coverage ratio as well as floor area ratio, which means that

the housing was well-constructed earlier than the implement of the master plan in Lingya district. Combining the inference above and the additional information received by their appearance, such as early typical design and construct method at early stage, it is acceptable to deduct that these buildings, which are considered as type B, are in keeping with the definition mentioned above.

With the negative listings, type C, in fact, is just a few in Lingya District. However, the land use is rationally non-conform, but legally conform, which is considered to be type D accounts for a large proportion. Most of them were constructed as the high-end residential buildings with no commercial facilities. Basically they did not violate the article of Urban Planning Law mentioned above, but once this sort of land use built gathers, they will block the connectability of the commercial activity, which impedes the regulation mentioned in article 35 of Urban Planning Law: "use of land and buildings may not impede the business activities in such areas". Besides, some blocks in Lingya were constructed as religious buildings, which are permitted in condition based on Enforcement Rules for the Urban Planning Rule (Kaohsiung):



The buildings or land use have no noise, vibrations, special smell, pollutions, breaking the commercial activities, community peace, public safety, as well as sanitary. However, religious buildings are well-known as the center of traditional or religious activities. With such events, it is hard to define if religious constructions break this conditional permission or not.

Figure 2-Boundary of Lingya, Kaohsiung City

8 CONCLUSION

According to the case study in Lingya, some of the commercial districts, which are defined as type D were constructed as pure housing as well as religious buildings in major. We think the reason why this two kinds of land use show up is based on the tradition of mixed land use. People in Taiwan are used to developing whatever they want on their own properties. With the negative listings, it is hard for citizens to violate land use control. When we observe them only with a few buildings, everything would be fine, and all of them follow the rules peacefully. However, when we zoom it out in larger scale and tons of constructions crowd in at the same time, every unit will connect to each other, which leads to a much more complicated situation. Once the builders construct something the planner don't prefer, but acceptable land use, the conception of every district would become meaningless, so would commercial district. With the threat the contemporary rules may cause, I think we should pay attention to type B, as well as the revision of relative rules. The reason for the former is that only little land is vacant now, old buildings will regenerate in the future. Therefore, type B may become the target of builders. As for the latter, we hope the planner and the government should face this problem and correct the loophole made by the regulations, preserving enough commercial accessibility and facility in the place they should develop.

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