

## Network Analysis in Policymaking: The Case of Significant Labor Events in Taiwan

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*This study examines the application of network analysis to the domain of labor policy in Taiwan. Specifically, it examines the spatial structures deployed and negotiated to achieve collective labor interests within the network of institutionalized power. The dual system of structure and agency are combined in a systematic discussion of policy networks. Notably, the relationship between dependency and resource distribution can be structuralized; however, this relationship is not permanently fixed with regard to labor policy events, which must be understood in dynamic terms. Policy outcomes are determined via dynamic interaction between institutional structures and policy actor behavior. Actor resources and their reciprocal relationships are changed across the events in the diverse network indicators. Different forms of internal spatial interaction between the actors exert influence on the latter's choices, influencing decision-making regarding labor event outcomes. A proposition is developed that integrates network analysis into a power structure framework. Finally, this study proposes that the application of social network analysis should simultaneously consider the plurality of network relationships and the impact of*

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*the political context of the power structure of labor policymaking. Network analysis provides a new pathway for reconstructing interaction patterns. The network structure of labor policymaking in Taiwan still conforms to a state-led model.*

**KEYWORDS:** network analysis; institutional structure; resource exchange; power-dependence model; power structure.

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In order to construct an extensive analytical framework for investigating labor policy, this study employs the social network method to contextualize the interactive structure of individual and sectoral analysis in labor policymaking in Taiwan. Using a network questionnaire survey, this study analyzes a structural network using thirty-nine key actors (survey data collected from 2000 to 2004). The empirical data provide more evidence for the transformation of the political regime and clarify the main arguments regarding shifting political structures in Taiwan. The social network analysis discussed here explores the structural relationships between key actors. Policy is recognized as the product of complex interactions among diverse key actors that include members of the government hierarchy, legislators, and various other organizations. Additionally, interpersonal network analysis stresses the active structure linking key actors in the network distribution of spatial structure. The discussion of power structure arguments includes an examination of social network indicators in order to identify linkage patterns and network relationships among key actors and to clarify their internal interactions during labor policymaking. The study of network analysis provides evidence that can be used to map out power structures in Taiwan.

## Theoretical Construction

### *Dynamic Social Network Analysis*

Early in the systematic development of network analysis, Scott identified two approaches to network method development.<sup>1</sup> The first is small group research, such as Moreno's investigation of friendship, while the second is structural functional anthology, such as the observational survey of Warner and Lunt.<sup>2</sup> In the mid-1950s British anthropologists studying urbanization noted social interactions while engaged in ethnographic fieldwork. They applied network concepts, such as density, span, connectedness, and cluster analysis. Simultaneously, a number of social psychologists designed a new experimental structure (the Hawthorne studies) which involved the notions of actor centrality and group centralization.<sup>3</sup> Together with the diversity of conceptual frameworks, Emirbayer and Goodwin demonstrated that network analysts generally use one of two conceptual techniques to explain how networks constrain diverse forms of social behavior.<sup>4</sup> *Relational analysis* focuses on concrete measurements of networks, social density, centrality, and social cohesion analysis which concerns itself with processes of recruitment to social movements. All these concepts recognize the direct and indirect connections among actors. Meanwhile, *positional analysis* stresses the importance of "structural equivalence" which is the sharing by two or more actors of equivalent relations vis-à-vis a third actor which helps improve understanding of both individual and collective behaviors.<sup>5</sup>

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<sup>1</sup>John Scott, *Social Network Analysis* (London: Sage, 2000).

<sup>2</sup>Jacob L. Moreno, *Who Shall Survive? Foundations of Sociometry, Group Psychotherapy, and Sociodrama* (New York: Beacon, 1934); and W. Lloyd Warner and Paul S. Lunt, *The Social Life of a Modern Community* (New Haven, Conn.: Yale University Press, 1941).

<sup>3</sup>See note 1 above.

<sup>4</sup>Mustafa Emirbayer and Jeff Goodwin, "Network Analysis, Culture, and the Problems of Agency," *American Journal of Sociology* 99, no. 6 (May 1994): 1411-54.

<sup>5</sup>*Ibid.*, 1418.

*Power Relationships of Networks in Social-Spatial Structure*

Numerous network researchers have applied the network approach to examinations of power relations and structure; for example, the early analyses of Laumann and others provide us with an essential dichotomy between influence and domination as fundamental analytical types of power relations within a network frame.<sup>6</sup> The power structure requires an actor to intentionally transmit resources and information to other actors. These diverse constituents of analytical elements comprise the *collective actor*<sup>7</sup> or the *action-set*.<sup>8</sup> These constructions of the network are temporary alliances whose members have the same outcome preference in relation to legislative bills and who attempt to coordinate their strategic actions in relation to various events. This analysis of the influence and domination relationships among powerful key actors provides useful concepts for developing a network-based explanation of policymaking.

Network structures frequently involve a smoothly functioning interplay between actors designed to serve their common interests. The reciprocal interdependencies among actors frame the network power structure. The emergence of power decided by the actor's functional position means that those in superior positions have greater power to assess their interests by their direct and indirect relations within the network structure and level of joint involvement in policy activities.<sup>9</sup> Building upon the concept of position, this can be extended to include the numbers of ties, their degree

<sup>6</sup>Edward O. Laumann, David Knoke, and Yong-Hak Kim, "An Organizational Approach to State Policy Formation: A Comparative Study of Energy and Health Domains," *American Sociological Review* 50, no. 1 (February 1985): 1-19; and Edward O. Laumann and David Knoke, *The Organizational State: Social Choice in National Policy Domains* (Madison: University of Wisconsin Press, 1987).

<sup>7</sup>Laumann and Knoke, *The Organizational State*, 127.

<sup>8</sup>Howard E. Aldrich and David A. Whetten, "Organization-Sets, Action-Sets, and Networks: Making the Most of Simplicity," in *Handbook of Organizational Design: Adapting Organizations to Environments*, ed. Paul C. Nystrom and William H. Starbuck (London: Oxford University Press, 1981), 132-67; and David Knoke et al., eds., *Comparing Policy Networks: Labor Politics in the U.S., Germany, and Japan* (New York: Cambridge University Press, 1996).

<sup>9</sup>Ronald S. Burt, *Toward a Structural Theory of Action: Network Models of Social Structure, Perception, and Action* (New York: Academic Press, 1982), 167.

of asymmetry, and the relative prestige of various structural positions.

In the same context, Lawler and Yoon found that in networks containing both equal and unequal power dimensional relations, there was more likelihood of internal cohesion in the former owing to the slightly positive everyday feeling produced by successful exchanges, something the Chinese call *personal trust*.<sup>10</sup> In a causal model of factors affecting organizational participation in the domain of state policy, issue interests, monitoring resources, and influence reputation are all antecedent variables affecting the locations of communication and resource exchange networks. These five variables jointly impact the ability of the core efforts of an organization to influence policy event outcomes.<sup>11</sup>

Furthermore, Coleman, a rational choice analyst, considers how actors with interests in different events exchange resources in a manner that influences the event outcome. Notably, dependency in the exchange relationship increases with the degree to which the resources of one actor are essential for another.<sup>12</sup> Similar research results were presented in the recent contiguous study by Burt, which dealt with social capital and drew upon the "structural hole" argument that emerged in sociology during the 1970s.<sup>13</sup>

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<sup>10</sup>Edward J. Lawler and Jeongkoo Yoon, "Network Structure and Formation in Exchange Relations," *American Sociological Review* 63, no. 6 (December 1998): 871-94. The mutual modification of the relationship between personal trust and *guanxi* (關係, personal relationship) commonly creates an interactive structure in social networks in Taiwan. The degree of personal trust based on *guanxi* generates different expensive relationships within personal or intimate and formal networks. Both terms are extensively used in research focusing on the mutual relationships in *guanxi*, personal trust, and the network structure of Taiwan's enterprises. For instance, see Ichiro Numazaki, "Network and Partnerships: The Social Organization of the Chinese Business Elite in Taiwan" (Ph.D. dissertation, Michigan State University, 1992), 87.

<sup>11</sup>Laumann, Knoke, and Kim, "An Organizational Approach to State Policy Formation," 15.

<sup>12</sup>James Coleman, *Individual Interests and Collective Action* (New York: Cambridge University Press, 1986), 45; and James Coleman, *Foundations of Social Theory* (New York: Cambridge University Press, 1991), 120.

<sup>13</sup>On the structural hole of entrepreneurial managers, see Ronald S. Burt, "The Contingent Value of Social Capital," *Administrative Science Quarterly* 42, no. 2 (June 1997): 339-65; and Ronald S. Burt, "Personality Correlates of Structural Holes," in *Power and Influence in Organizations*, ed. Roderick M. Kramer and Margaret A. Neale (Thousand Oaks, Calif.: Sage, 1998), 221-50. On the importance of weak ties in getting a job, see Mark Granovetter, *Getting a Job: A Study of Contacts and Careers* (Chicago: University of Chicago Press, 1973).

The "structural hole" concept is used to explain the flow of information among individuals and to control the form of projects that bring together people from opposite sides of the "hole." Burt thus alleges that the information benefits within the network increase with the number of "holes" spanned. This discussion of structural holes highlights the importance of "position" in the network structure.

However, the distribution of structural power is not static. Furthermore, elite theorists have asserted that political resources are concentrated in the hands of individuals occupying strategic positions in public and private bureaucracies.<sup>14</sup> The advantages associated with their network positions allow individuals or organizations to reduce some of the high costs associated with obtaining data; simply having an interest in a policy event has proven sufficient to stimulate involvement. Indeed, network actors bring new ideas, norms, and discourses into policy debates, and provide valuable information and personal testimony. By following organizational position and the exchange of resources, it can be seen that the more centrally located an organization is within the two inter-organizational exchange networks, the more likely it is to interpret the information it receives as creating a need for strategic intervention in policy events. This mobilization occurs independently of organizational interests in issues affecting the policy events.<sup>15</sup> The different levels of interpersonal network are constructed according to diverse individual interests and used to investigate internal power relationships relevant to policymaking through the analysis of inter-organizational relationships and other approaches. Relationship forms are characterized by voluntary, reciprocal, and horizontal patterns of communication and exchange. Furthermore, interpersonal network analysis has been widely developed for application in cross-national organizational research.<sup>16</sup>

<sup>14</sup>David Knoke, *Political Networks: The Structure Perspective* (New York: Cambridge University Press, 1991), 149.

<sup>15</sup>*Ibid.*; and see note 6 above.

<sup>16</sup>For instance, see Knoke et al., *Comparing Policy Networks*, for a comparative policy network analysis of Japan, Germany, and the United States. From reputational ties, communication, and coalitional partnerships, they constructed differentiated block models of power

However, it is also necessary to point out some of the more problematic issues involved in network analysis, including the specification of network boundaries, sampling, and group definition. Network sampling and boundary specification are particularly important considerations. To identify the actors within a system, it is necessary to determine a rational boundary for the social setting being considered, as well as the relationships used to reconstitute the informal network.<sup>17</sup> The conceptual linkages between structure and behavior must thus indicate the function of a position and a combination of relationships compounding two or more different networks.<sup>18</sup> Overall, the theoretical construction of network analysis traces the contextual development of policymaking, and offers an empirical active structure that reveals the network of relationships and interactions that exists among key actors participating in policy development.

## Methods

### *Boundary of Events and Actors*

This study uses a network analysis survey to approach the empirical aspects of power structure in labor policy decision-making. The first step was to set up the events and establish the boundaries of key actors with regard to significant labor policy events. It is divided into three stages, as follows:

1. *Setting the events*: The choice of policy events is based on the identification of the most controversial labor policy issues in official documents over the past five years. As Laumann and Knoke point out, a "critical, temporarily located decision point in a collective decision-making

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structure in the policy domains of the three countries, observing that Japan's policy network corresponded to a single-centered, decidedly corporatist model while Germany's was multi-centered and had pluralist cultural and institutional environments.

<sup>17</sup>Peter V. Marsden, "Restricted Access in Networks and Models of Power," *American Journal of Sociology* 88, no. 4 (January 1983): 686-717.

<sup>18</sup>Emmanuel Lazega, *Conventions and Structures in Economic Organization: Markets, Networks, and Organizations* (Newbury Park, Calif.: Sage, 1997), 47.

sequence must occur in order for a policy option to be finally selected."<sup>19</sup> The criteria used for selecting these events were that they possessed the following characteristics: they were *continued* (five years), *advocated* (at national level), and *controversial* (they had diverse organizational involvements). The events were the passing of the Gender Equality in Employment Act (1990-2003) and the extensive recruitment of foreign workers (1992-2000), both of which lasted a number of years (more than five years) and involved diverse organizational mobilization.<sup>20</sup> Additionally, it is important to examine the extent to which significant actors were positively involved in these labor issues in both the private and public spheres.

2. *The position and reputation approach*: Two factors were used to identify key actors for interview: position (structural location) and reputation (including political authority, social resources, and relational considerations). Inevitably, key actors are distributed among the following categories: (1) the executive sector, (2) the legislative sector, and (3) pressure groups or organizations with strict network boundaries (business, women's, and labor organizations established at the national level together with advocacy groups, not including other interest groups such as local labor unions and organizations).

3. *Snowballing*: A technique by which informants recommend influential individuals who are positively involved in decision-making regarding labor events. This can overcome the deficiencies of the structural position and reputation approach.

An interpersonal network questionnaire was used to accumulate individual respondent data relating to the interactive networks of thirty-nine anonymous key actors (eleven persons declined to respond) from the public sector and from significant national and advocacy organizations. The

<sup>19</sup>Laumann and Knoke, *The Organizational State*, 251.

<sup>20</sup>The labor policy domain can be separated into several subfields, including working conditions, discrimination in employment, and collective bargaining regulations. This author reviewed numerous significant labor events reported in the *Lifayuan gongbao* (立法院公報 Bulletin of the Legislative Yuan) and in the press. The two events selected were found to comply with the criteria for this study. The event network and the interaction structure of key actors were tracked back in the policymaking process.



Appendix contains a list of the anonymous interviewees and other relevant information. The social structure and the political interaction context are formulated on the basis of the reciprocal interactions in the dynamic system. From a network analysis perspective, this study attempts to rethink the interactive mechanisms and map out the power structure in labor events policymaking in Taiwan.

### *Analytical Programs*

The structure of the social network helps the author to analyze the internal structural model of different relationship styles, such as those suggested in the definitions of informal and formal relationships employed by Laumann and Pappi; Laumann and Marsden; Laumann, Knoke, and Kim; and Pappi and Knoke.<sup>21</sup> Additionally, the distribution of spatial structure will demonstrate the infrastructural basis of resource mobilization in the labor policymaking process. To analyze the network questionnaires, this study uses a program developed by Borgatti and Everett, the *Ucinet 6.29—Network Analysis Software* and Batagelj and Mrvar's *Pajek* network program<sup>22</sup> which is based on the transformation of data from Ucinet. A large network of data can be analyzed according to the similarity of (path distance between) the key actors and their relative networks, and this can capture the resultant structural relationships via a closed power structure model.

The interactions of the organizational system contrast with the results of a reexamination and verification of the individual responses to a ques-

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<sup>21</sup>Edward O. Laumann and Franz U. Pappi, *Networks of Collective Action: A Perspective on Community Influence Systems* (New York: Academic Press, 1976); Edward O. Laumann and Peter V. Marsden, "The Analysis of Oppositional Structures in Political Elites: Identifying Collective Actors," *American Sociological Review* 44, no. 5 (October 1979): 713-32; Laumann, Knoke, and Kim, "An Organizational Approach to State Policy Formation"; and Franz U. Pappi and David Knoke, "Political Exchange in the German and American Labor Policy Domains," in *Policy Networks: Structural Analysis of Public Policy*, ed. Renate Mayntz and Bernd Marin (Frankfurt am Main: Campus Verlag, 1992), 189.

<sup>22</sup>Vladimir Batagelj and Andrej Mrvar, "Pajek: Program for Large Network Analysis," *Connections* 21, no. 2:47-57. The Ucinet 6.29 program (2007) can be purchased from the website: <http://www.analytictech.com/downloaduc6.htm> (01/Jul/2007) and the Pajek program can be downloaded directly from the website: [vlado.fmf.uni-lj.si/pub/networks/pajek](http://vlado.fmf.uni-lj.si/pub/networks/pajek) (02/Aug/2007).

tionnaire regarding the interpersonal network (including informal and formal relations). The participation of the leaders of various organizations can be seen as a form of organizational involvement in the structural network. Meanwhile, data analysis can be seen as a complementary illustration that identifies the linkages between individual and organizational key actors.

### *Analytical Dimensions*

This study employs four analytical concepts for interpersonal network analysis: *density*, *centrality*, *cluster analysis*, and *multi-dimensional scaling* (MDS). First, a measure of *network density* is obtained using the matrix model of networks to measure the relationships of actors in a closed network structure. The degree of density is calculated by dividing the total number of network ties occurring in the matrix by the total number of possible network ties. These indicators of network density can be used to demonstrate the relationships of the entire group, the subgroups, and the cliques.

Second, *network centrality* measures the apparent centrality of the network structure of all of the significant actors. Network centrality is an important indicator of the influence of different actors and, indirectly, their ability to influence mobilization in collective actions. The measurement of network centrality includes degree (local centralization)<sup>23</sup> and closeness (global centralization)<sup>24</sup> of centrality.<sup>25</sup>

Third, *cluster analysis* reveals actors in the same cluster who have no negative ties with each other, as well as actors in different clusters who do not share any positive ties. Cluster analysis draws boundaries around objects in a multi-dimensional space that maximize homogeneity within an

<sup>23</sup>David Knoke, "Organization Sponsorship and Influence Reputation of Social Influence Associations," *Social Forces* 61, no. 4 (June 1983): 1065-87.

<sup>24</sup>Jo Freeman, "Resource Mobilization and Strategy: A Model for Analyzing Social Movement Organization Actions," in *The Dynamics of Social Movements: Resource Mobilization, Social Control, and Tactics*, ed. Mayer N. Zald and John D. McCarthy (Cambridge, Mass.: Winthrop, 1979), 167-89.

<sup>25</sup>Scott, *Social Network Analysis*, 89-94.

individual cluster.<sup>26</sup> A dendrogram can be drawn to show the level of similarity between key actors at which actors and clusters merge into more inclusive clusters.

Fourth, *multi-dimensional scaling* (MDS) settles the path distance of the dyadic relationships of all actors; moreover, the path distance is formulated by the distribution of actors as points on the graph (or dissimilarity) between pairs of objects as distances between points of a low-dimensional multi-dimensional space.<sup>27</sup> The dyadic relationships between actors can be calculated based on their binary social choice. Various terms for this method exist in the social sciences, one such term being Guttman's "smallest space analysis."<sup>28</sup> The picture of collective cliques is expressed by a two-dimensional MDS representation in which each actor is represented by a point. These points are arranged such that the distances between them correspond to their structural positions and power in the whole network of relations of labor policymaking.

## Results

### *A Systematic Structure of Key Actors*

Unlike studies of dependence networks linking relevant sectors and organizations, social network analysis can clarify both the formal institutional arrangements and the highly complex informal and formal relationships involved in interpersonal networks. Using micro network analysis, this study examines shifts in power structures indicated by the social network survey. This survey is focused on the social capital of the key actors involved in the two key labor events and the dyadic network relationships

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<sup>26</sup>David Knoke and James H. Kuklinski, *Network Analysis* (Newbury Park, Calif.: Sage, 1982), 65-69.

<sup>27</sup>In Scott's illustration, the Euclidean metric distance creates the open space and formulates the "map" of social relations which is analogous to a map, atlas, or other familiar spatial model. See Scott, *Social Network Analysis*, 148-49.

<sup>28</sup>Louis Guttman, "A General Non-Metric Technique for Finding the Smallest Coordinate Space for a Configuration of Points," *Psychometrika* 33:469-506.

**Table 1**  
**The Network Measurements of Key Actors in Labor Policymaking**

Indicators/Relations	Informal Relations	Formal Relations
Network density	0.099	0.446
Social distance	2.323	1.325
Network centralization	0.085	0.518
Network transitivity	0.006	0.139

among them. The ability of key actors to mobilize resources is highly dependent on their social relations. Therefore, the network density, centrality, cluster analysis, and spatial distribution of the key actors are measurable indicators in the interpersonal network survey.

The network density of informal relationships is only 0.099, while the figure for formal relationships is much higher, at 0.446 (see table 1). In a social-collective context, the low density of the informal network is used to formulate a structural dichotomy between the key actors in their informal network relationships. This phenomenon indicates deficient intimate relationships among the key actors, who were unable to effectively construct structural action-sets that provide an informal support pathway for formal networks between key actors in event decision-making. The ability of key actors to communicate thus constrains their ability to construct relationships in the public sphere. The high density in formal relationships is conducive to reciprocal interaction and coalitions of diverse key actors in policymaking.

Moreover, social distances are measured using the graph-theoretical and cohesive method which emphasizes measurement of the internal accessibility of key actors. This investigation reveals that the distance in the informal network (2.323) is greater here than in the formal network (1.325) in terms of labor policy (see table 1). These social distances clearly indicate a lack of informal relationships among key actors in the collective action structure. It is clearly more difficult to identify connections among key actors in the informal network than in the formal network. Additionally, the higher the centrality (power and strategic location) of key actors in

the structural network the larger the distribution of individual resources among a minority of members.<sup>29</sup> The pattern of power manipulation by key actors only centralizes their influence, and thus it is clear that the network centrality of the formal network significantly exceeds that of the informal network. Numerous resources centralized among a minority of key actors result in the closed decision-making structure of the formal spatial network.

Transitivity forces key actors to focus their internal choices within self-belonging subgroups in their network structure. The formal network clearly has a higher indicator of transitivity (0.139) than the informal network (0.006). In the formal network, key policy actors possess more linkages than they do in the informal network, helping them obtain network information and resources. Key actors attempt to become involved in numerous transitive relationships, perhaps as important brokers or by linking disconnected actors at cut-points. The figures for transitivity in the informal and formal networks thus demonstrate that it is easier to form collective actors from subgroups in the formal network than in the informal network.

In table 2 (extracted from the social network survey) the thirty-nine key actors are classified into four categories of collective actors based on their systematic attribution. The category "government sector" includes government officials and legislators; "business organizations" include business associations, brokerage company associations, and individual brokerage companies; and labor organizations include national-level labor organizations and unions. The concept of density has been used to examine mixed dyadic groups and the degree of density of different subgroups. The data in table 2 indicate that the collective sectors have a low density in informal networks. However, parts of these organizations still maintain private relationships in their network connections. For example, women's organizations have the highest density (0.218) with labor organizations in

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<sup>29</sup>Laumann and Pappi, *Networks of Collective Action*, 169; Knoke, *Political Networks*, 13; and Knoke et al., *Comparing Policy Networks*, 102-4.

**Table 2**  
**The Density of Collective Actors in Labor Policy**

<b>The Density of Collective Actors in the Informal Network</b>				
<b>Categories</b>	<b>Government sectors</b>	<b>Women's organizations</b>	<b>Business organizations</b>	<b>Labor organizations</b>
Government sectors	0.145	0.115	0.089	0.176
Women's organizations	0.115	0.020	0.008	0.218
Business organizations	0.089	0.008	0.043	0.022
Labor organizations	0.176	0.218	0.022	0.184
<b>The Density of Collective Actors in the Formal Network</b>				
<b>Categories</b>	<b>Government sectors</b>	<b>Women's organizations</b>	<b>Business organizations</b>	<b>Labor organizations</b>
Government sectors	0.566	0.483	0.458	0.472
Women's organizations	0.483	0.654	0.287	0.641
Business organizations	0.458	0.287	0.345	0.213
Labor organizations	0.472	0.641	0.213	0.676

- C1:** Number of government sectors: 01, 02, 03, 06, 09, 11, 13, 15, 17, 18, 20, 21, 24, 35, 38.  
**C2:** Number of women's organizations: 08, 10, 12, 23, 28, 32, 37.  
**C3:** Number of business organizations: 05, 14, 25, 29, 34.  
**C4:** Number of labor organizations: 04, 07, 16, 19, 22, 26, 27, 30, 31, 36, 39.

the informal network. These density results indicate that most collective actors did not form many personal connections in the informal network.

The results for formal networks are different from those for informal networks. Most individual subgroups have a high density in formal networks, indicating that interaction among key actors within subgroups is highly integrated. Meanwhile, women's and labor organizations exhibit high densities and exhibit the highest density with the government sector and other collective actors. Both informal and formal networks provide a positive structural base for the collective actors of women's organizations in the labor policymaking process. Furthermore, all of the collective actors maintain high densities with the government sector. This phenomenon gives the government sector structurally significant relationships and positions in the decision-making process. This analysis of interpersonal

**Table 3**  
**The Network Characteristics of Collective Actors**

Event (A) (B)	Action-Set	Number	Density	Average Path Distance
(A) The legislation of the "Gender Equality in Employment Act"	(Consent)	21	0.098*	2.483
	(Opposition)	3	0.009*	4.412
(B) The recruitment of foreign workers	(Consent)	9	0.145*	2.383
	(Opposition)	15	0.288*	2.044
			0.143**	2.442
			0.387**	1.854
			0.461**	1.468

\*: Informal network; \*\*: Formal network.

networks indicates the gradual formation of mutually integrated collective groups in the policy participation process.

The analysis of events listed in table 3 shows the network characteristics of the four action-sets, based on their individual opinions regarding specific events. With regard to event A, the Gender Equality in Employment Act, an oppositional model comprises two dimensions of opinion, namely consent and opposition. For this event, it is clear that the action-set of consent creates an advantageous position for twenty-one key actors. Moreover, the informal network in both the consent (0.098) and opposition (0.009) action-sets exhibits a low density. The main aspect of the consent action-set is the high density (0.348) that exists in interactive structural relations. Conversely, only three actors have lower communicative density (0.143) in the opposition action-set than in the consent action-set. Policy changes not only result from historical and structural change but are also influenced by the various powerful collective actors involved in event development. The consent action-set displays advantageous structural density in the policymaking relating to the Gender Equality in Employment Act.

For event B, the extensive recruitment of foreign workers, the action-set of consent is numerically weaker than that of opposition. There is a low density (0.145) and long path distance in the consent action-set (see

table 3). In contrast to the consent action-set, the opposition action-set exhibits a higher density (0.288) which provides an active base for the involvement of the informal network in policymaking. Furthermore, the structural characteristics of the formal network create more complicated network relations for policymaking regarding labor events. The high density (0.348) of the consent action-set with regard to the Gender Equality in Employment Act compared to the opposition action-set (0.143) helped policymaking to run more smoothly in this case. For event B, both the consent and opposition action-sets exhibit high densities (0.387 and 0.461, respectively). Both maintain high cohesive interaction in the policymaking structure. This situation creates a structural balance of collective actors in the formal network and is used to construct complex dynamic negotiation among diverse action-sets. The results of the investigation of density in action-sets coincide with the earlier findings on dependence networks which indicated the crucial role of the active action-set in their collective network.

Network centrality is calculated by counting the number of adjacent linkages between key actors and the power within different dimensions of the centrality network (see table 4). The more ties these key actors have with other actors in the social network, the higher their degree of centrality.<sup>30</sup> In the concrete active structure, central actors use their individual capabilities and resources to influence the policymaking decisions of other actors. Overall, degrees of centrality in the informal network are lower than those in the formal network. In the informal network, actors with higher centrality exist in government sectors (legislators and officials) that maintain intimate relationships with scholars and labor organizations. Actors no. 02 Jian (legislator), no. 21 Su (legislator), no. 36 Liu (ex-legislator), no. 03 Hong (Council of Labor Affairs, CLA), and no. 15 Cheng (Labor Bureau in Taipei) are the top five according to degrees of centrality within the informal network. In the formal network, most of the top ten key

<sup>30</sup>Stanley Wasserman and Katherine Faust, *Social Network Analysis* (New York: Cambridge University Press, 1994), 178-80.



**Table 4**  
**The Ranking of Centrality by Degree**

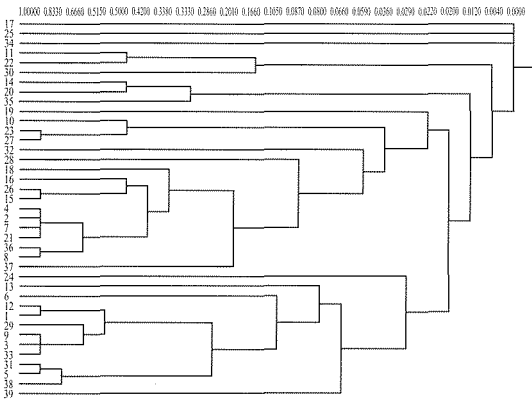
Ranking	Informal Network	Formal Network
1	01 (Jian:02)50.000	(Chang:06)97.368
2	(Hong:03)39.474	(Chan:09)92.105
3	(Su:21)34.211	(Cheng:15)84.211
4	(Cheng:15)31.579	(Dong:38)84.211
5	(Liu:36)31.579	(Bai:16)81.579
6	(Lin:26)28.947	(Chen:33)81.579
7	(Cheng:31)28.947	(Jian:02)76.316
8	(Cheng:33)28.947	(Hong:03)76.316
9	(Wei:05)26.316	(Wang:12)76.316
10	(Guo:04)23.686	(Guo:04)73.684

(\*): The name and number code of the key actors

actors are government officials, particularly from the CLA: no. 03 Hong (CLA), no. 06 Chang (CLA), no. 09 Chan (CLA), no. 12 Wang (scholar), no. 15 Cheng (official), and no. 38 Dong (CLA). The above results indicate that some labor organizations maintain more connections in the informal network and lay a foundation for alliances in their collective actions. Additionally, the investigation of centrality further confirms that the government system (for the most part the CLA) plays a leading role in constructing the formal network, while some scholars maintain better connections in the informal network.

Professional scholars (no. 05 Wei, no. 12 Wang, no. 31 Chen, and no. 33 Cheng), legislators (no. 02 Jian, no. 21 Su, and no. 36 Liu), and leaders of women's and labor organizations (no. 26 Lin and no. 27 Li) rank highly with regard to centrality in the informal network. The key government actors have high centrality scores and play major decision-making roles in the formal network: no. 06 Chang, no. 09 Chan, and no. 38 Dong. Furthermore, officers of labor organizations (no. 04 Guo, no. 16 Bai, no. 22 Li, and no. 39 Hong) and scholars (no. 31 Chen and no. 33 Cheng) hold key positions in formal networks. The investigation of network centrality reveals a shared and even distribution of power among the government, labor organizations, and professional scholars.

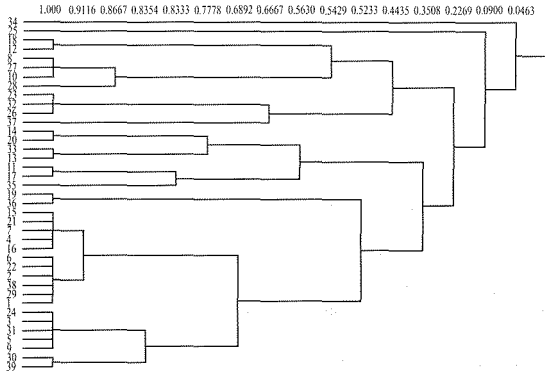
**Figure 1**  
**A Dendrogram by Cluster Analysis of the Informal Network**



The following uses the indicators found by cluster analysis to display the relational and attributional data. As demonstrated in figure 1, the hierarchically structured clusters can be represented as "dendrograms"<sup>31</sup> in the informal network. The step number of key actors comprises only two groups in the second step. The largest group is composed of legislators (no. 02 Jian; no. 21 Su; and no. 36 Liu), officers of labor organizations (no. 04 Guo and no. 07 Chang), and officers of women's organizations (no. 08 Wei). Intimate relationships thus exist in labor and women's organizations and between legislators in loose informal networks. Another small group

<sup>31</sup>As Scott indicates, the arbitrariness in determining the boundaries of clusters indicates that clustering methods may be seen as using a variant of the nesting procedure. The dendrogram (tree diagram) shows the clusters that exist at each level of similarity. The step number displays the similarity of key actors in the diagram. See Scott, *Social Network Analysis*, 127.

**Figure 2**  
**A Dendrogram by Cluster Analysis of the Formal Network**



comprises officials of the CLA (no. 03 Hong and no. 09 Chan), a member of a business organization (no. 29 Guo), and a scholar (no. 33 Cheng). These cluster compositions enable the formation of highly interactive relationships in the informal network and incorporate their organizational power in diverse structural networks.

Figure 2 shows that the formal network involves highly complicated clusters which form three groups in the second step. The largest group is composed of members of the government hierarchy (no. 01 Liu, no. 06 Chang, no. 15 Cheng, and no. 38 Dong), members of labor organizations (no. 04 Guo and no. 07 Chang), members of unions (no. 16 Bai and no. 22 Li), a member of a business organization (no. 29 Guo), and two legislators (no. 02 Jian and no. 21 Su). The second group comprises members of the government hierarchy (no. 03 Hong, no. 09 Chan, and no. 24 Lin), scholars (no. 05 Wei and no. 31 Chen), a member of a labor organization (no. 39 Hong), and a member of a national union (no. 30 Li). The third group is made up of members of women's organizations (no. 08 Wei, no. 10 Chou,

**Table 5**  
**The Relationship between the Informal and Formal Networks**

	Informal Network	Formal Network
Informal network	---	0.108**
Formal network	0.108**	—

\*\*P < 0.01

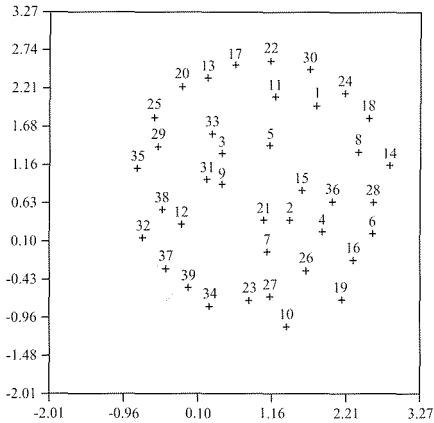
and no. 28 Chu) and a member of a labor organization (no. 27 Li). This complicated composition of groups is made up of the positive collective of actors and displays the highly interactive relationships embedded in the formal network. The third group demonstrates the intensive integration between labor and women's organizations. The women's organizations incorporate their power and strategies of organizational networking with labor organizations in the grouping structure.

After examining the various dimensions of the network structure, scholars have recently shifted their attention to the relationship between the informal and formal networks. This relationship is demonstrated by QAP<sup>32</sup> (*Ucinet 6.29*) analysis, which reveals its strength (see table 5). The figure (= 0.108) indicates a low correlation between the two networks, thus revealing strong agreement between the dyadic choices of a pair of key actors. Similarly, the informal network structure of the key actors does not provide a significant active base for the construction and support of the formal network.

The network indicators of density and centrality demonstrate the difficulty of locating key actors in the concrete spatial network. The following section focuses on analyzing MDS, which is combined with the spatial distribution of the structural equivalence and cluster analysis in an effort to trace the relationships between key actors. Additionally, the spatial locations of key actors can be partitioned to form groups, depending

<sup>32</sup>Ucinet's QAP deals with the relationships between the cells of a dependent network (informal network) matrix and the cells of an independent network (formal network). QAP provides an unbiased estimation of multiple regression coefficients. See David Krackhardt, "Cognitive Social Structures," *Social Networks* 9, no. 2 (June 1987): 109-34.

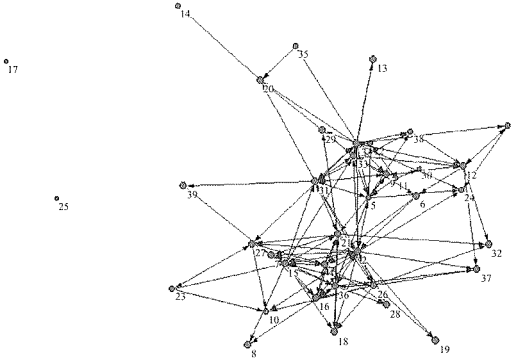
**Figure 3**  
**The MDS Spatial Distribution of Key Actors in the Informal Network**



on their similarity in terms of social spatial distance in the social network structure.

In figure 3, the analysis of MDS is based on the network spatial distribution which exhibits a dispersive distribution between key actors in the informal network. The concrete groups of the spatial distribution comprise members of the CLA and the Council for Economic Planning and Development (CEPD) (no. 03 Hong, no. 09 Chan, no. 11 Huang, no. 12 Wang, no. 38 Dong, and no. 01 Liu), and scholars (no. 05 Wei, no. 12 Wang, no. 31 Chen, and no. 33 Cheng). The formulation of the spatial distribution shows the extremely close relationship between the government and professional scholars. The structural distribution reveals the informal relationships that exist between the government hierarchy and professional scholars. These relationships help the government hierarchy construct professional networks linked to knowledge power. Furthermore, a short

**Figure 4**  
**The Pajek Spatial Distribution of Key Actors in the Informal Network**



spatial distance is identified between labor organizations (no. 04 Guo, no. 07 Chang, no. 15 Cheng, and no. 27 Li), legislators (no. 02 Jian and no. 36 Liu), and women's organizations (no. 10 Chou, no. 23 Hsia, and no. 26 Lin). The spatial distribution of key actors demonstrates the reciprocal interweaving and support that exists between women's and labor organizations. The relationship between these two types of organization has been established through long-term (from 1990 to 2003) mutual advocacy and strategic action with relation to labor policy decisions.

In figure 3, the spatial distribution of key actors in the informal network exhibits a natural degree of cohesion. The structural distribution of key actors takes the form of an encircling circumference that visually represents non-weighted matrices in the informal network. No clear star-points or bridgers of key actors exist within the isolated structural distribution of the informal network. Figure 4 (which is obtained using the *Pajek* program and then rotated 90 degrees) reveals a clearer network spatial distribution among these key actors in the network structure. By combining

figures 3 and 4, two main subgroups can be observed within the spatial distribution of the informal network. One of these subgroups contains most of the actors with government sector backgrounds (no. 03 Hong, no. 06 Chang, no. 09 Chan, no.11 Huang, no. 24 Lin, and no. 38 Dong). One member of a business association (no. 29 Guo) and four scholars (no. 05 Wei, no. 12 Wang, no. 31 Chen, and no. 33 Cheng) maintain close relationships with key government actors.

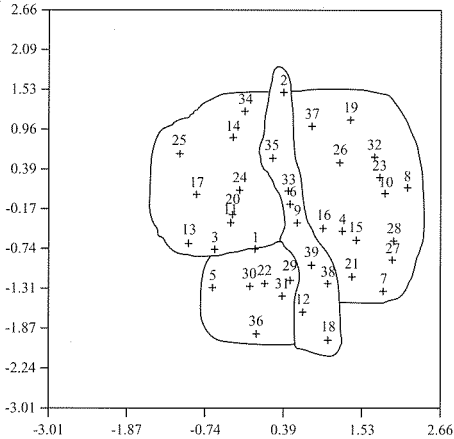
The other subgroup comprises labor organizations (no. 04 Guo, no. 07 Chang, no. 15 Cheng, no. 16 Bai, and no. 27 Li), legislators (no. 18 Shen, no. 21 Su, and no. 36 Liu), and women's organizations (no. 26 Lin and no. 28 Hsu). No. 02 (a legislator) and no. 05 (a scholar) provide the key links in the informal network. Additionally, the two chairmen of large brokerage companies (no. 34 and no. 25) are completely isolated within the structural network. A loose network of symmetrical dyadic relationships exists within the informal sphere. Comparison with the cluster analysis demonstrates network groups similar to the spatial distribution of MDS within the informal network.

In figure 3 there are two subgroups, one comprising key actors from labor organizations and unions (no. 04 Guo, no. 07 Chang, no. 15 Cheng, no. 16 Bai, and no. 27 Li) as well as legislators (no. 02 Jian, no. 21 Su, and no. 36 Liu), and the other comprising professional scholars and actors in the central government (no. 03 Hong, no. 05 Wei, no. 09 Chan, no. 31 Chen, and no. 33 Cheng). In contrast, the relationships among key actors in the informal network are only embedded within the context of "personal trust" in their interactive sphere and are used to construct an infrastructure in their active system. Figures 3 and 4 thus show deficient linkages and a negotiable space between key actors in the informal sphere. This interpersonal network analysis matches the finding of Laumann and Knoke, who indicated that loose informal networks lead to deficient monitoring of activities in the policy environments of action-sets and information delivery for strategic interventions in labor events.<sup>33</sup>

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<sup>33</sup>Laumann and Knoke, *The Organizational State*, 259.

**Figure 5**  
**The MDS Spatial Distribution of Key Actors in the Formal Network**



In the formal network, as figure 5 shows, the spatial distribution of members of labor and business organizations frequently creates an oppositional structure for policy events, with the two organizations almost never collaborating in diverse action-sets. Notably, a distinctive separation exists in the formal network of those key actors. The main groups can be assigned to four blocks in the formal network. The largest group of key actors includes labor organizations and unions (no. 04 Guo, no. 07 Chang, no. 15 Cheng, no. 16 Bai, no. 19 Wu, and no. 27 Li), and women's organizations (no. 08 Wei, no. 10 Chou, no. 23 Hsia, no. 26 Lin, no. 28 Hsu, and no. 32 Wang). Various organizational groups comprise the biggest collective cohesion in the spatial distribution of the formal network. Meanwhile, the second group comprises members of the central government (no. 01 Liu, no. 03 Hong, no. 11 Huang, no. 13 Yang, no. 14 Guan, no. 17 Ye, no.

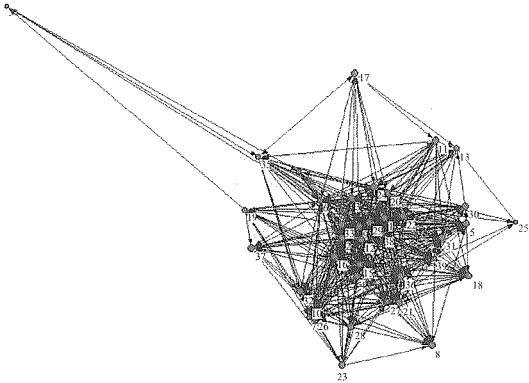


20 Wu, and no. 24 Lin) and the dispersive cohesion group (no. 05 Wei, no. 22 Li, no. 29 Guo, no. 30 Li, no. 31 Chen, and no. 36 Liu). The creation of high density and intensive spatial structures in the formal network suggests that relevant organizations may be better connected to other regional actors. Simultaneously, the segregation of the various groups does not lead to the construction of communicative nodes between key actors for either of the labor policy events.

The short distances between labor and women's organizations and their mutual penetration indicate an improvement in interactive relationships in the formal network structure. The key government sector actors take the opposite side to those from other organizations in the labor policy-making spatial structure. However, there are numerous important structural bridgers (no. 02 Jian, no. 09 Chan, no. 12 Wang, no. 18 Shen, no. 33 Cheng,; no. 35 Li, no. 38 Dong, and no. 39 Hong) linking the government actors and the labor and women's organizations. As discussed above, the greater the number of "structural holes" spanned, the richer the information benefits within the network. These actors perform a buffering function with regard to the construction of network channels within the oppositional structure and thus, as "structural bridges," help to convey information in the spatial power structure. In comparison, the cluster analysis of the formal network shows no adjacent distance with regard to the spatial distribution of actors in the MDS.

Figure 6 (rotated by 45 degrees) illustrates one of the highly cohesive subgroups comprising multiple sectors in the formal network. The group is comprised of fifteen members of whom no. 02 Jian, no. 04 Guo, no. 15 Cheng, no. 16 Bai, and no. 36 Liu belong to labor organizations. Furthermore, no. 01 Liu, no. 03 Hong, no. 09 Chan, no. 12 Wang, no. 20 Wu, no. 24 Lin, and no. 38 Dong occupy prominent positions in the government hierarchy. Two scholars (no. 12 Wang and no. 31 Chen), an official of the Taiwan Confederation of Trade Unions (no. 22 Li), and a member of a labor organization (no. 39 Hong) were also prominent mediators facilitating the coordination of the oppositional model in the formal network. Furthermore, no. 29 Guo (business organization) occupied the most central position in the formal network. The spatial distributions in figures 5 and 6 both

**Figure 6**  
**The Pajek Spatial Distribution of Key Actors in the Formal Network**

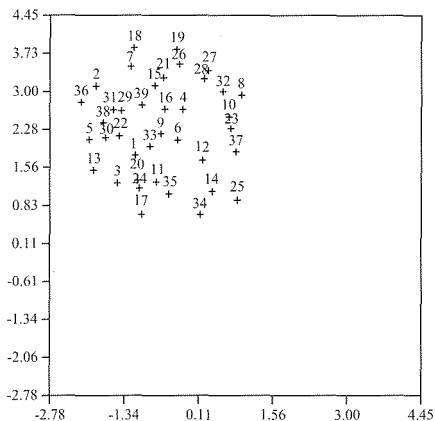


reveal significant interaction between these key actors. The complicated network structures enable more challenges and negotiations among the various sectoral key actors. These complicated penetrations permit actors from various organizations, especially business organizations, to access executive and legislative actors; however, all these organizations are still sufficiently powerful to construct their own formal articulations in the network structure.

The spatial distribution reveals some *bridgers*<sup>34</sup> in the central region of the formal network structure. Previous investigations focused on the spatial distribution of single key actors in the informal or formal social

<sup>34</sup>Most of the Kuomintang (KMT, 國民黨) legislators were chairpersons of business consortia or were supported by one consortium or another. In contrast, most of the Democratic Progressive Party (DPP, 民進黨) legislators are from basic non-institutional private labor organizations. They also maintain intimate relationships with their respective labor organizations.

**Figure 7**  
**The MDS of Multiple Dimensional Networks**



networks; however, that kind of analysis does not indicate the multiple network structure of key actors. Furthermore, different networks reciprocally influence the strategic action of key actors in relation to policy participation. The relationships between key actors in the informal and formal networks are not single-handed operations within the action system. To resolve the above weakness, attention has recently shifted to the multiple networks that exist in the internal coalitions formed by these key actors. *Concor analysis* (within *Ucinet 6.29*) is applied to combine two networks (informal and formal) and to calculate the similarity between dyadic key actors. This type of analysis relocates the spatial positions of key actors (see figure 7) and represents them in terms of their structural positions of multiple modification with regard to the labor policymaking events.

The *Concor analysis* illustrates four regional coalitions in the spatial structure. The maximum group comprises multiple sector key actors. The

core spatial distribution comprises the key actors in the central government occupying the dominant structural core in the multiple network analysis—including no. 01 Liu (CEPD), no. 03 Hong (CLA), no. 06 Chang (CLA), no. 09 Chan (CLA), no. 11 Huang (CLA), no. 13 Yang (Vocational Training Bureau, VTB), no. 17 Ye (CLA), no. 20 Wu (VTB), no. 24 Lin (VTB), no. 35 Li (VTB), and no. 38 Dong (CLA). Scholars (no. 05 Wei, no. 31 Chen, and no. 33 Cheng) and a member of a business organization (no. 29 Guo) appear to be positioned extremely close to the more prominent key actors as well as being close to the group of government actors. The results of applying *Concor analysis* to the two significant labor events are inconsistent with Laumann's research<sup>35</sup>: the data does not indicate a *hollowing core* of spatial distribution in Taiwan's policy decision-making structure. Instead, the key actors from different sectors can be located, as bridgers, in the core of multiple network spatial structures.

To summarize, interpersonal network analysis clarifies the status quo through a study of the power structures involving the spatial and power distributions and interactions among key actors. Analyses of both the informal and formal networks reveal patterns of reciprocal penetration in the spatial structure of key actors. The structural location of key actors in different sectors does not suggest any clear distinction in the spatial distribution; however, the different indicators (including density, centrality, cluster analysis, and MDS) simultaneously demonstrate the dominant position and location of government actors in the interpersonal network structure, particularly in the formal network.

### Conclusion

This study has examined social networks in an attempt to clarify the active policy structure of key actors with regard to significant labor policy

<sup>35</sup>Edward O. Laumann, *The Hollow Core: Private Interests in National Policy Making* (Cambridge, Mass.: Harvard University Press, 1997).

events in Taiwan. On the basis of various complex considerations, it establishes a boundary and selects key actors involved in the two events. The project presented in this study identified most of the key actors and strictly defined them according to their structural positions and real participant actions during labor decision-making.

The low density of the informal network indicates a structural dichotomy for key actors between their informal and formal relationships. In contrast, the network density exhibits the highly interactive structure of cross-sectoral key actors, particularly for the government and other collective actors in formal networks. The consent collective group of the Gender Equality in Employment Act exhibited high density (0.348) with regard to this event while, in contrast, the consent and oppositional groups in the formal network with regard to the recruitment of foreign workers exhibited high densities (0.387 and 0.461, respectively). Professional scholars, legislators, and officials of women's organizations were shown to possess higher centrality (including degree and power dimensions) in the informal network, while government officials, professional scholars, and officials of labor organizations had high centrality in the formal network. Government actors occupy a dominant position in the public network structure; but they did not construct effective informal relationships with other relevant organizations. The MDS provided better evidence of spatial distribution in informal and formal networks and thus demonstrated the creation of the power structure through a process of network analysis with regard to significant labor policymaking events.

The network indicators and spatial distribution of the formal network structure exhibited the highly intensive power structure interactions involved in the government hierarchy. In particular, the emergence of high sectoral density generated reciprocal penetration between the key actors in the government sector and a variety of other organizations. However, the government hierarchy still had the highest density and centrality in the formal network structure. These network indicators demonstrated the penetration of the bureaucratic state and the way it is embedded in various organizations. In the formal network spatial distribution, the key executive and legislative sector actors became "bridgers" located in the oppositional

structure among women's, labor, and business organizations. However, the investigation of interpersonal networks is inconsistent with the research of Laumann, in that the data did not reveal a *hollowing core* of spatial distribution in the power structure. The organizational state played a hybrid role of dominator and mediator in the spatial distribution of structural networks. The construction of the corporate framework demonstrated the adjustments made by the state in its approach to incorporating social forces into decision-making. In contrast, the spatial distribution of key actors demonstrates that various organizations effectively penetrated the government sector, occupying prominent positions and interacting cohesively, particularly in the formal network structure.

In the case of these two labor policymaking events, the organizational state in Taiwan has positively incorporated other relevant sectors and organizations in order to produce policy solutions through an oppositional structure. This is similar to the "policy-planning network" of the power elite developed by Domhoff.<sup>36</sup> In the two dimensions of position and reputation, network indicators demonstrate the existence of an oppositional model consisting of business and labor organizations. In the spatial structure, the government sector keeps itself at a short distance from business organizations and simultaneously acts as a mediator in the growing conflict between business and labor organizations.

In these two cases, the state-led political structure in Taiwan was characterized by two different layers of control. In the workplace domain, labor unions were tightly manipulated by the central government. Meanwhile, in the national domain, the central government pre-excluded relevant outside organizations from the decision-making process. Those organizations could not represent the rank-and-file as their spatial positions in various networks did not give them a significant role in the policymaking process. Overall, the spatial distribution of the interpersonal network structure demonstrates that the central government system still dominates the

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<sup>36</sup>William Domhoff, *Who Rules America Now? A View for the 1980s* (Englewood Cliffs, N.J.: Prentice-Hall, 1983).

main structural positions of power in policymaking with regard to labor events. The structural distribution of networks between relevant stakeholders empowers these stakeholders to negotiate with the government hierarchy, thus enhancing the diversity of the power structure.

Overall, key actors in the central government occupy the core of the spatial distribution and maintain a short distance between themselves and the relevant organizations. Both diverse network indicators and inquiries directed at powerful individuals in positions of influence show that the government sector holds most of the prominent positions in interpersonal networks. However, this sector maintains mutual penetration of spatial distribution with various other organizations in both the formal and multi-dimensional networks, particularly where the density of collective actors is concerned. Various labor organizations (including unions) have long been excluded from the policymaking process. From an examination of network structure, we can see that some leaders of national-level labor organizations have increased their political clout and have come to occupy powerful positions, thus enabling them to participate in controversial labor policymaking events.

Since the empirical investigation reveals interactive patterns in the policy network structure that involve multiple key actors in the spatial structure of labor events policymaking, the policy network is not, as Dowding has said, "simply a metaphor for the policy."<sup>37</sup> Key public sector actors still continue to dominate significant positions and create network linkages in the power structure of Taiwan. However, there is a different shortcoming in the diversification of both the meso-policy network and the micro network. Laumann indicated that social networks are more fragile than highly integrated structures.<sup>38</sup> The integrated structure suggests the existence of dynamic alliances relating to network construction throughout the policymaking system. The investigation of dependence

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<sup>37</sup>Keith Dowding, "Model or Metaphor? A Critical Review of the Policy Network Approach," *Political Studies* 43, no. 1 (March 1995): 153.

<sup>38</sup>Laumann, *The Hollow Core*, 45.

networks in hierarchic public sectors or diverse private organizations uses the personal networks of key actors to explicitly map out the structural network and power structure of Taiwan. Diverse powerful key actors have established significant relationships with the relevant parts of the public sector, even though the mutual penetration of the network system has not threatened the dominance of the government sector within the power structure. The network indicators demonstrate that the strong government sector occupies the core executive position and function in the governance structure, although government actors sedulously construct diverse network relations and allow various labor and business organizations to participate in policy subfields. The investigation of power structure networks demonstrates that the governance structure in Taiwan still conforms to a state-led model.



Appendix

List of Anonymous Interviewees

Number	Surname	Sector	Gender
01	Liu (劉)	Council for Economic Planning and Development (行政院經建會)	Female
02	Jian (簡)	Legislator	Male
03	Hong (洪)	Council of Labor Affairs (勞工委員會)	Male
04	Guo (郭)	Taiwan Labor Front (台灣勞工陣線)	Male
05	Wei (衛)	Scholar	Male
06	Chang (張)	Council of Labor Affairs	Male
07	Chang (張)	Taiwan Confederation of Trade Unions (全國產業工會)	Male
08	Wei (魏)	Social Service Center (新社服務中心)	Male
09	Chan (詹)	Council of Labor Affairs	Male
10	Chou (周)	Ping-Collar Solidarity (粉領聯盟)	Female
11	Huang (黃)	Vocational Training Bureau (勞委會職訓局)	Female
12	Wang (王)	Scholar	Female
13	Yang (楊)	Labor Safety and Health Institute (勞工安全衛生研究所)	Male
14	Guan (官)	Manpower Brokerage Companies Association (人力仲介協會)	Male
15	Cheng (鄭)	Labor Bureau in Taipei (台北市勞工局)	Male
16	Bai (白)	Taiwan Labor Front (勞工陣線)	Male
17	Ye (葉)	Vocational Training Bureau	Male
18	Shen (沈)	Legislator	Male
19	Wu (吳)	Labor Party (勞動黨)	Male
20	Wu (吳)	CMFW (職訓局外勞作業中心)	Male
21	Su (蘇)	Legislator	Male
22	Li (李)	Taiwan Confederation of Trade Unions	Male
23	Hsia (夏)	Career Foundation (導航基金會)	Female
24	Lin (林)	Vocational Training Bureau	Male
25	Chai (蔡)	Manpower brokerage company (人力仲介公司)	Male
26	Lin (林)	Newsletter of the Grassroots Women Workers Center (基層婦女勞工中心)	Female
27	Li (李)	Labor Legislation Action Council (工人立法行動委員會)	Male
28	Hsu (徐)	Association for the Promotion of Women's Rights (婦女權益促進會)	Female
29	Guo (郭)	National Business Association (全國商業總會)	Male
30	Li (李)	Chinese Federation of Labor (全國總工會)	Male
31	Chen (陳)	Scholar	Male
32	Wang (王)	The Awakening Women's Foundation (婦女新知基金會)	Female
33	Cheng (成)	Scholar	Male
34	Huo (霍)	Foreign labor brokerage company (外勞仲介公司)	Male
35	Li (李)	Vocational Training Bureau	Male
36	Liu (劉)	Ex-legislator, scholar	Male
37	Chang (張)	The Awakening Women's Foundation, scholar	Female
38	Dong (董)	Council of Labor Affairs	Male
39	Hong (洪)	Labor Rights Association (勞動人權協會)	Male

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