

2. Toward the Development of Plan-Making Methodology for Urban Regeneration

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2.1 Issues of Urban Regeneration and Expectation Toward Planning

One of the major issues of sustainable urban regeneration is to shape attractive urban space through renovation of existing urban space, thus contributing to the enhancement of people's quality of life. It is expected that in each area there should be a plan for a future vision of urban space that will implement effectively and creatively various measures such as preservation and utilization of historic buildings, reconstruction and repair of old structures, creation of a safe and comfortable pedestrian and bicycle environment, development of parks and open space, creation of a beautiful landscape, supply of community facilities, consideration for the environment and maintenance of safe and clean public spaces. It should be noted here that various actors, including citizens, businesses, government departments and non-profit organizations, take part in planning for and forming urban spaces. Thus, we should develop and apply systems, procedures and techniques to make possible the collaborative and continuous management of urban space by various actors.

Planning, or plan-making, for urban space in a city is a comprehensive activity to define goals, policies and implementation measures to shape urban space based on the current and the future conditions of the city and the demands of various actors on urban space. Therefore, in order to tackle the issues of urban regeneration, there are high expectations toward plan-making with the participation of various actors.

In cities in Japan, urban plans are developed in many settings, such as basic policies for municipal urban planning (urban master plan) since 1992 and district plans since 1980 under the City Planning Act, landscape plans

under the Landscape Act of 2005, downtown revitalization plans under the Downtown Revitalization Act of 1998 and 2006, basic schemes and plans for urban development projects (urban redevelopment projects and land readjustment projects), and various plans under municipal ordinances. However, many of them are not based on sufficient analyses of current and future conditions of cities, are not based on the demands of various actors on urban space, or do not comprehensively define goals, policies and implementation measures. There are many deficiencies in urban plans developed in Japan. The reason for this problem, besides the lack of financial resources and time consumed in plan-making, seems to be the underdevelopment of methodology for plan-making.

2.2 Need for Plan-Making Methodology Research and Development

Conceptually, tasks in plan-making consist of the following three aspects: “analysis of current and future urban conditions”, “spatial conception and composition”, and “consensus building and decision making”, each supported by distinctive methods (Fig. 2-1). Methods that support “analysis of current and future urban conditions” are scientific methods to analyze and describe the current and future population, economy, society and physical environment. Methods that support “spatial conception and composition” are creative methods to generate spatial solutions based on various demands. Methods that support “consensus building and decision making” are political methods to lead consensus building and decision making. Note that the three-part division is a conceptual categorization of planning methods, and actual tasks and methods may have two or three aspects at the same time.

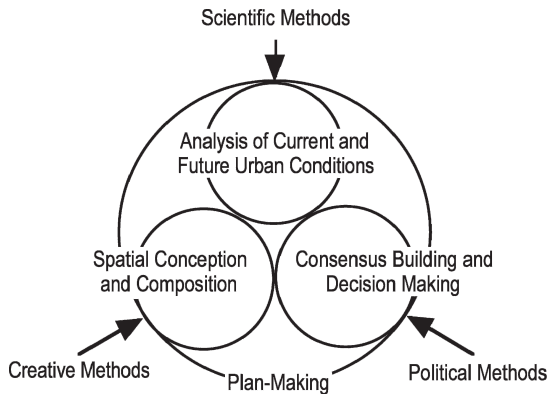


Fig. 2-1. Three aspects and supporting methodology of plan-making tasks

The origin of research and development of plan-making methodology in Japan can be traced back to the efforts of Takayama Research Unit, Department of Urban Engineering, University of Tokyo in the 1960s. The major interest of the research unit was “to clearly define the significance, role and function of an urban general plan that is structured around a physical plan, against the context of various measures to solve local and urban problems” (Takayama 1967). Research on European and American urban planning was conducted, especially referring to Chapin (1957) and Kent (1964), on the process of plan-making tasks and the generation of plans (Doi 1993). In “UR no.2: Urban General Plan” (Takayama Research Unit 1967), where research achievements at that time were put together temporarily, various problems, contents and plan-making procedures of urban general plans were reported. Some researchers of the era continued their research on urban general plans (Kawakami 1971; Morimura 1987; Doi 1993; etc.). Plan-making methodology issues dealt in these research efforts included planning areas and planning units, goal setting and district division, basic surveys, investment distributions and planning processes. Public involvement was not considered much at that time. The methodology then presupposed the increase of population and the expansion of urban areas, and mainly supported the two aspects of “analysis of current and future urban conditions” and “spatial conception and composition” in plan-making. In this process, the participation of various actors was limited.

In the 1970s, the focus of research shifted from urban general plans to residential (district) environment improvement plans. Morimura (1976) states that a residential environmental improvement plan generally takes the form of a district plan that fulfills the principle of residents’ scale, is resident-oriented, includes residents’ participation, has concern for residents’ welfare, and is both realistic and comprehensive. It is said that the planning area should be small enough for the residents to know it very well, that the plan should be developed based on residents’ real living demands, that the plan should be developed with direct participation of residents, that the plan’s goals should be the improvement of the residential environment, that the plan should be comprehensive, and that the plan should be accompanied with implementation programs. After the 1980s, to develop such district plans or smaller-scale facility plans (plans for parks, community centers, etc.), various machizukuri (the Japanese word for community development) workshop methods were researched and developed, including the “Machizukuri Workshop” by Nobuyoshi Fujimoto and Isami Kinoshita, the “Design Tool Box for Participation” by Yoshiharu Asanoumi, the “Machizukuri Game” by Shigeru Sato and the “Machizukuri Life Game” by Haruhiko Goto (Itoh 2003). These were the methods to support the aspects

of “spatial conception and composition” and “consensus building and decision making” in developing district plans or facility plans.

After the revision of the City Planning Act in 1992, urban master plans (citywide and sub-area plans) were and continue to be developed in many municipalities through citizen participation processes. However, the methods usually applied are the same methods for developing urban general plans that were researched and developed after the 1960s, or are the various machizukuri methods researched and developed after the 1980s. These methods are not sufficient to develop contemporary urban master plans for cities and their sub-areas that presuppose the regeneration of existing urban areas and the participation of various actors. As mentioned, the former focused on the aspects of “analysis of current and future urban conditions” and “spatial conception and composition” in plan-making in the era of population increase and urban expansion, while the latter focused on the aspects of “spatial conception and composition” and “consensus building and decision making” in developing district plans or facility plans.

Therefore, in order to tackle the issues of urban regeneration in “matured cities” in Japan, we need to promote the development of methods that support the three aspects of plan-making presupposing the participation of various actors. We also need to systematize the methods to establish a new plan-making methodology for urban regeneration. “Matured cities” are defined here as:

the cities that aim for high quality of life based on existing stock through a paradigm shift driven by the rise and the accumulation of intellectual standards of independent individuals, even though physical production and people’s desires for consumption in society and economy come close to fulfillment, and social vitality and economic growth do not necessarily follow the past rising trend, referring to Ichikawa (1998).

2.3 Framework for Plan-Making Methodology Research

In the United States after the 1960s, there was a development in planning theory that explained the stances and the activities of planning. It started as a response to the apparent limitations of rational comprehensive planning. There is no established view on the development process of planning theory (Khakee 1998), and researchers explain it in their own ways (Healey et al. 1983; Taylor 1998; Innes 1995; Fujii et al. 2000).

Here I use the framework of four planning models, based on Innes and Booher (2000) and Brooks (2002). Four planning models, namely the Technical Bureaucratic Model, the Political Influence Model, the Social Movement

Model and the Collaborative Model, are effective in different circumstances categorized by the levels of “diversity” and “interdependency” of actors (Innes and Booher 2000). Each model can also be characterized by the “place” and “activities” of planning (Brooks 2002). The “place” of planning is whether it is centralized (top-down) or decentralized (bottom-up). The “activities” of planning concern whether it involves certain rational activities or it involves various irrational activities on the premise that rational activities are impossible or unrealistic. As shown in Fig. 2-2, nine planning theories can be categorized into the four planning models.

Figure 2-3 shows the evolving process of planning theories, based on a review of relevant literature. First, Rational Comprehensive Planning

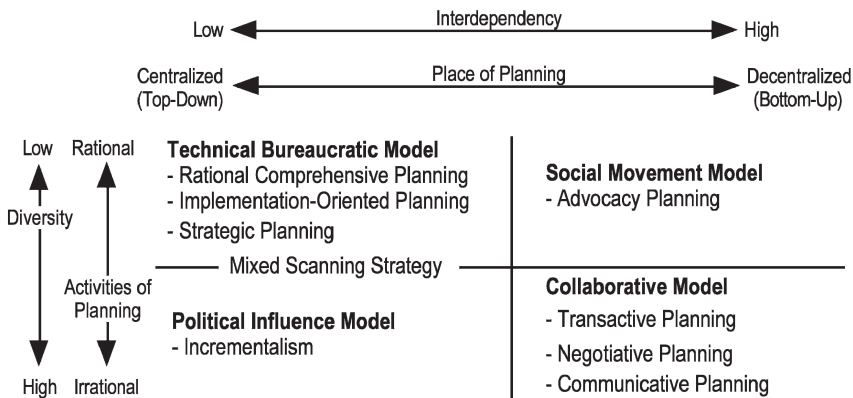


Fig. 2-2. Four planning models and nine planning theories (based on Innes et al. 2002 and Brooks 2002)

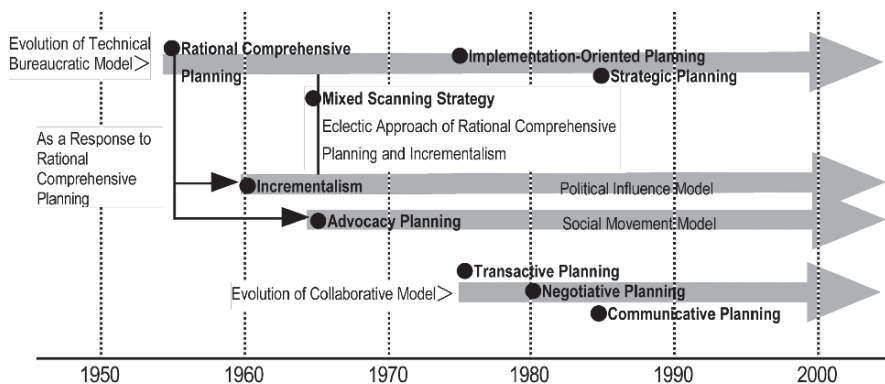


Fig. 2-3. Evolving process of planning theories

appeared in the 1950s. As a response to Rational Comprehensive Planning, two planning theories appeared: Incrementalism appeared from the end of 1950s to the beginning of the 1960s and Advocacy Planning appeared in the mid-1960s. Incrementalism was established as a Political Influence Model and Advocacy Planning was established as a Social Movement Model. The Mixed Scanning Strategy that appeared in the mid-1960s was an eclectic approach of Rational Comprehensive Planning and Incrementalism. The Technical Bureaucratic Model originated from Rational Comprehensive Planning and was developed as Implementation-Oriented Planning in the mid-1970s and as Strategic Planning in the mid-1980s. On the other hand, the Collaborative Model developed through Transactive Planning in the mid-1970s, Negotiative Planning in the 1980s and Communicative Planning since the mid-1980s. The development process of planning theories can be understood as the process of four planning models evolving to co-exist with the appearance of new planning theories. Four planning models and nine planning theories already co-existed in the 1980s when downtown plans were developed in US cities with the participation of various actors.

In practice, elements of the above four planning models are integrated in plan-making processes. Normative plan-making processes such as “Small-Area Planning” by Kaiser et al. (1995), “Downtown Planning: Basic Steps” by Sedway and Thomas (1983) and “Guidelines for Preparing Urban Plans” by Anderson (1995) show procedures for a series of individual tasks: analyzing current and future conditions, defining issues, setting goals and policies, generating alternatives and drafting a final plan. Citizens’ opinions are collected in relevant steps of the procedures. The procedures include the three aspects of plan-making, and prescriptions for individual tasks and the necessary skills of planners are listed. From such normative plan-making processes, we can understand the outline of planning methodology applied in making plans for cities and their sub-areas. But the details of plan-making methodology are not clear, and real plan-making tasks do not necessarily follow the presented normative processes. Therefore, in order to further explore planning methodology, fundamental analyses of the details of individual tasks that compose plan-making, the relationships between individual tasks and the ways various actors participate in individual tasks are needed. So, here I propose the following new analytical framework to grasp the tasks of plan-making more flexibly and in greater detail.

First, the elements related to plan-making are defined as follows and positioned in Fig. 2-4:

- Plan-making: Activity to define goals, policies and implementation measures to shape urban space based on the current and the future

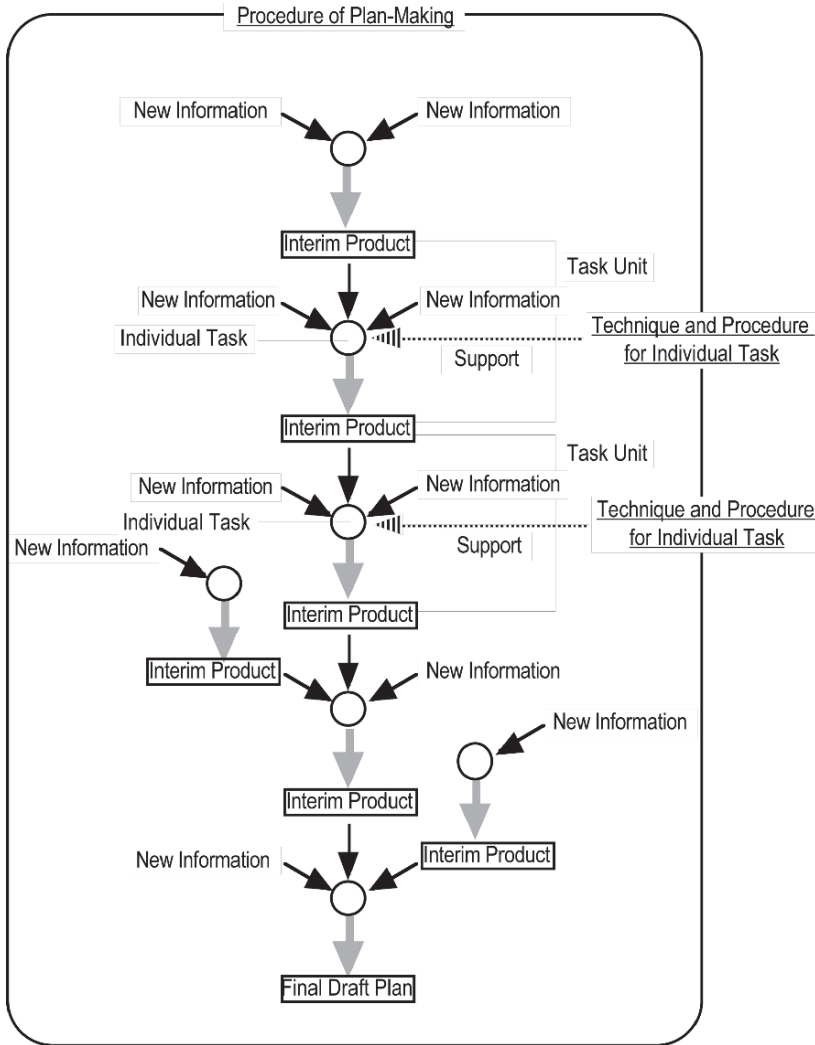


Fig. 2-4. Framework to analyze plan-making

conditions of the city and the demands of various actors on urban spaces. Specifically, plan-making is a series of individual tasks to lead to the “final plan” which includes goals, policies and implementation measures to shape urban space.

- Individual task: Task that compose plan-making process to lead to the final plan. The output of an individual task is combined as an interim product.

- Interim product: The output of individual tasks. Specifically, the latest draft plan or report at the moment. The interim product of a certain step or point in the plan-making process is the output of individual task based on the previous interim report and new information. By repeating this task unit, the interim product evolves and finally becomes a final draft plan.
- Methodology: A concept that embraces procedure and technique.
- Procedure: Generally, ways, means, steps, or planned actions to achieve the objective. In this framework, process or preparation of a series of individual tasks to achieve the objective of plan-making, i.e., to lead to a final draft plan.
- Technique: Generally, skills to do things cleverly (efficiently and well). In this framework, skills to conduct individual tasks of plan-making cleverly.

Second, steps to analyze plan-making methodology are proposed:

1. Information gathering, including document collection, interviews and field surveys.
2. Selection of study cases and understanding of their characteristics.
3. Grasp of planning area, period, organization and process.
4. Identification of task units (interim products and individual tasks) through analyses of planning documents (plans and reports) and interviews of municipal employees, architects, urban designers and planners involved in plan-making.
5. Documentation and description of the contents of interim products and individual tasks. Contents of interim products are based on analyses of public documents such as plans and reports, and internal documents such as working reports. Contents of individual tasks are based on internal documents such as working memos and interviews of those involved in plan-making. Unclear parts are inferred from the comparison of interim products before and after.
6. Assembling of points related to plan-making methodology.
7. Identification and systematization of plan-making procedures and techniques.

Watson (2002) points out that a new research approach called “practice movement” has emerged in recent years. This approach involves research on individual planners or planning practices. In other words, the approach is characterized by research that documents and analyzes planners’ various activities, planners’ outputs, interactions and effects. Watson (2002), by using the concepts of “experimental learning” and “cognitive psychology,”

logically showed the significance of “learning from practice,” the objective of “practice movement”. The analytical framework proposed above will contribute to this practice movement by providing an standard methodology to examine plan-making processes in detail.

2.4 Learning from Experiences of Downtown Planning in US Cities

Using the analytical framework explained in the previous section, two cases of downtown planning in US cities, the Portland Central City Plan (1988) and the Land Use and Transportation Plan for Downtown Seattle (1985), were studied to identify the plan-making methodology in each. See Keating and Norman (1991) for background, organization, contents and processes of the two plans, as well as other downtown plans in US cities. Tables 2-1 and 2-2 show a generalized summary of case study results. The details of the case studies are described in Murayama et al. (2003) and Murayama et al. (2004).

As concluded in Murayama (2004), the plan-making procedures of the two cases can be divided in to the three steps shown in Fig. 2-5. In each step, individual tasks that correspond to the three aspects of plan-making (“analysis of current and future urban conditions”, “spatial conception and composition”, and “consensus building and decision making”) are required, and the individual tasks are supported by three kinds of methods (“scientific method”, “creative method” and “political method”).

2.5 Prospects of Plan-Making Methodology Development

Premises of plan-making in matured cities are the regeneration of existing urban space substantially and the intensive participation of various actors. In terms of regeneration, the comprehensive, effective and creative implementation of various measures is important. In terms of participation, opening the contents of plan-making tasks to public is essential for the accountability of a plan and the transparency of consensus building and decision making processes. In order to respond to these demands, the development and the application of plan-making methodology (procedures and techniques) are necessary.

Table 2-1. Individual tasks and supporting procedures and techniques in Portland city plan

Portland Central City Plan

- Task 1: Examination of draft vision, goals and policies based on the results of a design event
- Technique to plan and implement various measures to collect citizen opinions on goals and issues of the planning area
 - Technique to analyze the collected citizen opinions
 - Procedure to examine draft vision, goals and policies, based on citizen opinions
- Task 2: Development and implementation of a research program
- Procedure to supervise the analyses of current and future conditions by multiple actors
 - Techniques to collect and present land use and urban design information
 - Technique to estimate development/redevelopment potential of districts and land use zones
- Task 3: Development of three basic spatial structure models through experts' charrette
- Procedure to develop realistic models from idealistic models
 - Technique to facilitate a charrette
- Task 4: Development of a spatial structure model and five alternative land use plans
- Technique to develop a spatial structure model and five alternative land use plans based on the results of research and draft vision, goals and policies
- Task 5: Reports and recommendations of functional advisory committees
- Technique to compose draft plan parts
- Task 6: Development of a land use concept plan
- Procedure to compose a draft composite plan from draft plan parts (district and functional)
- Task 7: Evaluation and modification of the land use concept plan and development of alternative district plans
- Technique to adjust or modify draft plan parts and the draft composite plan
 - Technique to evaluate the contents (performance) of the draft composite plan
- Task 8: Selection of alternative district plans based on the result of a public review
- Procedure to select alternative district plans
- Task 9: Organization of a final draft plan
- Technique to evaluate the draft plan's impacts on urban form and present the results
 - Technique to compose a comprehensive final draft plan (document)
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Table 2-2. Individual tasks and supporting procedures and techniques in land use and transportation plan for Downtown Seattle**Land Use and Transportation Plan for Downtown Seattle**

- Task 1: Implementation of research
- Techniques to analyze existing goals, policies and plans, and extract common goals and themes to start the plan-making process
 - Technique to estimate quantity, places and forms of future new developments
- Task 2: Collection of citizen opinions on issues and goals
- Technique to plan and implement various measures to collect citizen opinions on goals and issues of the planning area
 - Technique to analyze the collected citizen opinions
- Task 3: Development of guidelines for alternative plans
- Procedure to develop guidelines for alternative plans based on the result of analyses of current and future urban conditions and citizen opinions
- Task 4: Collection of alternative plans
- Procedure to collect alternative plans from individuals and organizations
- Task 5: Development of a preferable plan
- Procedure to analyze alternative plans by organizations and individuals
 - Technique to analyze the contents of proposed alternatives and define their characteristics
 - Technique to compose one preferable draft plan by combining the parts of alternative plans
- Task 6: Implementation of a public review and a density/building form research
- Technique to set realistic land use restrictions and development standards
- Task 7: Development of a draft land use and transportation plan and a draft environmental impact assessment report
- Procedure to define objects and items of impact assessment and commission parts of impact assessment tasks to multiple actors
 - Techniques to evaluate the impacts of alternative plans on land use and development, urban design and landscape, and archaeology and historic conservation, and present the results
- Task 8: Development of a mayor's recommended land use and transportation plan and a final environmental impact assessment report
- Procedure to select from alternative plans

Some prospects of plan-making methodology research development in the future are as follows. Regarding the aspect of “analysis of current and future urban conditions”, the development of techniques to collect and accumulate more various and accurate spatial information, to better estimate future development, to evaluate plan contents and impacts, and

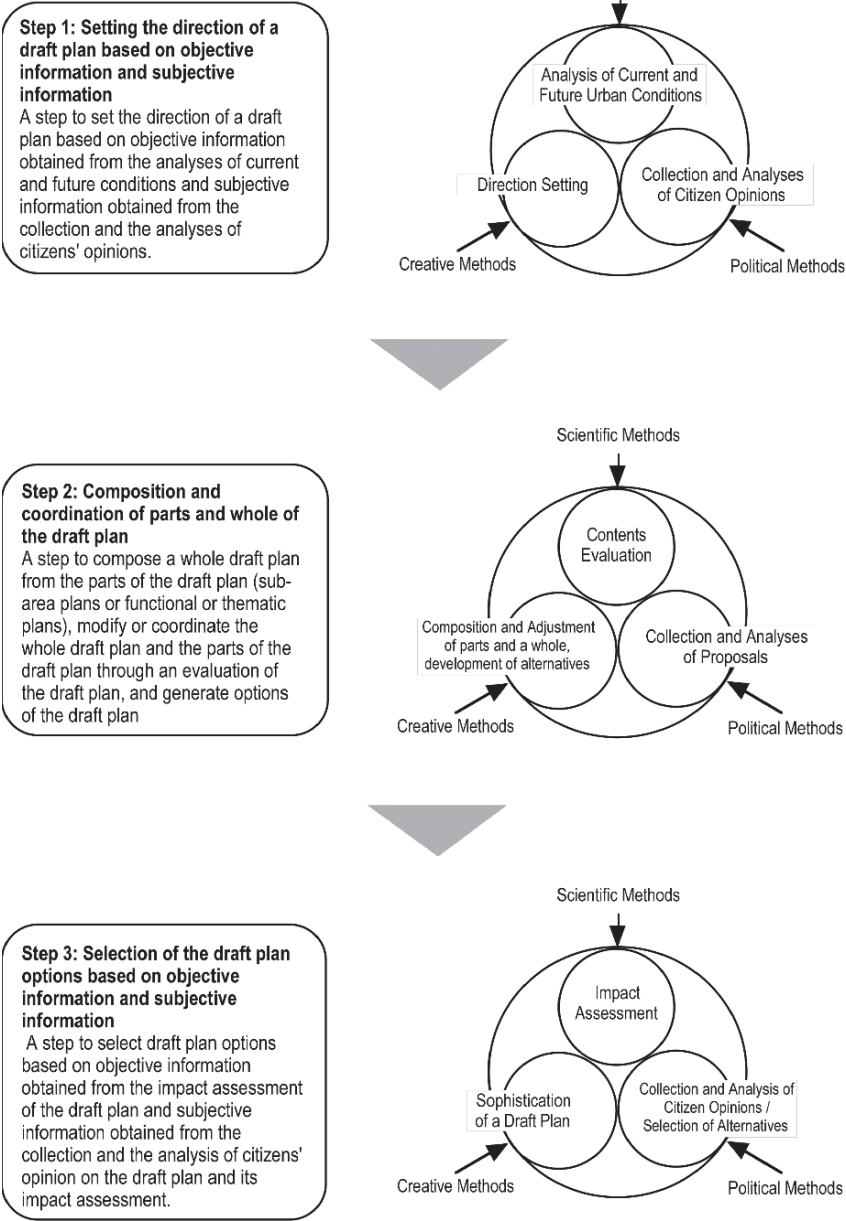


Fig. 2-5. Downtown planning procedures

to present things graphically are needed. Regarding the aspect of “spatial conception and composition”, research and organization of charrette facilitation techniques accumulated through practice and the detailed study of planners’ reasoning processes, sensibilities and creativity are the challenges. In the aspect of “consensus building and decision making”, research and organization of measures to collect and analyze more various opinions effectively and efficiently and the development of a technique to analyze alternative plans are needed.

Finally, in order for plan-making methodology (procedures and techniques) to be applied in urban regeneration practices in Japan, the following three points must be overcome. First is the training or education of professionals (government officials and consultants) to make the best use of plan-making procedures and techniques. Second is the security of sufficient financial resources. Third is the establishment of planning system centered on comprehensive plans of different spatial scales (region, citywide, area, district, etc.) which has not yet realized in Japan. If there is no planning system to implement restrictions, incentives, projects and consultation measures based on plans, there is no significance to the plans themselves or in making efforts to research and develop plan-making methodology.

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