

Necessity of planners and their activities

Akira Tamura

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Structuring of self-governing regional space: A report from Yokohama-proactive municipality, Space Design, No.85, Kajima Press, pp.20-32, Oct.1971.

This paper by Akira Tamura is dealing with his concept of planners in municipalities and was written open after he had achieved several notable successes in the practice of the urban planning of Yokohama. Although Tamura was an eminent planning consultant before he entered the city administration in 1968, he did not possess much planning achievements in practice to show. Soon after he came to the Planning and Coordination Office as its de-fact head, he accomplished a mission impossible as the undergrounding of inner-city motorway through having coordinated the concerned national ministries in charge of motorways and subways by his initiative. It took whole one year. Since this work, he became recognized as an able coordinator with high ability of practice among the city administration. Tamura had proposed the Six Major Projects requested by the mayor Ichio Asukata, but all those projects were under the planning stage during his years (1968-1978) in the office and limited number of projects could be shown visible at this stage. Therefore, most of what Tamura wrote on this magazine in 1971 were at the planning and coordination stage and waited to be implemented for decades to come. Nevertheless, during this period he devoted time and energy to educate and train his staff members who would, after Tamura relinquished his post in 1978, continue Tamura-style planning and coordination work for decades to come. After Tamura left the city administration in 1982, all those projects by his colleagues started to move and became gradually visible. (Toshio Taguchi 2025)

Why Plans Are Not Executed

Infertility of Planning and its Execution

After the emergence of urban problems in the 1960s, the 1970s are facing up to an environmental problem. Our environment not only in cities but also in rural and natural areas is now on the brink of collapse. Especially in cities, environmental deterioration is extreme and intense. Housing shortage, unpaved roads, traffic congestion, car hazards, lack of playgrounds, destruction of greenery, makeshift school buildings, flooding due to inadequate sewage systems, delays in waste disposal, air pollution, water pollution, noise, long-distance commuting, blocked sunlight, water shortages, and the list goes on.

These problems are the result of unplanned and unregulated urban developments. Proper planning should be done. Japanese cities have been sprawling without plan, and now are in this state that cannot be called cities. They are far from any kind of planning or order. The expression "huge village" is used to refer to Japan's large cities which are unplanned, disjointed entities without the basic investment that cities should have. This does not mean that Japanese cities have ignored planning. In 1918, the City Planning Law was enacted, and before that, the Tokyo City and Ward Revision Ordinance was promulgated in 1889 to transform Tokyo into an "imperial capital" befitting the Meiji nation. Even before that, the Westernization of the city center, including the Tsukiji foreigner's settlement, and the reconstruction of streets were planned in the 4th year of Meiji (1871). Since the Meiji Era, there have been countless laws and actual plans related to urban planning in Japan, as well as urban projects.

On the one hand, it is said that there is no planning, despite urban planning has been conducted for a long time. What is the reason for this contradiction? When we visit cities, we are shown a city plan, which shows transportation plans, land use plans, and plans for major urban facilities. Most cities also have master plans, comprehensive plans, or long-range plans. And, each municipality has a section of urban planning that has specialized staff members. Nevertheless, why the actual appearance of a city is unplanned or disorderly. Let me examine this situation.

Situational reasons

If there is a plan, the current urban situation is changing so rapidly that it cannot keep up with the plan,

thereafter the reality will remain unplanned. The current situation is changing so rapidly and the wave of urbanization has been so intense that plans must be reviewed one after another. However, the flow of the times will never be able to be settled as it should be, no matter how advanced the forecasting technology becomes. Since planning is to take measures in advance in anticipation of external circumstances, the responsibility solely on the circumstances would rather indicate that the plan was fundamentally flawed. In times of drastic change, it is necessary to have a planning method that can keep up with the reality, rather than simply abandoning the plan as a failure when it is not in line with the reality.

In the field of economic and social planning, new plans and revisions are appearing at a dizzying rate these days. While this is not desirable, it is necessary to have a certain consistency and to be flexible enough to make appropriate revisions.

In the case of a physical plan, it is difficult to revise it or to make it resilient, since each project takes several years to more than a decade to complete. In addition, those who came from civil engineering and architecture backgrounds, who have been engaged in physical planning, have considered urban planning as if it were their own field of design. Designing bridges, dams, and buildings is completely different from urban planning. In the case of design, failure to perform as designed may often be the decisive problem. In the case of planning, however, the plan includes both a part that requires strong constancy and a part that is quite flexible at the same time. The picture that is drawn may appear to be the same, but it has different meanings depending on the dimension, the position, and the time in which it is applied.

In socialist countries such as the Soviet Union, the planning of a district is made exactly as it is designed, and this is also the case in our country in the design of housing complexes. If land ownership is secured and the builder is a single entity, the dimension of design is stronger than the dimension of planning. However, even in the Soviet Union, such as in the case of Moscow's urban planning, there are deviations in the planned population. It is natural for a plan to anticipate such flexibility, and it is unreasonable to always follow a fixed plan.

The same is true of architecture. Architecture is a design in terms of structure and form, but includes a planning element of interior use. For this reason, it is considered to give users a degree of freedom in the way they use the inside of the building. It would be a mistake to restrict to a fixed use. This is why the idea of universal space and free partitioning are used.

For example, the idea of infrastructures and element-structures is one way to solve the problem of constancy and freedom. Planning is to seek some method to cope with changing circumstances, which is different from designing. Situational reasons are not decisive in this sense, but rather should be dealt with in the planning process.

Institutional reasons

When planning, the ability to carry out the plan depends on the legal system, fiscal policy, and taxation policy. If the various systems that are the weapons of planning are flawed, no matter how many plans are made, they will not be carried out, resulting in a gap with reality and a lack of ability to control reality. In addition, the ability to control the reality will be lacking.

Japan's urban planning laws and taxation systems have been extremely ineffective in controlling land. The recent new city planning law finally established urbanization zones and urbanization control zones to control land use and development. But this is too late for Japan, which has had dense land use, and the taxation system and other systems to back this up are still weak. In addition, there are many other deficiencies due to institutional reasons, such as the fact that city planning was carried out in a disjointed manner with priority given to individual projects. The City Planning Law is merely a procedural law and is ineffective, each project is not controlled and is executed only in a vertical

manner, and there are insufficient financial resources for city planning projects.

The city planning system is a weapon to protect and improve the environment, so it is necessary to have a comprehensive and powerful system in narrowly defined city planning law and related regulations. There are many problems in this regard, but I will not go into them further in this essay. However, these systems do not come from nothing, but are determined by the cultural level of Japan. Laws and institutions, however, must be enacted and implemented with social consciousness. The cultural level in Japan is still low in terms of awareness and understanding of the city and the environment, and this will not become a political force in the end. Even if there are city planning maps, they are powerless against environmental degradation caused by sprawl and overdevelopment. Comprehensive plans are simply created and then abandoned, because there are problems with the methodology of each plan itself which follows the status quo. The reason for this is the lack of effective institutional guarantees.

Executorial Reasons

Even if the plan itself is good, the linkage for its implementation is inadequate. It is natural that there is always some degree of discrepancy between planning and implementation. Inadequate enforcement systems and lack of will to implement may be one reason, but they are not necessarily the fundamental problem. Although such problems exist not only in urban planning, there are more important reasons that explain the critical discrepancy between urban planning and reality.

First, the City Planning Law of 1919 given a comprehensive nature as a law in relation to separate laws regarding road, river, port, water, sewerage, and rezoning, but rather was coexistent with them in the existing city planning system. Therefore, even if a project was determined as a city planning, there was no legal obligation to implement it as a city planning project. The systemic defect of not giving such a legal position to city planning, which should be comprehensive in nature, had only a weak or irrelevant relationship with implementation, as explained in the prewar "Exegesis of the City Planning Law" compiled by the City Planning Bureau of the Ministry of Home Affairs. City planning meant planning and did not include the act of carrying out such a plan. Therefore, it was questionable whether such a plan should really be called a city plan.

Secondly, in urban planning, where comprehensive control of both planning and implementation is essential, the city governments do not take the initiative in planning, and the implementation was carried out by a disjointed, vertically divided administration. As mentioned in the first point, it is difficult to have a relationship between planning and execution when urban planning has unplanned character and there is no one who has the overall initiative in planning.

Thirdly, in such a situation, there is no room for original planning techniques and planners who should be experts in planning to emerge. Therefore, there is no one who seriously addresses the connection between planning and execution, and the irrelevance of planning and execution exists as a matter of course.

Some of the problems in these implementation theories should be regarded as institutional problems. At the same time, however, we cannot rely on institutional theory alone. In this case, serious consideration of planning theory could help to remedy the institutional deficiencies both socially and culturally.

Theoretical Reasons

As we have seen in the previous sections, we suffered from the sterile social environment to establish urban planning. Urban planning was either a paper work or powerless to the realities of the city and therefore couldn't play a proactive and leading role. It was those who were called "project manager" rather than "planners" who practiced actual urban development and planning. Therefore, it is only

natural that the actual deterioration of the environment would be the result of the absence of planning.

The human environment cannot be guaranteed even if planning is forever barren. Within a given system, no matter how planning is done, there will be a limit to its effectiveness. Nevertheless, this does not mean that we should wait the various systems to be changed. Rather, it is necessary to deepen urban planning at the stage of planning theory, because there is no real plan. It is necessary, firstly, to overcome and compensate for institutional shortcomings and problems of implementation, and to have a plan that covers these shortcomings. Such a plan should never be a mere essay or picture, but should have a more practical meaning.

Second, deepening the theory of planning will make the best use of the existing institutions. Even the best weapons cannot be effective unless we know how to use them. And since we are using a weapon that is extremely ineffective, we must be very thoughtful about its use.

Thirdly, when planning theory permeates the public, it will raise social awareness of environmental and urban issues, which will ultimately change the system. If the system is left alone because it is bad, it will never change. Even if the planning is not a movement to change the system, it should provide a theoretical basis for changing the system, and should be the basis for the change.

Fourthly, as I mentioned in the section on situational theory, the human environment is in a constant state of change, whether we like it or not. Change of an environment depends on political, economic, and social reasons, but in the end, it is the variable factors of human society. And new technologies are needed to protect and create a human environment that can withstand such changes. This is not a matter of displaying his or her power, nor is it a disorderly selfish act, but a new human technology that looks at the environment of human society, and is the wisdom of mankind. Such a new technology deserves the name of planning.

Environmental Planners

The reason why we are facing serious environmental problems is because we have not yet reached this planning technology, which can be called the wisdom of mankind. It is fine when human activities were relatively small. However, in this era of drastic change and with nuclear power in our possession, if human beings do not have environmental planning technology to create and control their own environment, they will become extinct by their own power. We must say that mankind is standing on the edge of danger. This does not mean that direct control of the environment is sufficient. To preserve the urban environment, much effort should be put into pollution control. It is necessary to control the pollution occurring now, and it is also necessary to prevent it. Then it is required to have a comprehensive plan for the entire urban environment.

As we have seen, previous plans have been unworthy of the name of planning. We must create at least effective plan. Then it deserves the name of urban planning, and to this end, we must deepen the theory, reform the system, and provide the ability to implement. But this alone is not enough. The current planning is not enough even in the classical sense of urban planning. New environmental plan is more broadly concerned with how to preserve and create the environment for mankind. It must include not only air and water, but also biological system, and recognize the realities of life that develop independently of the physical environment. It is hoped that a planner will emerge who will be responsible for establishing such a new plan.

A Call for New Planner

The Three Schools of Planning

The 1960s, when interest in urban planning grew and urban planning was actively discussed, was a kind of urban boom period. Many people spoke out about the city or proposed plans. Active proposals were made by people on the architectural side. These included Kenzo Tange's Tokyo 1960 Plan,

Kiyonori Kikutake's Maritime City Plan, Masato Otaka and Fumihiko Maki's Shinjuku Plan based on elevated land, and proposals by Arata Isozaki, Kisho Kurokawa, and many others.

These proposals have gone beyond individual buildings, and have included collective buildings, complex buildings, district plans, and city plans. These proposals for planning beyond a single building were said to be urban planning. Architects thought that they were planning a city. These people can be summed up as the design school.

On the other hand, there were those who investigated the present conditions of the city and tried to create a comprehensive plan based on a realistic analysis of those conditions. These people later developed into planners in the Department of Urban Engineering at the University of Tokyo, the Department of Social Engineering at Tokyo University of Science and Technology, and some of the architecture departments at Kyoto's universities. The influence of these people led to the creation of many master plans in each municipality. These can be called the laboratory planning school. These people were also active in the 1960s.

In contrast to these architects and laboratory planners, there were people in the governmental agencies who drew arterial plans and determined zoning in the actual system. There were people called "urban planners" since the reconstruction from the war or even before that. These people were called "government agency planners." If we classify them in detail, we can make many more categories, but let us consider the roles played by these people in general.

The Designer School

The designers were the most glamorous and easy to be understood by people because they depict the shape and form of the city. It was the most active in the mass media. When they confronted cities in the same way as architectural design, they encountered some difficulties. It is not only the area that increases in size, but also the fact that the expansion brings in all kinds of things. It is still manageable so long as it is only physical things such as roads and plazas that connect buildings. Finally, they understood that the planning of a city is a process in which the shape and form of the city is only a small part of it, and there are too many conditions that must be met to make the shape and form of the city a reality. The designers thought of urban planning as creating a city.

What the design school people thought of as urban planning is not what we call planning here. But it was rather abstract design-study, often far removed from the actual city itself. If we confront the city as a sort of monster with design tool alone, we cannot move the real city.

Design in the construction industry is considered a technology of synthesis. It creates the human environment. Nevertheless, it would be a great mistake to apply the same methods of architectural design to the city and to think that the city is the extension of the scale of architecture. The role of architectural designers and that of urban planners exist in different dimensions, even if they require the same comprehensiveness.

In architectural design, many conditions (the decision to build, the adjustment of property rights, the determination of the construction body, the search for and acquisition of a site, the procurement of funds, the establishment of a budget, the measurement of content, the determination of management and operation methods, etc.) should be established. A great deal of energy is to be expended in determining these conditions, which are different from the design of a single object. There must be opponents to the decision, and considerable effort is required to coordinate opinions within the organization. A great deal of effort, both internal and external, is required to secure the funds. The list is endless.

The planning of a single building is even like this, but when it comes to a city, there are many complex factors of a different dimension. The greatest of these complexities is that urban planning is not the

same as the construction of a building in which no one yet lives. Architectural design on a blank site is quite different from moving the city as a living and active entity. Space development technology, which is called the systems industry or systems engineering, and urban planning are completely different in dimension. Even in the case of building a new town, there is existing agriculture and some kind of life. For changing them, it is not enough to just draw a picture.

In this way, in the case of urban planning, as in the case of architecture, we are ultimately dealing with space and the environment. Although the plan is presented in the form of a picture or a diagram, it is used to change and maintain the space and environment in various stages. If it were to be realized simply in a straight line, it would cause something unmanageable. Therefore, urban planning includes “plan not to make.” The proposals for the city presented by the design school start from the abstraction of the conditions, and it would be impossible to realize them as they are. Planning is not a glamorous work like the design school, but a steady and persistent work. It is not a picture of a city in good shape and form that is shot up like fireworks and then disappears into the night sky, but is a work of controlling and building the city as it is in the throes of its reality. However, this does not mean that the design school is completely useless. Being aware of the differences with planning, it will be able to fulfill its original role as design.

The first of these roles is to provide a concrete, visual vision of the city. If we are only absorbed into reality, we will not be able to discover new solutions, but rather, by freely depicting the city, we can open the way to new solutions. This will gradually help shape social consciousness.

Secondly, if we say that a city is not only a form, it will appear as a concrete form. Planning alone does not create a city. Once a good plan is in place and conditions are organized, a designer who understands the urban perspective can create a magnificent environment. A cooperative relationship between planners and designers will be necessary. Sakaide's artificial elevated land planning by planner Asada and architect Otaka is one of the new urban forms created through such cooperation.

Thirdly, it will play a role to fill something that is lacking in the city. Designers will play an important role in designing a playground for children in a small space between buildings, designing a system of separation of cars and people, and creating various urban mechanisms.

Fourthly, people are trying to bridge the gap between planning and reality, not only in terms of form, but also in terms of communicating with reality. In any case, the role of the design school has been considerably reorganized and separated from that of the ideal role of planners.

The Laboratory School

The laboratory school emerged as the mainstream of urban planning when the role of the design school was not recognized as urban planners. A small number of these people had existed for some time, and they investigated the actual conditions of cities by introducing methods of foreign urban planning, and sorting out the basic problems. When the limitations of the design school were shown, people's expectations for planning were concentrated in this school, which had been hidden behind the glamor of the design school.

The people of this school could be divided into two groups: the research and analysis people and the planning stars. In the beginning, more effort was devoted to the analytical aspect than to the planning, and much effort was devoted to the means of clarifying the features of cities, and many efforts and studies were made to quantify this reality. Some of the planners specialized in transportation planning and housing planning, but most of them were oriented toward comprehensive planning and tried to plan the city not only in form but also in totality. Comprehensive planning also aimed at the physical planning, such as land use, transportation, supply and treatment, parks and green spaces, etc. This type of comprehensive planning, including its subtypes, has formed a universal pattern and has been implemented by local governments throughout the country.

This type of planning was born as a criticism of the design school. A criticism of the localized nature of the government agency planning will be discussed later. This school of people has retrieved the role of planning from the design school, which has been socially glamorized. It is the original planning role based on a more realistic understanding of the totality of the city.

However, once this type of planning had run its course, a new question arose. The so-called comprehensive plans developed by this school were, in the end, nothing more than a bunch of papers. They were not strong enough to cut into real urban planning, just as the design school could not relate to the real world. If we start with population planning, population itself is not something that can be planned and is only a projection. Moreover, the plan only painted a picture of what the city would look like 10 to 20 years from then without any clues to realize the comprehensive plan. The plan was only a composition without any effort to make the whole municipality a comprehensive body. They left the difficulty of synthesizing one municipality due to the complex and diverse entities involved in a city. The important question of who the subject of the planning will be discussed later. The municipality, which is preparing the plan, should at least conduct comprehensive administration and projects. Thus, a demand for a more practical and realistic type of planning to the laboratory school, which has been powerless in terms of plan realization in the face of changing circumstances, has arisen.

The plans of this school also played some roles. First, as I mentioned earlier, it lacked dynamic practicality, but it did establish a method to show the synthesis in an annual perspective. Secondly, it made the necessity of planning more widely recognized than the design school. Thirdly, many new attempts at urban analysis were made, although not immediately useful, they built up a body of knowledge that can be used in future planning. Fourthly, it provided supportive power for the revision of various institutions. However, its limitations also were revealed as mentioned above. The laboratory group will continue to play a role mainly as analysts, but it will be different people who will take a practical role in environmental planning in the future.

The Governmental Agency School

Unlike the design school and the laboratory school, the governmental agency school has not made a spectacular appearance, but has consistently existed in governmental ministries. Recently, government agency planners such as economist-planners have emerged in the Economic Planning Agency, but the so-called urban planners have been around for a long time before that. These people have created various systems of urban planning, and have implemented the present system based on them. Nevertheless, the actual cities that are the result of these people's efforts are full of contradictions. As already mentioned above, there is a debate as to whether there was even a plan at all. The contradiction seen by the design school and the laboratory school was to change the discrepancy between the reality and the planning done by the government agencies. At first glance, the public tends to think that the flamboyant design school and the laboratory school were in the majority and misunderstood that these people are driving the actual urban planning. The Agency School has always existed, and the central and local governments together define, plan, and control the city planning system in Japan. The design school is completely unrelated to these people. The laboratory school does not move the government agencies. Except for a few people, the laboratory group is also completely unrelated to the government agencies. Contacts are made in the occasion of institutional changes, or in the time of seeking their opinions within their framework. There is a considerable difference between the laboratory group and the government agency group, even though they are both referred to in the same category of powerless planners. Until now, they have been almost entirely separate entities. Even though there is a problem as to whether the plans of the government agencies can really be called plans or not, the laboratory group, which only translates foreign city plans and conducts research on plans, cannot move the city planners of the government agencies. Therefore, it is impossible to influence public project sectors, which are the real city-building units of the government.

What is the reason for this disconnect? Aside from the design school, the laboratory school lacks

awareness of the actual urban planning being conducted by the government agencies, and has failed to provide practical guidance to the government agencies. This is not only because of the lack of recognition of the actual situation, but also because the plans of the laboratory school were not oriented toward such a practical direction. They were more analytical, or were just one-size-fits-all plans that had little to do with practice, and did not have the awareness and power as a practical planner necessary for environmental planning. Like the design school, the laboratory school must admit its limitations.

Secondly, the governmental agency school is a weak entity that does not have the power to create cities. Even if these planners are often emphasized as the "ideal" type of planners, they cannot act on that basis alone. The design school and the laboratory school have their limitations as practical planners. The reason why the government agencies reject them is that they, as comprehensive planners, have not secured practicality in other aspects of urban development. They are therefore unable to escape from their narrow institutional framework. However, even within the governmental agency school, pioneers such as Eikoh Ishikawa emphasized that urban planners are not merely colorists or physical engineers, but rather cultural engineers with a higher level of synthesis. Unfortunately, the existing institutional framework does not provide them with the job skills to demonstrate such a comprehensive nature, and the government agency planners are also victims of the current whole system.

In conclusion, although I have reviewed these three schools, none of them can be the planners of the new era. The plans and designs that were made by them have ended up as their own complacency, and they are different from concrete practical planners who are believed to secure the living environment of the residents. Rather, individual engineers, such as sanitary engineers and public health engineers, play a part as practical planners in their respective fields. However, they are not enough to do at present. We need to establish a comprehensive science to solve environmental problems and new planners who can plan and implement this science in a practical way.

The Birth of Planner and Their Role

The Planner as a Comprehensive Engineer

Architects are needed to design buildings, and civil engineers are needed to build bridges and dams. Sanitary engineers are needed to build sewage treatment plants, and plant engineers are needed for petrochemical plants. In the same way, urban planning requires urban planners. But that is not the only reason why we need a planner. A city is a collection of roads, waterways, buildings, plazas, parks, etc. Therefore, a city is created by civil engineers, architects, and landscape architects. It is these individual engineers, not planners, who create cities. Why, then, do we need planners in urban planning?

If a city were simply a collection of individual objects, there would have been no need for a planner. But a city should not be a jumble of roads, buildings, parks, plazas, etc., but needs some kind of synthesis of them and a new system. Without such a new order, roads would not function as roads, and architecture would not function as architecture.

The proverb "God-made nature and man-made the city" does not simply refer to the city in relation to nature as an accumulation of artifacts, but also to nature as an exquisitely ordered system, and the city as a system with a different order. The fact that the city is said to be an organism also indicates that the city is a system. It is a large organism that consumes, produces, acts, and excretes, and when that system is destroyed, the city ceases to function as a city. If the city is a comprehensive, gigantic system, then new technologies are needed to integrate it, and planners are the engineers who can create such new integration.

Modern science and technology have followed the direction of specialization and segmentation. This was a necessary means for the progress of science, and it has led to the elucidation of many new facts. On the other hand, it cannot be denied that microscopic and localized movements, so-called "specialized idiots," have arisen. Even though it is called a university, it is no longer possible to discuss

common problems among different faculties. Departments, let alone faculties, are subdivided into specialties, making it impossible to discuss and exchange ideas outside of the specialty. However, since human society and life are in one synthesis, a new synthesis is needed in addition to the subdivision of specialties. The more specialization progresses, the more it will be necessary to have a certain proportion of disciplines who can engage among these disciplines as a kind of generalist. Recently, the need for collaborative activities among such different specialists has come to be widely recognized. Especially in new fields such as environmental science, space science, and marine science, such interdisciplinary research is being conducted. The same applies to the integration of various technologies in the field of systems industry, which has recently become popular. Here, the synthesis of technologies has at least three aspects. The first is the physical synthesis, which is the synthesis of civil engineering, architecture, landscaping, etc. for the formation of the environment. The second is the synthesis of the socioeconomic aspects, which is a comprehensive understanding of the conditions that create the physical environment and social life. The third is the synthesis of the dynamics of goals and reality over time, which is the synthesis in practice.

The Paste Planner

A city is originally a comprehensive organism. Therefore, a systems science that requires a synthesis is necessary to deal with the entire city. Planning cannot be done without a comprehensive systems technology. A planner is such a comprehensive engineer.

The planner's comprehensive nature can be likened to the role of paste in the production of concrete. Concrete can be divided into two parts: aggregates such as gravel and crushed stone, and a paste composed of sand, cement, and water. Aggregates, no matter how strong they are, do not paste well because of the interstitial spaces between them. The paste sews between the aggregates and fills the gaps between them to form concrete that can withstand strong forces. Usually, the strength of the aggregate will be stronger than that of the paste. However, it is the weakest part of the concrete that determines the whole strength, and it is the paste that is the filler, without which the concrete would not be possible.

Comprehensiveness does not mean just binding the aggregate with a net or wrapping it in a cloth. If so, it does not achieve anything. We need a technique that connects all of them together like a paste to create something different. However, this technology does not completely change the previous ingredients, as is the case with compounding. The aggregate gravel is still there if you look closely. It is just that it is no longer gravel or sand, but something else: concrete. Building a city can be likened to the technology of making this kind of concrete. Here, the aggregate is the technology of civil engineering, architecture, landscaping, etc., and the paste is the technology of the planner. Without both, a city is no longer a city. However, in this metaphor, it is not enough even if the aggregate and the paste exist independently and are bonded together. Some modern adhesives bond the joints by gradually dissolving them. The integrated technology and the individual technology influence each other. Even if a planner is necessary as an integrated technology, there are many aspects to integration. A planner is not a combination of a civil engineer, a builder, and a landscape architect.

A man once said that he had built roads, airfields, sewerages, and buildings. So now he was going to do city planning. Being proficient in each of these techniques is necessary for urban planning, and it may yield good results. However, it is not necessary to be an expert in each technique. What is needed is the skill of how to synthesize them. Each technology, no matter how many you put together, is only that. Aggregate alone cannot be made into concrete without paste, no matter how fine the aggregate is. Each technology is an aggregate, and the technology of synthesis is a paste, which are qualitatively different from each other.

Necessary Skills of a Planner

Simply saying "concrete paste" is only a figurative expression, but it does not clarify the content of

the term. We have seen that the design school, the governmental agency school, and the laboratory school have all fallen short, nevertheless each of them have useful elements. The new planners need to take what they need of these elements and develop as new engineers different from them.

(1) Comprehensive technology to explore how the human environment should be

Urban planning is environmental planning. If we fail to control the environment, human beings will destroy their own survival environment owing to their own activities. As human activities increase, the destruction of the environment becomes more frequent. Under the behavioral principle of the profit seeking society, production and flow tend to be weighted heavily. This has resulted in the deterioration of the living environment. Production and flow are necessary for human beings. Therefore, we need a new science to recognize their interrelationships in a comprehensive manner, and a deeper insight into human civilization. These are issues of science and philosophy before technology. But as environmental technology is directly related to human existence, it is inevitably necessary to explore the ideal state of the human environment. For this purpose, the proposals of the design school will be of great help, and research and evaluation based on ecology, cultural anthropology, and the theory of civilization must be considered.

(2) Technology for the comprehensive optimization of the human environment

If we only have insights into the human environment, we will end up as critics. Based on such insights, we must look at the various forces at work (social, economic, political, and cultural) and consider what kind of human environment is most desirable in the context of the various constraints (land, resources, weather, finance, technology, etc.) and the activities (production, distribution, information, etc.). The technology is expected to comprehensively create the most desirable human environment in the environment.

It is a process of selecting the best combination from among dozens of complex combinations of natural, technological, economic, social, and other conditions. There are tens or thousands of possible combinations, and it is not easy to select one out of them. Moreover, it is difficult to evaluate combinations of different dimensions. Moreover, it is impossible to determine the best solution based on individual technologies. For performing this optimization, there are methods such as system analysis developed in the field of social engineering, quantitative methods such as modeling and simulation, and pattern-based decision making based on drawings and maps.

Planning here is not merely an economic or social plan. Modeling and simulation is one means of planning, and must be taken down to the physical conditions that ultimately determine the human environment. The physical plan displayed here is different from a simple blueprint, because it incorporates not only physical dimensions but also many other dimensions simultaneously, not only spatially but also temporally and non-physically. Moreover, as already mentioned, a city is a living thing and cannot be drawn on a white board without permission. Although a solution bleeds when cutting is depicted on the organism of a city, it should not be a Frankenstein city-building that destroys the living organism, or gathers a bunch of broken human beings.

Thus, an optimal solution sought here is presented as something with complex semantic content, even if it appears simple at first glance. Optimization is not an abstract or ideal state, nor does it mean that it fits well. It is about how effectively given conditions can be used to realize the desired direction of the human environment, and not about static optimality at a certain point in time.

(3) Technology that makes the most effective use of available means and provides practical means

Weapons are necessary in the struggle, but they are all inadequate to make them socially effective. This does not mean that they cannot be used. In practice, there is a difference between using these tools unconsciously and doing consciously considering their availability. When using the same tool, it requires individual skill in its usage. It is also a creative and practical skill to create additional means to use the same tool. So long as laws and systems are never fixed, tools can be created if they are truly necessary.

(4) Comprehensive technology for the strategic programs for the creation of the environment

No matter how many blueprints are made for the movement of a living city, they are meaningless without the skills to make them a reality and to move them forward. As was the case with many comprehensive plans, most of the city planning maps by government agencies were merely regulatory maps, and there was no program to create the city in that direction. For realizing a plan, control and promotion techniques are necessary. It is necessary to define major strategies and tactics to put them into practice, considering the behaviors of many business entities and the reactions of the recipients of those behaviors.

While the plans are comprehensive and diverse, it is necessary in practice to narrow down the problem in reverse, asking what is the problem to be solved, what is the greatest difficulty to be solved, and what is necessary to be done. From such a narrowing down of the problems, we must find the best measures to be taken in a realistic manner. It is not possible to synthesize a plan by simply listing all the plans. In such a strategic theory, even a single plan can have a variety of meanings. The plan must be a projection of the actual invisible strategy. In this sense, a plan that shows only roads and land use is a low-dimensional plan. Planning technology has been a philosophy and a science, and it is in this dimension that planning technology will be at its best.

(5) Comprehensive technology to control and promote specific plans

In urban development, many technologies such as roads, sewerage, parks, architecture, etc., must be implemented concurrently, so it is necessary to control them comprehensively while filling in what is necessary, correcting misdirection, and promoting what is lagging. It is truly a comprehensive technology of paste. Without this kind of control and promotion, it would not be possible to comprehensively demonstrate the power of each technology and main role. In addition, these are not only the synthesis of physical technologies, but also the important precept that moves a living city. There must be a living reaction, and appropriate judgment must be added to adjust without misjudging the overall situation. If the planner is not directed not only to the aspect of creating static plans, but also to the aspect of making the plans come alive, there will always be a disconnect between the plan and the actual situation.

Planner's Activities

The comprehensive technology described above has not yet been established. It will take time to create planners who can make full use of these technologies. To do so, it is necessary to revise existing laws and financial issues as external constraints, and as internal conditions to establish training institutions and methodologies to nurture planners. As for the future of planners' activities, we would like to point out a few issues.

(1) Planners in organizational activities

Although a planner can be a single person, an organization is needed to carry out the planner's activities. It is difficult for a single person to satisfy the above-mentioned conditions, and even if a single person satisfies them, the planner in a practical setting may end up being a bystander or a debater unless several planners are involved in the practice as an organization. Although they may only make necessary comments or give advice from time to time, planners as practitioners usually need a planner organization to facilitate their activities and to fill in the gaps between each other. Such an organization will probably emerge in both local governments and the private sector.

(2) Engineers and Planners

As already mentioned above, technology is different from the one based on the elucidation of natural laws used by engineers. The technology used by planners is the planning, which is creating various conditions for the creation of the total environment based on the laws of nature and society. However, there is a planning stage by engineers before designing. It resembles the technology of meaning used by planners. The engineer who deals with this planning phase should cooperate with the planner.

(3) Designer and planner

There are two types of designers: designers of individual properties such as architecture and crafts, and urban designers and landscape designers who deal with a much wider range of design. In the latter case, there are same elements of planners. The planner's role is to lay the groundwork, and the designer is the upper structure. Even here, a cooperative relationship with a designer with a broad perspective is very necessary in the planning stage. By acknowledging importance not to let the planning process become dry designer's ideas can stimulate the planning process.

(4) Economists, social planners and planners

The term "planner" here refers to physical planners: planners in urban and environmental planning. They are called physical planners not only because they draw physical shapes and forms. Even physical planners have a great deal of work to do in aspects that do not appear in physical form. They do not put it together as an abstract composition or a number, but they take every possible means to realize it as a living, concrete environment. The physical appearance is a consequence of this. But the economist-planner, who never reaches the physical point, is different from the social planner, who is concerned with the physical aspects after and before. It is at the point of physical forming that the non-physical conditions become most decisive for the human environment. From that point on, the solutions that existed before the physical forming become highly concentrated and determined. Therefore, the focus is on how to organize the social, economic, physical, and natural conditions for physical forming before that point, and this is most necessary in a complex place like a city. The planner of the future will be called upon to play a new role in collaboration with other professions and to fulfill responsibilities that cannot be replaced by other professions.

The Planner and the Subject of the Plan

The planner is not a planning entity.

What should not be misunderstood here is that no matter how good a planner may be, he cannot become the subject of the plan. In general, when a building is built, there is a client, and the planner, designer, and builder are the servants of the client. In this sense, architects are not subjects either. In the case of the architect, however, even if the contractor does the construction, the final form and shape are determined by his drawings. For this reason, architects call the buildings they design their works of art, and the same may be said of other designers. Artists, such as painters and sculptors, are truly works of art because they do not leave the construction to others, but create it themselves. Architects and designers, on the other hand, are indirect works of art. For urban planners, there is no such work of art. The role of the urban planners is not only to create things, but also to lead and coordinate comprehensively how to improve the urban environment, including conservation and control at the same time. And how to resist or utilize external forces, and the actual designing of the urban environment is not a one-way work. In addition, it is the designers and engineers who create the design, and planners usually do not directly. In this sense, the planner is in a more indirect position in terms of making things, but that is exactly what is needed to create the complex environment of the city. It is impossible to call a city a work of art, but even a small district plan cannot be a work of art for the planner. The planner is the scriptwriter and director of the overall control of the environment. However, he himself is not an actor. It is the designers and engineers who are the actors who will receive the loudest applause. Then let me examine the subject matter of the plan.

(1) The state = central government - The state is the entity that legislates, organizes, budgets, and plans the national government. The national government is certainly the most powerful organization with the most authority. However, whether is it the most convenient unit for environmental planning? Environmental issues require a very local and comprehensive nature. A single road needs to connect one point to another from the national dimensional point of view. National trunk roads may be necessary to connect various parts of the country. However, for a particular region that it passes through, it may cause great destruction of its cultural assets, or it may cross through residential areas, causing noise and exhaust emissions. Such environmental problems must be solved on a regional basis. Regional problems caused by industrial development cannot be dealt with by simply following the

national government's policies. They must be considered from the appropriateness of such national-level planning and the security of regional planning. Thus, the national government cannot be the planning entity for every region, and is an entity to play an indirect role in environmental planning.

Therefore, the role of the national government lies elsewhere. The national government is inevitably expected to play a role in broad institutional solutions, and comprehensive measures. And it is to set up a nation-wide planning framework, which should include major planning of nation-wide expressways, railroad trunk lines, international airports, comprehensive resource use of water allocation, land use and fundamental development policies of industrial development, urban decentralization. They must be carried out by the national government agencies. However, it is the national government who tries to become the leading body of regional environment planning, while neither sorting out the governmental roles nor leaving their duties.

(2) Municipalities - Municipalities are doing comprehensive regional environment plannings. It is believed that urban planning is an authority inherent in cities. In a complex and expanding bureaucracy at the national level, it is impossible to expect the administrative integration at regional levels. This is true even in socialist countries. Therefore, if the role of the national government is as described above, municipality which is established in the region and directly entrusted by the residents, should become the main body for planning at the regional and environmental level.

Until now, the national legislation did not fully recognize the autonomy of local governments. Urban planning was a national task decided by the competent minister, and local governments were merely one of the executing agencies of the plan. This legal system is expected to change drastically in the future. Although the national government has been checking details of plans up to the present, the national government's checks are not always necessary. When it intrudes into the plans more than necessary, it brings the national government's vertical divisions to the local government administrations. It causes an imbalance in the plans which leaves the residents to suffer the effects of it.

Municipalities also have their own problems. They have not got rid of the old bureaucratic subcontracting system, and sometimes they act as a subcontractor to the national government. They behave as a "superior" to the residents. This is gradually changing with the introduction of directly elected mayors, but municipalities themselves will be required to reorganize themselves as autonomous bodies.

Even though planning authority is delegated at the municipal level, there are no planners who can implement it. One of the most significant changes in the postwar period was the improvement of educational standards, and the era in which the central bureaucracy was the only elite is over. Therefore, it is through trial and error for people to learn, and practical planners will be nurtured in municipalities. They are responsible for their own environmental planning and have direct contact with their residents.

People say that municipalities cannot be trusted, because they are not strong enough to resist various pressures from outside and inside. Those are aspects easily influenced by the power of representing specific interests. Unlike the fixed old frameworks, we will take the residents' side to promote environmental planning by taking in their voices and transcending the institutional frameworks. Environmental problems occur very close to us. If we take a rigid attitude toward them, we will not be able to solve them. Flexibility in dealing with changing situations should be taken as a requisite.

It is unsuitable to be an environmental planner if their plans are made only for the sake of specific interests. This should be checked by all residents who have concerns about broad interests under the principle of openness. For stopping the one-way flow and unifying the planning organization, the new group of planners can carry out consistent planning with a scientific basis. Thanks to its plannings the entire municipality can move as integrated entity. The responsibility of the head of the municipality, who is directly elected by the residents, is great, and the responsibility of the residents to check him

or her is also great.

(3) Private sector - The Ministry of Construction estimates that private sector investment accounted for 68% of the total construction investment in 1969. Since government investment includes many elements unrelated to urban development such as landslide control, flood control, and coastal works, the private sector may account for more than 70%, nearly three-fourth of the actual urban construction. In this sense, the private sector is a real actor in urban construction. However, it is still difficult for the private sector to become an environmental planner by itself.

The principle of private companies is the pursuit of profit. It is not a bad thing in itself. In addition to simply pursuing current profits, companies can also achieve corporate profits by gaining social credibility and improving the environment over the long term. As a corporate behavior, the burden of environment is placed on the public external economy. Although they take actions that improve the local environment, they may have a negative impact on the whole city. The private sector, which is an important part of the environmental formation, is inevitably subject to environmental planning at the municipal level. Then the private sector, within the framework and rules of planning, should bear the necessary burden on the external environment and determine how to improve the local environment in balance with its profits. For this reason, private companies cannot be more than local implementers of environmental plans.

(4) Residents - Residents are responsible for about 1/3 of the investment in the environmental development in the form of housing construction. However, if each resident makes his/her investment on their own, the environment will not be maintained. Rules for each region are necessary. This is the reason why the residents have come together to form their own municipalities and check each other's actions. In Japan, however, since there is no history of local governments formed by the residents themselves, they are merely a dispensation by the central power. We must admit that the current local governments are not sufficiently organized. If environmental planning is controlled according to the individual residents, contradictions will eventually accumulate. The urban environment is a system with an attempt to minimizing friction and catching its merits while forming high-density contradictions within its own environment. If friction is left unchecked, the contradictions will explode. Therefore, it is difficult for residents to be the main body of the whole environmental system, even though they can be the main body in the management of playgrounds and the opening of school facilities in a small area.

Residents could be the main body of environmental planning, but they should not be individual residents of each district. They should form their own self-governing body that is desirable for environmental planning, and the self-governing body controls residents themselves. Although we do not know whether the current scale and organization of local governments are appropriate as the self-governing body, the residents must create their kind of local government. Therefore, planners are required to make environmental plans and put them into practice.

Environmental planning is a mutual control. The planner, trusted and employed by the self-governing body, is to control the client residents for the benefit of them. It must be done not under the authority of a central state, but as an expectation of the residents of their society.

Can a municipality be the main actor of environmental planning?

The municipality must be the main actor of environmental planning. However, there are many issues that need to be overcome.

- (1) Municipalities should have independent planning and execution authority of environmental planning, both legally and financially.
- (2) Municipalities should be free from subcontractor role of the central government. They should, communicate actively with residents, and have the original characteristics of a self-governing body.
- (3) Municipalities should have the ability to make comprehensive plans for the environment,

strategically operate these plans, and promote them as action plans that do not end up as paper plans.

First, what is called "group autonomy" in relation to the national government, especially for environmental planning? Second, the municipality is established on the trust of the residents as a responsible party for the environment. Third, the local government should have the capacity for planning and execution.

No matter how much authority a municipality has or how much interaction it holds with citizens, it will not be able to achieve anything if it implements haphazard planning or lacks comprehensive, localized solutions. A municipality must have the ability to plan comprehensively to demonstrate its capabilities as an organization. Environmental planning begins when a municipality acknowledges the planning control by planners and contradictions within itself. It is the municipality which can accept contradictions, and it can demonstrate regional comprehensiveness in planning and resolve these contradictions. Although municipalities are vulnerable, they must be the main actors in environmental planning, otherwise no others. If the current structure of the municipality is inadequate, it must be changed through the power of environmental planning.

Planners and Municipalities

The planner is not the main actor of the plan. But when a municipality becomes a main actor of environmental planning for its residents, rather than a subcontractor from above, it needs a practical planner inside and outside. There are many tasks in the planning process. These can be done by outside planners, because it is difficult to have enough planners for the nearly 600 cities, if counting towns and villages much more municipalities. Moreover, municipalities may not have a planner for all its departments, since there is a considerable specialization among planners. Therefore, freelance planners can support the planning of municipalities. Freelance planners will be more efficient to perform assigned roles where they are most needed.

However, even when an external planner is hired, an internal planner is also a practical entity in environmental planning. It is likely to happen if the municipality does not understand what is being requested to it or does not know how to use the external planner to its advantage. It is planning and cities that live in changing realities. If we compare planners to doctors, the external planner is basic medicine. The internal planner is the clinician who takes care of health and, in some cases, performs surgery. For a municipality as an environmental planning entity, it must have both.

A Practice in Yokohama City Municipalities and Environmental Planning

Although residents are the main actors in environmental planning, an organization is needed, which is called a municipality, or in the case of an urban area, a city. As a municipality was originally born, it should never be an agency of the central government. The current municipalities have many problems to overcome. Nevertheless, the control of our environment, which is crammed into a small area, is based on the self-governing organization rooted in the residents.

There are two principles of self-government: resident autonomy and group autonomy. Yokohama is already a huge city with more than 2.3 million inhabitants (3.7 million as of 2025). In such a huge city, whether it can have an organization that can fully absorb the living energy of the residents? We are challenging how urban environment planning can be carried out in practice. In this context, we create a role, a position, and a duty for new planners. I do not expect that these efforts will be immediately rewarding. However, instead of sitting on our hands and making critiques or discussing planning without reality for the sake of discussion, planners should be born in the realities of cities that are moving day by day. Environmental planning should find its clues in these realities. Let us have a look at the attempts made in Yokohama by planners for these environmental plans.

Planning and Coordination Office

In 1968, the City of Yokohama established the Planning and Coordination Office. This is an attempt to deal with environmental planning in earnest and to create a planner as a new institution. It intends to remodel urban planning as a comprehensive environmental plan by a single municipality through uniting its vertically divided departments into a horizontally integrated entity. This is different from the function of the current planning department, which is only defending the status quo and nothing more than clerical work as a stapler for the papers submitted from the various departments.

It is not a planning that either avoid addressing to the realities or gently touches superfluous phenomenon. We should go in and makes comprehensive plans while correcting the course of each project plan in the more realistic fluctuations of the situation. Conventional governmental agency planning is a subgenre of the laboratory planning school. Here, the aim is to be more practical. It is because of a defect of the legislation that does not recognize the general nature of city planning and places it in parallel with projects. The city planning department is trying to carry out each project separately, never putting them together as one comprehensive environmental plan. The reason why municipalities have been unable to do this shows their weakness and lack of planners.

The Planning and Coordination Office is not only a group of planners, but also a planner organization. The planner here is not only an individual, but also an organization of planners (i.e., a kind of planning board). Therefore, the members of the Planning and Coordination Office are not necessarily limited to those who have narrowly defined urban engineering and planning, but engineers of all the administrative departments can become planners of the Planning and Coordination Office as a whole. If necessary, a producer system to seek the cooperation of outside private planners and designers is required. It is a system to seek cooperation from outside private planners and designers when necessary. The Planning and Coordination Office is a planner, a producer, a project promoter, and a controller. It aims at a new organization that is different from the design school, the laboratory school, or the governmental agency school. Let us introduce some of the roles it has played.

Strategic planner for six major projects

Yokohama City became destructive by the war (1941-1945) and the requisition by the occupation forces afterwards, and the wave of urbanization in the 1950s led to a rapid increase in population through suburban developments without enough infrastructure. In response to this, the city planned and launched strategic project for the framework necessary for the city. These are considered necessary for a city of 3 million in the future. These are (1) the subway project, (2) the expressway project, (3) the Bay Bridge project, (4) the Kohoku New Town project, (5) the Kanazawa-Tomioka Area Development Project, and (6) the city center enhancement project.

These plans are not just construction projects, but also contain planners' strategies as practical planning. The main ones are as follows:

- (1) The municipalities become independent planning body by taking the initiative in proposing large-scale plans, not letting individual departments pursuing on their own initiatives.
 - (2) These strategic projects do not depend on limited public taxation for financial resources, but are able to expand resources by mobilizing other business entities and conducting corporate management through foreign bond issues. Taxation can be used to realize a civil minimum for the residents.
 - (3) The abstract long-term plan cannot be usable, but a master program can be used for urban development that can be implemented tomorrow. It is a realistic movement instead of a mere picture.
 - (4) Because new large-scale projects cannot be handled by a single department alone, we break down the system of vertical division of administration and call for a new overall motivation within the municipality.
 - (5) By giving the start, it will become being sensitive to the need for new planning, and will foster a new group of planners who can handle these projects.
- All of these are strategically important.

Environmental Control by the Yokohama Method - An Environmental Planner

Environmental planning, however, must proceed on two fronts: development and regulation. The current laws and regulations are not sufficient in terms of regulatory aspects. If ignoring the environmental degradation because there is no law or regulation for it, we must admit that the municipality is merely a subcontractor of the national government. For a municipality to be an agent of environmental improvement, it should adopt a new approach. This philosophy has given birth to a means of environmental control called the Yokohama method.

The Yokohama method does not ignore or go outside the bounds of the existing legal system. Since it is impossible for a municipality to take such a step. However, laws and institutions are never fixed, but are always changing. Yet, laws and institutions are rarely born in advance of the demands of the times. Rather, new legislation is enacted only when the demands of the times make such revisions unavoidable. Laws are inherently conservative in nature, and cannot move until social demands and evaluations have been established to a certain extent. Therefore, we should not attack the conservatism of the law on that basis alone.

In an era of rapid social change like the present, we cannot wait only for the revision of national laws and the enactment of local ordinances that is framed within the law. Then, what will fill this gap? Sometimes the judiciary plays the role of adopting the interpretations of the new era with precedents. However, in many cases, it takes a long time to do so. This is where the role of the public administration is required.

Unlike interpretation of the law, the administration can incorporate considerable comprehensiveness and speed. However, the administration becomes a partisan if it makes a careless mistake. As for the direct election of the head of a municipality, the head is always subject to the checks of the residents, and bureaucratic partisanship is not allowed. In the case of an anticipation of the times, it is rather a phenomenon that the legislation follows the currents of the times. Therefore, the Yokohama method, which receives strong support directly or indirectly from the people, cannot be a bureaucratic partisanship.

The representative example of the Yokohama Method regarding exhaust gases from the thermal power plant situated on the reclaimed land developed by the city is that, in response to the problem of pollution, for which the local residents had no authority at that time, the method, with the background of the residents' movement on the one hand and scientific results on the other, and with a small lead in the land sales contract, negotiated with the companies and finally reached an agreement signed between the municipality and the companies to stop the pollution. The Yokohama method was the first of many anti-pollution agreements that followed in many parts of Japan, and it has been utilized in subsequent legislation and standards. This was a very anticipatory approach to the needs of the times.

The second example is that a memorandum was concluded between the city and a development company to correct the situation of the huge residential development. It used the land readjustment law, but school sites had not been taken and roads had not been paved. Then, Local Development Guideline was formulated by the city administration in 1968. This was not started from Yokohama, but it has become common in rapidly growing regions, since the second largest city of Yokohama forged it to control vast development pressure. National new systems such as the Housing Land Development Law and the subsidy system for school sites are emerging along this direction. In addition, the new city planning law was also focused on how to effectively use it as an environmental plan, within the limited legal framework.

In this way, the Yokohama method is adapting to the trends of the times as quickly as possible with the maximum use of the administrative framework such as the Six Major Projects. The set of strategic projects is a master program, and it must be developed and coordinated in relation to other projects,

depending on changing circumstances. While a project is promoted by a concerned department, the entire content of the project cannot be rigidly fixed. New contents must be incorporated to achieve the original purpose of the project.

This kind of promoter role and new planning within a larger administrative framework require the Kanazawa land reclamation project conducted by several bureaus of the city administration; the land reclamation fund was provided by the Finance Bureau through a special issuing of foreign bonds, the fisheries compensation was provided by the then Agriculture Bureau and the Land Reclamation Bureau (now the Urban Development Bureau), the Tokyo Bay Road by the Road Bureau and the Planning Bureau, redevelopment permit in the port zone given from the Port Bureau (outside the port zone permitted by the Prefecture Government), the pollution control by the Anti-pollution Bureau, and the site planings are conducted by the Sewerage and Garbage Bureau. The Planning and Coordination Office oversees the overall planning of the project; the energy center concept, the sea park concept, and the model residential area concept.

Planning Coordinator

Environmental planning lacks responsible entity for it. This shows that projects are prioritized rather than planning in Japan's urban development context. For this reason, when projects conflict with each other, projects with strong financial backing are sometimes given priority and no other value is recognized. This situation is undesirable from the standpoint of environmental planning. When various projects are to be carried out in combination, only one of them will eventually take precedence over the others. In such cases, a planner must coordinate these projects as a controller, or as a coordinator. This is one of planner's roles.

In the narrow urban area of Yokohama, I coordinated the projects of expressways, subway and park. This was a difficult task due to the competition among ministries of the central government, and there were many difficulties in coordination among the departments of the city and prefecture administrations and public authority. In the end, the result may not have been desirable from the perspective of each project entity, and coordination always leads to dissatisfaction. However, it is impossible for a single administrative department to coordinate and control regarding the contents of the three projects, and the role of a planner is necessary.

Another example, the garbage incineration plant was integrated to combine a community facility in the area. Even though it was seen as a repugnant facility, a recreation facility for the elderly and a hot water pool were planned using the surplus heat produced from the plant. This project concept is progressing with the cooperation of all the departments concerned.

Design producer

Environmental planning does not end with figuring out abstract planning of land use, transportation and public facilities. Some of them are controlled and promoted by environmental planning, and become concrete through project implementation.

What the residents can see, hear, and touch directly is this figuration, and this is the urban space. Since most of the figuration is done by the private sector, the municipality is in the position of control, but what it does should have an excellent impact on the urban environment as a figuration. If public works are cheap and low quality, they will be a waste of taxpayers' money.

It is the task of each project departments rather than the role of the planner to implement, materialize, and embody the project in this way. In some cases, it is necessary to include various new elements in the project. For this purpose, it is necessary to mobilize urban designers at times and industrial designers at other times to create a better implementation system. According to this principle, the design committee of architects, industrial designers, graphic designers, etc. was formed to design the subway system as an environmental design in addition to the technical aspects, which will play the

role of a producer, and to design the trains, station furniture, guide signs, etc. The committee also played the role of producer by inviting industrial designers to design a pedestrian bridge connecting a park and an amusement park that changed the image of the conventional pedestrian bridge.

Conclusion

The role of the internal planner of a municipality is endless, including the systemization of data as a precondition for planning, contact with residents, reflecting of ward residents and city organizing citizen councils, and research for the establishment of a comprehensive urban science. Although the need for comprehensive environmental planning is keenly felt, no entity, condition, or staff has been created to truly carry out this task. Confronting the environmental problems of mankind since the 1970s, it is hoped that an environmental planning entity will be born. The resident movements that seem conspicuous locally now will come to fruition one day. Then new planners will be born both at municipalities or outside.

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