法政大学学術機関リポジトリ

HOSEI UNIVERSITY REPOSITORY

The Dynamics of Protest Activities in Japan: Analysis Using Protest Event Data

著者	Nishikido Makoto
出版者	法政大学人間環境学会
journal or	人間環境論集
publication title	
volume	12
number	2
page range	103-147
year	2012-03
URL	http://hdl.handle.net/10114/7159

The Dynamics of Protest Activities in Japan: Analysis Using Protest Event Data

Makoto Nishikido†

1. Introduction

The purpose of this paper is to understand the dynamics of protest activities in Japan after World War II, using protest event data after the war, and to analyze the structural factors that defined it. The aim is to examine the traditional historical understanding through this type of analysis. In recent studies on social movements, analysis using event data has been introduced to understand the dynamics of macro social movements which cannot be grasped through case studies. This kind of analysis is called event analysis, which collects information on protect activities as a whole from data sources such as newspapers, using a certain standard in an attempt to quantitatively understand the whole picture of protest activities. Although in traditional case studies, the phenomenon of the protest movements becoming more or less active could only be discussed through experience the event analysis makes such an understanding through experience firmer. Instead of just grasping the macro dynamics of protests, through quantitative analysis of the relationship with the structural factors such as political and economic factors, it becomes possible to understand the causal relationship between the two.

This paper will examine the dynamics of social movements in Japan after World War II from three types of analysis which use protest event data. First, it is demonstrated that the change of social movements in Japan in 1945-95, by comparing the protest cycle in West Germany which was analyzed by D. Rucht (1988). The event

[†]Hosei University E-mail:nishikido@hosei.ac.jp

analysis has been prepared in terms of methodology by social movement researchers in the West since the 1980s and in Japan also are an analysis of the environmental movement in the period between 1968-82 by Nakazawa, et al. (1998) and a study concerning the relationship between the social movement in Miyazaki Prefecture and the political opportunity structure by Yamamoto and Watanabe (2001). Thus, event analysis for grasping the dynamics of social movements in Japan has been partly conducted, but the features of the dynamics of social movements in Japan have not been analyzed using international comparisons. Moreover, by providing an overview of the dynamics of the social movements in Japan after World War II, it becomes possible to grasp the macro-dynamics of the environmental movements that were not covered by the study by Nakazawa, et al. and examine the dynamics of the environmental movements in Japan after World War II.

In addition, this paper will also examine the argument that the citizens' movement as a whole "stagnated" in the 1980s (Shoji, 1989) and the argument that there was a qualitative change of the protest activities from the macro dynamics using event data. It can be stated that this will contribute to the discussion about the continuity/discontinuity of the movements. For example, "new social movement" theory became popular from the 1980s to 1990s in the field of social movement studies and a qualitative "discontinuity" between the old-type movements and new-type movements was discussed, but was there really such a tendency? Could the trend of "Social Movement Society" a hypothesis proposed by D. Meyer and T. Tarrow (1998) — where protest activities become a permanent state, with large scale protests by a large number of members, and the movement becomes specialized and institutionalized, become the main measures of fighting disputes—be confirmed in Japan? It will become possible to answer these questions.

The second purpose of this paper is to grasp the dynamics of the environmental movements after World War II, using protest event data after the war, and analyze the structural factors that defined it. The aim is to examine the traditional historical understanding through such an analysis. For example, Nakazawa *et al.* (1998) showed that the dynamics of the citizens' movements related to the environmental issues in 1968-82 was defined by the political opportunity structure factor more than the structural strain factor. Yamamoto and Watanabe (2001) used event data from Miyagi Prefecture to analyze the effects of the political opportunity structure and the economic fluctuation on protest events and point out that the extent of the effect of the political opportunity structure varies by issue. The analysis of this paper is unique

in that it elucidates what kind of structural factor defines the protest activities related to the environmental issues in the period after 1980, which the research by Nakazawa et al did not follow. Making use of the aforementioned studies, this paper analyzes the relationship among the political variables, economic variables, and urbanization variables with the dynamics of protest activities and examines the traditional historical understanding.

Finally, it examines that the dynamics of social movements in Japan, especially labor movements and "new social movements", by using cross-sectional data from all prefectures. The previous event analysis of the social movement in Japan has used only the data of whole Japan, and the data of Tokyo which is a capital in Japan (Nishikido and Yamamoto, 2007). In this paper, it is thought that making the findings by a time series analysis of protest cycle in Japan more clearly by analyzing the cross sectional analysis.

Previous studies on event analysis and an overview of event data in Japan after World War II will be discussed below (Section 2). Next, the dynamics of social movements in West Germany analyzed by D. Rucht and the characteristics of social movements in Japan after World War II will be compared, and the features of social movements in Japan will be examined (Section 3). Also, the dynamics and characteristics of environmental movements in Japan after World War II, and the structural factors regulating its level of activity will be analyzed (Section 4). Then, cross-sectional analysis will be performed in order to analyze the factors regulating the level of activity of social movements in Japan after World War II (Section 5). Finally, trends in contemporary social movements in Japan will be discussed (Section 6).

2. An Outline of Protest Event Analysis and Event Data Concerning the Protest Activities in Japan After World War II

2.1 The History of Protest Event Analysis

"Event Analysis" is the general name for research which quantitatively understands and analyzes activities (events), such as protest gatherings, strikes, and demonstrations. Information on the date the event occurred, the location, the number of protestors, the form of action (tactics), the target of the protest, features of its leaders are extracted from newspapers and public documents, etc. based on a certain standard

and encoded on one sheet for each event. By replacing this information with numerical values (coding), event data which is a qualitative data set is created. Presenting the characteristics of social movements throughout society using this event data is the major aim of event analysis. For example, from a change in the number of events, what kinds of social movements were active at when, and the level of activity of social movements throughout society can be understood. Also, from data on whether the event was violent or peaceful, the characteristics of the tactics in social movements and its changes can be grasped. This type of information makes regional comparisons, in addition to chronological changes, possible. In other words, event analysis views the group act which actually occurred as an-"event," and is an attempt to elucidate the total image of activities that occurred within a specified space at a specified time under that chronological and regional accumulation.

On the other hand, in this event analysis, it developed along with theoretical developments in structural theories of political opportunity in social movement research (political process approach). In other words, the relationship between macro dynamics regarding the social movements depicted in the event data and the macro structural factors, such as political and economic factors are quantitatively analyzed and sought a causal understanding of the factors which occur in social movements and specified forms of protest. Furthermore, the largest feature of event analysis reliant on the quantitative processing of social movements is that it excludes unclear and symbolic arguments. As R. Koopmans (1995: 3) said, "the underlying experiential fact raised by researchers on movements thus far is not above symbolic theory and knowledge of well-known movements," the greatest objective and feature of event analysis is that it composes a reality regarding the dynamics of social movements in a form different from that of impressions and actual feelings, and acquires more certain knowledge through comparison with the realities of movements embraced thus far. Then, this analysis gives a way to answer "large questions" such as understanding macro transitions in social movements and social change which cannot be found out via case studies.

The history of event analysis above was conducted by American social movement researchers such as C. Tilly, D. McAdam, and S. Tarrow, and western European researchers such as H. Kriesi and D. Rucht, and the methodological developments of event analysis also advanced. According to Rucht, Koopmans and Neidhardt (1998: 9-15) the history of event analysis began in the 1960s, and there were three sources in its early stage. The first is, as stated in *World Handbook on Political and Social*

Indicators, research focusing on the collection of long-term data from as many countries as possible. This database, which has three editions (Russet et al., 1964; Taylor and Hudson, 1972; Taylor and Jodice, 1983), covers 136 countries and collects data from 1948-1977. It uses the New York Times as its primary data source, and compliments it using secondary sources. Second, although it was not as concerned as the research presented above in creating comprehensive data, there is research on the causes, dynamics and effects of collective violence (Gurr,1968; Lieberson and Silverman,1965; Spilerman,1970, etc.) . Third, there is the research for the purpose of relatively long-term research on specified regions done largely by the historical sociologist C. Tilly.

From research centered on strikes (Snyder and Tilly, 1972; Shorter and Tilly; 1974) and on collective violence (Tilly *et al.*, 1975), a strand of Tilly's research, which later shifted its attention toward various activity repertories (Tilly, 1978; 1995), intends to not only elicit the statistical relationships among variables in comparatively small sets, but to also elicit the changes in the quantity and form of protests by using historical data, secondary sources, and other sources of data. ¹

Inspired by these kinds of researchers in the 1970s, it was in the 1980s that social movement research using newspaper data became a full-fledged endeavor. McAdam (1982) used event analysis for research on the civil rights movement, and Jenkins (1985) for the agrarian movement. Also, Tarrow (1989), influenced by C. Tilly, composed event data for social movements in Italy between 1967 and 1973, and theorized the protest cycle analyzing changes in action repertoire. On the other hand, preparing the event analysis manual (Social Protest and Policy Innovation Project (1985)) is said to have provided the methodological base as the base for subsequent event analysis.

On the other hand, Kriesi, who conducted event data analysis in Switzerland from 1945-1981, later conducted comparative research on social movements in France, West Germany, Holland and Switzerland from 1975-1989 (Kriesi *et al.*, 1995). Also, Ekirt and Kubik, who were methodologically influenced by Tarrow, constructed a social movement database for Eastern Europe (Poland, Slovakia, Hungary, and the former East Germany) from 1989 to 1994, after the conclusion of the Cold War (Ekirt and Kubik (1998), Sazbó (1996)). In addition, the Prodat project, led by Rucht, collected and analyzed protest event data in West Germany from 1984 until 1989. This resulted in studies such as Rucht (1998; 1999) and Olzak and Uhrig (2001). Furthermore, independent of the aforementioned activities, Olzak (1992) analyzed

ethnic strife in the United States from 1877-1914 using event histories, and Bessigner (1998) also created protest event data in the Soviet Union from 1987-1992.

In studies other than these, event analysis is used in the organizational ecology approach based on Tarrow's protest cycle theory (Minkoff, 1994; 1995; 1997; Olzak and Uhrig, 2001, etc.), which discusses the relationship between the ups and downs in social movements; research analyzing the transmission of protest events, using event history analysis (Soule, 1987, etc.); and social movements against globalization (Imig and Tarrow, eds. 2001, etc.). In this way, event analysis created a trend in social movement research, has become methodologic

2.2 About Protest Event Data in Japan After World War II

The data source of the event data in this paper is Asahi Shimbun from August 15, 1945 to December 31, 1995. The reason for using the Asahi Shimbun is that it has more data on social movements than other national papers (Watanabe and Yamamoto, 2001), and that it has an environment where it is easy to extract data for the 50-year period after the end of the war. Specifically, using the CD-ASAX(Asahi Shimbun Postwar Headline Database) I listed the articles related to protest activities and after conducting sampling for every four days from August 15, 1945 I collected protest event data from newspaper articles in accordance with the definition of protest event.²

The general definition of a protest event is, "for more than one person who, explicitly/potentially, are opposed or antagonistic to, or have complaints about the authorities or organizations of a similar character, regardless of whether in an organized way or not, to get together and act holding a demand that would affect others." Protest activities against not only the authorities, such as the national and local governments, but also corporations with influence of authorities behind them and corporations that have an overwhelming power in the local area are included. The contents collected about one protest event include the event's time and date, location, tactics (action repertory), the type of discontent causing the event, the type of the demand of the protest, and characteristics of the people who protest.

This paper will analyze the totality of the events that took place based on the discontent, interpreting it as social movements related to other issues. For example, environmental movements are defined by the totality of the events that took place based on the discontent about the "environment".

2.3 The problems with event data and points about them to bear in mind

The largest criticism about the event analysis method is the problems of the data source. The problems such as that the larger the event is the larger the treatment in the newspapers and that as the mass media have a cycle of interest in specific issues and the issue that is at the peak of such a cycle tends to be picked up more have been pointed out. In order to build a data base covering a long period of 50 years after the war, however, the continuity in time and consistency in the data collection method are essential conditions. Of course, it is impossible for any paper to collect information covering everything and this can also be said about data sources other than newspapers. On the other hand, it is more difficult for alternative sources to satisfy the abovementioned conditions of the continuity in time and consistency in the data collection method. Therefore, it was determined that newspapers would be the best data source.

There would also be a criticism that data source sampling would cause specific important events to be missed. This abstraction of qualitative aspect of movements, however, is not a problem of sampling. It is rather an inherent problem of event data. The important point for event analysis is to secure the appropriateness of sampling that important social movements and non-important social movements will have the same opportunity to be picked up. The event data obtained in such a way will make it possible to grasp the macro situation which cannot be grasped by case studies that deal with only specific movements ³.

3. Comparative Analysis of Protest Cycles in the Postwar Japan and West Germany

3.1. Protest Cycle in Postwar Japan

First of all, regarding the dynamics of social movements in postwar Japan, let us review the outline from event data. Figure 1 is the shifts in the number of protest events and the scale of protest events. The scale of protest events is represented as the product of the number of events, which occurred at a certain time and the extent of disruptiveness of the action repertoire in a certain region. Also, the action repertoire is the type of forms of action performed at a single event. Specifically, there are six types:

1) initial stage activity (consultations, assemblies, resolutions, the establishment of the organization of the movement, etc.), 2) peaceful acts of protest within the system

(lawsuits, proposals, appeals and petitions, etc.), 3) large-scale mobilized demonstration actions (demonstrations, mass bargaining, etc.), 4) somewhat extreme acts of protest within the system (audit requests, recalls, referendums, etc.) 5) oppositional demonstration actions (sit-ins, occupations, strikes, etc.), 6) violent protest activities (violent acts in general) (Kriesi et al., 1995). Based on the event scale demonstrated in this way, it is possible to understand the impact and radicalness of protest activities. From Figure 1, it can be seen that the 1950s was not a time of comparatively great change regarding the mobilization of social movements, regardless of the vitality of labor disputes. In the 1960s, there were three mobilization peaks: 1960, 1965, and 1969. These waves were due to the U.S.-Japan Security Treaty, the anti-Vietnam War movement, and the student movement. On the other hand, there was a decrease in the number of protest events from the mid-1970s, and regarding the scale of protest events, on the whole they were on the decline. As for the dissociation between the number of protest events in the 1970s and the scale of protest events, the number of protest events did not stagnate much, but the radicalness of protest events clearly dropped, meaning that protest movements on a whole stagnated

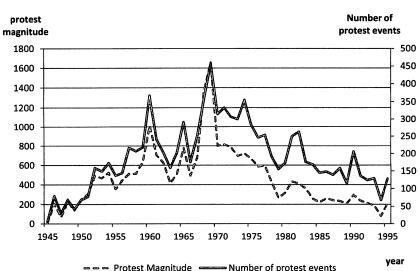
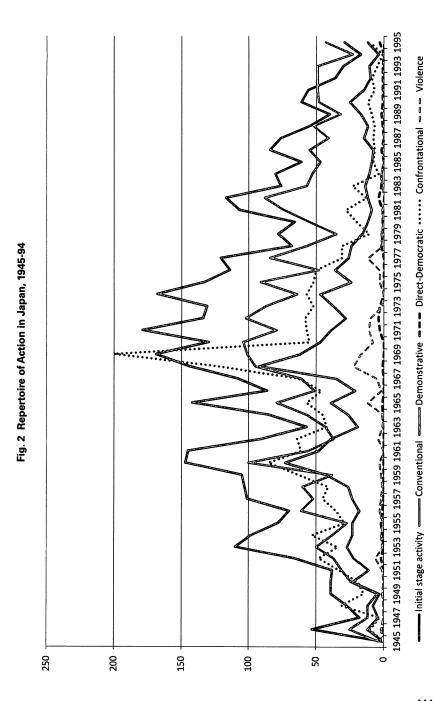


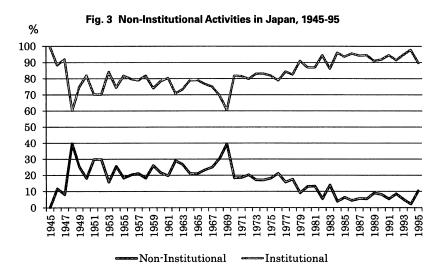
Fig. 1 Protest Events and Protest Magnitude in Japan 1945-95



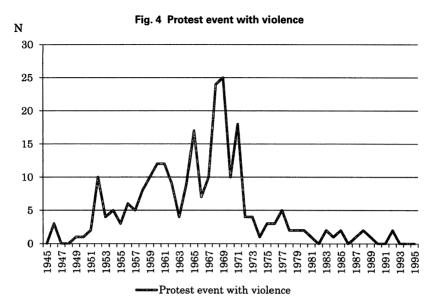
111

Also, the repertoire of protest activities greatly changed. Figure 2 shows the change in protest repertoire (form of action) regarding protest movements as a whole. Although the proportion of movement repertoire which has comparatively stable fluctuations until the end of the 1960s, at the end of the 1960s, the "oppositional" and "demonstrative" repertoires increased. However, from the 1970s and beyond, these two repertoires suddenly decreased, and the peaceful repertoires increased. Also, from the decrease in the early-stage movement activity repertoire, which includes establishing movements, especially from the 1990s on, suggests that newly formed movements were decreasing.

Figure 3 presents oppositional protest movement and violent protest movements as "institutional protests" and all others as "non-institutional protests," and the chronological changes related to shifts in the relative proportions of their frequency. This figure has 1969 as the standard, and the fact that violent protests are decreasing can clearly be seen.

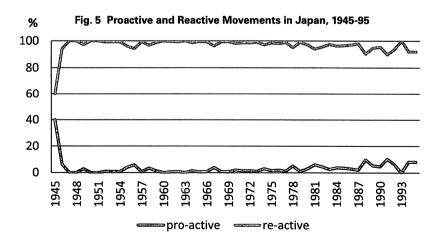


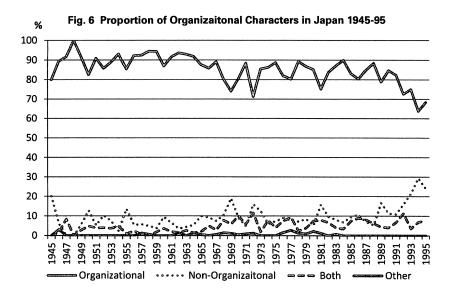
Also, Figure 4 demonstrates the shift in the number of events, which had violent clashes. Looking at the relationship between the activity repertoire (Figure 2) and violent clashes, it can be seen that violent clashes also suddenly increased from the mid-1960s, corresponding to the violent action repertoire seen in the mid-1960s. On



the other hand, despite the fact that violent action repertoires were not seen much in the 1950s, violent clashes can be seen. This difference suggests the possibility that in contrast to protest movements in the 1950s, which resulted in violent clashes with the authorities due to the use of oppositional repertoire action, from the mid-1960s, movements (mostly student movements) actively utilized violent repertoires. which had not been used prior to that period. This may underlie the fact the student movement in the 1960s had "no choice but to take up arms" in order to overcome the situation. In other words, in the upswing in protest movements at the end of the 1950s, oppositional action repertoires were at the center, and viewed from the standpoint of the leaders of later movements, they thought it was possible to resist using more radical means of protest. Then, the end of the student movement in the 1960s resulted in the violent repertoire losing its sense of effectiveness, and from the 1970s on, violent protest tactics and violent clashes suddenly decreased. In this way, the fact can be seen that in the mid-1960s, postwar Japan was actively using "violent repertoire" in its protest activities, and when the limits to its effectiveness became apparent, the protest repertoires suddenly moved in the direction of becoming calm and systemized.

Next, let us look at the shifts in the types of demands made by protest movements (Figure 5). The demands made by protest movements have been organized using the concepts of pro-active and re-active. Pro-active activity is protest activity to obtain something new, and re-active activity is activity to resist an incursion on alreadyexisting rights. Compared to re-active protest movements, which resist incursions on already-existing rights, pro-active demands, which gain new rights, are actions of the counter-proposal and proposal types, and can be taken as one of the characteristics of "new social movements." From Figure 5, it can be seen that over 90 percent of protest movements are re-active, excluding the year 1945, where sample number are extremely small. Also, for pro-active protest movements, when they are organized in order by the year in which the proportion rose, the ratio of pro-active protest movements increased in 1949, 1955-56, 1967, 1978, 1981, and particularly after 1987 and beyond. From this fact, when considered together with Figure 1, it is clear that there were many pro-active demands made in periods in which protest movements actively unfolded compared to other periods. On the other hand, from 1987 on, despite that it was a stagnant period for protest movements as a whole, pro-active demands increased. In other words, in contrast to times when protest movements were active up to that point, it can be said that protest movements championing pro-active demands relatively increased despite protest movements being inactive. From this, a new movement can be seen in Japanese protest movements overall from the late 1980s.





Finally, let us examine the shifts in the organization of protest movements (Figure 6). Basically, organized action occupies the majority of the protest movement in postwar Japan. However, in the periods when protest activity was comparatively active, such as 1955, 1960, 1965, 1969, 1972 and 1981, the proportion of unorganized activity is high. Also, from the 1990s on, the proportion of unorganized activity rose, and this means a decrease in organized protest activity.

Taking the aforementioned analysis into consideration, from the mid-1970s, a substantial change could be verified in the number of protest events, the protest repertoire, the organization of the movements, and the demands of the protest movements. In other words, it can be seen that the 1970s was the borderline for great change for social movements in Japan. In Section 4, a comparative analysis will be performed, dividing postwar Japan into two periods: up to the 1970s and from the mid-1970s on. Cross-sectional analysis will be used for chronological comparison, and the work of reading into the how the relationship between social movements and social construction factors should be becomes fruitful.

3.2 Comparison with West Germany

When the aforementioned series of social changes in postwar Japanese society is compared with that of West Germany, the characteristics of social movements in Japan probably become even clearer. Until the end of the 1960s, the waves of the social movements practically unfolded in the same manner, but after that they show largely different aspects. Below, I will compare the event data analysis conducted by Rucht (1998) on social movements in West Germany with the Japanese results presented above.

Figure 7 shows the shifts in the number of protest events in West Germany from 1950-1992 divided into four activity repertories. The fluctuations in the 1950s were relatively stable, and there was a large peak in mobilization at the end of the 1960s. In other words, from the 1950s until the mid-1970s, a trend in event numbers quite similar to that of Japan can be seen.4 However, in West Germany from the late 1970s on, social movements show a giant upswing. Even after seeing the largest mobilization post-World War II in the early 1980s, the number of events continuously fluctuates at a high position. Not just the number of events, but for the action repertories adopted by the movements there was an increase in movements with violent repertories as well as demonstrative ones. An important point is that "new social movements." such as peace movements or environmental movements, are in the background of these high mobilizations. Also, Rucht mentions that this trend in West Germany is "not exceptional even when compared to France, the Netherlands, and Switzerland" based on a comparison made using the data created before the West German data set⁵ (Rucht, 1998:33). Therefore, when the contrasting trends of social moments in Japan are taken into account, the following theoretical implications are suggested.

The first is the point that the "new social movements" that developed in Western Europe did not rise up in Japan. Certainly, although the unorganized nature (informality) of the movement rose overall, it did not become that large of a movement. Also, the repertories adopted by the movements were not violent, but extremely peaceful. As to the "new social movements" indicated in social movement research in Japan in the 1980s, it can be said to be limited to a very small number. Second, the hypothesis of the "Social Movement Society," presented by Meyer and Tarrow (1998) – the hypothesis that the constancy of protest activities, large-scale protest activities by various types of members, and the specialization and systemization of movements become important methods – has not yet reached Japan. When society is viewed from the aspect of social movements, Japan made a large shift from Europe in the 1970s.

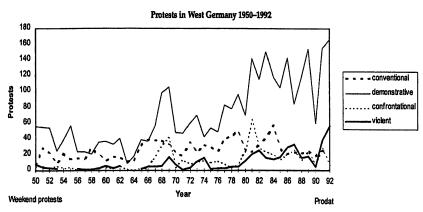


Fig 7 Number of events by repertoire in West Germany, (Rucht, 1998:36)

4 Environmental Movements in Japan⁶

4.1 Overview of protest activities related to environmental issues after World War II in Japan

4.1.1 Dynamics of protest activities— the number of events and the magnitude of events related to environmental issues after World War II in Japan.

The fluctuation of the number of events shown in Figure 8 is the fluctuation of the number of events with discontent related to environmental issues. This shows that there are some peaks in the protest activities. First, the peaks found in the middle of 1950s and in the first half of the 1960s can be considered as the reflection of the emergence of movements for victims of industrial pollution. The peak between 1968 and 1973 could be thought to be the effects of the lawsuits related to industrial pollution, intensification of citizens' movements caused by the occurrence of pollution problems around the country, the problem of large-scale development projects such as the Mutsu-Ogawara development project, and the Sanrizuka struggle, etc. It could also be found that the trend of protest activities related to the environmental issues and that of the student movement are separate since the trend of the student movement peaked in 1969, which is different from the peak of the environmental movements. On the other hand, while the number of the events relatively decreases after 1974, the peaks observed in 1981, 1985, and 1990 can be thought to reflect the trend of the

117

movement against nuclear power, protests against large-scale development projects, and various protest activities related to the living environment.

Thus, judging from the number of the events, the argument that the citizens' movements "stagnated" in the 1980s compared to the 1970s becomes questionable. When a judgment is made based only on the number of the events as is the case in the traditional studies, however, the movement which has a large number of regular events ends up being regarded as having a surge of protests while one protest event with a highly disturbing nature is treated relatively small. Therefore, it is necessary to grasp the dynamics of the environmental movements from the viewpoint of the event magnitude.

The event magnitude is obtained by the product of the number of events that occurred in a time period at a certain area by the disruptiveness e of the action repertoire. "Action repertoire" means the kinds of action form performed in one event: 1) Action at the beginning of a movement (consultation/meeting/resolution/establishment of a movement organization); 2) moderate protest action within the system (litigation/representation/lobbying/petition); 3) demonstration-type mass mobilization action (demonstration/collective negotiation); 4) rather radical protest action within the system (audit request/recall/referendum); 5) antagonistic protest action

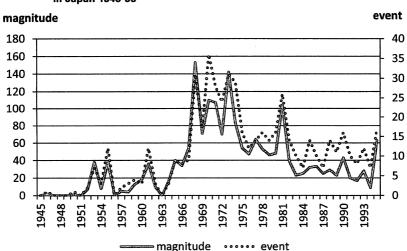


Fig. 8 Protest Events and Protest Magnitude of Environmental Movemens in Japan 1945-95

118

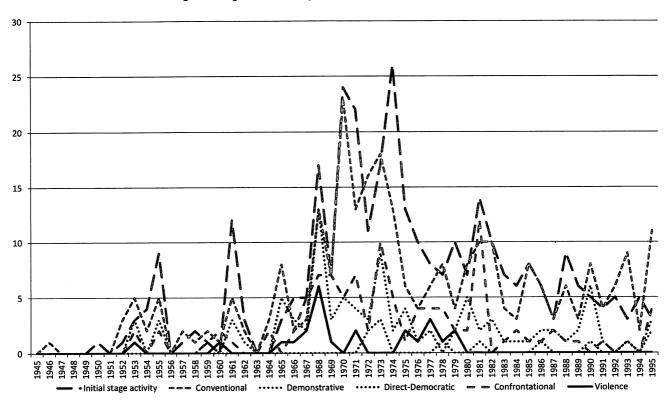
(sit-in, occupation/strike/); 6) violent protest action (violent acts of all sorts) (Kriesi et al., 1995). It is possible to grasp the impact and radicalness of protests through the event magnitude expressed in this manner. Figure 1 shows that the difference between the event number and event magnitude started to increase since 1974 and that the tendency becomes salient after the 1980s. In other words, the protest-type environmental movements after the 1980s have not "stagnated" in terms of the number of events but seem to have "stagnated" from the impact and radicalness of the movement as a whole.

4.1.2. Action repertory

Changes in the action repertories will be discussed in more detail. Figure 9 shows the changes of the action repertories of protest activities related to environmental issues. First, it shows that as a general tendency, the institutional repertory (the actions at the beginning of movements and moderate protests within the system) is the central component. On the other hand, violent protest actions can be observed in the latter half of the 1960s and in the latter half of 1970s, which is due to the reflection of the trend of the Sanrizuka struggle. Demonstration-type mass mobilization actions and antagonistic protest actions can be observed to a certain degree until the 1980s, but not since the 1990s. Instead, the ratio of the actions at the beginning stage of movements and moderate protests within the system increases in the 1990. In terms of the actual numbers, although the number of actions at the beginning stage of movements generally had surpassed that of moderate protest actions within the system since 1974, there has been a reversal of this relationship since the 1990s. If the decrease of the actions at the beginning stage of movements is considered to be a decline of the emergence of social movements, it can be determined that protest activities related to environmental problems stagnated since the 1990s with moderate protest activities within the system staged by existing environmental organizations playing a central role.

Figure 10 shows the changes in the ratio between the radical protest actions (action repertory: antagonistic protest actions and violent protest actions) and non-radical protest actions (those other than the above two) of the protest-type environmental movements. While avoiding interpretation of the situation before 1960 due to the lack of data, it can be seen that the radical protests started to disappear in the latter half of the 1970s.

Fig. 9 Changes of action repertories of environmental movements



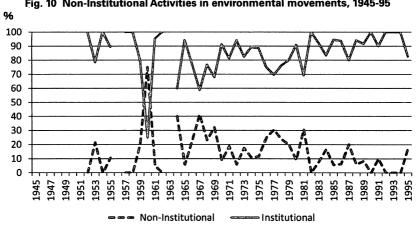


Fig. 10 Non-Institutional Activities in environmental movements, 1945-95

The following can be drawn from the above results first, the strengthening of protest activities related to the environmental issues proceeded from the mid-1970s. The second is the "stagnation" of protest activities in the 1990s. In 1995, fifty years since the end of World War II, as can be seen from the increase of the number of the events and rather radical action repertoire, a new tendency is suggested, but the beginning state actions of movements is still smaller and it is thought that it cannot be simply said protest activities became more energetic.

4.1.3. Type of protest and or organized activities

The types of demands in protest activities will be discussed (Fig. 11). "Type of request" shows what kind of request is being held at a protest event and is generally categorized into pro-active demands and re-active demands. Activities for the purpose of obtaining new rights etc. that have not yet been recognized are pro-active activities and activities to resist infringement of existing rights are re-active activities. Compared to re-active demands, activities championing pro-active demands are protest activities making alternative demands. This is considered to be a feature of the "new social movements". Now, it can be seen in Figure 4 that pro-active activities have started to increase in the 1980s. The period from the 1980s to the 1990s is a period when social movements toward the type presenting an alternative from the traditional criticism/indictment type were taken up (Shirakawa, 1998). In the "new social movement" theory, "networking" and "alternative" were stressed and the

discontinuity with the traditional-type movements was stressed. Signs of the shift from the traditional protest-type movements to the proposal-type movements from the 1980s can be seen from the event data.

On the other hand, concerning the degree of organization of movement organizations responsible for protest event ⁷, excluding the mid-1960s for which there is a lack of data, not much change can be observed in the ratio of non-organization activities (Figure 12). The ratio of organized activities was stabilized since the mid1960s but it went on into the 1990s. In other words, the point maintained by the new social movement theory that informal activities and network-type movements were on the rise in the 1980s is discredited when seen from the movement as a whole. In the 1990s, when the organized movements increased, a glimpse of the "movement society", where the trend toward specialization of movements was pointed out, can be seen.

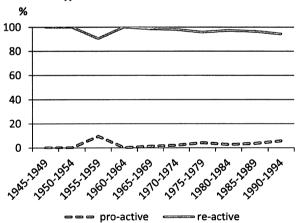
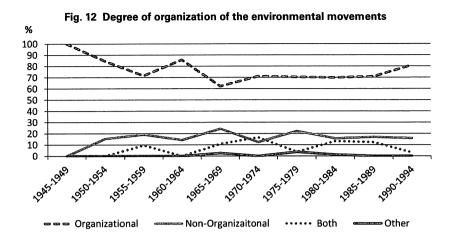


Fig. 11 Ratio of types of demands of the environmental movements



4.1.4. Summary

This is a summary of the arguments presented above. First, in around the mid-1970s, the event number relatively decreased, the event magnitude, which shows the impact of a protest activity, became smaller, and the action repertoire shifted to become more moderate. Thus, qualitative changes of the protest activities related to the environmental issues can be observed here. Secondly, it became apparent that in the 1980s, when it was thought that "the movements stagnated," although there was no stagnation in terms of the number of the events, the event magnitude was small, which meant that the movements stagnated from the viewpoint of the impact that the environmental movements had on society (radicalness). Third, it was confirmed that the environmental movements that make pro-active demands, which is a feature of "the new social movements" started to increase in the 1980s. The trend of the environmental movement, which is informally organized, however, showed no signs of changes and the argument about the qualitative discontinuity of the movements stressed by the new social movement theory can be only partly supported. On the other hand, in the 1990s a tendency in the increase of organized activities in the environmental movements was observed. There is a possibility that this is related to the trend toward specialization, which is a factor of the "movement society" asserted by Meyer and Tarrow. With regard to the environmental movements of the 1990s, however, both the number and the magnitude of the events decreased and there were no signs of a "movement society," where protest activities themselves become a permanent state in the society and the issues and their leaders come from a broad base.

4.2 Protest activities related to the environmental issues in the postwar Japan and the structural factors

4.2.1 Historical divisions for postwar environmental movements in Japan

Then what are the structural factors that define the dynamics of protest activities related to the environmental issues after the war? The structural factors which lead to movements will be examined by period. In setting up the historical divisions for postwar environmental movements, the discussion by Nakazawa (2001) is helpful. This discussion concerns historical divisions set up by connecting the politico-economic situation after the war and incidents which are markers of the environmental movements, in addition to the discussion about the relationship between the environmental issues specific to each period and the environmental movements. Three historical divisions will be established, and they will be compared with those by Nakazawa looking at the data in the previous section.

The first historical period is until 1963, before the environmental movements became visible. As seen in the previous section, however, it is not that there were no environmental movements in this period but since there is only a small amount of data, in the following analysis the extent of the use of this period is limited only to that of reference. The second historical division is 1964-73, "the age of movements," when problems with pollution and development became visible. In 1964, the first opposition movement emerged against the advance of a petrochemical complex in the Mishima-Numazu area in Shizuoka Prefecture. This movement gave influence to the surge of the citizens' movements after that. It can also be said that this is a period when pollution lawsuits, including those related to the four major pollution induced diseases, were started and various environmental movements emerged. The third historical division is 1974-86, "the age when the degree of the visibility of the movements weakened," and 1987-95, "the age when the interest in the global environmental issues rose." Concerning the former, since there was an oil shock in 1973 ushering in a period of slow growth, there is an argument that the economic recession due to the slow growth period affected the stagnation of the protest activities (Shoji, 1989). There is also an argument, which is popular among the environmental researchers, which is that the environmental policies "regressed" starting in 1974. Concerning the latter, the Chernobyl nuclear power plant accident occurred in 1986, which led to anti-nuclear power movements around the all over Japan too. Although in the classification by Nakazawa, the two periods were discussed separately, Figure 8 shows a sharp drop of the event magnitude in 1974 and thus it can be determined

that since 1974 environmental movements stopped becoming visible. Therefore, the period from 1974-95 is established as the third historical block.

4.2.2 Setting of variables and the analysis methodology

(1) The theoretical background of the structural factors and setting of variables Next, the structural factors that define the dynamics of the social movements will be summarized by roughly dividing them into three groups: political factors, economic factors, and urbanization factors. Concerning the political factors, drawing on the political opportunity structure theory, the three aspects of political opportunity will be addressed: 1) political stability, 2) access to politics, and 3) alliance with elites. Concerning 1) political stability, the share of the seats of the Liberal Democratic Party and the increase rate of the LDP seats in each year in the House of Representatives will be used. In postwar Japan, the general interest at the time of elections has been whether the LDP would win a majority and the extent to which the LDP increased or lost its seats. The former could be shown by the seat share (seat share ratio) of the LDP in each year. For example, there is an argument that if the LDP seat share is high, the political opportunity structure is exclusive leading to the protest activities going through the process of emergence/subsidence. The latter could be shown by the extent to which the number of the seats changed in the election compared to the previous election: the rate of the increase/decrease. This is an argument that the increase or decrease the number of the seats of the LDP, which has the political power, would lead to motivation for protest activities by movement organizations. For example, there is an interpretation that a decrease of the seats of the LDP would lead to protest activities by movement organizations which judge that there is political instability.

Concerning 2) access to politics, the elections of the House of Representatives and the nationwide local elections, which are important elections of the national and local politics respectively, will be taken up. It is at the time of elections that not just movement organizations but people in general can express their views toward politics through existing political channels and since politicians have to gain votes, they try to respond to demands of people. On the movement side, these are the time periods when there is a higher chance that the authorities take up their demands and thus it can be considered protest activities tend to occur. As dummy variables we gave 1 to the period when elections took place, 0 to the period when there were no elections. Since there is no data for the period between 1964 and 1991, it is necessary to discuss this in a limited fashion. We decided to use the number of the progressive local

governments to show the degree of the access for movement organizations to politics. While the progressive local governments are said to be a product of the citizens' movements from the 1960s to the 1970s, the increase of those governments can be considered to signify, from the citizens' movement point of view, that the access for the movement organization side to the political system is "opened."

Concerning 3) the alliance between the movement organizations with elites, the argument is that the existence/non-existence of political allies that have an affinity for protest activities defines the occurrence of protest activities. In Japan, progressive forces such as the Socialist Party and the Communist Party are thought to be elites with favorable attitudes to movement organizations. Therefore, the ratio of the members of the Socialist Party and the Communist Party in the House of Representatives is used for the politics at the national level, and the ratio of the number of the prefectural government where the progressive forces such as the Socialist Party and the Communist Party have no less than one-fourth of seats in the prefectural assemblies for the local political level.

Second, concerning the relationship between economic factors and protest activities, while there are various arguments such as Marxist-type arguments and those based on resource mobilization theory, the variables to be used are the unemployment rate, consumer price index (ratio to the previous year), and economic growth rate (GNP/ GDP growth rate). From the resource mobilization theory point of view, the argument is that when the unemployment rate is low, the consumer price index decreases, and when the economic growth rate is high, the resources for the movement organizations increase leading to higher chances for the occurrence of protest activities. On the other hand, the Marxist-type argument is that a rise in the unemployment rate, an increase in the consumer price index, and a decrease of the economic growth rate will lead to the occurrence of protest activities due to economic discontent. Therefore, in verifying the arguments of the resources mobilization theory and Marxism, although the same variables are used, the relationship is opposite. In relation to the economic factors, there is a structural strain factor, which Nakazawa et al. (1998) examined. With regard to the structural strain theory, in which rapid industrialization causes structural strain, which in turn leads to the occurrence of protest activities, the industrialization rate (the increase rate of the shipped manufactured product value) will be used as a variable.

Third, concerning urbanization and protest activities, there are the following arguments: that the concentration of homogeneous or heterogeneous people in cities leads

to protest activities in urban areas or that urbanization leads to social problems peculiar to cities, which in turn, lead to occurrence of movements⁸. Since these arguments define urbanization by the amount of people which flow in and out of a space called a city, it is used as an urbanization variable for the rate of migration into metropolitan areas (the ratio of migration from non-metropolitan areas to metropolitan areas (the Tokyo, Chukyo and Hanshin areas) in relation to total migration).

(2) Method of analysis

For each historical division established in 4.2.1, the relationship between the structural factors and the event magnitude established in 4.2.2 (1) will be analyzed. As for the sample number, one quarter (three months) is set as a division for dealing with the event magnitude and defined it as one unit. For example, we have 40 samples for 1964-1973 (4 samples/year x 10 years). 1963 and earlier are excluded, since the data is limited, as well as 1995, since it is a statistical outlier.

The analysis was performed in the following manner. First, the relationship between the structural factors and the event magnitude by correlation coefficient is shown and the relationship between the two is interpreted (4.3.1.). Second, multiple regression analysis is performed with the structural factors as the independent variables and the event magnitude as the dependent variable (4.3.2.). Since there is a danger of multicollinearity due to the high correlation between independent variables, however, analysis using variables obtained through contraction of variables by principal component analysis will be conducted. Specifically, principal component analysis is conducted on the political variables from 1948 (LDP seat share (House)—Socialist Party and Communist Party seat share (House), the increase or decrease in rate of the LDP seat number, LDP seat share (local), Socialist Party and Communist Party share (local) and local assembly progressiveness rate) and the economic variables from 1949 (consumer price index, economic growth rate, industrial growth rate, unemployment rate). Two factors for political variables were extracted as a result of the principal component analysis. (Table 1) The first factor can be considered one related to national politics since the LDP seat share (House)—Socialist Party and Communist Party seat share (House) and the increase or decrease rate of LDP seat number, and the second factor is one related to the local politics since LDP seat share (local)—Socialist Party and Communist Party share (local) and local assembly progressiveness rate are related. As the difference between the LDP seat share and the Socialist Party and Communist Party seat share shows the relative strength of the conservative force, for both the first factor and the second factor the plus value

of factor loading indicates that the conservative force is strong. In other words, the interpretation is that when the relationship with the dependent variable is positive, political opportunity is stable (the political opportunity is "closed"), and protest activities become active. Through these variables it becomes possible to show which of openness/closedness has affected protest activities both the national and local political levels. On the other hand, concerning the economic variables, one factor was extracted (Table 2). This factor means that when it is positive the economic nature becomes higher, and it can be interpreted that when the relationship between this factor and protest activities is positive, the economic affluence energizes protest activities. Multiple regression analysis will be conducted with the following four variables as independent variables: two political variables for national and local politics, the economic variable, and the rate of migration into the metropolitan areas as the urbanization variable⁹.

Table 1 Results of primary factor analysis of political variables (factor loading matrix after rotation)

Variable	Factor 1	Factor 2	Communality
Rate of Seat (LDP- (Socialist & Communist Party)) (National)	.936	127	.893
Increase Rate of LDP Seat (Lower House)	.892	.240	.853
Rate of Seat (LDP- (Socialist & Communist Party)) (Local)	166	.868	.781
Seat Ratio of Left-Wing Parties in the Council	298	768	.678
Eigenvalue	1.789	1.417	
Contribution rate (%)	44.717	35.415	

Factor sampling: principal component analysis Rotation: promax method on Kaiser normalization

Table 2 Result of primary factor analysis of economic variables(factor loading matrix)

Variable	Factor 1	Communality
Consumer Price Index	.733	.537
GDP Increase Rate	.935	.875
Industry Growth Rate	.878	.771
Unemployment Rate	836	.698
Eigenvalue	2.882	
Contribution rate (%)	72.043	

Factor sampling: principal component analysis

4.3. Analysis

4.3.1. Correlation analysis

Table 3 shows the correlation coefficient between protest activities related to the environmental issues and the structural factors by historical period. First, the political factors will be stated. Concerning political stability, the correlation coefficient between the LDP seat share and the protest event magnitude in 1964-73 is negative (-.400, p<.05). At the center of the environmental issues in 1964-73 were industrial pollution and large-scale development pollution. This is a period when the polity was not engaged in environmental policies in earnest and in the relationship between the movement organization and the polity, the former were in an overwhelmingly unfavorable situation. It was difficult for environmental organizations to enter the polity and carry out protest activities. The result of the data shows that when there is political instability, in other words, when the political social opportunity structure becomes "open," the movement tends to become energized.

Concerning 1974-94, however, with regard to protest activities and national politics, the relationship with the political variables disappears. This result suggests that the movements were staged in areas which were not related to the national politics. This can be considered to be related to the fact that the nature of the central environmental movement shifted from industrial pollution and large-scale development pollution to "self-incurred" types such as life-form pollution and global environmental issues and that the nature of the environmental movement itself changed from that with the style of protesting against the state to a more moderate movement.

The aforementioned "disassociation" between the environmental movement and the polity can also be considered as a result of the "completion" of the policy-level reaction of the environmental policies since 1974. Due to the completion of the environmental policies no more changes could be expected on the side of the movements in environmental policies. Could it be because of this that movement organizations stopped to organize protest activities despite the changes in the political opportunities? In other words, we can assume that protest activities related to the environmental issues came to be carried out estranged from the existing political system.

Table 3 Correlation between the environmental movements and structural factors

table o contraction between the environmental movements and structural factors						
Independent Valiable	1950-63	N	1964-73	N	1974-94	N
[Political Factor]						
[Political stability]						
Rate of LDP Seat in the Lower House	103	56	400*	40	.095	84
Increase Rate of LDP Seat in the Lower House	167	56	.066	40	.063	84
Access to politics						
Year of the Lower House Elections	.009	56	186	40	085	84
Year of Nationwide Local Elections	.237+	56	256	40	032	84
Number of Left-Wing Local Governments	-	-	.412**	40	.354**	72
[Alliance with elites]						
Seat Ratio of Left-Wing Parties in the Lower House	.162	56	210	40	.252*	84
Seat Ratio of the Socialist Party in the Lower House	.190	56	320*	40	.176	84
Seat Ratio of Japanese Communist Party in the Lower House	231+	56	.264+	40	.237*	84
Seat Ratio of Left-Wing Parties in the Council	077	56	.265+	40	.157	84
[Economic Factor]						
Unemployment Rate	.165	56	.021	40	363**	84
Consumer Price Index	028	56	.408**	40	.367**	84
GDP Increase Rate	.067	56	.232	40	.339**	84
Industry Growth Rate	148	56	.214	40	.275*	84
[Demographic Factor]						
Migration Rate from Non-Urban to Urban Areas	.064	40	436**	40	.105	84

^{***} p<.001 ** p<.01 * p<.05 + p<.1

Concerning the access to the polity, no relationship can be observed for the House of Representatives election years or the nationwide local election years. Concerning the relationship with the number of progressive local governments, there are positive correlations for both 1964-73 and 1974-94 (.412 (p<.01), .273 (p<.05). As for 1964-73, while there is an aspect that the surge of the environmental movements (citizens' movements) led to the birth of progressive local governments, at the same time it can be said that it is possible to interpret that the increase of the progressive local governments opened up access to the polity for the movement organizations, which in term energized the protest activities. However, that this effect of the progressive local governments subsided in 1974-94 (the correlation coefficient was .265 for 1964-73 (10% significant) and no relationship for 1974-94). On the other hand, concerning the alliance with political elites, there was a positive relationship with the Communist Party seat rate share in 1964-73 and 1974-94 (.264 (p<.1), .273 (p<.05)), showing that the ally of the pretest activities of protest activities related to the environmental issues is not the Socialist Party but the Communist Party. Between the years 1964-73, there

is a positive correlation with the rate of progressiveness in the local assemblies (.265 (p<.1)). This indicates that the emergence of environmental movements was in association with the progressive force at the level of local assemblies. These suggest that the citizens' movements related to the environmental issues that mushroomed around the country were being staged in association with the progressive parties at the local level. The effect of the progressiveness rate of the local assemblies could not be observed in 1974-94.

Next, concerning the relationship between the economic factors and the environmental movements, there is a positive correlation with the consumer price index for both 1964-73 and 1974-94, which suggests that the discontent due to the price hikes led to the emergence of environmental movements. However, as is shown by the fact that in 1974-94, when the protest activities were in a relative declining trend, there was a negative correlation with the unemployment rate (-.363 (p<.01)) and a positive correlation with the economic growth rate (.339 (p<.01)), it can be observed that the environmental movements tend to become active in economically prosperous years. Furthermore, in 1964-73, there was no relationship observed in the industrialization rate. The effect of the "structural strain", which was discussed heatedly in the citizens' movement studies in the 1970s, could not be confirmed. For 1974-94, however, as is shown by the observation of the relationship with industrialization, the effect of "structural strain" cannot be totally denied. Finally, concerning the urbanization factor, in 1964-73, there is a negative correlation with the rate of migration into the metropolitan areas (-.436 (p<.01)) and the argument that the increase of the migration into urban areas lead to the emergence of social movements could not be verified10. In 1974-94, the result was that the effect of urbanization could not be observed.

4.3.2. Multiple regression analysis

Tables 4 and 5 show the correlation efficient between the event magnitude of the protest activities related to the environmental issues in 1946-73 and 1974-94 and the independent variables obtained by the principle component analysis. It can be seen that the political factors (local) and economic factors affected the emergence of protest activities in both periods. ¹¹

Table 4 Correlation between the protest activities and the independent variables (1964-73)

1964-73	Environmental Movements	Political Factor (National)	Political Factor (Local)	Economic Factor
Political Factor (National)	.068			
Political Factor (Local)	.414**	094		
Economic Factor	.309*	046	.108	
Urbanization Factor	436**	.191	850***	287*

^{***} p<.001 ** p<.01 * p<.05 + p<.1 N=40

Table 5 Correlation between the protest activities and the independent variables (1974-94)

1974-94	Environmental Movements	Political Factor(National)	Political Factor(Local)	Economic Factor
Political Factor (National)	.001			
Political Factor (Local)	.226*	.374***		
Economic Factor	.372***	233*	.542***	
Urbanization Factor	.105	.407***	.350**	.178+

^{***} p<.001 ** p<.01 * p<.05 + p<.1 N=84

Tables 6 and 7 are the result of multiple regression analysis with the protest event magnitude of the protest activities related to the environmental issues of 1964-73 and 1974-94 as the dependent variable and political factor (national politics), political factor (local), economic factor and urbanization factor as independent variables. First, it will be examined that at 1964-73. Between the political factor (local) and urbanization factor in 1964-73, multicollinearity was suspected (the correlation coefficient between the political factor (local) and the urbanization factor is as high as -.850 (p<.001)). Therefore, we conducted multiple regression analysis making models removing the political factor (local) and the urbanization factor respectively (Table 6). In Model 1 with the political factor (national politics), the political factor (local), and the economic factor, a positive correlation between the political factor (local) and the dependent variables can be observed. The economic factor shows a positive correlation albeit with the significance level at 10%. On the other hand, in Model 2 with the political factor (national politics), the economic factor, and the urbanization factor, a negative correlation between the urbanization factor and the dependent variables can be found. The effect of the economic variable cannot be observed here. From the above, it can be seen that the environmental movements in 1964-73 were

defined by the strength of the conservative force in local politics and the low level of the migration into urban areas. In other words, it can be seen that in 1964-73 the "closedness" of the political opportunity structure in local assemblies was energizing the environmental movements, and the environmental movements were energized during the years when the rate of migration into the metropolitan areas was low. As was stated when discussing the correlation analysis the argument that the population concentration led to occurrence of social movements was not verified and the contrary result was shown.

Next, concerning 1974-94, between the political factor (local) and the economic factor multicollinearity was suspected (the correlation coefficient: .542 (p<.001). Therefore, it is set up that two multi regression models removing one of these variables in each and conducted analysis (Table 7). The result of the analysis was that in both Model 1 with the political factor (local) and Model 2 with the economic factor a positive correlation was confirmed with dependent variables. When the coefficient of determination adjusted for the degrees of freedom is looked at, while the model with the economic factor put in shows Adj-R2=.115, the model with the political factor (local) applied shows Adj-R2=.028. From this result it can be seen that it the economic factor that better defines the dynamics of the environmental movements in 1974-94. In other words, one should be able to find a tendency in the environmental movements in 1974-94, protest activities get more energized in economically affluent years.

Table 6 Structural factors that define the enviornmental movements (1964-73)

	Model 1 (beta)	Model 2 (beta)
Political Factor (National)	.117	.155
Political Factor (Local)	.396**	
Economic Factor	.272+	.199
Urbanization Factor		408*
Adj-R2	.194*	.188*
Durbin-Watson ratio	1.402	1.383
N	40	40

^{***} p<.001 ** p<.01 * p<.05 + p<.1

able / Structural factors that define the enviornmental movements (1974-94)					
	Model 1 (beta)	Model 2 (beta)	Model 3 (beta)		
Political Factor (National)	118	.095			
Political Factor (Local)	.247*		.022		
Economic Factor		.395***	.354**		
Urbanization Factor	.067	004	.034		
Adj-R2	.028	.115**	.108**		
Durbin-Watson ratio	1.895	2.122	2.099		
N	84	84	84		

Table 7 Structural factors that define the enviornmental movements (1974-94)

4.3.3. Summary

In summary, in 1964-73 when there were frequent protest activities related to the environmental issues, the closedness of the political opportunity structure at the local level defined the emergence of protest activities. While protests related to the environmental issues were often about national policies as is the case in the movements against industrial pollution/large-scale development pollution, overall, it can be thought that protest activities were staged concerning local level problems allowing the effect of local level political opportunity to have an effect. The result of the correlation analysis in 4.3.1show that the environmental movement in this period proceeded in association with the progressive force like the progressive political parties (Communist Party) and progressive local governments.

On the other hand, concerning 1974-94 when protest activities decrease substantially, it can be pointed out that the relationship with the political factor became weaker considerably. Although the result of the multiple regression analysis showed the closedness of the political opportunity in the local politics leads to environmental movements, the effect is small. As for a reason for this, first, it can be thought that the difference of the character of the environmental issues which were the subject of the environmental movements in this period, and the accompanying trend toward moderation in protest activities prompted the environmental movement to break away from the political area. A second point is that since 1974, due to the completion of the environmental policies on the part of the government, the motivation for protest activities based on the change of the political function structure ceased to function for the environmental movement. It can be assumed that either the protest activities related to the environmental issues started to occur in areas which are not related to politics or the environmental movement stopped to have protest activities due to the

^{***} p<.001 ** p<.01 * p<.05 + p<.1

change of the political opportunity structure. Concerning the environmental movement in 1974-94, it became clear that the economic affluence defined the dynamics of the environmental movements. The factors defining the dynamics of the environmental movements shifted from political ones to economic ones and a tendency of "movement of affluence" can be observed: rather than economic poverty generating protest activities, economic affluence leads to emergence of protect activities. While this suggests that that it would be even more difficult for the environmental movements protesting against authorities to emerge due to the present recession, a picture completely different from the "movement society" in the West can be seen.

5. Cross-Sectional Analysis

5.1 Purpose of Analysis

An analysis of the overall shift in social movements in postwar Japan in Section 3, and the analysis of the dynamics of the environmental movement in Japan in Section 4 suggest that the substantive transition in social movements in postwar Japan was in the mid-1970s. How did the structural factors giving rise to protest movements around this "transition point" change? Also, were there changes in this transformation point between traditional issues movements, such as the labor movement, which led postwar Japanese social movements, and new issues such as the environment, women, welfare culture and discrimination? In this section, we will reconfirm the findings from chronological analysis of the level of activity in postwar Japanese social movements conducted thus far with cross-sectional analysis using data arranged by prefecture, and make more reliable findings.

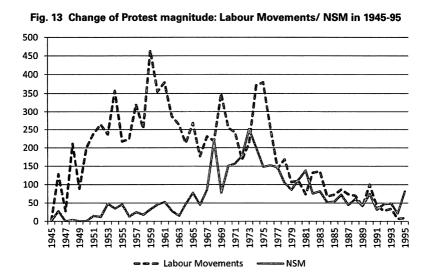
Below, we will extract the protest event data arranged by prefecture every five years after 1955 and analyze (cross-section analyze) its relationship to structural factors. After discussing the variables to be set (5.2), we will conduct a correlative analysis between protest activities (protest magnitude) and structural factors (5.3), and finally we will perform multiple regression analysis in order to confirm which structural factors regulate protest activity (5.4).

5.2 Setting the Variables

The variables will be set in the same manner as in the analysis of environmental movements in Section 4. The macro structural factors influencing social movements

are broadly categorized as 1) political conditions, 2) economic conditions, and 3) social conditions (urbanization), and variables were set for each of these. Regarding 1) political conditions, the difference in the influence political opportunity structures have on national and local politics is also taken into consideration based on political opportunity structure theory, and therefore variables are set separately for national and local politics. The variables for national politics employ the percentage of votes in the House of Representatives elections, and the difference between the percentage of votes for the LDP and that of votes for the Socialist/ Communist parties. Furthermore, the arrest rate (=number of acknowledged cases/number of arrests) was adopted as a measure of government oppression. On the other hand, at the local assembly level, the increase in the percentage of votes for the LDP and the percentage of seats held by the Socialist and Communist parties were used.

For 2) economic conditions, Marxist theory, the theory of relative deprivation, and the theory of resource mobilization were taken into consideration, and the unemployment rate, the price gap (since 1975), prefectural income per capita (since 1965), and the Gini coefficient (since 1980) were set as variables. Regarding 3) social conditions (urbanization) concentrated district population ratios (since 1965) and population density were used as variables.



On the other hand, as for the dependent variables, the product of the number of protest events and the degree of radicalness (action repertoire) within a region analyzed as a unit is defined as the "protest magnitude" for a given region, and it is classified into the following two types of movements based on the "discontent" in the protest event. First, there are protest events with discontent regarding "labor," and this shall be deemed the labor movement. Second, events with discontent pertaining to "environment," "human rights," "consumers," "women," "welfare," and "culture" are defined as "new social movements," taking the debate on new social movements thus far into consideration (refer to Figure 4). The aforementioned variables were collected every five years from 1955 by prefecture, two time period divisions, (1955-70) and (1975-90), were established, and the relationship between protest magnitude and the variables was analyzed.

5.3 Results of Correlative Analysis

The left side of Table 8 shows the correlation between the labor movement and structural factors. As to the relationship between the labor movement and political factors, first, from demonstrating that an increase the number of seats held by the LDP in local assembles and protest movements are positively correlated, the relationship between the "closedness" of political opportunity and the vitality of the labor movement can be indicated. On the other hand, since there is no relationship with political suppression, the tendency for the labor movement to energize its protest activities with protest activities through existing political channels at a time when political opportunity structures are "closed" can be seen. Also, for both 1955-70 and 1975-90, the labor movement was active in regions with a low degree of conservativeness, ¹⁴ and furthermore, the relationship between the vitality of the labor movement and the Socialist Party can be seen, which is in contrast to the relationship that the "new social movements" has with the Communist Party, which will be discussed later.

As to the relationship between economic factors and protest activities, for both time periods, the labor movement was active in areas with lower prefectural resident income, and this tendency was stronger during 1975-90. Regarding the relationship with the price gap, the labor movement developed in regions with a higher price gap for 1955-70 (=regions with high income) and in regions with a lower income gap for 1975-90. Also, for 1975-90, movements were created in areas that had a low unemployment rate, low prices, and low prefectural resident income. Furthermore, the relationship to the Gini index was negatively correlated for 1975-90 and movements

sprang up in places with low inequality gaps. Finally, regarding urbanization factors, there was a positive correlation for 1955-70, but results for 1975-90 are either weak or nonexistent.

Table 8 Correlation Analyses

Labor Movement					New So	cial 1	Moveme	nts†
	1955-70	N	1975-90	N	1955-70	N	1975-90	N
[Political Factor]								
% of LDP Seat (Local)	.119	180	.112	184	.084	180	049	184
Increase Rate of LDP Seat (Local)	.155*	180	.313***	183	140+	180	.048	183
% of Socialist Party Seat (Local)	.215**	180	.449***	184	.037	180	.068	184
% of Communist Party Seat (Local)	016	180	053	183	.152*	180	.094	183
% of Vote for LDP (National)	047	180	001	184	335***	180	122	184
% of Vote for Socialist Party (National)	.265***	180	.006	184	303***	180	061	184
% of Vote for Communist Party (National)	.061	180	.059	181	.248**	180	.152*	184
Rate of Arrest	079	180	.016	184	350***	180	076	184
[Economic Factor]								
Unemployment Rate	013	180	261***	184	.044	180	008	184
Price Inequality	.482**	45	336***	184	.168	45	.199**	184
GDP	327***	171	677***	184	.644***	171	.053	184
Gini coefficient	-		407***	138	-		089	138
[Demographic Factor]								
% of Polulation of Densely Inhabited Area	.195*	135	094	184	.017	180	.298***	184
Population Density	.285***	180	014	184	.087	180	.237**	184

^{***} p<.001 ** p<.01 * p<.05 + p<.1

Viewed overall, a relationship with existing political factors can be seen in both periods in the labor movement, but the effect of the national politics factor cannot be seen for 1975-90. Economic and urbanization factors show that the labor movement developed in local areas from 1975-90. In other words, the labor movement rose up due to political factors at the regional level from 1975 on, and it developed in economically depressed areas (local areas).

On the other hand, the effects of "new social movements" and structural factors are on the right side of Table 1. Regarding political factors, from 1955-70, a negative correlation between the increase in the percentage of seats held by the LDP in local assemblies and the arrest rate can be seen. In other words, the fact that the "openness" of political opportunity is related to "new political movements" can be seen. Also, in the period from 1975-90, the relationship to political factors becomes

[†] New Social Movements = environment, women, human rights, welfare culture movements

virtually invisible. Furthermore, in progressive regions under the Communist Party, a tendency for "new social movements" to take place could be seen, but in general, there were fewer effects of political factors from 1975-90 than there were in 1955-70.¹⁵ Moreover, from the connection between economic and urban factors, in areas with high urbanization where the population is concentrated in a high-income area, the tendency for "new social movements" to take place can be confirmed.

It can be seen from the above results that "new social movements" developed in economically affluent areas throughout the postwar period. This can be said to reflect of the new social movements as a "movement of wealth," but it is from 1975-90 that the urbanization factor is the most strongly seen. Regarding political factors, there is a tendency for movements to develop in basically progressive regions. From 1955-70, it has been found that the openness of political opportunity energized "new social movements" due to the negative relationship between the percentage of seats held by the LDP in local assembles, the arrest rate, and protest magnitude. For "new social movements," which do not have existing political channels, the political weakening of the authorities may have been a chance to create protest movements. Also, the issues of the movements themselves were an objection to the authorities. On the other hand, from 1975-90, "new social movements" were no longer connected to the aforementioned political factors, and the "depoliticization" of "new social movements" could be verified. This kind of loss of the relationship to political factors can be considered the establishment of a system which handles issues touted by "new political movements" and a transition away from a type of protest activity which resists the authorities.

5.4 Results of Multiple Regression Analysis

Since there is also the possibility that in the aforementioned correlative analysis there was a pseudo-correlation, multiple regression analysis is performed to control the variables. However, in conducting multiple regression analysis, particularly in cases where macro data is handled, it is necessary to overcome the problem of multicollinarity due to the high correlation coefficients. Taking multicollinarity from these charts into consideration, the percentage of votes for the LDP-Socialist/Communist parties in House of Representatives elections, the percentage of increase/decrease¹⁶ of the number of seats held by the LDP in local assemblies, per-capita prefectural resident income, rate of unemployment,¹⁷ as well as the population ratio in concentrated districts were used for the indirect variables assigned to multiple regression

analysis. Also, as a characteristic of the data, since these analysis results may not be robust, the correlative analysis results will be used supportively and the analysis results were not overly relied on.

Table 9 Regression Analysis of Labor Movement

Labor Movement		
	1955-1970	1955-1970
% of Vote for LDP- (Socialist & Communist Party) (National)	178*	204*
Increase Rate of LDP Seat (Local)	089	
Unemployment Rate	.205**	.212**
GDP	742***	715***
% of Polulation of Densely Inhabited Area	.174*	.150*
Adj-R2	.446	.445
N	127	127

^{***} p<.001 ** p<.01 * p<.05 + p<.1

Labor Movement

	1975-90	
% of Vote for LDP- (Socialist & Communist Party) (National)	137*	
Increase Rate of LDP Seat (Local)	111	
Unemployment Rate	.276**	
GDP	681***	
% of Polulation of Densely Inhabited Area	.144*	
Adj-R2	.560	
N	183	

^{***} p<.001 ** p<.01 * p<.05 + p<.1

Table 10 Regression Analysis of NSM

NSM		
	1955-1970	1955-1970
% of Vote for LDP- (Socialist & Communist Party) (National)	.099	.023
Increase Rate of LDP Seat (Local)	026	
Unemployment Rate	.042	002
GDP	.672***	.701***
% of Polulation of Densely Inhabited Area		.003
Adj-R2	.411	.460
N	171	171

N	C	N A
IN	. 7	IVI

	1975-90	1975-90
% of Vote for LDP- (Socialist & Communist Party) (National)	110	
Increase Rate of LDP Seat (Local)	.041	.042
Unemployment Rate	085	085
GDP	049	048
% of Polulation of Densely Inhabited Area	.411***	.342***
Adj-R2	.084	.081
N	183	183

^{***} p<.001 ** p<.01 * p<.05 + p<.1

The results of the multiple regression analysis are as seen in Table 9 and 10. The labor movement, along with "new social movements," supported the results of correlative analysis. As stated above, the major structural factors which influence both types of protest activity were verified. The major points elucidated from the view of multiple regression analysis are that the results of "new social movements" from 1975-90 had an extremely low coefficient of determination in multiple regression analysis. This suggests the possibility that "new social movements" occur dissociated from structural factors such as politics and economics.

6. Conclusion

This paper examined the dynamics of social movements in postwar Japan by making a comparison using event data from social movements in West Germany and conducting cross-sectional analysis using event data in postwar Japan. As a result, it was shown that postwar Japanese social movements changed greatly from the 1970s. Social movements in Japan from the mid-1970s on differed from the dynamics in West Germany, which showed the same trend up to that point, in that the event number of protest activities decreased and the action repertoire shifted not to violent, but to moderate. These findings demonstrated that a "social movement society" has not yet arrived in Japan, and the possibility that a "new social movement" in western European contexts did not exist in Japan.

Moreover, this paper analyzed the dynamics of protest activities related to the environmental issues and the structural factors that define them using protest event data after the war. As a result, the qualitative changes of protest activities related to the environmental issues could be elucidated and the understandings of existing studies could be reexamined. First, with regard to the understanding that the citizens' movements stagnated in the 1980s, it turned out that on the contrary the number of the protest events increased, so it cannot be stated there was stagnation in terms of numbers. From the viewpoint of the event magnitude, a picture of stagnation could be observed. It was considered that this was due to the fact that the action repertoire of protest actions related to the environmental issues became moderate since the mid-1970s. Second, it was shown that while protest activities holding alternative demands (pro-active demands), which is one of the features of the "new social movements" that have been pointed out as characteristic of the movement in the 1980s, increased, no change was observed in the degree of organization. These findings suggest that the "continuity of the movements" pointed out by the "new social movement" theory was only partly confirmed. Third, it was shown that while the trend of specialization of movement organizations from the 1990s was observed, the protest activities related to the environmental issues as a whole showed more stagnation. Fourth, it became apparent that there was a difference between the structural factors that affect the dynamics of the protest activities related to the environmental issues depending on the periods: the period when the protest activities as a whole thrived (1964-73) and the period when they subsided (1974-94). While in 1964-73, a relationship was observed between the closedness of the political opportunities and

alliances with progressive force at the local level on the one hand, and the emergence environmental movements, on the other, there was almost no relationship with the political factors. As the background to this, it was thought that as a result of the environmental movements turning more moderate due to the changes of the issues which are the subject of the environmental movements, disassociation between the environmental movements and the politics emerged and that due to the completion of the environmental policies on the part of the government, changes of the political opportunity structure ceased to function as a motivation for movement organizations to emerge. In 1974-94 it was shown that the economic affluence was a condition for environmental movements to emerge.

Next, with analysis using cross-sectional data, the relationship between the labor movement and "new social movements," which were comprised of protest events with discontent over things such as the environment, and human rights, and structural factors was examined. While labor movements came to develop in local areas, a departure from politicization was observed in "new social movements." From this, the space where the objection known as social movements can be thought of as becoming further polarized: issues remaining in political territory, and becoming disassociated from politics. Then, this suggests that when the phenomenon of the decrease in the number of protest movements and the disruptiveness of form of action are taken into consideration together, while social movements in Japan have an expression of interest using systemized political channels, an extremely moderate protest movement will develop in areas where there is no relationship to politics.

The theoretical implication of the above findings is that in explaining the dynamics of present protest actions related to environmental issues, it might be necessary to reconsider the premise of the political process approach and the political opportunity structure theory, namely that the dynamics of the social movements are defined by political factors. The results of the analysis show that even in the protest-type environmental movements that cannot avoid confronting polity, it is not the political factors but the economic factor that define the dynamics. Moreover cross-sectional analysis also shows the same tendency. Therefore, while the relationship between movement organizations and polity will continue to be an important issue, it might be said that in order to answer the question why and how "protest" should be made, another kind of logic will be become necessary.

Next, the empirical implication is that the protest in Japan appear to be in a state of stagnation and that the protest activities could be thought to be subsumed by the

system. This is quite different from the picture of "movement society" hypothesized from the trend of the social movements in the West where large-scale protest actions are being carried out by diversified members with a radical action repertoire is growing. Furthermore, the analysis result that the factor that defines the dynamics of protest activities is economic affluence suggests that in the present Japan experiencing continuing recession, the protest activities will further stagnate with protests against authorities becoming more difficult. Won't such a general overview surrounding protest activities give an important suggestion when discussing the practical issue of how to break the straightjacket situation for movement organizations. The result of the analysis of this paper, however, does not mean stagnation for all social movements in Japan. There is a possibility that various activities in forms other than "protest" proceed, which will become a driving force of solving social problems. As for the task for social movement studies, in order to grasp the trend which cannot be grasped fully through protest event data²⁰, it might be necessary to carry out reconstruction of event data and conduct reexamination of the analysis policy and at the same time to examine points such as in what kind of logic such activities surface and how they exert their influence, through methods including case studies.

Notes

- ¹ For example, in E. Shorter and C. Tilly (1997), from an analysis of changes in strikes in France, it was shown that demonstrations by workers belonging to firm networks with a long history positioned in the core of industrial companies were evident. C. Tilly, L. Tilly and R. Tilly (1975) show that violent uprisings occurred due to the large-scale reorganization of the political structure in France.
- ² Concerning the method of constructing event data, please see Nomiya and Nishikido (2000). The newspaper used is the Tokyo edition. The primary reason for conducting coding every four days is the cost problem. The number of the hits of Asahi Shimbun articles of a headline search for the 50 year period was 159,086. Secondly to avoid concentration on particular days of the week, extraction was conducted every four days.
- ³ Moreover, there might be a criticism that since such a confirmation "is not necessary since it is already a common knowledge and something obvious." It should be noted, however, that such "common knowledge" is an understanding based mainly on case studies. In case studies are, as can be understood from the feature of the methodology, the researchers pick up the "important" subjects of study in the particular period. In contrast, there is a tendency for "unimportant" subjects not to be taken up. The event data that this paper uses are data compiled making the chances of important movements and unimportant movements taken up as events equal. If a "common sense" obtained through case studies is examined using such data

- and, as a result, the same result is obtained, that "common sense" will become a more generally accepted understanding. If the result ends up not giving support, it will lead to a possibility of a new interpretation.
- ⁴ Rucht (1988) also presents data pertaining to the number of participants at protest events divided into four repertories, but it follows almost the same trend as the number of events.
- ⁵ The group of H. Kriesi, R. Koopmans, J. W. Duyvendak and M. Giugni composed event data trying to quantitatively depict new social movements in Europe, and H. Kriesi, *et al.* conducted a comparative analysis on the number of events in four countries: France, Germany, the Netherlands and Switzerland. Koopmans (1995) and Duyvendak (1995), etc. analyze this data set.
- ⁶ This analysis is based on Nishikido (2003a).
- ⁷ Protest events staged by organizations were judged as "organized" activities and those not staged by organizations as "non-organized."
- 8 However these arguments are a little ambiguous theoretically, therefore these variables are used as control variables in multiple linear regression analysis.
- ⁹ Although regression analysis using time series data should normally involve regression analysis of auto correlation correction, since there was little difference in the result with multi regression analysis with OLS, multi regression analysis with OLS was conducted.
- ¹⁰ It is difficult to specify what this result indicates. Although there is a possibility that a time lag exists for the effect of urbanization, a conclusive statement cannot be made. It can be said that it is rather a result that suggests the ambiguity of the existing arguments.
- ¹¹ The correlation analysis showed a negative correlation between the LDP seat share (House of Representatives) and the environmental movements in 1964-73, the effect of the political factor (national politics) contracted through the principal component analysis was not confirmed. This was because the variable contracted through the principal component analysis showed relative strength of the conservative force.
- ¹² Additionally, in these fields included in new social movements, the tendency to demand new rights with unorganized activity is more conspicuous than in others (Nishikido, 2003b).
- ¹³ Additionally, since the Tokyo Metropolitan District is an analytical anomaly, it has been excluded from analysis. For trends in social movements in Tokyo, refer to Nishikido and Yamamoto (2007).
- ¹⁴ However, the analytical findings proving this point are the conservativeness at the national government level from 1955-1970 (percentage of votes gained by the LDP—percentage of votes gained by the Socialist/Communist parties), and the conservativeness at the local assembly level from 1975-1990.
- ¹⁵ Moreover, when the data, including the Tokyo Metropolitan District, which was a statistical anomaly, was analyzed, the result "new social movements" were unlikely to happen in "conservative" regions, but were more likely in "progressive" areas was statistically significant. This result can be said to reflect a feature of the Tokyo Metropolitan District, which is strongly "progressive."
- ¹⁶ As the "LDP vote percentage Socialist Party/Communist Party vote percentage" in local assemblies has a high correlation to the "LDP vote percentage Socialist Party/Communist Party vote percentage" in national politics, it is not used as an independent variable. Insofar as political factors are divided between national government and local areas, there is no difference from the viewpoint of local conservatism or progressivism.
- ¹⁷ Regarding 1975-90, it is possible to use the Gini coefficient as a variable, but the correlation to the unemployment rate is high at .596. For regions with a high degree of inequality (areas with a high Gini

coefficient), the result that the unemployment rate is high conforms to general experience, so only the unemployment rate is used as a variable. Also, by using the unemployment rate as a variable, it is also possible to make comparisons to 1955-70. However, since the correlation to the urbanization variables is also high, the problem of multicollinearity remains.

- ¹⁸ Variables were logarithmized and multiple regression analysis was conducted in a similar manner, but no large changes were seen in the results.
- ¹⁹ Since the political factors and economic factors are mutually related it is necessary to proceed with analysis of the mutual interaction between the political factors and economic factors. I would like to consider it a future task.
- ²⁰ This study was based on an analysis of event data until 1995, but regarding the "stagnation" trend in Japan after that, I would like to do a separate analysis of event data from 1996 to 2005.

Reference

Beissinger, M.R., 1998, "Event Analysis in Transitional Societies: Protest Mobilization in the Former Soviet Union", pp.284-316 in Rucht, Koopmans, Neidhardt (eds).

Duyvendak, J. W., 1995, *The Power of Politics: New Social Movements in France*, Boulder: Westview Press.

Eisinger, P. K., 1973, "The Conditions of Protest Behavior in American Cities," American Political Science Review, 67(1): 11-28.

Ekirt, G. and J. Kubik, 1998, "Protest Event Analysis in the Study of Democratic Consolidation: Poland, 1989-1993", pp.317-348 in Rucht, Koopmans, Neidhardt (eds).

Gurr, T., 1968, "A Causal Model of Civil Strife: A Comparative Analysis Using New Indices", American Political Science Review 62: 1104-1124.

Imig, D. and S. Tarrow eds., 2001, Contentious Europeans: Protest and Politics in an Emerging Polity, Lanham: Rowman & Littlefield.

Jenkins, C, 1985, The Politics of Insurgency: The Farm Worker Movement in the 1960s, Columbia University Press.

Koopmans, R., 1995, Democracy from Below: New Social Movements and the Political System in West Germany. Westview.

Kriesi et al., 1995, The Politics of New Social Movements in Western Europe, University of Minnesota Press.

Lieberson S. and A.R. Silverman, 1965, "The Precipitants and Underlying Conditions of Race Riots," American Sociological Review 30: 343-353.

McAdam, D., 1982, Political Process and the Development of Black Insurgency 1930-1970, The University of Chicago Press.

Meyer, D. and S. Tarrow, 1998, "A Movement Society: Contentious Politics for a New Century," pp.1-28 in D.

Meyer and S. Tarrow (eds) The Social Movement Society, Rowman and Littlefield Publishers.

Minkoff, D. C., 1994, "The Institutional Structuring of Organized Social Action, 1955-1985," Research in Social Movements, Conflicts and Change, 17: 135-71.

- Minkoff, D., 1995, Organizing For Equality, Rutgers University Press.
- Minkoff, D., 1997, "The sequencing of social movements", *American Sociological Review* 62(5): 779-799.
- Nakazawa, H. et al., 1988, "The Dynamics of Protest Waves of Environmental Movements in Japan: A Comparative Analysis of Structural Strains and Political Opportunity Strucure (1968-82)", *Journal of environmental sociology* 4, 142-157, [in Japanese].
- Nakazawa, H., 2001, "Structural Transformation of the Relationship between Environmental Policies and Environmental Movements: An Overview of 35 years", *Journal of environmental sociology* 7, 85-98, [in Japanese].
- Nishikido, M., 2003a, "The Dynamics of Protest about Environmental Issues in Japan after WW II: Using Protest Event Data", *Journal of environmental sociology* 9, 107-123, [in Japanese].
- Nishikido, M., 2003b, Empirical Research about Ups and Downs of Protest Activities, Doctoral Dissertation in Hokkaido University, [in Japanese].
- Nishikido, M. and H. Yamamoto, 2007, "The transformation of social movement in postwar Tokyo: using issue relation approach for event analysis" *The Hosei journal of humanity and environment* 7(2), 1-10, [in Japanese]
- Nomiya, D. and M. Nishikido, 2000, "Constructing Social Movement Date Base: Its Logistics and Method", *The Annual report on cultural science* 102, 107-127, [in Japanese].
- Olzak, S., 1989, "Analysis of Events in the Study of Collective Action," *Annual Review of Sociology*, 15:119-141.
- Olzak, S., 1992, The Dynamics of Ethnic Competition and Conflict, Stanford University Press.
- Olzak, S. and S. C. N. Uhrig, 2001, "The Ecology of Tactical Overlap," *American Sociological Review* 66(5): 694-717.
- Rucht, D., 1998, "The Structure and Culture of Collective Protest in Germany since 1950", pp. 29-57 in Meyer, D.S. and S. Tarrow, The Social Movement Society: Contentious Politics for a New Century, Rowman & Littlefield.
- Rucht, D., 1999, "Linking Organization and Mobilization: Micheles's Iron Law of Oligarchy Reconsidered," Mobilization 4(2): 151-169.
- Rucht, D., R. Koopmans, F. Neidhardt (eds), 1998, Act of Dissent: New Developments in the Study of Protest, Sigma.
- Russet et al., 1964, World Handbook of Political and Social Indicators (1st Edition), Yale University Press
- Shoji, K., 1989, Ningen saisei no shakaiundo (Social Movements for Human Being Regeneration), University of Tokyo Press [in Japanese].
- Shorter, E. and C. Tilly, 1974, Strikes in France 1830-1968, Cambridge University Press.
- Snyder, D. and C. Tilly, 1972, "Hardship and Collective Violence in France, 1830-1960," American Sociological Review 37: 520-532.
- Social Protest and Policy Innovation Project, 1985, *Project Manuals*, mimeograph.
- Soule, S. A., 1997, "The Student Divestment Movement in the United States and Tactical Diffusion: The Shantytown Protest," Social Forces, 75(3): 855-83.

- Spilerman, S., 1970, "The Causes of Racial Disturbances: A Comparison of Alternative Explanations," American Sociological Review 35(4): 627-649.
- Szabó, M., 1996, "Repertoires of Contention in Protest Cultures: An East Central European Comparative Survey," Social Research 63(4): 1155-1182.
- Tarrow, S., 1989, Democracy and Disorder: Protest and Politics in Italy, 1965-75, Clarendon Press
- Taylor, C.L. and M.C.Hudson, 1972, World Handbook of Political and Social Indicators (2nd Edition), Yale University Press.
- Taylor, C.L. and D.A.Jodice, 1983, World Handbook of Political and Social Indicators (3rd Edition), Yale University Press.
- Tilly, C. et al., 1975, The Rebellious Century: 1830-1975, Harvard University Press.
- Tilly, C., 1978, From Mobilization to Revolution, Addison-Wesley Publishing Company.
- Tilly, C., 1995, Popular Contention in Great Britain 1785-1834, Harvard University Press.
- Yamamoto H. and T. Watanabe, 2001, "Dynamics of Social Movement and Political Opportunity Structure: Event Analysis of Social Movements in Miyagi Prefecture, 1986-1997", *Japanese sociological review* 52(1), 147-162, [in Japanese].
- Watanabe, T. and H. Yamamoto, 2001, "Shakai Undo ibento de-ta sakusei no houhou to kadai" (The method and problem of creating social movement event data), *Shakaigaku kenkyu*, 69: 155-179 [in Japanese].

Acknowledgment

This study is a result of the joint research of Daishiro Nomiya (Sophia University). A part of this research was supported by Grants-in-Aid for Scientific Research (20730353).