AKIRA TAMURA

YOKOHAMA: THE MAKING OF A CITY

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Akira Tamura made up his mind to pursue city planning as his lifework at the age of thirty-six, and left the real estate department at Nippon Life Insurance Company to start a new job at Environmental Development Center in January 1963. Ichio Asukata, on the other hand, became the Mayor of Yokohama in April 1963, and expressed his eagerness to reconstruct the city of Yokohama which had been burned to the ground by the firebombing raids of World War II. He commissioned the Environmental Development Center to develop a reconstruction plan for the city of Yokohama in 1964. Akira Tamura responded to his order by drawing up a proposal for the "Six Spine Projects" as a reconstruction plan for the city of Yokohama. Mayor Asukata decided that this plan should be promoted by none other than Akira Tamura who designed this plan, and offered him to join the city office and carry out the projects. Akira Tamura accepted his offer, and laid the foundation for the projects during his ten-year tenure at the city office under Mayor Asukata. After the new Mayor took over and Akira Tamura left the city office, his successors continued to carry out his intentions and their efforts culminated in the successful completion of the Six Spine Projects, including Minato Mirai, Kanazawa area reclamation, and Kohoku New Town that we see today. In 2000, he was awarded the Architectural Institute of Japan's Grand Prize for "Construction and Practice of the Theory and Method of Urban Development," and became widely known as one of the greatest city planners. This book concisely outlining details of his involvement in the reconstruction of Yokohama conveys his first step in city planning.

Akira Tamura spent his youth marked by successive wars from the Second Sino-Japanese War to World War II. I suppose that there are few people today who remember how Tokyo had burned down to the ground. While the burnt smell still lingered in the city, he entered the Department of Architecture at the University of Tokyo and studied under Professor Kenzo Tange. His bachelor's thesis was about "Changes in Regional Structures of the Metropolis." Perhaps because of the nostalgia he had for the cityscape in Tokyo before the war, he became interested in how people shape and change the city. After graduating from the Department of Architecture, he joined the Ministry of Transportation. He looked at the city in a new light and realized that the city not only consists of buildings but also involves human relationships. This finding led him to recognize the importance of law which sets forth rules among people, and he took a college entrance exam for the second time to enter the Department of Law at the University of Tokyo. It seemed that Akira Tamura spent his youth learning fundamental rules and broadening his horizons.

He passed away on January 25, 2010. Several people who were interested in his activities throughout his career gathered and built a momentum to do further research on Akira Tamura, and launched a non-profit organization named Akira Tamura Memorial - A Town Planning Research Initiative NPO. Since I had often heard about his activities from him as his younger brother. I became an organizer for the organization. This year marks the fifth anniversary of its founding, and the English translation of this book is one of the projects to commemorate and celebrate the occasion. We at the organization have been making efforts to clarify Akira Tamura's words and actions based on objective materials, and our research has revealed that he always emphasized the importance of addressing issues from comprehensive viewpoints and making persistent efforts to plan and coordinate accordingly, and his philosophy has been successfully passed down to next generations. We are learning the importance of determining the right direction for all matters through our research. On another note, while Akira Tamura wrote a number of books after he resigned from his position at the city of Yokohama, we had assumed that his books were not distributed outside Japan, for all of them were written in Japanese. To our surprise, however, we heard from several of our acquaintances from Korea that his Machi-zukuri (city planning) trilogy published by Iwanami Shoten, namely Machi-zukuri no Hassou (Approaches to City Planning), Machi-zukuri no Jissen (City Planning in Practice), and Machizukuri to Keikan (City Planning and Cityscape) have been translated into Korean and were being read by a considerable number of people, and were being favorably received. This prompted us to think that his accomplishments and philosophy as a city planner should be conveyed to all the people in the world as well.

As we entered the 21st century, global issues of environmental degradation and excessive urbanization have become themes that cannot be overlooked. Each region has its own history and political system, and there are no simple solutions. On the other hand, however, human beings share certain common values. Local governments are capable of fulfilling the expectations and hopes of many people. Akira Tamura emphasized that the ability to think comprehensively and provide insights is indispensable for civil

servants including themselves. I am convinced that this message should be conveyed to the world across time and nations.

Mayor Ichio Asukata retired all of a sudden, and Akira Tamura left the Yokohama city government three years later. He taught at universities and enjoyed interacting with students, while spending large part of his time traveling abroad. He wrote an essay on his experiences of seeing the world inhabited by people and experiencing its diversity, and it seemed to me that the theme of Akira Tamura's final chapter was "people" and "citizens." He established private academies in Tokyo and Yokohama, where he conveyed his "human theory" while talking about his own life. Furthermore, he presented an image of an ideal citizen in the theory, which eventually developed into his civil government theory. In my view, it conveyed his vision of utopia.

August 2020

Chihiro Tamura

田村千尋



The city of Yokohama was in shambles. It was understandable. This was the natural consequence of World War II and the occupation of the entire city by the U.S. occupation forces. Even after the city was finally returned to Japan, it was left with the scars from the war and the occupation. In addition, the lush greenery in the suburbs was being ravaged by urban sprawl spreading from Tokyo, and the spirits of the people in Yokohama were withered.

Around this time, I was working in the private sector and involved in the urban planning and regeneration project for Yokohama. While I never imagined I would end up working for the City of Yokohama, I was personally drawn to this project because I had settled in an apartment in front of Yamashita Park, one of the symbolic places in the port city of Yokohama.

From my residence on the eighth floor, I was able to see white luxury cruise ships from foreign countries across the park. The red gate of Chinatown was in front of my apartment building. I sat down in a dimly-lit restaurant sipping jasmine tea on the night after I finished moving in to my new home. The scent of jasmine tea drew me into the fascinating city of Yokohama. I was born and raised in Tokyo, but Yokohama eventually became my home before I knew it. Come to think of it, my grandmother had traveled all the way from Niigata through the Mikuni Pass to Yokohama to study in the first decade of the Meiji period (around 1870's), and her daughters who were my aunts and my mother who was the youngest had also studied in a boarding school in Yokohama and experienced new cultures from foreign countries. I must have had their blood running in my veins.

At the time, I was working on projects including regional development and urban planning in various parts of Japan and the Expo '70 in Osaka. The City of Yokohama was ready to commit to city planning on a full scale and asked me to implement projects our firm had proposed to the city. It was a great opportunity to put the theory of urban development into practice and validate its feasibility in Yokohama which had become my beloved home town. Yokohama had lost its autonomy and was overrun by disparate developments, and it had to be transformed into a unique and delightful city with fascinating new characteristics. It was definitely worth a try.

There is a significant difference between theory and putting city planning into practice. When one wants to implement innovative and creative ideas, numerous obstacles inevitably arise. In order to overcome the obstacles, one needs to convince opponents and gather forces of those involved. We exchanged heated discussions, anger and laughter with many people, and the energy and power of all those involved helped Yokohama regain its autonomy and gradually revive itself as a result.

City planning is like weaving "wefts" into "warps" or the "vertically divided" systems of citizens, businesses, administrative organizations, and local government departments to create a fabric of the city. It was from these endeavors that the unique city of Yokohama began to emerge. This book is a record of how we implemented city planning for Yokohama while overcoming various challenges.

Not only is the final result important for city planning, but also ideas, methods of implementation, establishment of systems, and human resource development are important. I touched on practical knowledge and skills required in implementing hands-on city planning, challenges we faced, and the development processes in this book as much as possible. I believe some of the methods mentioned in this book should be applicable to city planning in cities other than Yokohama, and it would be my pleasure if they serve as useful resources. An increasing number of citizens, local governments, government offices, and businesses started paying more attention to their cities. I believe city planning can be implemented using different methods that are most appropriate for each city. This book introduces one of such examples.

City planning influences one's daily life. It would be necessary for each person to think about city planning as if planning his/her home if he/she wants to create a better future for his/her family. We can definitely create a much better city step by step, if we put together everybody's ideas, knowledge, and efforts. It is my hope that that the practical example of Yokohama's city planning will inspire other cities to implement new city planning.

In publishing this book, I would like to firstly thank all those involved in Yokohama city planning who struggled, argued, and collaborated with me. What I learned from them (including those who criticized me) in our practice became my lifelong treasure and joyful memories.

Special thanks to members at the Yokohama City Urban Design Division for providing photographs and drawings used in this book. Last but certainly not least, I would like to express my deepest gratitude to Ms. Aiko Nagakura at the Chuko-shinsho editorial department for editing this book.

January 1983

Kikuna, Yokohama Akira Tamura

田村明



Let's Have Fun

The workplace was full of energy. A colleague called out from the other side of the room. A heated discussion was going on here. Someone was working on a drawing there. Five or six people were engaged in vigorous argument around a drawing on an extra-large drafting table. Another person just brought in a model.

This room was the home of the Planning and Coordination Bureau, a section in charge of promoting Yokohama's city planning. The atmosphere here was decidedly unbureaucratic. Nobody looked sullen with knitted eyebrows or behaved with an air of importance. They were all young and lively.

We could not simply go by hard-and-fast rules, nor bury ourselves in piles of routine paperwork. City planning as a profession does not abide by precedents or standards. Some standards do exist, but we could no longer afford to follow such outdated and fixed ideas. How could we break away from conventions and create something new? There was no time to waste.

While higher job titles earned some respect, there was no hierarchy once we started a discussion. An employee with no title would openly state his/her opinions and ideas in front of everyone. Sometimes we would argue heatedly. "Maybe we can do it this way." "Let's give it a try and see what happens." Many opinions are exchanged. Our job was to create something new. Someone would say, "Hey, don't be so serious. Let's have fun!" Everyone would smile and another round of discussions would begin.

People visiting our office would often tell us, "This room doesn't feel like a city office at all!" Or, "Looks like you are really enjoying work! " Some of them had already taken off their ties. Here was a person with a messy hair, and there was a person with a long beard. A person in front of me was wearing a bright red shirt, but it didn't bother me so much.

Many people of different professions—city planner, designer, architect, researcher, and more—came and talked to us. These people and city officers actively mingled with each other.

Citizens, of course, visited us, too. Sometimes an angry citizen would storm into our office, and other times we would see a middleaged citizen and a young officer engaged in a friendly conversation. Some journalists would occasionally drop by for a chat.



There were people from public and private sectors. At a first glance, they looked somewhat serious and fastidious. But soon they would get used to the lively atmosphere and start talking more casually, just like the rest of the people in this room. Difficult conversations would start to loosen up. There were naturally many serious issues to discuss, but we would honestly talk person-toperson without brandishing one's authority, legal power, or social status.

Here at the Planning and Coordination Bureau, we faced many challenges concerning city planning. Because there was no precedent to follow, the bureaucratic habit of "following precedents" did not apply. We ventured into a new realm. Everything would depend on how you look at it. We happily took up challenges and explored new horizons.

People often have preconceptions that a city office is inflexible and inactive. But it can become flexible and active like this office by changing the way of working. Active and creative city governments should take the initiative in creating cities for the future.

Birth of the Planning and Coordination Section

On April 5, 1968, a new section was established at the Yokohama City Hall. It is the Planning and Coordination Section (Here "section" and "bureau" are synonymous. The first Section Director was Kazuo Suzuki, who also served as the Yokohama City Technical Superintendent, a higher rank equivalent to the Bureau Director. The Section was later renamed the Planning and Coordination Bureau. It will be referred to as the Planning and Coordination Bureau hereinafter) responsible for comprehensively overseeing Yokohama's city planning. The Planning and Coordination Group was the core group of this section.

When it started, we did not even have a proper room. We were allocated a strange, long and narrow room at the end of the third floor of the City Hall. It was only 4.5m in depth, but had a width of 20m. It was originally part of a long balcony and later converted into a makeshift room by building walls around it.

The story began in this strange, long and narrow room. The name of the room, "Planning and Coordination," did not sound familiar to people in general as well as to other city officers. Even the fifteen employees who were assigned to work in this room probably did not know what they were supposed to do there. As for myself, it was totally unclear what and how much we could possibly achieve even though I was appointed as the chief of the Planning and Coordination Section after years of working as a real estate developer at a life insurance company and as a city planner at an urban planning office.

I had worked with different prefectural and municipal governments as an outside consultant in the past. Local governments throughout Japan had been exploring ways to deal with significant social changes including urbanization and regional developments during the economic growth in the Showa 30's (1955–64). The administrative organization of local governments lacked comprehensive capacity to meet new challenges in society. This led to the establishment of new organizations called something like a "planning section" or "planning and coordination section", which are responsible for long-term projects, comprehensive projects, regional development projects and so on.

Around this time, however, local governments lacked sufficient human resources and many of them commissioned university laboratories and outside consultants to develop plans and visions for such projects. While the idea of outsourcing to complement a local government's lack of comprehensive capacity presented a new perspective, the local government administration was not prepared to work this way and carried out projects in different ways without incorporating plans developed by outsourced service providers.

By the mid-Showa 40's (1969-1971), planning sections gradually developed sufficient capacity to deal with long-term projects and comprehensive plans on their own, but in fact, they still found it difficult to overcome obstacles caused by the vertically divided administration system in the city hall and implement their plans, much to their disappointment.

After seeing such struggles at planning sections in other local governments with my own eyes, I wanted to steer the newly established Planning and Coordination Section at the Yokohama City Hall in six directions as follows:

First, we should create horizontal connections in the vertically divided local government administration in order to approach the city planning from a comprehensive point of view. I had also seen vertically divided administration systems in the central government and private companies, but vertical divisions at local governments were by far the worst. City planning should start from establishing a comprehensive system.

Second, we should change the receptive attitude and the lack of autonomy in the local government administration in order to seize the initiative and take more active and positive approaches. It is important that administration officials develop more active attitudes, think and act proactively from community-based viewpoints, instead of reactively following prescribed approaches including inflexible application of laws and regulations issued by the central government and implementation of subsidized projects decided by the central government.

Third, we should develop guiding principles of city planning. Instead of habitually maintaining the status quo, we should question, reflect on, explore new directions of our current practice and think about how a city should be. We should never get carried away by thoughtless realism.

Fourth, our principles, at the same time, should go beyond ideology and abstract ideas. They should guide our efforts in dealing with reality and creating an ideal city. Principles are important, but city planning cannot be achieved if we neglect and ignore reality. Persistent and sustainable approaches are indispensable in pragmatic city planning.

Fifth, we should critically examine today's city that is becoming more and more generic and inhumane while prioritizing functionality and economic efficiency, and strive to create more humane and richer environment. It is important to approach city planning not only from quantitative viewpoints but also from qualitative and creative viewpoints. In order to do so, we need to use more detailed and specific methods including design.

Sixth, we should instigate a paradigm shift and let citizens and local governments lead city planning from now on, instead of continuing the status quo where the central government or private companies have been taking part in city planning for a long time. Twenty years have passed since the end of the war, and now is the time to actually think about local autonomy. We should think about ways in which citizens and local governments created by the hands of citizens take the initiative in city planning. They should grasp current situations and urban issues unique to each region and approach city planning from a comprehensive point of view.

The six directions stated above are all easier said than done. For example, the vertically divided administration system resulted from the fact that local governments were never given autonomy and gradually lost mutual connections throughout the 100-year history of the centralized government system and administration since the Meiji period, and it is impossible to change it overnight. If we try to change it, we are bound to run into objections and rejections. One of my friends, upon hearing that I got a new job at the Yokohama City Hall, said to me, "You will definitely fail."

But you never know what future may bring. It is at least worth a try. We are still exploring possibilities of city planning. If we somehow manage to see a glimmer of hope guiding us to a new direction, we can call it a success.

Life in Yokohama

I fortunately had two good reasons for working for the City of Yokohama. The first reason was that we had already settled in the city center of Yokohama and have grown to love the city. We lived in a rental apartment on the eighth floor in a public housing, with a great view of Yamashita Park and Yokohama Port. We often saw luxury cruise ships including the Canberra with a 40,000 plus-ton capacity moored in the port around that time.

In addition, the place where we settled was actually the point of origin of the City of Yokohama and also the original location of the foreign settlement. Coincidentally, we settled in the historic center of Yokohama. On New Year's Eve, it was full of fantastic atmosphere. When the clock hit twelve, high and low whistling sounds of all ships moored in the port would start at once in the dense fog. At the same time, lively sounds of firecrackers celebrating the New Year would echo from Chinatown on the opposite side of the port, and the city would be lit up with flashing lights. I had grown to love this multicultural city of Yokohama. Our home was about ten minutes on foot to the City Hall. None of the colleagues live this close to the City Hall. But I already had a home here before starting at a new workplace.

Proposal of Six Spine Projects

The second reason was that Yokohama City's strategic projects called Six Spine Projects had been originally proposed by Takashi Asada's regional planning office I had worked for, who was delegated the work by Yokohama City. All of the Six Spine Projects were extremely challenging. After I presented the projects at the City Hall, top executives at the City Hall secretly complained, "The guy has such a big mouth."

Naturally, I had no prospect of taking a job at the City Hall and promoting these projects at that time. This is why I was able to speak without constraints. Nevertheless, as a citizen of Yokohama City, I probably felt more committed to these projects than projects in other regions. I put my heart into writing texts for a booklet entitled "City Planning in Yokohama: Citizens Create Yokohama's Future," commissioned by Yokohama City with an aim of promoting Yokohama citizens' better understanding of the Six Spine Projects.

In general, if a local government adopted a small part of a consultant's proposal, it was deemed a success. Surprisingly, however, Yokohama City announced that they were planning to implement all of the Six Spine Projects, and established a new section called the "Planning and Coordination Section" to comprehensively promote these projects. We had a huge responsibility. We had to prove that pragmatic city planning was possible. As a person involved in the process of developing the Six Spine Projects that were regarded as strategic projects to promote city planning, I had good reasons and a great responsibility to accomplish the goal.

New Staff Members

As mentioned earlier, city governments and prefectural governments started establishing "planning sections" under slightly different names such as planning, planning and coordination, planning and research, planning and development and so on. On the other hand, however, there were also "project sections" in the field of city planning, and it was difficult for the general public to understand the relationship between the two. In general, a planning section consisted mostly of administrative staff. On the contrary, a project section consisted mainly of civil engineers and other technical professionals including architects and landscape architects.

For this reason, a planning section held meetings and gathered project plans they delegated other sections to develop, but could not take part in actual and specific planning. They had no choice but to accept opinions of technical professionals in a project section or a civil engineering section. Fully comprehensive city planning cannot be achieved this way. Likewise, because a project section is a subsection of the Bureau of Urban Affairs of the Ministry of Construction, they were allowed to work only within a specific framework and not allowed to deal with issues related to ports, economy and others. As a result, they only dealt with tangible projects including road construction, land rezoning, and redevelopment, and they were influenced more by directions given by the central government rather than the local government's specific ideas.

In summary, a planning section in a municipal government tended to remain abstract and conceptual, while a project section dealing with specific issues were narrow-sighted and stayed within the realm of technology.

Considering the circumstances, our newly-established Planning and Coordination Section consisted of both administrative and technical personnel, unlike planning sections in local governments throughout Japan. Since the Planning Division in the Planning Department focuses mainly on technology, they were fully capable of discussing specific technical issues. They did not separate between ideas and reality. The most important thing was how ideas and concepts would be implemented in real situations. If the ideas and reality were not related to each other, comprehensive city planning would not have been achieved. Moreover, new perspectives based on planning and urban design that the technical personnel of the city lacked would be introduced. We would also bring in outside experts to deal with other areas that are lacking.

To begin with, both tangible and intangible aspects should be considered simultaneously in city planning. It does not make sense to separate between administrative and technical personnel. Administrative personnel should pay attention to specific issues, and technical personnel cannot achieve successful city planning within the confines of the technical expertise they are familiar with. In the central government offices, administrative personnel and technical personnel are totally separated. My multidisciplinary academic background covering both administration and technology and my professional experience connecting the two fields were probably helpful in integrating them.

What mattered was how they would start working based on their respective expertise and eventually develop into a new type of professionals capable of taking action based on the comprehensive, realistic, creative, and civic point of view. First of all, one was required to have a) a broad and comprehensive perspective and flexible thinking, b) motivation, perseverance, courage, logical persuasiveness, and an ability to persevere and take action, and c) a viewpoint and honest opinions as a citizen in this work environment. He/she would learn new knowledge and methods as required according to circumstances, while complimenting each other through collaborative processes in the organization.

The city planning personnel at the new Planning and Coordination Section were required to have the ability to foresee future issues and grasp global issues from a broader perspective. Sometimes one would need to think from the viewpoints of civilization theory and cultural theory. Other times they would need to come up with specific ways to win difficult negotiations, verify technical issues, and come up with specific aspects involving colors and shapes that speaks to one's heart. Pragmatic and comprehensive city planning cannot be achieved if we only have a big picture but do not know how to implement it.

A Room for Contemplation and a Terrestrial Globe

The newly-established Planning and Coordination Section was assigned to this strange, narrow and long room on the third floor. But the shape of the room was not the only strange thing. But both the large and small tools used in the room were slightly different from what was used in typical city hall offices. We needed to break free from bureaucratic routines and start anew. However, the new staff members except myself all "grew up" in other sections in typical city hall offices. It would be no use if I simply talked to them about the importance of comprehensive perspectives or the will to implement ideas—because they would not understand me anyway. Instead, it would be more effective to change the scenery that their eyes see. That would make a good start of our new work.

First, we renovated the room. The narrow and long room was divided in two with accordion partitions. Half of the wall was covered with dark sepia fabric to alleviate the bureaucratic atmosphere. We modified some wall details to store rolled drawings inside top areas of the walls. The drawings could be pulled out and stored easily when one wanted to see a Yokohama city road map, land use map, park and green land location map, supply/waste water diagram and so on. Naturally, this was a very primitive method compared to a computerized database of map information they had developed more than a decade later around the time I resigned from the city hall. We may say this was an early prototype of the new system.

The wall was partially covered from the floor to ceiling with a large patchwork of aerial view photos at the scale of approximately 1:10,000. We were able to identify every single individual house in the photos. A roll-down projector screen mounted on the ceiling above the aerial view photos was used to show slides of detailed information if necessary. A light box for tracing and drawing cabinets were placed at a corner of the room: they used it to trace drawings and obtain necessary information. In this way, we used half of the room to provide various databases of the Yokohama City for everyone to use whenever necessary. Although database organization is a common practice in general, most local governments have not efficiently organized their databases as of today. It was probably because databases were not necessary for them since they had been simply repeating the same routine for many years. But city planning should be conducted based on accurate, unbiased, and diverse databases to begin with.

A three-dimensional model of the Japanese Archipelago at the scale of 1:800,000 and a terrestrial globe were placed at another corner of the narrow and long room. The terrestrial globe showed a threedimensional topographic model as well as land uses and oceanic conditions. I would always tell staff members to think about the city of Yokohama not only from city-based perspective but also from much broader perspectives encompassing the metropolitan area including the Tokyo Bay, the Japanese Archipelago, and planet earth. These tools were a way of tangibly communicating my message. I suppose Landsat satellite images would be more useful today. But we needed to use these items then and had to persuade the Furnishing Section at the Finance Bureau into buying them.

The person in charge of general affairs had a hard time every time I decided to buy certain items. The employees at the Furnishing Section told him, "We understand you need a Japanese Archipelago map. But why do you need a terrestrial globe when dealing with issues in Yokohama city?" Local governments at that time, even the government of the cosmopolitan city of Yokohama, never thought about the world outside of their own regions, and the government officials were only concerned about things related to the respective bureaus they worked for. Historically, Yokohama was founded as a consequence of interactions with foreign countries, and now it is a

sister city/friendship city/sister port to ten cities around the world, and the Yokohama Port handles international trades with other ports throughout the world. Despite these facts, the city officials did not understand the significance of buying a terrestrial globe back then.

I am not sure how useful these tools were to the staff members. But I am sure that they successfully taught them to change their work methods and think comprehensively, flexibly and practically. But I think it was worth investing a small amount of money to buy these tools, because they contributed to educating people who later successfully implemented innovative city planning in Yokohama that was highly praised by other local governments in Japan. They generated tremendous effects worth much more than the amount of money paid.

Information System

We also updated the filing system. The designated string binding filing system at the city hall looked so bureaucratic and poorly designed. It reminded one of a hard-wired official sitting among piles of paper and doing the same routine work in an old-fashioned city hall. It was another example of the same old "follow-the-precedent" attitude. In order to change this, we adopted what was called the "G filing system", which gave a well-organized, colorful, cheerful, and bright impression to the room. All information was classified into four categories identified by colors. The way these colorful files lined up along the wall brightened up the room and gave a more systematic and modern impression. The Finance Bureau, however, said that it was not necessary to buy new files and we were not allowed to buy things not designated by the city.

Somehow I managed to persuade them into buying them with an excuse that the Planning and Coordination Section was a new organization. However, other bureaus in the city hall also started using G files a few years later. They understood the value of a good-quality product and copied our style. While officials at the city hall was inflexible in general, they could be flexible in some cases. It depended on whether or not the person in charge appreciated the value of whatever you suggested.

We also invented "information cards" in our section. A person in charge made brief notes of all information obtained at meetings/from outside sources or given by outside collaborators in these cards, distributed the copies to all persons involved, and sorted them into G-files. Necessary information should not be held within a certain group of people, but should be shared among all team members. We successfully did so by adopting "information cards" and the G-filing system.

Large Table Approach

There was another important tool. We ordered an extra-large drawing board. We asked for the "largest possible" size and obtained a twotatami-sized (approximately 1.8m x 1.8m) drawing board. It was placed in the middle of the room. We gathered around this drawing board to discuss challenging issues. The staff members had individual drawing boards, but they would have worked alone by themselves without communicating with others. This extra-large drafting board, on the other hand, was a shared item used for collaboration among many people and was not to be used exclusively by a single person.

It is impossible to create something new and tackle challenging issues by oneself in city planning. Collaboration with various people is essential. Anyone, when standing around the large drawing board, could not help but collaborate. When we discussed certain issues, the relevant drawings, maps, and a large roll of tracing paper were spread on the table along with many permanent markers and felt-tip pens. In addition to verbally expressing opinions, people were asked to draw sketches or write down words and numbers on tracing papers. By doing so, ideas become more concrete and the person who presented them would come up with even better ideas, while other participants in the discussion around the table would understand his/her intensions better. Then the discussion would become more specific.

I would also write down my opinions and ideas one after another on tracing papers. It did not matter how well it was drawn or written. The act of drawing and writing itself was important. It would facilitate better communication among the team. It was also useful for the team members to resume the discussion when I was not there. We needed to bring out the best ideas in everyone when addressing new comprehensive issues. By doing so, all of the participants were able to share related information and everyone's knowledge. This was an effective way of gaining new knowledge and opening new possibilities.



We called this extra-large drafting board the "Large Table" and came up with the term "Large Table Approach" to symbolically explain the way the Planning and Coordination Section worked. All members of the section gathered around the table once a month. After I became the chief of the bureau three years later in 1971, the table no longer served the purpose because it was not large enough to accommodate the increasing number of people. But the fundamental idea remained valid. The "Large Table Approach" encouraged everybody to firstly unite under the same goal and secondly share information with others. Information had to be shared among all members of the team instead of falling under the ownership of a single person. When information was shared, everyone would understand what the colleagues were working on and collaborate as necessary, while avoiding inefficient overlap. Thirdly, the "Large Table Approach" encouraged everyone not only to passively receive but also actively participate and exchange knowledge and information with others. Unlike other sections, the Planning and Coordination Section did not engage in routine work, but this approach was essential in carrying out our work comprehensively. It was necessary to divide work among the team and avoid overlap within the section, but the division should not generate a vertically divided system which consequently would create gaps among the team. What we needed was an efficient work system where the team members would collaborate with each other as required while carrying out individual tasks. Whenever a new team member joined the team, I would always tell him/her about our "Large Table Approach."

Target Meeting

We regularly held "target meetings" as well. In the beginning, the target meeting was participated by all team members, but as the team grew larger, each group started holding the target meeting individually. Basically, personnel at the higher ranks than the section chief were encouraged to refrain from speaking and listen to younger employees. Group leaders and persons directly involved in the project mostly spoke.

City planning is a comprehensive work. Officials at the Planning and Coordination Section were likely to feel lost and easily forget their initial goals, because they had to deal with an infinite range of issues and also because they did not have precedents, manuals or routines to follow. In order to keep them on track, we regularly held target meetings to let them know clearly what every member of the team was doing. After the meeting, they would respectively discuss with me their respective weekly/monthly/trimonthly targets as well as details including specific procedures, points of research, persons to meet, how to negotiate and so on.

We also communicated and provided necessary feedbacks among the team outside of these meetings, but it was important to clearly indicate what issues we had to deal with in front of everyone, and this was what the "Large Table Approach" was about. It also gave young employees opportunities to voice their opinions, understand their tasks better, and demonstrate their best abilities. The development of young people's abilities was essential in implementing new projects. If upper rank personnel would only talk among themselves and provide only bits and pieces of information to young employees, they would not be able to motivate young employees to do their best. Young employees would naturally feel motivated and do their best if upper rank personnel would provide and share necessary information and sincerely work with them to tackle issues at hand.

Instructions should be given precisely at an appropriate timing, and should be directly addressed to persons in charge. In implementing the "Large Table Approach," the director communicated individually with each member of the team, and it was a very demanding task. When I was the director of the bureau, we had more than sixty employees. This was probably the maximum number of people I managed to communicate directly with.

This type of method was necessary in order to implement work comprehensively without following routine procedures or standardized methods. We could not simply let the Planning and Coordination Bureau fall apart. Young employees' unfettered opinions inspired me to look at things from a fresh perspective. I also had meetings with employees in managerial positions including the section chief and department chief about issues regarding administration, human resources affairs, the city council and so on. This was also important in practically accomplishing the targets set in the target meetings.

Atypical and Flexible Thinking Style

It was in this way that the atmosphere, tools used, the way of working, and meeting methods in this strange room were somewhat unusual. The old bureaucratic ways of working gradually gave place to new ones. People adapted to change. Eventually, those who "grew up" professionally outside of the city hall started coming to work for the city of Yokohama. These people and those who "grew up" professionally inside the city hall mutually inspired and learned from each other for further development. The old bureaucratic ways of working was to work solely based on the laws, regulations, and precedents. They strictly followed formal logic and avoided any new challenge by saying that such case was not designated in the law or there was not enough budget. They turned down any creative work because there was no precedent. These people generally just stopped thinking on their own accord. I called it a "typical and fixed thinking style." In contrast, the keyword shared among people in this strange room was "atypical and flexible thinking style." Fixed routine works like family registration could be done based on "typical and fixed thinking style." On the other hand, city planning is a work constantly dealing with something new and changing. It is about creating something comprehensively where there is no precedent or manual to rely on. One should thoroughly research existing conditions in an objective manner, grasp important points, think about which direction to take and what we can do, find possibilities and implement ideas.

The "atypical and flexible thinking style" was about facing the reality, changing the existing conditions, and moving them forward step by step. Being "flexible" is about exploring all possibilities without limit and does not mean "thoughtless" or "haphazard." It is a way of working where one responds to actual conditions, come up with new ideas and create something new, while aiming to accomplish set targets based on his/her principles. It may be called an "atypical and creative thinking style."

Everybody in this room constantly explored new possibilities. When one reached a deadlock, he/she struggled to get over it. When one found himself/herself in a rut, he/she needed something to help him/her break out of it. A system that helped create something new for the city gradually took shape in this small room in the Yokohama City Hall. It was the key to implementing new city planning in the city of Yokohama, while involving many people and organizations along the way.



The First and Most Challenging Project

A very important task awaited us on the day the Planning and Coordination Bureau started, while there were not enough staff yet. The first task turned out to be the most challenging and also the most symbolic project.

It was a very specific project of burying the elevated Metropolitan Expressway passing through the center of Yokohama underground. It was easier said than done. Burying the long and massive structure was no easy task. The underground is not an empty space, but various things including a subway under construction, sewer pipes, power cables, water pipes, telephone lines among others are buried there. In addition, the city center of Yokohama was mostly located on an extremely weak ground formerly composed of an inlet and a reclaimed land dotted with rice paddies until the end of the Edo period. The ground was so weak that even the construction of the subway was deemed technically difficult.

An Expressway would be twice as wide as a subway and the complicated issue of vehicle exhaust fume extraction would be involved. Furthermore, it occasionally has to go under the river or make detours to avoid underground parts of buildings. The construction of an expressway passing next to buildings can be extremely dangerous, because even large buildings may slide or tip over during the digging process.

The decision to bury the expressway was formally made one month ago after mulling it over for quite a long time. While the city planning decision didn't specify whether the expressway was to be elevated or buried underground, the Department of Urban Affairs of the Ministry of Construction and the Road and Highway Bureau of the City of Yokohama in charge of this project had agreed that it would be an elevated expressway.

The city planning decision is a legal procedure based on the City Planning Act and has an important meaning where details of the decision are decided based on this procedure. In terms of administrative procedures in those days, it was decided by the Minister of Construction after discussion at the Kanagawa Prefectural City Planning Regional Council. After that, the Minister of Construction issued a construction order to the Metropolitan Expressway Public Corporation, and the construction began. In those days, the City Bureau of the Ministry of Construction had an absolute power over the city planning decision and was the final decision maker, while the situation is pretty much the same today. If the Ministry of Construction says no, it would be impossible to decide on any plan nor secure a construction budget, and the Metropolitan Expressway Company Limited would not be able to start construction without receiving authorization from the Ministry of Construction. While city planning rights belong to cities in West Germany, city planning is decided by the central government in Japan. All decisions regarding this case was made by the Ministry of Construction.

Metropolitan Expressway Yokohama City Center Route

The plan to extend the Metropolitan Expressway No.1 connecting the city center of Tokyo and Haneda Airport to Yokohama had been continuing for a long time. At first, the city planning decision to extend the Expressway by 13.7km from Haneda to Higashi Kanagawa in the City of Yokohama was made in 1964. The construction started next year. It was partially completed in July 1968 and all lines between Haneda and Higashi Kanagawa opened on November 28, 1968.

Between Haneda and Higashi Kanagawa, this expressway passes through the Keihin Industrial Zone straddling the border between the City of Kawasaki and the City of Yokohama. We did not have any problem in deciding the route and things proceeded smoothly because it was a factory and warehouse zone and the expressway used spaces above industrial roads and canals. But difficulties awaited beyond this point. Since the route to Higashi Kanagawa was nearing completion and necessary arrangements had to be made to start the next construction, the city planning decision regarding the construction of the route spanning 2km from Higashi Kanagawa to Takashimacho via Yokohama station (where relatively few obstacles against the construction existed) was made in 1966 and the construction started in 1967. While some issues had to be resolved in the area where the expressway passed in front of the east exit of Yokohama station, the city planning decision was made smoothly on condition that the expressway should pass over National Route No.15. This was because the construction of the expressway was the top priority.

The route beyond this point towards the Kannai district presented many challenges. The original city center of Yokohama was located in Kannai and not in the Yokohama station area like today. Kannai is home to Japan's first trading port that opened up to the world, served as the gateway to the world and promoted Japan's modernization and westernization. "Kannai" literally means "inside the kanmon (checkpoint)." The foreign settlement and trading companies were located in this area, and there was a checkpoint between the foreign settlement and the Japanese settlement for security reasons.

The expressway route passing the Kannai area was called the "Yokohama City Center Route." The area where Yokohama Station is currently located was still under the sea in those days.

The commercial center of Yokohama moved to an area around Yokohama Station after the war, but the Kannai area is still regarded as the birthplace of Yokohama. Yokohama's history, unique characteristics and beauty are all concentrated there. Reconstruction in Kannai was delayed due to war devastation and requisition by the U.S. occupation forces after the war, and although Kannai was in ruins, many government offices including city offices and prefectural government offices are located in this area. There are also unique shopping districts including Isezakicho, Bashamichi, Motomachi and Chinatown.

Topographically, the Kannai district is a narrow land constituting a small world of its own and is located between two small hills called Noge and Yamate. The location of the new expressway, which is an extremely large infrastructure, had to be considered carefully, because it may significantly affect the city and cause serious problems.

While the project was implemented by the Metropolitan Expressway Company Limited, the City of Yokohama established the Expressway Planning Office and conducted various research and studies on expressway routes. In addition to an elevated expressway, they were also considering the possibility of using the open-cut method. But they eventually adopted the elevated systems for building new routes in which they were likely to face relatively few obstacles, because the top priority during the high economic growth period was placed upon how to build in the fastest, most economical,

and technically easy way possible. Finally, at the end of February 1968, the city planning decision was made for the construction of the 4.2km route from Takashimacho through the city center (where the Yokohama Park rampway is currently located) to Shin Yamashita-cho.



Image of an elevated expressway



Image of an underground expressway

Green Axis

The historic city center of Yokohama was in a state of devastation and misery. It was necessary to restore the Kannai district somehow in order to regain the unique characteristics of Yokohama. A plan to establish a zone called the "Green Axis" was proposed to set the foundation for further development. It would be a 1.5km-long linear park called "Odori Park" stretching from the existing Yamashita Park by the seaside all the way to Maita Park via Nihon Odori Street, Yokohama Park and the City Hall. The plan aimed to strengthen the connection between the port and the city, provide effective disaster prevention measures and improve the quality of life in the city center by taking a unique approach to developing a green park as well as the surrounding districts along the park. It would stimulate and promote development along the axis connecting the central commercial thoroughfares in Isezakicho.

Odori Park was one of the key features of the Green Axis that defines the concept. However, the expressway construction approved by the city planning decision procedure was based on a plan to build a large interchange above the entrance to Odori Park and an elevated expressway above the linear park. The Green Axis concept would be completely destroyed if a large interchange was placed at the center of the triangular city center surrounded by hills. During this period, expressways in Tokyo as well as a portion of expressways entering the city of Yokohama were mostly elevated structures and were generally taken for granted. Elevated expressways were the technically easiest, fastest, and most economical way to build, putting aside adverse influences on urban landscapes.

The only exception was an area around the Imperial Palace in Tokyo where the expressway was buried underground at great cost in order to preserve the beautiful view of the Imperial Moat. But it was unthinkable to do the same thing in a place like Yokohama. There were comments from people like, "A linear park would be most convenient for letting roads pass above," "It is far more important to build roads than worrying about destroying the urban landscape in the small city center of Yokohama" and so on. We even heard someone say, "We can install lawns on the leftover land under the elevated expressway and call it a park." But we felt that we should never let things like that happen in this very place. The city center of Yokohama is very narrow and surrounded by hills. The old city center of Yokohama, which once thrived as the center of westernization and the gateway to the world, would be completely cut up into pieces and become one of the noisy and chaotic cities existing everywhere. Because the city center of Yokohama was already in a devastated condition, one could have argued that we could just build an expressway and didn't need to worry about other issues. Such an opinion would make sense if one would focus only on the present. But city planning should be implemented for a better future. We knew we should not give up the Green Axis concept so easily just because elevated systems would be cheaper and easier.

In addition, two of Yokohama's main shopping thoroughfares, namely the Isezakicho shopping street and the Kannai (currently renamed as Bashamichi) shopping street, filed a petition with the city for expressway route changes due to the reason that the large expressway structure hovering over the entrances to respective shopping streets would divide the city center, hinder city development and adversely affect the appearance and security of the streets as well as the urban structure.



Concept plan of the Odori Park and the Green Axis

Scar between Eyebrows

While the city planning decision was initiated by the Ministry of Construction, there was much confusion in the city government because those who were not involved in the process were not informed of details on various matters. On March 22, less than a month after the city planning decision was made, a top-level executive meeting with the Mayor was held. After listening to
explanations by executives, it became clear to us that we would not be able to implement the Green Axis plan even though we were allowed to construct the expressway.

"The planned interchange of the elevated expressway would be a scar between eyebrows. Urban spaces in Yokohama would be completely destroyed," the Mayor Asukata said. "The scar would not disappear. I kept waking up at night, thinking about the future of the city center in Yokohama. People at the Ministry of Construction are determined to build what they want, and the central government is in the strongest position because they hold the nation's purse strings. But we can't let them give our city a scar between eyebrows. We can't accept the idea of the elevated expressway. We should go back to square one and start over. We should think about burying the expressway underground, instead of using an elevated system. I ask all of you to be my accomplices. Otherwise, we would be playing a losing game." These words by the Mayor threw the meeting into confusion.

Objections such as, "It would be impossible, considering the whole story up until now," "All projects would be delayed," "It would cause confusion in the city council," "The Ministry of Construction would be furious" and so on were raised. But the mayor insisted again, saying, "Project delays are acceptable. I kindly ask you to think about ways to somehow construct the expressway using either underground or open-cut methods. Yokohama's fate depends on this battle. Please get ready to fight with all your might." Upon hearing his words, respective bureaus at the city office started addressing the issue of burying the expressway underground. This meeting took place two weeks before the Planning and Coordination Bureau was established and I started working for the Yokohama city office.

Vertically Divided "String Curtain" Administrative System

Citizens generally think that the city office and the mayor work together as a single entity. It totally makes sense. As an organization, they should naturally operate that way. Otherwise, a mayor elected by citizens would not be able to formulate ideas for the entire city of Yokohama and share them with respective administrative sections.

However, this is not always the case. The city office sections are respectively connected to sections and bureaus at central ministries and government offices based on "vertically divided" systems. In other words, city office sections execute the laws and regulations issued by bureaus and sections at respective ministries and government offices, receive subsidies and implement projects. They have to deal with notifications by the said agencies as well as the laws and regulations. The city office bureaus would send any questions regarding the execution of laws and regulations to relevant central ministries and the city offices execute them based on their answers instead of discussing them among the local government. This is why the city office manage to operate without "horizontal" connections among the bureaus, and the respective bureaus would be reluctant to support the mayor's decisions to address new issues when faced with problems including the laws, regulations and notifications from the central government.

To make matters worse, those who have thorough knowledge of the laws and regulations are considered outstanding administrators, and employees at the city office are deprived of opportunities to take the initiative in tackling problems and their professional capabilities have gradually deteriorated as a result. They are totally different from administrators at the central government who were willing to devise and execute new policies.

In addition, outstanding employees at local governments negotiate with the central government and obtain subsidies to carry out their respective projects. Ambitious and outstanding employees in respective bureaus and sections have strong connections with the central government based on the "vertically divided" system and it was becoming increasingly difficult for local governments to establish their own ways of thinking.

The City of Yokohama was one of such local governments. The city office has nineteen bureaus and four administrative committees (equivalent to bureaus), all of which are respectively based on "vertically divided" systems. Roughly speaking, the city's Road Bureau, Sewer Bureau, and Planning Bureau are connected to the Ministry of Construction; the city's Port and Harbor Bureau is connected to the Ministry of Transport Port and Harbor Bureau; the city's Transportation Bureau is connected to the Ministry of Transport Railway Supervision Bureau; the city's Public Welfare Bureau is connected to the Ministry of Health and Welfare; and the city's Education Committee is connected to the Ministry of Education. Each bureau operates based on a "vertically divided" system, and there is almost no room to incorporate the city's own ways of thinking. As many as thirty-thousand employees at the city office worked only within the respective "vertically divided" systems, and there are huge obstacles to overcome in order to address issues related to the city in its entirety or new issues. Each bureau does not want other bureaus to interfere with their business, while they do not interfere with businesses of other bureaus in return. The most important task for them is to keep a good relationship with bureaus and sections at the "head ministries" of the central government which they are respectively connected to.

The "head ministry" is originally a term used by local agencies of ministries, which refers to the respective central government ministries. It is equivalent to the term "headquarter" used by private companies. In fact, the term "head ministry" is customarily used by employees at city office bureaus without hesitation, even though they are supposed to be independent. It is as if respective bureaus at local governments think of themselves as local branches of bureaus and section of respective central government ministries. While local governments were given autonomy under the new constitution at the time of the establishment, they lack independence and remain as subordinate agencies of the central government as was the case during the pre-war days.

Because bureaus of a local government are respectively connected to central government ministries based on the "vertically-divided" system, the local government completely lacks "horizontal" connections even though it looks like a single entity. It resembles a "string curtain" which looks like a single object but is actually only "vertically" connected. I came up with the term "vertically divided string-curtain administrative system" to explain a situation like this.

Responsibilities of the Planning and Coordination Bureau

Regarding the issue of the expressway, plans and ideas suggested by the Ministry of Construction City Bureau would be usually fully implemented through the city's Road Bureau. Roads are one of the important factors in city planning, but there are many other important factors as well. For example, various issues including parks, development of shopping streets, ports and harbors, urban landscapes, unique characteristics of the city among others are involved with the expressway. They must be considered in comprehensive ways before making a plan and implementing it, or otherwise the city would fall apart. However in reality, only the intentions of the Road Department are given priority because they are in control of the budget and have the authority, and the city had lost as a whole the perspectives to incorporate and harmonize various values mentioned above.

Under these circumstances, the newly established Planning and Coordination Bureau was the only bureau capable of dealing with issues comprehensively as an agent representing the citizens and the entire city. Needless to say, the Planning and Coordination Bureau is not connected to any "head ministry." It is the only bureau capable of exercising its own autonomy as a local government and think about the city's future from the citizens' viewpoints.

Fortunately, the newly established Planning and Coordination Bureau of the City of Yokohama consisted of technical personnel specializing in various fields including road, sewer, planning, architecture among others, and we were able to have pragmatic discussions with the respective bureaus on specific issues, unlike the previous planning sections consisting only of administrative personnel who could do nothing more than hold abstract discussions. If the Planning and Coordination Bureau had not been established by this time, no bureaus or no one would have been able to respond to the Mayor's order, promote the project and compile technical coordination proposals.

The bureau in charge needs a strong motivation to go against past precedents, change the tide, and discuss the matter further, or otherwise things would become ambiguous. This is because such attitudes would have a negative impact on relationships with the central government and parties involved. In addition, none of the bureaus was ready to address issues straddling across different bureaus in a comprehensive manner and to make efforts to find specific answers. In the end, they would run out of time and go back to the original proposal. They would just say, "We reviewed the issue of burying the expressway underground from technical viewpoints, but we could not solve them," and that would be the end of it.

It was a difficult task for members at the Planning and Coordination Bureau, because the bureau was just inaugurated and members who came from other bureaus had no idea how to "think comprehensively." They had worked within the "vertically divided system" until then, and some of them had been dealing with this issue at the Road Bureau. They had been suggesting that the elevated expressway would be the only way possible until the day before. It would be difficult for them to completely change their opinions just because they moved to a different bureau. The Planning and Coordination Bureau embarked on the first and most difficult voyage on the day of inauguration, with the crews barely trained properly.

Creating Comprehensive Values

The expressway construction was considered to be one of City of Yokohama's six major strategic projects, and was a much-needed endeavor that would connect the underdeveloped city center of Yokohama and Tokyo. But at the same time, we also needed the Green Axis as well as humane urban spaces featuring the unique characteristics of Yokohama. Hands-on city planning aims to harmonize and combine different values and plans in the most desirable way, while considering new values and values for the future in addition to past precedents.

Very few people were concerned about greeneries and urban landscapes around 1968. City planning, however, should include not only the significant values at the time of planning but also values that will be definitely necessary in the future. It is almost impossible to make revisions to city planning after its completion. City planning takes a long time, and there is a big disparity between the time of planning and completion. Even though it looks tedious, this is why we must include values that will reflect the future at the time of planning. Even if people don't understand some of the values at that time, they will eventually manifest its significance after completion.

Since describing the entire process of burying an expressway underground is long enough to fill a book, it must be omitted here. But generally, speaking, we had to meet various challenges one after another from the start. Voices were raised from the Ministry of Construction with such comments as, "Why do they have to raise the issue of underground expressway again after it was deemed impossible?," "The new guy named Tamura incites the Mayor to make unreasonable demands," "The City should have given up the idea of burying the expressway underground," and so on.

It was a difficult situation. But we had to come up with all possible ways to implement the underground expressway construction. We had to persuade them in a humble manner and make them understand Yokohama's requests. This was the only way. We wrote several letters to explain the reason why we must bury the expressway underground. This was our way of gradually conveying the city's intentions. Because I was a newcomer at the city office and one of the strongest advocates of the underground expressway, officials at the Ministry of Construction asked, "The Executive Director of the Department is not reliable. We would like to talk with the Director General of the Bureau." Mr. Suzuki, who was my superior serving as the Technical Superintendent of the City and the then Director General of the Planning and Coordination Office, took charge of this task and painstakingly visited the Ministry of Construction numerous times to negotiate. Finally, the Ministry of Construction acknowledged the significance of the Green Axis and started taking into consideration the possibility of the underground/semiunderground expressway construction. Because cars have gas emission issues, it would be impossible to bury it completely underground: it had to be partially buried underground and largely open-cut. Because the cross section of the expressway would be more than twice as big as that of the subway, technical concerns about the weak ground at the city center of Yokohama was discussed many times. While making plans to bury the expressway under the Green Axis, we faced two challenges. Firstly, it turned out that the Odori Park (originally planned to be 1.5km long) would be only 400m long at most and the rest of the park would be nothing but a big hole above the open-cut expressway, because it was impossible to bury the expressway entirely underground. This meant that a large

part of the site would not be something we could call a "park" or the "Green Axis."

Secondly, there was not enough space to place subway lines side by side as originally planned if the expressway is buried under Odori Park, which meant that the subway routes had to be moved somewhere else. The Ministry of Construction suggested that the subway plan should be revised because they have made concessions in consideration of City of Yokohama's request to implement the underground expressway idea. On the other hand, the Ministry of Transport which deals with subway construction approvals said, "The subway had been decided prior to the expressway, so there is no way the plan will be changed for the sake of the expressway." Both ministries did not back down, and the City of Yokohama was caught in a dilemma.

After making a step forward towards the underground expressway construction, we were caught in a bind again. They would not be able to finalize the subway plan and start the construction until the expressway plan was decided. The City Council would be held responsible for the delay. We jokingly (or maybe seriously) said to the Mayor, "Why don't we just run away under the cover of the night?"

Inside the city office, people who had been relatively cooperative started to suggest, "Maybe it's time to give up," because they were worried about negative impacts it might have on their work. "So arise because of the Odori Park. Is it really many difficulties necessary?," someone said. While both the Expressway Bureau and the Subway Bureau strongly voiced their opinions, the Park Bureau hardly spoke when they attended meetings. They were not allowed to give their opinions because its "head ministry," or the park construction division at the Department of Urban Affairs of the Ministry of Construction is in a much weaker position than the road construction division at the same department. The values of respective bureaus in a local government are determined according to the positions of respective ministries in the central government's power structure. The Park Bureau was in a much weaker position than the rest

However, this only applies to the power structure in the central government. The City of Yokohama was different. Yokohama's city center had been repeatedly devastated by earthquakes and World War II. Building the Green Axis there meant a lot for the city, because it was a grand vision for the long-term future of Yokohama. We could not let the current "power structure" of the central government make decisions for the plan. Moreover, the value of "urban landscape" was not connected to any "head ministry." The local government must clearly argue its importance. In addition to coordinating the overall plan, the Planning and Coordination Bureau gave opinions about the quality of urban environment in the future with reference to the Green Axis, Odori Park, and the urban landscape among others, because there was no other bureau in the city office that would voice their opinions on these matters. On the other hand, the Planning and Coordination Bureau is in charge of promoting the expressway construction and the subway construction as part of the Six Spine Projects. In addition, our responsibilities also included voicing opinions for new values, coordinating the overall plan, and making specific revisions to the proposed plan.

Meetings were held on a daily basis, and heated discussions were exchanged repeatedly. They were harsh opinions from persons in respective positions, but as frank and thorough discussions were carried out, things went smoothly once the proposal was decided. While the discussions got emotionally charged once in a while, we were able to discuss issues in a calm manner most of the time. I think that everybody shared a passion to create something good instead of just trying to save face, because those present at the meetings were mostly engineers. After a meeting with respective bureaus, we would go back to the office and gather around the large table to have an internal discussion regarding various possibilities and strategies. The staff members did a good job, even though they were not familiar with this type of task.

As a result of a long negotiation, we finally started discussing a modified plan in which the subway lines would circumvent the Odori Park, in addition to the idea of burying the expressway underground and semi-underground. Technical personnel at the Ministry of Construction still continued to oppose this plan vehemently, but we would be able to make most of the Odori Park site into a green park this way. In this plan, the subway line would be built under the Odori Park, while its route would be slightly adjusted so that some parts of the land along the Japan Railway route would be used for road construction. It had a pacifying influence on both the Ministry of Transport and the Ministry of Construction, as both the subway construction side and the road construction side made compromises to a certain degree. But having said that, the purpose of this plan was not to show deference to both ministries. It was originally developed based on technical grounds provided by the city which suggested that the modified plan would provide more advantages to both subways and city planning.

There is no such thing as a "perfect proposal." In creating a city where many diverse values coexist, some degrees of contradiction would inevitably arise. We just have to think about ways to minimize the degrees of contradiction and implement beneficial values by combining them in the best way possible.

We were trapped in a deadlock again and again, but every new possibility and problem associated with it was discussed in detail. While some bold proposals were presented, they were completely rejected. We kept stopping and moving forward all the way through the negotiation process with the help of many people, but both parties were running out of ideas for plausible proposals.



Plans of the expressway and the Odori Park (above: original plan, below: modified plan)

Snowy Expressway

Almost a year had passed after the start of the negotiation for the underground expressway. The delay in making decisions on the plan adversely affected the subway plan as well as the expressway plan. The Ministry of Construction had told us to refrain from starting construction until decisions regarding the expressway were made. We had to find a way out of this situation somehow. It was already March and the City Council budget meeting, which was one of the most important meetings for the city, had started. This issue would be raised at the City Council in several days and the city office bureau in charge would be blamed for the delay of the expressway construction and the subway construction. Decisions on this plan had to be made by then. Needless to say, the decisions had to incorporate the opinions of the City of Yokohama.

This issue of the underground expressway construction was the starting point and was symbolic of Yokohama's city planning that would develop later on. If we should fail, our experimental approach to creating new qualitative values by exercising the local government's autonomy and thinking comprehensively would never succeed. As pointed out by Charles Austin Beard who was invited to Japan by Shinpei Goto more than fifty years ago immediately after the Kanto Great Earthquake, city administration in Japan was completely disorganized and lacked comprehensive responsible autonomy, which is still the case today.

Primarily, a local government as a representative of citizens should have autonomy, but it had actually been driven by "top-down" orders from respective ministries of the central government based on the "vertically divided" system and various demands made by businesses. This expressway plan was also handled in the same way. The ministries of the central government respectively focused only on their specific fields and lacked abilities to think comprehensively. A local government would be able to fully demonstrate planning abilities by dealing with regional, specific, and comprehensive matters including city planning autonomously. The City of Yokohama, which was capable of thinking about issues regarding the Green Axis and urban spaces comprehensively, should have taken the initiative in dealing with this issue, rather than the ministries of the central government which would only focus on the road or the subway.

Yet somehow, this issue was finally coming to a close. Officials at the Ministry of Construction gradually leaned toward the City of Yokohama's proposal as a result of their patient persuasion. The ministry finally agreed on the construction of the underground/semiunderground expressway. As a final move, we made an appointment to unofficially meet with the Administrative Vice-Minister of Construction through the intermediary of a third party. The Administrative Vice-Minister at that time was a road engineer and practically the chief executive in technical and administrative matters. On the day of the meeting on March 4 in 1969, the Tokyo-Yokohama metropolitan area was hit by unusually heavy snow. Train services of all railways including the Japanese National Railways were canceled. We headed for Kasumigaseki in Tokyo from Yokohama in the snow. The taxi we managed to hire was driving with snow chains at a speed of 20-30km per hour. We got on the newly opened expressway at Higashi Kanazawa. While the expressway usually has two lanes each way, they piled snow onto the outer lanes on both ways and only inner lanes covered with white snow on both ways were open. It was a completely different view. There was almost no car on the expressway usually full of cars and wheel tracks on the snowy road extended infinitely into the winter wonderland.

The Tokyo Tower emerged into view beyond the snow. We were approaching Kasumigaseki. As we drew near, I felt a burden of responsibility mixed with a feeling of anxiety on my mind. The pressure of Kasumigaseki representing high walls of the central government offices was great.

"How do you think about this proposal?," the Administrative Vice-Minister said, as he showed us the proposal of burying the expressway underground through the Odori Park using an open-cut method and slightly simplifying the interchange. I said, "I disagree, because we would not be able to realize the idea of the Odori Park based on the Green Axis Plan conceived by the City of Yokohama in this way." Moreover, new problems in city planning would arise by modifying the interchange. I firmly repeated the assertions the City of Yokohama had been making for a year. I could not afford to be vague on this occasion. I clearly stated what had to be said. Finally, the Administrative Vice-Minister fell silent. There was a moment of tension. Then, the tension eased. We finally got over the hump. Various scenes of our year-long struggle came and went in my mind's eye like a revolving lantern. The expressway would be built underground/semi-underground and its route would be modified to circumvent the Odori Park. It was basically agreed that the Odori Park would be built according to the city's original plan. Details of the plan would be discussed based on this agreement and necessary procedures would be carried out later.

On the way back to Yokohama, the snowfall slowed down, but the expressway was still a narrow and straight road buried in snow. But this narrow and straight expressway would be extended to Yokohama's city center underground soon. They would be able to start the subway construction now. The Odori Park would be built as planned. The car drove on slowly, while the snow chains rattled merrily as if singing a happy song.

A Series of Challenges

Obviously, that was not the end of our struggle. There were objections from government officials because we negotiated directly with the Administrative Vice-Minister. But since the basic agreement was already made, things settled down accordingly in the end.

However, another problem arose from our surroundings soon after a moment of relief. Residents demanded that the Odori Park be changed to a car parking even though we finally managed to remove the expressway from there. All our efforts would be in vain if it were to be replaced by a car parking. Both the "vertically divided" system of the government offices and residents' demands look at things lack broad perspectives and break up city planning by demanding temporary benefits in the same way. But we managed to settle this matter from a broader perspective.

Later, we encountered another alarming situation. The construction at the Oe Bridge turned out to be extremely difficult because we had to deal with the five-layered structure consisting of a subway, expressway, river, street bridge, and the Japan National Railway bridge from bottom to top as a consequence of burying the expressway underground. Moreover, it turned out that the gradient of

the underground railway was not steep enough that it would not reach the platform of Sakuragicho Station under the Golden Center Building which had already been built, because the subway would be constructed deeper than originally planned. We had no choice but to dig the ground and build a new station one level below and transformed the already built station into a concourse. We faced so many technical problems like this, but if one of the problems remained unsolved, we had to go back to the beginning. The Road Bureau and the Transportation Bureau from the city office, with whom we had heated discussions on a daily basis, did their best to overcome these problems. The Road Bureau had been our biggest opponent who harshly objected and argued against our ideas, but they turned out to be the best colleague in the end. We at the Planning and Coordination section could not have done anything without support from the technical personnel at the city office. While respective bureaus of the City of Yokohama government had different standpoints and views and were not cooperative at first, they cooperated with each other and achieved a great success after the final proposal was decided. The city plan for the expressway was formally revised in November 1970, more than two and a half years after the negotiation started.

Several years later, we got hold of information about a plan to build a vent tower for emergency use on top of the expressway. We had developed a comprehensive information network by this time, but this plan would completely diminish the significance of the underground expressway. Coincidentally, the reconstruction plan of the Yomiuri Shimbun Newspaper building next to the expressway was underway. This type of architectural projects had nothing to do with expressways under normal circumstances. But upon hearing the news about this plan, the Planning and Coordination Bureau negotiated with the Yomiuri Shimbun and asked them to enclose the vent tower in their new building. Nobody would notice that a vent tower was enclosed in the building at a glance. Implementing the underground expressway was not the end of our work. We needed to keep watching out and take necessary follow-up action. We were able to obtain comprehensive information and solve the problem this time. It would have been impossible to work this way in the "vertically divided" system of the city administration in general.

The underground expressway construction had been originally deemed impossible due to the high construction cost. But in terms of

economics, it should not be a problem because the expressway tolls were raised more than double the original rate. The idea of "cheap and nasty" that focuses only on the present would be a totally inefficient and unproductive investment in city planning from a longterm perspective.



Diagram of the five-level intersection construction at the Sakura Bridge (upstream side) in Sakuragicho Source: Takashi Tatsugami, 1973, Chousa-kihou(Yokohama City Research Periodical), 63, p39.

Concept of Odori Park

After the underground expressway issues were cleared, we were finally able to proceed on developing specific concepts and plans for Odori Park, which was the main feature of the Green Axis concept. Because the park would be as long as 1.2km while its width would be 44m at most, we had to develop ideas from new perspectives.

The Concept Review Committee (Chairperson: Mitsuo Yokoyama) consisting of external members including city planners, architects, and landscape architects was organized. The Committee decided that

the entire park would be composed of three zones, namely "Stone Square," "Water Plaza," and "Green Forest."

The idea was to create a multiple-use park designed to be as open as possible, so that it would gradually have a positive impact on the surroundings. The Green Axis concept aimed to transform not only the park but also the surrounding areas into pleasant urban spaces full of greenery.

The Stone Square would have two types of stages, one accommodating five hundred people and another accommodating three thousand people. We designed 4.5m x 4.5m tents in various colors used for bazaars and festivals at the square and embedded ground anchors. A fun temporary town would appear instantly by installing tents there. While parks in general tend to avoid being used this way, this square was intended to encourage citizens to actively use the place and the Steering Committee was established to facilitate such uses.



Image of Odori Park

The Water Plaza was designed to express the life and movement of water by showing how it springs out, falls, flows, accumulates, and whirls. As one ascends to the ground level from the Isezaki-Chojamachi subway station, he/she first finds a sunken garden with water falls on both sides, and then arrives at the Water Plaza above. Our discussions focused on how to make water approachable for children and citizens instead of merely creating beautiful landscape using water. From the standpoint of park management personnel, water should be treated only as a landscape element. Their argument is that people might possibly drown even in 10cm-deep water and that they would not be able to take responsibility for it. But sturdy fences around water features would not be a pleasant sight. We devised design details including fences concealed under water in order to make water features approachable as much as possible. Water overflows and makes puddles. In the summertime, children have so much fun playing with water. It was a product of compromise between the planning side and the management side.

The Green Forest is the widest area occupying two thirds of the entire park. People enjoy strolling around the trees, small square, dirt paths, lawns and to relax. All trees were newly planted for this plan: large amounts of greenery were brought into Yokohama's city center. There are also narrow dirt paths in the park.

City and Sculpture

We made a plan to install a sculpture in order to make the Odori Park a friendlier and more refined place for citizens. At the end of 1960's, people considered it extravagant when a local government decided to install a sculpture. Fortunately, we found a generous donor. Citizens would not object if we used the donated fund to install a sculpture instead of tax money. Nevertheless, the donor's name was not attached anywhere.

When it came time to install the sculpture, we had difficulty selecting which work to display. The surrounding areas were still underdeveloped. We felt that a site-specific sculpture might be interesting, but considering the dignity and future of the Odori Park, it should be something different. For this reason, The Sculpture Installation Committee which included leading art critics and sculptors was established, and after thorough discussions, the three sculptures "Meditation" by Auguste Rodin, "Three Parts Object" by Henry Moore, and "La Belle Servante" by Ossip Zadkine were chosen. They were all outstanding modern and contemporary sculpture works, and moreover, we commissioned a prominent sculptor Churyo Sato, who was one of the committee members, to design bases for the sculptures. In the end, I felt that we succeeded in creating a dignified atmosphere at the Odori Park. At that time, people still debated whether it would be appropriate to install sculptures in an outdoor environment. We explained to the citizens that, "If unfortunately there is anything against the sculpture works, it would be regrettably a reflection of the cultural attitude of the citizens of Yokohama. We need to choose between storing away the sculptures out of the citizens' sight or raising the level of citizens' social interest by installing these masterpiece sculptures. It would be indicative of the cultural level of the City of Yokohama." As of today, the three sculpture works have been displayed without any trouble. Today, local governments all over Japan are actively installing outdoor sculptures using tax money.

Project Completion and the Beginning of City Planning

The underground/semi-underground expressway up to the Yokohama Park Ramp opened at the end of March 1978, exactly ten years after the day we had started working on the construction of the underground expressway. Drivers on the expressway do not even realize that there is a canal flowing above. People took for granted that the expressway ran underground from the beginning. This was nothing to be surprised about. Six months later, the Odori Park opened in September 1978 and the sculptures by Auguste Rodin and Henry Moore were unveiled. The new Mayor had taken office by this time. People strolling in the Odori Park probably would never have imagined that a gigantic elevated expressway was originally planned to be built above this place, because it does not exist today and the expressway is running underground. City planning is a large-scale drama, but after it is finished, it becomes part of our daily life, and that's just the way it is.

On the opening day of the Odori Park, a newspaper reporter who had closely followed our story spotted me and said, "Mr. Tamura, it's finally completed!" And I said to him, "No, today marks a new beginning. From a city planning point of view, it is just a completion of a project for the Odori Park. The Odori Park will have a positive impact on its surrounding areas and beyond, and new city planning will start in various places.

There is no end to city planning. A completion of a project should be a beginning. Yokohama's city planning was spurred by this way of thinking, while exploring new qualities.

If the construction of underground expressway had not succeeded, the local government would have felt a sense of powerlessness of a sub-organization. Unorganized approaches based on the "vertically divided" system would have been implemented mainly, while an idealistic approach of "comprehensive thinking" would have been totally denied. Values including humanity and urban landscape would have been left out.

The gigantic structure would have torn up the city and the Kannai district of Yokohama would have become one of the many average cluttered towns that exist everywhere. And the areas that would have been torn up by the structure including Bashamichi and Isezakicho would have never developed the power to transform themselves into major shopping centers that we see today.

City planning totally depends on the first step one makes. If we succeed in realizing something new, then we can realize other new things to follow.

CHAPTER2

PROMOTION OF STRATEGIC CITY PLANNING PROJECTS

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Project method: Six Spine Projects

Yokohama as a Critically Ill Patient

During Showa 20's (1945–1954), most cities have been going through a "critically ill" condition due to heavy damage and Japan's surrender in World War II. From the Showa 30's (1955–1964), there was a considerable recovery from the devastation, and with the end of recovery process from the war damage in general, cities developed to a certain degree as Japan's economy began to grow rapidly. On the other hand, various urban issues including overpopulation, environmental degradation, soaring land prices among others arose during this period, which were different from urban issues in Showa 20's.

Yokohama, however, still remained a "critically ill patient" in Showa 30's. This was because urban issues including rapid urbanization and overpopulation arose in Showa 30's before the city set out to work on the war damage reconstruction in Showa 20's; the city was forced to deal with issues of Showa 20's and 30's at the same time.

These issues can be summarized as follows:

(1) Most of the inner-city areas had been destroyed by fire during World War II and were in seriously devastated conditions. The areas, after slowly recovering from the damage caused by the Great Kanto Earthquake twenty years before, were destroyed once again. Kannai, the birthplace of Yokohama, and the wider Kannai district, the site of Japan's first open port and foreign settlement, had been the center of Japan's modernization and cultural development, but most of the areas were devastated.

(2) Most of the Kannai district was requisitioned by the U.S. Army after World War II. Being requisitioned meant that it became a land in Japan controlled by a foreign country which belonged to neither Yokohama nor Japan. Even before the war, Yokohama was originally a port city with a peaceful commercial port and no military facilities. However, because of its proximity to Tokyo and its port facilities, the entire city was turned into a military facility for the U.S. Occupation Forces, driving out the people who wanted to reconstruct the district. They even built a landing field for light aircrafts in an area just behind the current Isezakicho shopping street, where light aircrafts constantly landed and departed.

Because the requisition was effective for an indefinite period, many people left and abandoned the Kannai district in the city center of Yokohama where there was little prospect for reconstruction. Yokohama's urban functions lost the opportunity for reconstruction and Yokohama became a city without character that had lost its heart. The situation eventually changed and the requisition was lifted nearly ten years later. By that time, Kannai had turned into a vast grassy field, so desolate that it was called "Kannai Ranch."

(3) During Showa 30's, the rapid concentration of people in Tokyo flooded out of the city and the hilly areas of Yokohama were developed randomly in a worm-eating fashion. Yokohama's population growth rate was the highest among government-ordinance designated cities which are delegated many of administrative functions normally performed by prefectural governments, and the uncontrolled land development of residential land, landslides, river flooding, insufficient road networks and sewage systems, and the lack of urban facilities including schools, child daycare centers as well as increased financial expendire to cover these facilities, have led to serious financial difficulties.

(4) The old city had been confined to the port and waterfront, but due to rapid urbanization in rural areas in the suburbs where the newly developed residential land and the old city existed unrelated to each other, it created a situation which put great strain on the urban structure of Yokohama. Moreover, the city became Tokyo's commuter town, and was losing its own identity and no longer standing on an equal footing with Tokyo.

In addition, Yokohama was faced with other urban issues that arose in other cities, such as pollution, water resources, waste, transportation, land prices, diminishing green spaces, housing shortage, collapse of communities, and the loss of individuality, as well as issues unique to Yokohama including the change in transportation systems due to containerization at the port and the changes in port functions due to the development of air routes.

Metaphorically speaking, the issues from (1) to (4) are symptoms of Yokohama having an obesity problem with weakened internal organs and bones. The city center serving as its heart was desperately weakened and the bones were falling apart, while it put on so much excess fat on the outer surface and unable to walk by itself. What should we do with a patient like this?

The diagnosis is simple. It should reduce fat and weight and strengthen its heart, inner workings, and the skeleton. The question was, how can a city be cured this way? Causes of the disease which made Yokohama so critically ill still existed and it would be extremely difficult for the city of Yokohama to cure the disease by itself.

It was around this time when newly-elected Mayor Asukada requested Environmental Development Center (Director: Takashi Asada), an office specializing in regional development for which I was working for then, to develop ideas for Yokohama's city planning. It was an interesting theme for me, as I was already living in the heart of Yokohama near Chinatown, facing Yamashita Park where I had a panoramic view of the port.

Conventional approaches to this type of project would be to develop a long-term comprehensive plan for the city. In fact, the city of Yokohama had already formulated the "National Basic Comprehensive Plan for the International Port City of Yokohama" in 1957 and had been revising it. Considering the fact that there were many cities which had not developed long-term plans like this, we would be able to propose something progressive and plausible by listing up project plans.

However, we already knew the shortcomings and limits of this comprehensive planning method. First, it was impossible to keep up with the actual situations using this method, because of extremely rapid changes in society, especially for a city like Yokohama. Second, one would end up making a plan merely listing up project plans submitted by respective bureaus of the city hall, as if stapling their project documents together. It was just a matter of formality based on the same old "vertically divided system." It lacked an overall and comprehensive perspective. Third, it lacked a driving force and energy to transform the city and change the actual situation. Fourth, the future was considered as an extension of the status quo, and new goals and values were not incorporated. Fifth, plans incorporating future visions focused only on visions and did not indicate methods to achieve the goal.

Sixth, it was limited to administrative projects carried out at the expense of the local government, and relationships among the regional operation entity and other entities were not indicated. Moreover, other shortcomings including an overemphasis on construction plans, the lack of financial means and progress management and so on had been pointed out.

It would be impossible to overcome these shortcomings in longterm comprehensive plans. This was because this method was founded on a system that prioritized the central government and that did not acknowledge the autonomy of local governments, and also because it would be difficult to accurately grasp changes in socioeconomy. Long-term comprehensive plans like this would be no more than coordinate axis and yardsticks that local governments would use as a reference. In other words, these plans were static and referential rather than dynamic and energetic. They were not useless, but not effective enough for a "critically ill patient" like the city of Yokohama at that time.

Project Method

Therefore, we decided to avoid makeshift approaches of slightly modifying long-term comprehensive plans and came up with a way to deal with current issues in Yokohama called the "Project Method." The method is to foresee the future of Yokohama, select specific core projects from a strategic point of view, concentrate on implementing them, strengthen the inner workings and of the city of Yokohama, narrow down the focus gradually, revitalize other administrative sections as a whole and implement Yokohama's city planning.

The administration of local governments at the time was anemic, stuck in a rut, and adhered to the "vertically divided" system, but it was difficult to change the situation. This was a strategy to bring back the energy in a rather forceful way by boldly launching challenging projects transcending the conventional framework of the administration while keeping an eye on the whole situation.

While it is necessary for a local government to act on certain assertive logic such as "how it should be" and "what should be done," it often ends up as a mere criticism and has little effect in the real world. On the other hand, however, if they act only on realistic logic such as "this is all that we can do" and "we don't have the budget and authority," it would be impossible to solve any issues and move things forward.



The Six Spine Projects for City Planning

In general, comprehensive plans are based on assertive logic, while project plans do not go beyond realistic logic. Since assertive logic and idealistic logic do not have the means to achieve an ideal, they unfortunately often end up as mere abstract sentences.

On the other hand, the "Project Method" is extremely pragmatic and clear enough to be understood by anyone. It is practically a matter of "to do" or "not to do." It is also a matter of finding practical means to an end. One cannot afford to stay within the confines of abstract or idealistic logic. The method inevitably brings all actors on the stage whether they like it or not.

The aim of the Project Method is not about implementing as many strategic projects as possible. It would be better to focus on a limited number of projects which might deviate to certain aspects, because we can put more energy into each of them. If we try to implement too many projects comprehensively, we are likely to lose focus and end up with something less powerful, which is similar to a comprehensive plan that simply lists up ideas. "A limited number of projects" means that many things are missing. It is easy to make demands only verbally, but it would be nothing but a mere formality like the question and answer sessions at a congress. "A limited number" means that one has to select. The selection and decision process alone should help one cultivate practical abilities. In addition, if we focus on a limited number of projects which deviate to certain aspects, we accummulate more practical knowledge and skills to carry out other subsequent projects as well.

Proposal of Six Spine Projects

First of all, we reevaluated the innovative roles the city of Yokohama had played throughout the history, starting from its establishment process and its achievements as a port city (the center of modernization), industrial city (the center of Keihin Industrial Zone spanning from Tokyo to Yokohama where the heavy chemical industry, the most innovative industry in pre-war days flourished), and residential city (superior residential areas in the suburb of Tokyo). These characteristics have been changing in the post-war period. Today, only heavy cargo ships come in and out of the port, and cultural and trade functions are diminishing. Heavy industries are causing pollution and indiscriminate residential development is causing environmental problems.

However, since this outstanding historical characteristics is still prevalent, we decided to eradicate the existing problems, find new possibilities for the next era, reduce mutual inconsistencies, and set a goal to become an international and cultural city that could play a central role. In order to achieve this goal, we proposed six strategic projects as shown below and named them the "Six Spine Projects."

- (1) City center area enhancement project
- (2) Kanazawa area reclamation project
- (3) Kohoku New Town development project
- (4) Expressway network construction project
- (5) High-speed train (subway) construction project
- (6) Bay Bridge construction project

(1), (2), and (3) dealt with the maintenance and preparation of the "inner workings," while (4), (5), and (6) dealt with the maintenance and preparation of the skeletons. Moreover, (1) and (6) were about creating unique characteristics of the city which would be appreciated by Yokohama citizens.

All of them were specific and tangible construction projects and their contents were clear enough for anyone. In addition, they were not ordinary construction projects but each of them had basic principles. While they appeared to be independent projects, they were actually deeply related with each other. In summary, the contents of each project are as follows:

The aim of the city center area enhancement project was to revive the "heart" of Yokohama which had been weakened due to damages from the war and requisition, and to create unique characteristics and fascinating new features for the city.

While the site of the Kanazawa area reclamation project had been the only natural beach remaining in Yokohama, reclamation work was underway in the area between the city of Yokohama and the city of Yokosuka and a reclamation project by a private sector was also underway in this area. While the area along Tokyo Bay was mostly used to attract factories around this time, the city of Yokohama decided to use the remaining coastal area to improve the overall city structure of Yokohama instead of attracting factories there. The city of Yokohama procured proprietary funds by borrowing Deutsche Mark bonds in order to carry out the land reclamation work and construction work of a sewage treatment plant and garbage disposal plant both of which didn't exist in this area as well as a seaside park including housing, an island and a natural beach.

The aim of the Kohoku New Town development project was to prevent indiscriminate development, unlike other new town developments aiming to build as many houses as possible. In addition, the project was carried out based on the citizen participation method from the start.

The expressway network construction project was a plan to build a skeletal network of automobile-only expressway by collaborating with the Ministry of Construction, the Japan Highway Public Corporation and the Metropolitan Expressway Public Corporation, because it would take too long to build an expressway network which the city had not been able to develop after the war as part of the city's general road planning. The expressway network was expected to cater to the needs of Yokohama's urban structure that had extended to the suburbs as well as to fulfill the needs from the new motorization. Another purpose of the project was to control the volume of passing traffic in a suitable manner in Yokohama due to the fact that it is located along Tokaido, which is one of the major arterial roads in Japan that has a high volume of passing traffic.

The high-speed railway was planned not only as a substitute for the city tramway which had gone out of business but also as a new means of transportation to directly connect the city center of Yokohama and the urbanization areas which rapidly expanded to the suburbs. It was designed to connect the city center, the port and citizens while complementing other transport services including the Japan Railway and other privately-owned railways.

The Bay Bridge was functionally planned as a bypass across the sea transporting cargos dispatched from the port area along the sea and the industrial zone across the sea without passing through the city of Yokohama, and to also be part of the Trans-Tokyo Bay Expressway. It was also expected to serve as a symbol of the Port of Yokohama which would help foster emotional ties between citizens and the port.

Factories that had been obstacles against the city center enhancement project would be relocated to the Kanazawa reclaimed land, and the Bay Bridge would help reduce the volume of passing traffic in the city center by serving as a bypass road while serving as a symbol of the city of Yokohama at the same time. In the same way that expressways and subways increase convenience, all the projects related, helping and complementing each other.

Provided that these projects would be carried out smoothly, we would be able to build a major backbone to reinforce the confused urban structure of Yokohama, restore order, change the structure of the city as a whole while preventing random residential development and reclamation, regain the unique characteristics of Yokohama, and rebuild the city center of Yokohama.

Execution of the Six Spine Projects

All of the Six Spine Projects were major undertakings for the city of Yokohama. Therefore, the decision regarding the execution of the projects should be discussed not only at the city council but also among the citizens.

This plan was different from the administration plans and project plans from the past, and should be discussed among all citizens. The Six Spine Projects was presented as a proposal by the Mayor to the citizens in January 1965.

In order to publicize the project, we managed to break away from the rigid bureaucratic format of the city hall and made a booklet for citizens in a new easy-to-understand format as well as relying on the city's newsletter and newspapers. Information was conveyed mainly through the use of illustrations on all pages in this format. The city hall changed significantly after that. Today, many booklets with different designs are published by the city hall. But in 1965, the Six Spine Projects proposals booklet designed by Kiyoshi Awazu was outstandingly sophisticated for its time.

In order to accomplish our aims including promoting citizen participation and changing old conventions of the administration, it was necessary to break away from the bureaucratic constraints and create something new that serves the citizens' interests like this booklet did instead of just talking about them.

The city council took it very seriously. Considering the capacity of the city of Yokohama at that time, all of the projects were extremely challenging and many of them criticized the projects for being unrealistic. They were probably overwhelmed by the grand scale of the projects, but if it is realized, it would be better for the city. At first, they were asking, "Is it possible?" Then, they demanded to "Get started now." And after a few years, they started asking, "Is it not finished yet?" It was impossible to finish so soon. Each of the projects would take at least ten-plus years or even several decades to finish. Nevertheless, the negative and unenterprising mood of the



city hall completely changed, and they started thinking proactively and progressively.

While many objectives were stated in documents for comprehensive plans and long-term plans, they were vague and it was uncertain which ones were accomplished and which ones were not. For this

The Six Spine Projects Plan and Location Map

reason, they would mostly be forgotten after a few discussions at the planning stage. On the contrary, the contents of the projects were specific and clear enough to remember in this project method so that we were able to engage the citizens in the projects. It meant that we had to cope with their demand to implement them as soon as possible.

The Goals of the Six Spine Projects

As we saw earlier, city planning in the Six Spine Projects based on the project method was no longer implemented through abstract discussions. Specific actions were taken to resolve specific issues, and the citizens, city council and administration were no longer spectators nor critics but were actively engaged in the process. Because we were dealing with specific ideas, it was easy for anyone to imagine them, voice opinions about them, and actually see them. City planning was no longer something carried out solely by professionals and a limited group of people, but something people can actually see. Because these construction projects are in tangible forms, they were easy to understand from the citizens' point of view, and would generate a new power in the future.

On the other hand, there were views that, "The Six Spine Projects are nothing more than random large-scale construction projects." But as I mentioned earlier, the Six Spine Projects based on the project method were not random construction projects. While the overall aim was to rebuild the skeleton and strengthen the inner workings and disposition of the city of Yokohama, the projects actually involved many other intangible strategies and tactics. Here, I would like to explain some important points of the Six Spine Projects:

(1)In terms of financial resources, general revenue including taxes were hardly used, and other financial resources were used. The projects were implemented without placing a significant burden on the city's finances.

When executing a project, the first problem we face is funding. All of the Six Spine Projects cost between several hundred billion yen and one trillion yen or more, and it was impossible to implement the projects within the general account budget (the primary source of income was city taxes.) For this reason, funds other than city taxes were mostly used to cover the cost, and city tax revenues were used to execute pump-priming strategies to supplement the cost. Other funds included Deutsche Mark fund in the case of the Kanazawa area reclamation project, and mostly private funds in the case of the city center area enhancement project, and the Housing Corporation (as it was then called) funds in the case of the Kohoku New Town development project.

Since the constructions of the large "skeleton" and "inner workings" of the city would be funded by revenues other than taxes, the city's general account budget in which the largest component was city tax revenues, was allocated for other essential projects the city had to implement by all means. The city focused most on the constructions of schools, nursery schools, construction and maintenance of water and sewage systems and roads, construction of waste management plants, maintenance of firefighting facilities among others, which were carried out within the general account budget in addition to subsidies from the central government. These were also challenging projects for the city, but they were urgent necessities and steadily implemented by the city without large-scale publicity. Because the Six Spine Projects were covered by other funds, the city was able to use the general account budget for other necessary projects without problems. The city managed to overcome the limit of the so-called "thirty percent autonomy" (a satirical term referring to the fact that a typical local government's internal revenue sources account for only thirty percent of its total combined revenue) by carrying out projects worth more than the local tax revenues

(2)The city established autonomy by making plans for large-scale projects carried out in the city from a comprehensive viewpoint and executing them on its own, while the projects were carried out by entities other than the city.

A man said to me, "But the so-called Six Spine Projects are actually carried out by entities other than the city of Yokohama, right?" What he said was right. All projects except the Kanazawa area reclamation and the subway construction were implemented by other entities including public corporations, private and third sector companies. In the case of the Kanazawa area reclamation, buildings on the reclaimed land would be constructed by private companies and public corporations. But that is exactly why the city should exercise its autonomy over the entire city, make plans for these largescale projects, connect them to each other so that they can be effective for the city of Yokohama as a whole. The city government is the only implementing body capable of taking comprehensive approaches. The projects would not benefit the entire city of Yokohama if each implementing body make plans based solely on its own benefit.

City planning should be implemented through joint efforts by multiple entities and the city should serve as the producer and coordinator. Projects implemented by the city itself constitute only part of the entire city planning. If respective implementing entities, be they the central government itself or public corporations, implement projects for their own benefits without comprehensive visions and visions for Yokohama's future, they might have adverse effect on the city. The city should lead the projects in such a way that each project keeps a good balance with the entire city while considering visions for the city's future from a comprehensive viewpoint.

Instead of just building roads, they should be planned to work well with the existing road system of the city of Yokohama and keep a good balance with other projects. Public housing should not be built only for the convenience of the Housing Corporation but should be integrated into the city planning of Yokohama. Land reclamation should not be carried out randomly for the benefit of companies, but one should consider how it benefits the entire city.

The main constituent of the city planning project includes many entities as mentioned above in addition to the respective citizens, but the local government is the only entity capable of coordinating it in a fair and comprehensive manner. In order to implement the city planning, it is necessary to utilize the existing forces acting on the city. If the city of Yokohama were to receive a certain amount of money, it may have adverse effect on the city in some cases, while it may help the city carry out excellent city planning projects without using tax revenues in other cases.

In the previous comprehensive plans, only administrative projects were covered by the city, and it was difficult to make requests to other constituents. In other words, they were simply a litany of individual project plans and not comprehensive city plans at all. If the city did not intervene, each of the Six Spine Projects would have been carried out at each entity's will. By taking the initiative of the Six Spine Project, the city aimed to make the best use of the largescale projects in order to promote city planning by providing directions and ideas that would benefit the entire city and guide the projects accordingly. This is based on the idea of a "comprehensive management" of the city as a region. In addition, the most important thing was that the city clearly declared its own position as the implementing body of all projects carried out in the city of Yokohama even if they were implemented by respective entities.

(3) In order to carry out this project, the framework of sectarianism was broken in government administration and a comprehensive system where various bureaus collaborate with each other was established in order to successfully implement the projects.

Because the "vertically divided system" of the administration resulted from laws and subsidies issued by the central government and its bureaus, it would not change so suddenly. Even if someone suggests the need for a more comprehensive system, it would be of no use because routine tasks were done at each bureau in the vertically divided system. Attempts to create comprehensive and "horizontally divided" systems by making inter-bureau project teams and to coordinate meetings were most likely to fail.

As we saw earlier in the case of the expressway construction project, each of the Six Spine Projects is so intertwined with various other projects that no single department can satisfactorily carry them out. Therefore by delegating duties for the Six Spine Projects to the administration, they were forced to create a comprehensive system to facilitate collaborations between different bureaus instead of giving endless preachings that would end up in vain and learn to work in new ways. Cooperation with almost all bureaus of the administration was indispensable in completing both the Kohoku New Town development project and the Kanazawa area reclamation project. Ward offices which previously had no part in the city's projects were also drawn in to be involved.

(4)Inspire new creativity and change the method of administrative execution.

Local administrations, which up until now have only had to enforce laws and regulations based on methods stipulated in the central government's manual, were faced with situation where they had to create their own methods and change the way they work. The Six Spine Projects dealt with themes not covered in the manual nor the laws and they had to think about ways to deal with them on their own. Their disposition significantly changed as they tackled specific issues and were given more opportunities to come up with their own ideas. Such changes gradually permeated through respective bureaus and officials who were not involved in the Six Spine Projects.

(5)Change the attitude of officials who are stuck in the same routine, find highly motivated people and develop their abilities, and gather people who demand active approaches to existing issues.

In an environment where the same routine was repeated over and over again, people are not able to develop their skills and highly motivated and competent personnel will remain unnoticed. But we were able to find highly motivated people and develop their abilities fully by actively raising issues. Once such a positive atmosphere was created, it eventually spread to other places and highly motivated officials who saw it wished to participate in the projects. We gathered more people and developed their abilities thanks to such synergistic effects.

(6) Create positive energy by taking the last stand.

The bureaucratic "safety-first" mentality discourage people from tackling new issues. They only deal with issues which are likely to be successful and avoid difficulties, but they will not be able to gain positive energy this way. On the other hand, the most challenging large-scale projects were publicly announced in the Six Spine Projects and there was no turning back. People's latent abilities and energy were unleashed by taking the last stand. Many executives and officials developed their abilities further by pursuing new challenging goals posed by the Six Spine Projects.

Therefore, the Six Spine Projects that had various strategic meanings were not just construction projects but it was not necessary to explain them to people every step of the way. People found themselves working towards the direction mentioned above before they knew it as they continued to tackle the projects in earnest. Because they were dealing with specific project plans, they were able to consider them as an extension of their regular work and develop them further in the beginning. It was easy to take action because they were not forced to make a 180 degree change, but as the projects developed further, they had to inevitably change the work system and their mindset. This change eventually results in changing the disposition of the local government itself.

On the other hand, the projects also have certain restrictions. It was important to remember the strategic significance and promote the reformation of the local government by gaining new energy phase by phase, enriching the contents, and raise issues. Otherwise, they would have been most likely to prioritize the projects only and lose various meanings that existed there. The Planning and Coordination Bureau not only promoted the projects, but served the role of pursuing qualitative significance of the Six Spine Projects by executing specific projects.

Building Up the City Center Area and Relocation of Mitsubishi Heavy Industries

Kannai Ranch

As mentioned earlier, the requisition of the city center and the Kannai district was finally lifted, but these areas were still covered with weeds and resembled a ranch where grass crickets chirped even at the beginning of the 1960's. The area was called by an anonymously coined name, "Kannai Ranch," in a derisive way. It was a peaceful postwar scenery in the central area of the city of Yokohama, but in fact, the sidewalks were crumbled, curbstones were chipped, and even some war-devastated areas remained there. Concrete plate pavements on sidewalks were loose and uneven, and shepherd's purse shoots were growing through the gaps between them. Many vacant lots here and there were fenced off by ungainly barbed wires.

When I visited Yokohama on business in 1955, the year no longer considered "postwar," I tried to make sense of the situation of the city in front of me. It was totally chaotic like the scene of a fire. It was not "postwar" at all, but the immediate aftermath of the war still existed there.
The impression of Yokohama continued to remain negative after that. "High and Low" by film director Akira Kurosawa was set in Yokohama, but it portrays the city as a city of crime, violence, drugs, and prostitution. By the mid-1960's, the city center of Yokohama had lost its chaotic energy and was left with a carefree state of ruins at random.

Moreover, the city structure changed drastically between 1965 to 1975. The old city center of Kannai was abandoned and the commercial center moved to an area around Yokohama Station The suburban population increased, and areas around terminal stations like Shinjuku, Shibuya, and Ikebukuro in Tokyo became commercial centers due to the development of railways. It was inevitable that the city center shifted to an area around Yokohama Station which was one of the largest terminal stations in Yokohama. Kannai was the birthplace of Yokohama where foreign settlements were established, the port was built, international trade took place, and also where it became the center of modernization. During this era, the first Yokohama Station was located in Sakuragicho, right next to the Kannai district, and the site of the current Yokohama Station, which is the third station, was still under the sea. Important commercial districts including Bashamichi. Isezakicho and Chinatown are located in the Kannai area. We could not afford to abandon this area entirely.

Revitalization of Yokohama's City Center

The primary objective of one of the Six Spine Projects, the somewhat stern-sounding City Center Enhancement Project, was to revitalize old parts of Yokohama including the Kannai district and its surroundings. The history of Yokohama and Japan after modernization began in this district. We felt that we should create a city featuring Yokohama's most unique characteristics including the port, full of dreams and humanity, instead of following a one-sizefits-all city planning methods.

The second objective of the City Center Enhancement Project was to establish a new connection between the area around Yokohama Station that had developed after the war and the Kannai district. The industrial district and the port logistics base district including the Mitsubishi Dockyard, Japan National Railway Yard, Takashima Pier, and Shinko Pier were once located on the outer edge of the Kannai district, but now they are located right in middle of the two city centers. The idea was to relocate these functions which were not appropriate for the city center to other areas and redevelop the port area as the new center to promote the unique characteristics of Yokohama.

The city of Yokohama was built in valley sandwiched between small hills. The Kannai district is a triangular terrain surrounded by two hills, Yamate and Noge, located on the delta plain of the Ooka River. The present city center area around Yokohama Station is a narrow delta of the Katabira River located among the hills. The two city centers of Yokohama were shaped like two wedges inserted from the sea into the land. If the two wedges were connected with a shaft, they would form a "clamp" which is used to connect two architectural components. Therefore, we established a slogan "from wedges to a clamp" for the city center enhancement. The "clamp" had to be planned in such a way that it would strengthen the connection between the port, which is a symbol of Yokohama, and the citizens. As mentioned previously, the "Green Axis" would be inserted and rich, humane and generous spaces would be provided in the wedges inserted into the land.

Connecting the two city centers with a clamp did not necessarily mean that all of the districts should be designed in the same way. The area around Yokohama Station and Kannai district were city centers with different characteristics to begin with, and the connecting part should also contribute to creating new characteristics for Yokohama. There was no point in connecting city centers with similar characteristics, as they would end up canceling out each other's characteristics and energy. The port and the area's international character should be the main theme of this district.

The City Center Enhancement Project also targeted various other districts besides those areas. There were many existing issues including the reorganization of the lively but overcrowded and chaotic shopping district around the west exit of Yokohama Station, redevelopment of the inland industrial zone behind the said shopping district, development of areas around the east exit and west exit of Yokohama Station, development of the Honmoku district after the requisition had been released, and so on. These issues were interconnected with each other, and also intertwined with the rest of the Six Spine Projects. New subways and roads would serve as the city center's important arteries , and the Yokohama Bay Bridge would not only serve as a new symbol of the port city but serve as a bypass road to prevent heavy vehicles from passing through the city center. Moreover, factories on the Kanazawa reclaimed land would be relocated to revitalize the city center and reduce pollution. All of these were strategically correlated.

It would be difficult to explain everything here. The first objective of revitalizing and transforming the old city of Yokohama into a city with unique characteristics shall be discussed in the later chapter on urban design. Here I am going to discuss the second objective of transforming the "wedges" into a "clamp" with a particular focus on the issue of the relocation of Mitsubishi Heavy Industries.

Relocation of Mitsubishi Heavy Industries

Mitsubishi Heavy Industries, formerly known as "Yokohama Dock" in the old days, was born here on this site in 1871. It was located immediately on the outer edge of the Kannai district and formed a part of the port, making it an ideal location for shipbuilding and repairing. As a result of urbanization and development of the city center area around Yokohama Station, this location became a central point between the Kannai district and Yokohama Station. Although the development of this area had been discussed before World War II, it was impossible to deal with this issue at that time. This time, we dared to tackle this issue in order to respond to changes occurring in the urban structure of Yokohama.

When the Six Spine Projects was proposed in January 1965, Japan was experiencing a period of high economic growth and many land reclamation projects were underway along Tokyo Bay in order to attract manufacturing industries. An extensive petrochemical complex plan was underway on the bayside on the Chiba prefecture side across the bay from Yokohama. Along the bayside on the Kanagawa prefecture side, an industrial zone was established on the south side of Yokohama and a land reclamation was underway in Yokosuka to attract machine industry manufacturers including ship builders and automobile manufacturers. Contrary to the trend of attracting factories in this era, Yokohama's plan to redevelop the industrial district and to convince a specific company to relocate, namely Mitsubishi Heavy Industries, was a bold attempt. While the private companies were more willing to take the initiative to move out, for large corporations with strong backing from the central government as the leaders of economic development, local governments were a weak presence for them that they were able to ignore.

However, Yokohama was a little different. In 1963, they had already succeeded in preventing pollution by large corporations by non-legal means through the "Pollution Prevention Agreement". At that time, pollution-related laws and regulations hardly existed, and the central government opposed the idea of legally forcing corporations to bear the cost for pollution prevention because it would weaken their ability to compete in the international markets. In response to a petition from local residents, the city of Yokohama addressed the issue and enacted the non-legal pollution prevention agreement system so that corporations would promise the city to prevent pollution. Inspired by this case, local governments throughout Japan enacted similar "pollution prevention agreement" system one after another and consequently the central government held a National Diet session to discuss pollution in 1970. As a result, fourteen pollution-related laws were enacted and the Environment Agency was established.

These pollution measures demonstrated that if there is a need and public support from the local community, a local government was able to take necessary measures against major corporations, which had been a dominating presence over local governments and communities, regardless of whether they had the authority to do so or not.

While they were dealing with a different issue this time, the fact Yokohama's track record was implicitly at work on the Mitsubishi relocation was a major underpinning factor. On the other hand, if the issue of relocation was handled poorly, they would have fought back by saying that they had no right to make arbitrary plans on somebody else's property. Or, if they did agree to relocate, the city would have had to pay a huge amount of compensation for the relocation and that would have been meaningless. The best way would be to pave the way for relocation and encourage them to take this step eventually. Originally, the relocation was inevitable from both a regional and corporate perspective, as Yokohama's population grew, urban areas expanded, the city's urban structure changed, the scale of factory sites expanded and the limitations of the industrial zones within Tokyo Bay and others changed the shape of Yokohama, Tokyo Bay, the Japanese archipelago and the factories. This meant that the city would be able to naturally encourage them to relocate if they handled it in the right way. But this was a pioneering approach of raising issues that the parties involved were unaware of, and this was totally different from compulsory eviction and relocation to make way for a road construction.

In fact, an increasing number of factories in industrial zones like this started to relocate to other areas voluntarily in the early 1970's. The Plan for Reforming the Japanese Archipelago published around this time proposed that the existing industrial zones should be kept in check and factories should be distributed throughout the Japanese Archipelago. The idea was to develop new industrial bases throughout the country because the existing industrial zones could no longer provide sufficient land and corporate environments to build factories as the manufacturing industry grew and became built up on an enormous scale. Laws including the Factory Relocation Promotion Law (1972) were enacted to promote relocation. Inspired by Yokohama's achievement, other cities also started planning land reclamation to promote redevelopment of inner-city factories.

Trends like these were influenced by business fluctuations, but the city of Yokohama's plan was to keep the big picture in check and persuade the Mitsubishi side by proposing long-term goals. In addition, relocation had to be carefully planned because there were many people associated with Mitsubishi and a simple eviction would have been problematic. Functions related to the port including shipbuilding and repairing was needed. Therefore, factories were relocated to other areas in the city of Yokohama in order to keep a good balance between the port function and the local economy.

This post-industrial site would be redeveloped to make the new Yokohama more central and attractive, and would be used mainly by the private sector. On the other hand, vitality and excitement of the city could not be generated by public facilities alone. It would be better to delegate considerable responsibility to privately-owned companies and let them carry out projects under public supervision. Naturally, the city should be able to cleverly exercise its authority to reclaim land and lead the projects s to make it more civic in nature.

Yokohama's Strategies for Relocation of Mitsubishi Heavy Industries Because various intents as mentioned above were involved in the relocation of Mitsubishi, it was of a completely different nature from that of forced relocation or relocation associated with public construction projects in general. In case of public construction projects, relocation can be achieved by paying compensation. But in this case, it is necessary to have comprehensive strategic measures to control the city's expenses and encourage attractive development, not to mention the relocation measure itself. This was not a typical bureaucratic project in which its aim was to simply complete the project itself. Therefore, we took various strategic means as follows:

(1) Clearly state the ideas including "from two wedges to a clamp," "open waterfront areas to the public," and "regeneration of the port as an international city" and disseminate the information

regarding the waterfront redevelopment including the Mitsubishi site at home and abroad.

(2) Clarify the city's standpoint and policy. Clarify the city's attitude by revealing existing issues and create enthusiasm from the efforts.

(3) Promote the Kanazawa area reclamation project to facilitate relocation within the city area in order to maintain and develop the port function and regional economy.

(4) Considering the current status, it is clearly disadvantageous to keep operating factories here for a long time. Because the corporation tends to focus only on immediate profits, we should

seize the opportunity to let them know that it would be difficult to continue corporate activities in the current condition considering the distribution of the manufacturing industry in Japan and the city structure of Yokohama.

(5) Create conditions where the corporation has no choice but to decide to relocate on their own accord, and encourage them to make a necessary move at the right time. The city should specifically let them know their firm determination to proceed in this direction while responding to matters in a flexible manner.

Among these means we planned to take, we first implemented (1) and (2) by way of public announcements. We also approached the

central government and launched the "Keihin District Urban Development Research Committee" (Director: Eika Takayama) comprising experts, the Ministry of Construction, Ministry of Transport, Economic Planning Agency, Japan National Railway, City of Kawasaki, and the City of Yokohama. The Committee confirmed that the site would be redeveloped as the key point of the city center area after the relocation of Mitsubishi Heavy Industries. Later, it served as a reference for the central government's metropolitan area basic plan. The Kanazawa area reclamation project, one of the Six Spine Projects, was conducted using the city's own resources from Deutsches Mark fund which was not connected to any corporation to implement (3). Additionally, the situation stated in (4) gradually emerged due to the trend in constructing industrial sites throughout Japan while taking actions accordingly.

We negotiated with Mitsubishi while making necessary preparation to create various conditions accordingly. The actual negotiation started when Mayor Asukada made an offer to then-President of Mitsubishi Heavy Industries Fumihiko Kono at the end of 1967. It was not a request but was meant to encourage Mitsubishi's spontaneous decision. "How long do you intend to continue working in such a small site surrounded by urbanized areas at the back of the port? It would be impossible to continue corporate activities in the long run on that site. We have prepared a new location for you on the reclaimed land in the Kanazawa district." Hearing this, Mitsubishi responded, "We are willing to collaborate with the city of Yokohama," although they were still careful about reaching a decision. What we had to do now was to work out specific details.

Economy is a living creature. While Japan's overall economy at that time was basically still growing rapidly, it was fluctuating at a rapid pace. In addition, Mitsubishi took a cautious stance and prioritized organizational decisions over individual decisions. The negotiations since then were a long process.

Shortly before negotiations began, Mitsubishi had just purchased a plot of land to build a ship repair dock in the Honmoku district of Yokohama. At that time, they turned down the city's offer to buy a larger plot, but now they said they wanted to purchase the plot they had turned down. Even though we said, "Because you turned down the plot, we sold it to a smaller business," they persisted in buying the plot in the Honmoku area. This was because the Kanazawa district was further away than Honmoku, and the reclamation was just starting and the land still didn't exist. It took a considerable amount of time to persuade them to give up buying the plot in Honmoku. We finally started negotiating with them on the land to be reclaimed in the Kanazawa district, but the negotiations were deadlocked after the top executive of Mitsubishi was replaced by a new executive.

For these reasons, it became necessary for the city to clearly state its position. Mitsubishi stated that they wanted to reclaim a small portion of land in the current factory site and build a workshop there. This would have been easily approved by the Port and Harbor Bureau based on the conventional "vertically-divided" administration system. But now that we were working to resolve the relocation issue, we could not afford to give them the approval so easily. Therefore, we decided that the city would conduct the reclamation work and lease the land to Mitsubishi until the relocation. This way, it will not impede the works of Mitsubishi for the time being, and will demonstrate that the city was dealing with this issue as a whole and was exercising unprecedented autonomy. The small land would serve as a seed lot after the reclaimed land was redeveloped. However, because the Port and Harbor Bureau did not issue them a permit so easily as in the past, Mitsubishi seemed shocked as expected. Mitsubishi had probably assumed that they would be able to handle the Port and Harbor Bureau in any way they wanted. Mitsubishi was powerful enough to manipulate the central government and ministries. However, the city had begun to demonstrate their overall stance and determination. As they had expected, Mitsubishi was shocked by and spurned by the city's rejection. But it effectively made them understand that it would be difficult to keep the factories on this site for a long time and that they should not underestimate the city. The Planning and Coordination Bureau played the villain, and things moved forward.

Before Mitsubishi decided what they wanted to do, the city was pressed for a time limit for deciding on the uses of the entire Kanazawa reclaimed land, which they wanted to relocate to, and had no choice but to allocate about 562,000m2 plot for Mitsubishi. Soon after that, taking advantage of the unprecedented shipbuilding boom, Mitsubishi was constructing an enormous shipyard with a one million-ton dock on Kouyagi Island in Nagasaki. They also wanted to have a plot with an area between 992,000m2 to 1,653,000m2 in Yokohama which was comparable to the plot in Nagasaki. which would be more than twice as much as the 562,000m2 plot. But it was impossible to change the land use plan of the Kanazawa reclaimed land at this point. While it was impossible at that point, we were making necessary arrangements so that Mitsubishi's needs would be met in the future. But as a result of the oil crisis in 1973 and the subsequent shipbuilding recession, Mitsubishi stated that they would relocate its factories in the city center but would not need most of the land in Kanazawa anymore. Their actions fluctuated greatly, but this was the reality of Japan's economy itself.

The tide had changed and now there was no need to rush. Responding to the changing needs and fluctuations in Mitsubishi's demands will be difficult in its own right, but once a major company like Mitsubishi stepped in this far, there was no turning back on the relocation issue. Moreover, as mentioned previously, national policies and society as a whole strongly demanded the relocation of factories in the city centers, and an increasing number of factories voluntarily relocated to other areas. Reorganization of shipbuilding was also underway. Once a flow was generated, there was no turning back. All that remains to be done is to ensure that we proceed. If the city makes haste and bear a great burden, it would consequently impose a burden on the citizens. In addition, the city had to take sufficient time to study the contents that would enhance the attractive qualities of the waterfront area in Yokohama and lead Mitsubishi in the right direction. Needless to say, this type of negotiation should not be unilateral, and one should think about the other's benefits. But city planning should not focus only on the immediate future. Parties involved often think only about short-term gains and end up failing in the long run. Instead of engaging in ordinary real estate development, by creating an attractive city, citizens will benefit, and Mitsubishi will also make a reasonable profit at the same time.

Relocation Agreement with Mitsubishi

The city council urged the Mayor to negotiate with Mitsubishi as soon as possible at each session. The big tide was coming. While we had to seize the best timing to make actions, it was like waiting for ripe persimmons to fall naturally. Mitsubishi had no choice but to make a move due to the enactment of three laws related to the manufacturing industry during the early 1970s including the Enforcement of the Metropolitan Manufacturing Industry Restriction Law, the Manufacturing Industry Relocation Law and the Manufacturing Industry Location Law. Once things started to move, the city council increasingly asked for tangible achievements. A negotiation method like this would not be advantageous for the citizens, but it would be necessary for government offices to draw a line at some point. Mitsubishi was also like government offices. In response, both parties began negotiations to build on the agreements they had reached from1975 to the present in order to create a concrete agreement. Until then, Mitsubishi's requests fluctuated too frequently, but the fluctuation eventually ceased and the Kanazawa area reclamation work was nearing completion. After a series of detailed negotiations, the two parties signed two different written agreements in March 1976.

The first one was a basic agreement stating that Mitsubishi Heavy Industries would relocate from the current site and the land would be used for the redevelopment of the city center. This was the most important point in the negotiation, and it was a confirmation that this issue was already ripe enough. This basic agreement alone would be able to fulfill the "clamp" plan as part of the city center enhancement project.

The second one was an agreement regarding the sale of the Kanazawa reclaimed land. Since it was already in the post-oil shock era, it was decided that the land will be reduced to approximately 330,000m2 and sold two years later. We asked Mitsubishi to pay nearly 30% of the cost as security deposit at the beginning. This was in effect a down payment and so the agreement was practically as effective as a formal agreement. However, in view of the economic fluctuations, both parties agreed to make a formal agreement and have the remaining amount paid two years later. If Mitsubishi was still economically unstable after two years, the formal agreement can be extended further.

This was the "ripe persimmon" logic, meaning to wait until the time is ripe, mentioned earlier. Basically, if the relocation has been decided, it would be better not to make haste while pushing for negotiations and one has to consider the other party's situations. The city had sufficient resources because the money was already paid in the same way as the land sale. Even if they did not sell the reclaimed land to Mitsubishi, their original purpose was already met because the relocation of factories in the city center was already decided. All that remains is to ensure that the city takes the initiative while carefully observing the economic situation and responding flexibly to the situation on Mitsubishi's part.

But as a result, two years later in March 1978, it was extended for another two years, and in March 1980, it was decided that the deadline for the official sale and transfer of the Kanazawa reclaimed land would be executed in 1985. At that time, the mayor had changed from Mayor Asukada to Mayor Saigo.

After the Six Spine Projects were announced in 1965, it took about ten years to make the transfer agreement, and fifteen years before the deadline was fixed. This was not a long period of time at all from the time scale of city planning. Moreover, it would take twenty years to complete the development of the post-industrial site, but it would take longer before it was fully functional. Thus, even a city planning project like this would take more than half a century. Still, it was not over as an urban development. Within a long period of time, many people are involved throughout this process. In the meantime, times change but not just the business itself. The basic ideas for building a high-quality city that is uniquely Yokohama, as well as the spirit and methods to seek for the better must be preserved and should be passed on to future generations.

Kohoku New Town

Kohoku New Town Method

The construction of a new town is underway in an area ten kilometers north of the city center of Yokohama. It would become a city with a population exceeding two-hundred thousand by the mid-1980's. It is the Kohoku New Town, which is one of the Six Spine Projects. This new town is not much different from other New Towns in Japan in appearance. The development method appears to be the same as other new towns as it is legally based on the rezoning of the land carried out by the Japan Housing Corporation. However, in principle and method, the original ideas of the city of Yokohama



The Green Matrix of the Kohoku New Town Source: Website of the City of Yokohama 2020

are incorporated into what could be called the "Kohoku New Town Method" which is completely different from other New Towns.

When we were planning the Six Spine Projects, the biggest headache was to think about what to do with the suburban areas.

Previously untouched affordable hillsides became prime residential areas for those who were pushed out of Tokyo, and the greenery on the hills had been stripped off and eaten away by uncontrolled, worm-eaten development. Once the railroads and roads from Tokvo were built, the residential developments proceeded with full force with no consideration for the situations in the city of Yokohama. During the mid-1950's until the early 1970's, legal means to prevent such residential developments did not exist. The basic idea was that not only the ownership of the land, but the land use was at the discretion of each land owner. Therefore, privately-owned developers and even public housing corporations did nothing more than maintenance works within the public housing complex. Problems including overflowing rivers, inadequate artery roads and shortages of schools and nursery schools were imposed on the local government. The development of urban facilities and financial difficulties were common concerns for municipalities in and around the Tokyo metropolitan area.

It was around this time that the local government issued a bold statement such as "Say no to public housing complexes," but from the perspective of absolute land ownership at the time, these statements were only screams at best, and were not powerful enough to restrain developments which were actually progreesing rapidly. Of course, the best way to deal with this would be to restrict developments of areas without adequate urban facilities by clear land regulations, but it was impossible to do so in the mid-1950's.

In particular, Kohoku New Town, the area closest to Tokyo and bordering Kawasaki in Yokohama, was still underdeveloped but it would be fully developed in the blink of an eye. The east side of Kohoku New Town was under development along the Tokyu Line and the south side was under development along the Yokohama Line. The northwest side had been a desolate land in the middle of nowhere, but the Tokyu Corporation bought up all the land and built Den-en Toshi Line to connect the area and the center of Tokyo. National Route 246 connecting the area and Tokyo was also improved, and it suddenly transformed into an area in Yokohama most closely connected to the center of Tokyo. The northern side adjacent to the city of Kawasaki was already under development. If left alone, the Kohoku New Town district would have been bought up by various developers in a few years and fallen victim to their indiscriminate developments. However, the developers had already set an eye on the area.

If that had been the case, the city of Yokohama would not have been able take necessary measures against the development of unimproved rivers and artery roads and insufficient schools and parks. In fact, in Totsuka ward, which is farther away from Tokyo, was rapidly developed in several years while roads and rivers outside of the development areas remained untouched. If the Kohoku New Town area had been left unsupervised, it would have been badly affected and be in a poor quality by indiscriminate developments by now.

Prevention of Indiscriminate Developments

We had to reverse the situation where indiscriminate developments gradually expanded even if we advocated curbing development verbally. Therefore, we thought of a way to establish an orderly system by proposing a new town, following the logic of "fighting fire with fire." The new towns should be properly developed, both inside and outside of the development areas, in order to create a wellorganized living environment first and eliminate the need to clean up the mess caused by indiscriminate developments. If development pressure was unstoppable, this was the method to control the unstoppable power of developers by making an orderly rather than a disorderly development.

The aim of a typical new town development is to buy up suitable land for residential development and build as many houses as possible. On the other hand, the primary purpose of Kohoku New Town was to prevent indiscriminate developments and build urban facilities in advance, and the construction of residential plots and new houses were the results of those actions.

There were voices that said, "This land should be kept green without residential developments." This plateau at the tip of Tama Hills was indeed a pleasant green land, but there was no system or budget to preserve the greenery at that time and the residents, who were the landowners, would have disagreed. Were it not for the new town plan, the landowners would have sold their land to different developers in pieces, and it would have been entirely filled with residential plots as a result of small- and mid- sized random residential developments and become a chaotic and poorly organized district with no roads and waterways, let alone greenery. It would have been impossible to change the situations afterwards.

The site of the Kohoku New Town development was a 2,250 hectare area which remained undeveloped in the mid-1960's. Unlike the typical new towns, this area was not intended to be entirely developed as residential plots and was up to the residents to decide what to do with it.

Among the residents, farming was already a mere formality, and there were many people who wanted to sell their land, or even if they did not want to sell their land right away, turn it into residential plots. On the other hand, a small number of people wanted to continue farming. In addition, some of the places, including existing settlements and places where small-scale developments already started, were difficult to deal with. By taking these into account, we gradually worked out a land use plan through the participation of residents while keeping in mind the wishes of various people.

Districts to be turned into residential plots had the Housing Corporation purchase a portion of the land, and then work with the remaining landowners to rezone it. In the past, the Housing Corporation suddenly entered into a takeover bid regardless of the willingness of the local government, and often ran into trouble with the local government afterwards. This was because the Housing Corporation simply wanted to build more houses and meet their quota regardless of the local government's intentions. However, the Kohoku New Town system is based on the local city of Yokohama's strategies and the local residents' wishes that requires the Housing Corporation to play a role that makes the most out of its technical prowess. It was an attempt to serve as a model for the collaborative relationship between a public corporation and a local government in which the local government takes the initiative in regional planning and make use of the public corporation's technical prowess.

Meanwhile, an urban agriculture method was conceived for those who wanted to continue farming. Later, the City Planning Act was revised and the system of urbanization zone and urbanization control zone was established. Kohoku New Town was gradually divided into areas subject to urbanization and areas not subject to urbanization with the intention of the residents, in the same way that an electrolysis is divided into positive and negative poles.

Residents Participation Method

Kohoku New Town is a rare example in which residents participation method was incorporated from the beginning of the project. During the progress report phase, the Kohoku New Town Development Monitoring Council (later renamed as the Liaison Council for the Promotion of Developments) was established to set up a forum for discussion among the representatives of the local landowners, the city of Yokohama, and the Housing Corporation.

The council discussed a wide range of issues including districts of the new town, classifications of land use, project details division of responsibility, construction schedule, site acquisition price, decisions regarding how to deal with ancient ruins, central district development, resettlement and more and final decisions were made.

There was some debate about the residents participation method in the beginning, but now, there is no one who would deny this principle in any local government. Yet the method is still a mere formality and used only temporarily in many cases. On the contrary, Kohoku New Town has maintained a permanent residents participation system and many issues have been resolved through discussions for over a decade. It is perhaps possible to claim that this long-continuing example is unparalleled by any other.

Having said that, not all of the methods adopted for the Kohoku New Town were the best. A special council comprising representatives of residents of Kohoku New Town was established, and the relationship between the administration and the council became somewhat similar to that of the administration and the city council. On the other hand, residents started to consider it as a place to issue requests to the city hall rather than a place to think for themselves. Thus the relationship between both parties tended to be unilateral. There were also a number of issues including the relationship with new residents who has not participated in this council. At a time when people were still doubtful about the residents participation method and there was only opposition movement when it came to residents and administration, the Kohoku New Town's achievements in city planning centered around organized and constructive discussions should be commended, albeit in a sober way. Nowadays, there is an aspect of thinking independently. City planning through residents participation cannot be achieved overnight and is not so sophisticated, but it is gradually taking root through a variety of trials and errors.

Urban Agriculture

While the term "urban agriculture" is used in various fields today, it was a term and a concept nobody took seriously back in 1968 when the city of Yokohama started using this word.

This was because cities and agriculture were originally considered to be an adversarial one, and their only commonality was "suburban agriculture" in suburban areas near big cities. However, in rapidly urbanizing areas such as the Tokyo area, suburban agriculture zones get eaten up first and eventually get pushed outward. Therefore, the idea of urban agriculture, unlike suburban agriculture on the urban periphery, is to allow the existence of agriculture in the middle of urbanized areas. Instead of looking at the relationship between urbanization and agriculture from a negative viewpoint and treat agriculture as something that gets eaten up due to urbanization, urban agriculture reconsiders the relationship between them from a positive viewpoint in order to achieve the coexistence of cities and agriculture.

City planners would oppose the idea of incorporating agricultural land that has not been developed and urbanized in the city, and farmers would take no interest in small-scale agriculture co-existing in the city. However, the Yokohama City Agricultural Affairs Bureau (later renamed as Greenery Affairs Bureau) were eager to take on this new challenge. They organized an urban agriculture research group, conducted research on concepts and problems of urban agriculture and development of specific methods through vigorous discussions with scholars specializing in agriculture, green land, and urban planning, and produced many reports.

In a country like Japan where rapid urbanization takes place with inadequate regulations on land use, urban agriculture effectively restrains unrestricted urbanization, secure a certain amount of open spaces, create connection between city residents, nature, and agriculture, and ensure the livelihoods of motivated farmers. To be specific, the city of Yokohama established its own system regardless of the central government system where motivated farmers are gathered in areas exclusively designated for agricultural use to assist them with the development of agricultural infrastructure and collaborative projects.

Later, even the City Planning Act established a system called green areas for production to incorporate agriculture in cities. This was probably because Yokohama's idea of urban agriculture was adopted by the central government. Moreover, the term "urban agriculture" has come into widespread use. It may be the sign of the times, but a single example or achievement can change the world. In recent years, the concept of Kleingarten (citizens' vegetable garden) has been widely adopted in cities across Germany and other countries in Europe. This allows citizens to use vacant lots in the city to cultivate considerable areas of vegetable gardens for health benefits and relaxation of citizens living in the city. Although this is not agriculture, it is an example of urban farmland in the city. While urban agriculture still has a long way to go, we should think more seriously about farmland in cities including similar examples mentioned above.



Urban Agriculture in Kohoku New Town

Other Experimental Approaches and Problems

There is still a lot to be said about Kohoku New Town. In implementing urban design in the central district, we have devised a system called the "Selective Land Transfer System" in which the central district is planned in accordance with the wishes of the residents. The idea of creating a green belt called "green network" throughout the area making the most out of the natural land has been partially realized. In addition, we built uniquely designed elementary schools and junior high schools and made considerable efforts on preservation and research of ancient ruins. The lush green road that we did for the access road is also unique.

However, there was not enough time to go into more details. What was more unfortunate was that Kohoku New Town was not just a project but a unique system which could not be universalized for other districts. The idea for developments of other underdeveloped areas in the suburbs of Yokohama was that they could adopt the Kohoku New Town method or else the developments would not be permitted otherwise. Kohoku New Town is an area closest to Tokyo and is prone to rapid development, so we decided that this method could be adopted to minimize indiscriminate developments, and we felt that we should continue to adopt this method in other areas one after another based on our first achievement. However, the development pressure on Yokohama from developers in the mid-1960's was so strong, and without any legal means to restrain it, other districts were developed insufficiently and more rapidly than Kohoku New Town as a result. The project method alone was not enough to stop the residential land development.