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<https://doi.org/10.15017/4797994>

出版情報：地球社会統合科学. 29 (1), pp.15-37, 2022-09-15. 九州大学大学院地球社会統合科学府
バージョン：
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Comparative Narrative as Secondary Analysis

—Reconsidering the “Hachinosu Castle” Dispute— ※

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※ This paper is a translation of the following paper in Japanese: Kazuto Misumi “Niji-Bunseki to shite no Comparative Narratives: Hachinosujo Funso no Saikou,” *Riron to Hoho (Sociological Theory and Methods)* 16(1): 103-120, 2001. Reprinting is admitted by the Riron to Hoho editorial committee. For the reason to reprint English translation in this journal, please see postscript in the end.

Abstract

Focusing on P. Abell’s comparative narratives as a standard analytical method for which there is an abundance of qualitative data in recent years, this paper will review its general properties and issues and then consider its meaning, particularly in secondary analysis of qualitative data. As a case study, it will consider the initial stage of the so-called “Hachinosu Castle” dispute in opposition to the construction of Shimouke and Matsubara dams in Kyushu, Japan. First, through interactive mode abstraction we will identify the key phases in the dispute process. Then, we will explore the issue using a semantic approach that expands on Abell’s local explanation, centered on these key phases, to consider how gaps among the parties in their intents and their understandings thereof impacted the course of the dispute. The aim is to position the method of comparative narratives in secondary analysis within an analytical framework of semantic exploration ⇔ abstraction ⇔ generalization, to make it more effective.

Keywords: Comparative narratives, secondary analysis of qualitative data, “Hachinosu Castle” dispute (Shimouke and Matsubara dams)

1. Trends in Qualitative Data Analysis, and Comparative Narratives

Standard analytical methods for qualitative data have been deployed in recent years in various fields of history and social sciences. In sociology, for example, a look at the *Annual Review of Sociology* shows related research trends starting from Franzosi’s (1998) perspective of narrative analysis, Mohr’s (1998) context of semantic structure measurement, and Abbott’s (1995) sequence-analysis framework (also see Abbott and Tsay 2000), as well as Griswold (1993) in sociology of literature. Another development is analysis of historical phenomena using narrative texts as materials within rational choice theory, which increasingly is being deployed empirically (Hechter 1983; Bates et al. 1998). What these developments all have in common is an orientation toward formal analysis, including computer assistance. This includes application of game theory as well as deployment of content analysis through application of methods including network analysis, map analysis, and grammatical analysis (Heckathorn 1983; Mohr 1994; Carley 1993; and Franzosi 1997 are just some of the numerous examples), analysis of

historical phenomena using Boolean algebra (Ragin 1987), and event structural analysis using the “ETHNO” computer assistance program (Heise 1989; Griffin 1993; Umino 1992). Tatsuki’s (1995, Tatsuki 1988) formal narrative analysis of the field of psychotherapy from a chaos-theory perspective and Fararo and Skvoretz’s (1984) generative structurism also would appear to be linked to these analytical methods on various points.

The method of comparative narratives (CN) that is the focus of this paper also was proposed by Abell (1984, 1987) as a part of this new trend focused on semantic structure and sequence. Abell’s analytical method already has been introduced briefly by Kosaka (1992) and Misumi (2000), and *Journal of Mathematical Sociology* 18 (2-3), 1993 included a special issue on the subject. However, with the exceptions of Misumi (1998) and Watanabe (1998), it has seen almost no substantial deployment in research since then. Even the abovementioned special issue of *JMS*, while describing multifaceted possibilities for future development including linkage to generative structurism of Fararo et al (Skvoretz 1993; Fararo 1993), deployment adopting Bales’ interaction process analysis (Kosaka 1993), and testability through optimal matching analysis (Abbott 1993), pointed out a variety of limitations. Further consideration should be required for purposes including reviewing the interrelations with the numerous other analytical methods referred to above and increasing the systematicity and feasibility of theorizing based on qualitative data as well.

Still, since most of these analytical methods (including CN) are oriented toward data-cohesive theorizing and are deeply related to epistemological domains (Franzosi 1998, p.526), it may not be appropriate to consider them from purely technical aspects alone. As discussed below, CN is rooted in practical syllogism, an issue of practical knowledge that has been known since Aristotle’s time. While the introduction of CN and the *JMS* special issue referred to above stressed its aspects as a qualitative data analysis method, not a few of their points are related to epistemological issues. Taking such points into consideration, this paper will study the applicability of CN to secondary analysis of qualitative data weighted more toward epistemological aspects.

Generally, the environment around social survey has been getting difficult, including problems related to survey response rates. As such, secondary analysis of data from past social surveys will grow increasingly important in the future. In sociology especially, despite thick accumulation of descriptive monographs, there has been little progress on systematic analysis of them. Not a few records of various incidents and events that have been collected by journalists and administrators have rich sociological implications and have sufficient detail to withstand secondary analysis. One issue involved in conducting secondary analysis of such qualitative data is the fact that ‘reality’ is constrained by the field of view of an agent who made the document. However, if records of a single phenomenon or event are available from multiple differing points of view, it is possible to identify relative ‘reality’ to some degree through comparative analysis of them. From this perspective, this paper will consider the efficacy of CN using as a case study a local conflict concerning construction of a dam that is well-known in Japan as the “Hachinosu Castle” dispute.

2. Theory and Methods of Comparative Narratives

Before stepping into concrete analysis, it would be useful to overview the theory and methods of CN and review the general points at issue ¹. Toolan (1988, p.7) proposes as a minimalist definition of the ambiguous term “narrative,” “a perceived sequence of nonrandomly connected events.” ² While for the most part the narratives treated in CN also can be thought of within this definition, the actual subject is not a series of events but a chain of actions. Additionally, the agent who is supposed to ‘perceive’ basically will be a researcher. Following Abell, we introduce the description below, with α representing any actor and o any resulting action (of which an attempt at explanation is being made):

αIo α intended o .

Furthermore, we categorize actions into the following four types by using the similar descriptive method. (While Abell [1987, p.15] also considers forbearance of an action, we exclude it here because it would make explanation complicated.)

αDIo α intentionally did o .

αDo α did o . (o occurred as a result [not initially intended] of doing or preventing another action.)

αPio α intentionally prevented o .

αPo α prevented o . (o was prevented as a result [not initially intended] of doing or preventing another action.)

Employing the above descriptive method, Abell proposes the local explanation of an action (o above) using the following syllogism based on circumstances, intention, and belief:

(A) Under circumstance C , αIo (α intended o) <intentionality assumption>

(B) Under circumstance C , α believed that “ o would result only if α conducted x .”

<Epistemic assumption>

(C) Accordingly, under circumstance C , αIx (α intended x) and αDIx (α intentionally conducted x).

(D) As a result, αDIo .

The validity of α ’s belief does not matter in (B) above. Even if α ’s belief was mistaken and x led to z , and then z in turn led to the result o , syllogistically αDIo can be inferred. The conclusion αDo can be reached only if it is understood that α ’s initial intention was not αIo . As suggests by the abovementioned explanation, Abell sees the presence of intention as differentiating action from behavior and primarily looks at means-ends action (subjectively rational action) ³.

This syllogism can be expanded to cover interactions between two or more actors. For example, when “ α intentionally causes another actor β to conduct o ,” the following inferential construction is formed:

(A) $\alpha I[DIo]$ (α intended to cause somebody to conduct o intentionally)

(B) α believed that if α conducted x then β should conduct o .

(C) Accordingly, αIx (α intended x), and αDIx (intentionally conducted x)

(D) $\alpha DIx \rightarrow \beta DIo$ (α ’s intentional action x led to β ’s intentional action o .)

(E) Thus (by the transitive law), $\alpha DI[\beta DIo]$

The arrow “ \rightarrow ” above indicates a relationship of one element leading to another, or a socially determined relationship. This is not necessarily a direct causal relationship, and it includes processes such as revision of others' intentions or beliefs through authority, negative sanctions, or influence (Abell 1987, pp.40–45). The chain of actions by one or more actors linked uninterruptedly over a certain time series through this ‘leads to’ relationship is the narrative subject to analysis using CN⁴.

CN involves two courses of analysis of such a narrative. The first is abstraction, under which the original narrative is transformed into a simplified narrative according to certain mathematical rules. The second is generalization, under which the general pattern of a special process that generates a similar result is extracted by formal comparison of multiple abstracted narratives. What makes Abell's concept unique is the way it defines a narrative as a digraph satisfying the following properties and primarily considers abstraction and generalization as formal manipulations in this digraph.

- 1) Finite set of actions that satisfies the weak order over time: $A=\{a_i\}$
- 2) Finite set of actors: $I=\{\alpha, \beta, \dots\}$
- 3) Mapping from I to A
- 4) ‘Leads to’ relationship, L , in set A : a_iLa_j (action a_i leads to action a_j)
- 5) L is asymmetric (if a_iLa_j , $a_j\tilde{L}a_i$), reflective (a_iLa_i), and non-cyclic⁵

Let us consider the rules of conversion between two digraphs defined on action set A and other action set C . To do so, we will consider set P_A to consist of all subsidiary sets of the set A and, likewise, set P_C to consist of all subsidiary sets of the set C , defining the binary operation $*$ on each of these. This binary operation $*$ basically is defined as the set of all actions on the path that connects action a_i and a_j . In sum, by establishing a conversion rule under which if actions a_i and a_j are mapped to c_k then all actions on the path between the two are also mapped to c_k , it is possible to group together a number of actions while maintaining the socially determined relationship among the actions. Strictly speaking, this conversion rule is defined by the following p-homomorphism mapping ψ for equation (1), between the groupoids defined by binary operation $*$ in P_A and P_C :

$$\psi(a_i*a_j)\subseteq\psi(a_i)*\psi(a_j) \quad (1)$$

Equation (1) represents a relationship of inclusion rather than equality in order to allow that the same action in A can be mapped to the different action in C simultaneously. Accordingly, a newly created set of actions satisfying equation (1) is not an equivalence class, strictly speaking (Abell calls this unity tolerance).⁶

The mapping has two modes: single-actor mode and interactive mode. The former focuses on two actions by the same actor and maps all actions by that (and only that) actor on the path between these actions, to the same set. The latter maps all actions on the path between the two actions focused on, to the same set, regardless of whose actions they are⁷. However, in each of these modes how to group actions together is not determined solely mathematically. Normally,

there are several ways by which actions could be grouped based on the above conversion rules. To determine which grouping to employ, we need to consider the semantic contents of the actions. While Heise (1993), Willer (1993), and Abbott (1993) all have pointed out the arbitrariness of this point, this is not necessarily a disadvantage because semantic consideration in this phase should have interpretive sociological significance.

Generalization also can be basically considered as p-homomorphism between two narratives at different stages of abstraction. However, when graphing two narratives in terms of abstraction does not yield identical results, generally some ambiguity remains regarding the similarity between them since no further criteria for judgment are identified clearly (Abbott 1993; Michaelson-Kanfer 1993). In this case, application of optimal matching as suggested by Abbott (1993), and deployment through game theory as suggested by Abell himself (1993a), do seem to have some possibilities. However, even so the issue still remains as to what degree they are semantically same even if the graphs are similar. Moreover, in not a few cases insufficient information will be available about choices and payoffs that are necessary for game theoretical formalization. It may be possible to create a certain similarity index by matching the stages of abstraction between narratives; however, since as noted above the method of action grouping is not determined solely mathematically, it is not easy to fix a strict standard.

The abovementioned undeveloped aspect in generalization may be one major reason for the lack of progress on accumulation of CN research; in addition, there is another restriction that the results of analysis are dependent to a considerable degree on the initial narrative (that is, the kinds of actions and their connections each other originally described). Since abstraction means mapping of actions, there is little opportunity for heuristically drawing out the structures of graphs (socially determined relationships) not included in the initial narrative. Accordingly, it is important how the ‘leads to’ relations between actions are drawn initially based on observation, data, and other sources of information. However, if we remain faithful to Abell there is no choice but to depend on the practical syllogism referred to above, and no other clear guidelines have been indicated (Heise 1993; Willer 1993; Abbott 1993).

However, as it was in the case of the arbitrariness of abstraction noted above, CN can be adequate despite this difficulty of arbitrariness in creation of the initial narrative. First, it is natural that researchers conducting analysis for different purposes would create different narratives for the same subject, and it is not necessarily desirable to exclude such differences. Even if researchers separately extracted greatly differing narratives on the same subject for the same analytical purposes, it would be possible to take into consideration the theoretical or practical implications of such differences. Additionally, it goes without saying that artificiality to make abstraction and generalization easier must be avoided, clarifying social processes that are glimpsed in advance in fieldwork or data is meaningful. We shall be sure that any method of analysis necessarily will involve some arbitrariness or limitations.

Whatever the case, considering the analysis focus (the social processes to be focused on) in advance (or simultaneously with fieldwork or data analysis) would be vital to using CN effectively. There are two major courses to be taken. The first is that of theory building to which

Abell was oriented, and the second is that of exploring cases. The latter refers, considering analysis focus while proceeding with the actual analysis, conducting supplemental fieldwork and document research or changing informants as necessary, and then deepening the understanding of the case (namely, initial narrative). The reconciliation of different narratives on the same subject mentioned above could be related to both courses; however, it belongs primarily to the latter. In a sense, the strongest advantage of CN might be that we can proceed in both courses under the same analytical framework.

3. A Schematic Secondary Analysis of the “Hachinosu Castle” Dispute

Incidentally, in secondary analysis of narratives concerning past incidents and events that is the main subject of this paper, generally it is difficult to accumulate consistent and repetitive <research-description-analysis> process described above. This becomes even more difficult the more time has passed since the incidents and events. In addition, it is common for descriptions of incidents and events to be organized to some degree from the point of view of the parties involved, or of the chroniclers. While some stages and aspects may be described in considerable detail according to the chronicler's perspective or point of view, portions described only in schematic or abstract forms may be included as well. That is, the content of a single initial narrative may involve gray areas and intermittency. Accordingly, it may be effective to prepare, as a starting point, a schematic narrative that has as much detail and is as free of intermittency as possible and then to use various materials to conduct analysis while returning to the details in part. This refers to starting from an initial narrative that has been abstracted to some degree and then deploying interpretive sociological inferences (local explanations) while focusing on the inflection points and inadequacies contained—an attempt that moves in the opposite direction of Abell's abstraction.

As noted at the beginning of this paper, ‘reality’ is a particularly important issue in secondary analysis. Analysis in the direction described above can be expected to contribute to a relativization of ‘reality.’ Generally, the following three aims should exist:

- 1) Development of a more reasonable narrative (“more truthful story” [Michaelson-Kanfer 1993, p.217]) through comparative analysis of different narratives of the same event.
- 2) Comparative analysis of different narratives (of parties involved) regarding the same event and surmising how these differences in recognition affected the development of the event.
- 3) Extracting patterns in the recognitions of creators of narratives and analyzing how social factors influence on them (deployment through discourse analysis)

In this paper we will attempt an analysis mainly on the second aim, using the “Hachinosu Castle” dispute as a case.

The mountainous region to the north of outer rim of Mt. Aso in Kumamoto, Japan, was the site of a local conflict concerning the construction of Shimouke and Matsubara dams. Japanese people may recall this as the "Hachinosu Castle" dispute. It was an event that involved fundamental issues of how public works should be approached, inspiring debate in courtrooms, the parliament, and the media over a period of more than a decade starting in the end of 1950s.

While a number of publications chronicle this dispute in detail, it will be revised below based on the following five sources: chronicles by Tomoyuki Murohara, a central figure in the opposition to the dams, published in the form of memoirs (Murohara 1960) and a study (Murohara 1972), the chronicle and data prepared by the Ministry of Construction (Shimouke and Matsubara Dams Study Group 1972), the chronicle and analysis prepared by a survey group from Kansai University (Kansai University Shimouke and Matsubara Dams General Academic Survey Group 1983), and a literary documentary by Ryuichi Matsushita (Matsushita 1989). Since it would be too complicated to consider the entire course of this lengthy dispute, this paper will focus on its initial stage.

In 1953, a major flood on the Chikugo River, a waterway managed by the national government, resulted in 147 fatalities. In response, the Ministry of Construction (through the Kyushu Regional Construction Bureau; “Kyushu Bureau” hereinafter) moved urgently to develop dams upstream on the river. After abandoning its initial planned site (Kusebata in Oyama town) after it had become embroiled in a complex struggle, it switched to a plan for two dams at Shimouke and Matsubara. Although this plan first was announced to the local community in the summer of 1957, preliminary studies had begun in 1954. The resulting reservoirs would inundate parts of four towns and villages in Oita Prefecture and one town in Kumamoto Prefecture (affecting a total of 350 households and 1900 residents). Local residents, chiefly from the settlement of Shiya in Oguni town on the Kumamoto Prefecture side (Mr. Tomoyuki Murohara), declared their opposition soon after the plans were announced. Kyushu Bureau attempted to negotiate land swaps from various approaches, but these attempts were unsuccessful, and in January 1959 it decided to apply the Expropriation of Land Act. In May of that year, Kyushu Bureau started to fell some trees that were impeding excavation work, through forcible entry on residents’ land, but a sit-in by opponents who rushed to the site after hearing of the work forced it to be suspended. The fallen trees were used to build on the site a structure that came to be called the (first) “Hachinosu Castle,” which became a base for activities in opposition to dam construction.⁸ This led to the intensification of the dispute, chiefly in the courtroom, while the situation on site escalated with the “melee in the water” when efforts were made to remove the Hachinosu Castle and with the arrest and prosecution of Mr. Murohara. Looking back on the chain of events from this perspective, the social process through application of the Expropriation of Land Act by Kyushu Bureau played an important part in the initial stages.

Appendix A is a detailed schematic narrative table with this point in mind. Since it was prepared using Shimouke and Matsubara Dams Study Group (1972, pp.26–100, 559–595, and Ch.6 timeline) as the main source, it basically represent the view from the Ministry of Construction’s perspective. However, since it also was prepared through mutual supplementation and reconciliation of the descriptions of multiple related parties, including the Academic Survey Group, it should achieve a degree of ‘reality.’ Then we fix it as the starting point for the initial narrative.

The narrative table in Appendix A shows the passage of time in the somewhat general increments t_1 , t_2 , ..., t_3 in the leftmost column, with consideration for the time intervals between

actions. To the right, it shows the preconditions of each action (external given conditions and preceding actions) and, to their right, it lists and describes the action $^X a_i$ that took place. The superscript X at left indicates an actor (with letters indicating all actors in the case of joint actions by more than one actor), while the subscript i at right is a serial number. The rightmost column describes the important results of the action taken place. Appendix B depicts this narrative table in the form of a digraph. It was prepared by plotting ‘actions that took place’ in the narrative table and drawing arrows from all applicable preceding actions indicated in ‘preconditions.’

Regarding abstraction, generally single-actor mode is suitable when clearly showing the movements of actors being focused on, while interactive mode is suitable when clearly showing the movements of phases being focused on (Misumi 2000, pp.127–128). Since the purpose in this paper is to probe the important phases in the process through application of the Expropriation of Land Act, we adopt the interaction mode to conduct abstraction. The method was employed by manually grouping acts on the graph in Appendix B while checking them against equation (1) above. The results are shown in Table 1 and Figure 1. The abstracted narrative table in Table 1 shows the newly bundled abstract actions as C, describing to the right the set of original actions making up C and its general semantic content. The superscript to the left of C shows the related actor, while the subscript to its right is a serial number. The concatenations of the graph can be judged from Appendix B. While under this narrative it is possible to carry out further abstraction within the range of certain restrictions (see Note 7), no effort was made to proceed beyond this level of abstraction because this study stresses semantic consistency among the individual C elements.

In considering this abstracted narrative, three phases are focused on as important catalysts in the process through application of the Expropriation of Land Act: the briefing (C_4), Mr. Murohara’s decision to oppose the project (C_7), and Mr. Murohara’s statement “fight the law with the law” (C_{11}). In particular, the resolute refusal to negotiate that began with the posting of wooden placards and the suggestive statement “fight the law with the law” can be seen, at least in the case of the narrative referred to above, as having forced Kyushu Bureau ultimately to shift from negotiation to a legal dispute. “The Regional Construction Bureau, . . . seems to have seen this as a sign that the opposition’s stance was not merely a demand for increased compensation but a refusal to discuss the matter at all unless the dam construction plans were abandoned” (Shimouke and Matsubara Dams Study Group 1972, p.35). This understanding must comprehend at least one aspect of the facts of the matter. However, no clear answer worthy of such a description is apparent in the series of materials available to ask whether it was the national government (and directly, Kyushu Bureau) or Mr. Murohara who forced this dispute to become one involving bodily injury and lengthy litigation in court.

Table 1. “Hachinosu Castle” Dispute Abstracted Narrative Table (Interactive Mode)

Abstracted action	Constituent elements	Meaning of abstracted action
^{ABC} C ₁	^A a ₁ , ^A a ₂ , ^B a ₃ , ^C a ₄ , ^{ABC} a ₅	Resolution of problems related to preliminary survey
^{ABC} C ₂	^A a ₆ , ^C a ₇ , ^A a ₈ , ^A a ₉ , ^C a ₁₀ , ^A a ₁₁ , ^B a ₁₂	Mr. Murohara demands an explanation of the repeated trial excavation work by Kyushu Bureau
^{ABCDE} C ₃	^{ABCDE} a ₁₃ , ^E a ₁₄ , ^D a ₁₅ , ^B a ₁₆	Protest and opposition at the Shiya briefing
^{ABC} C ₄	^{AD} a ₁₇ , ^A a ₁₈ , ^B a ₁₉ , ^A a ₂₀	Resolution of problems at the briefing through an apology by Kyushu Bureau
^{ABCDE} C ₅	^{ABCDE} a ₁₃ , ^E a ₂₁	Loggers not satisfied with the briefing appealed to Mr. Murohara
^B C ₆	^B a ₂₂	Mr. Murohara maintained his stance
^{BEF} C ₇	^B a ₂₃ , ^B a ₂₄ , ^E a ₂₅ , ^F a ₂₆	Mr. Murohara resolved to oppose the project and the opposition rallied to the cause
^{AB} C ₈	^A a ₂₇ , ^B a ₂₈	Closing of negotiation liaisons on the Kumamoto Prefecture side
^{AGI} C ₉	^A a ₂₉ , ^{AG} a ₃₀ , ^A a ₃₁ , ^I a ₃₃ , ^G a ₃₄	Kyushu Bureau persuaded Oita Prefecture to support its side
^{BEF} C ₁₀	^{BE} a ₃₂ , ^{BEF} a ₃₅	The opposition party applied pressure
^{ABEFHJ} C ₁₁	^A a ₃₆ , ^H a ₃₇ , ^J a ₃₈ , ^A a ₃₉ , ^B a ₄₀ , ^{AB} a ₄₁ , ^{BEF} a ₄₂	In failing to reach an agreement, Mr. Murohara stated, "fight the law with the law," appealing firm opposition.
^{AJ} C ₁₂	^A a ₄₃ , ^J a ₄₄	Kyushu Bureau failed in external mediation
^{AC} C ₁₃	^A a ₄₅	Kyushu Bureau decided to apply the Expropriation of Land Act

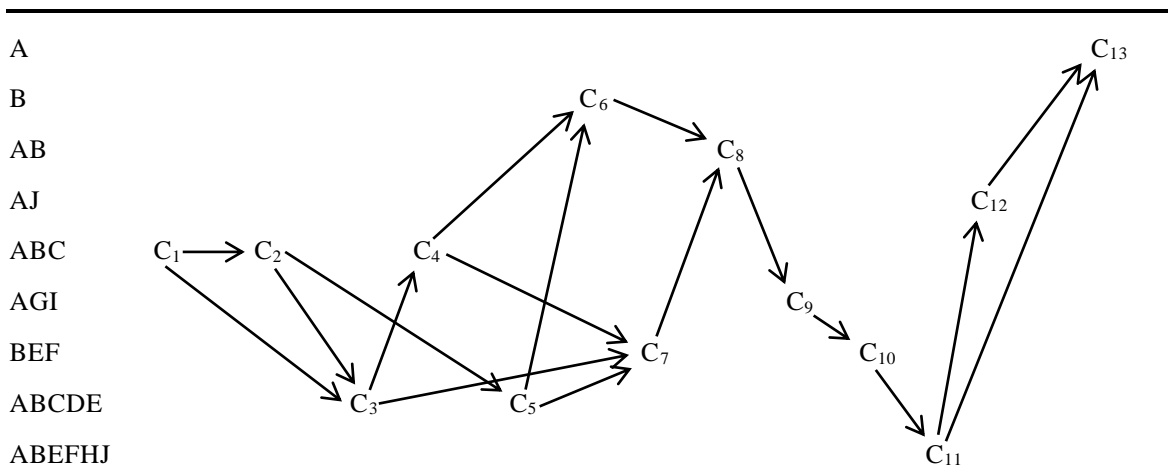


Figure 1. “Hachinosu Castle” Dispute Abstracted Digraph (Interactive Mode)

While there is some ambiguity in the records as to whether the statement was as clear as “fight the law with the law,”⁹ even so was Mr. Murohara’s intent to force Kyushu Bureau to apply the Expropriation of Land Act? Or, alternatively, did Kyushu Bureau (Ministry of Construction) decide to launch the process toward application of Expropriation of Land Act in opposition to Mr. Murohara’s intent (or in opposition to its own intent) because it was unable to perceive Mr. Murohara’s true intent? In the following section we will explore this point while returning, to some more degree, to the details of the case.

4. Semantic Exploration of the Turning Points in the Dispute

When considering an exploration of a narrative focusing on the intentions of actions, Abell's local explanation serves as the guideline. Originally local explanation uses a single action or a set of interactions in the initial narrative as an explanatory unit. But it would be more appropriate to apply this somewhat more broadly when considering how initial intentions, and differences between actors regarding them, impact the course of events within a larger-scale flow of events. That is, this paper will attempt a formal interpretive sociological approach from a perspective that differs somewhat from that of the abstraction considered above, by surmising from the data hypothetical intentions corresponding to the key resulting actions and grouping instrumental actions that can be considered similar in light of their intentions, and at the same time excluding actions that are extraneous in the context.

There is some possibility that Mr. Murohara desired a legal dispute and intended to get Kyushu Bureau to apply the Expropriation of Land Act (o) as a(n unavoidable) step toward that end. If this indeed were the case, then the following deductive formula could be envisioned. (Indicators of actors correspond to those in the narrative table; x includes the hanging of wooden placards [^Ba₂₂, ^{BE}a₂₅], the rally meetings [^{BE}a₂₉, ^{BEF}a₃₉], and the demonstration [^{BEF}a₃₂]. x' corresponds to ^{AB}a₃₈.)

■ Inference 1

(A) BI [DIo]

(B) B believed "If B ceases to negotiate and remains steadfastly in opposition (x), then A will conduct o."

(C) Accordingly, BIx, and then BDIx.

(D) However, BDIx → AD[~]Io. ([~]Do represents restraint from conducting o.)

(E) As a result, B believed "If B clearly states, 'fight the law with the law' (x') under circumstances in which negotiations have broken off, then A will conduct o." (Mr. Murohara revised his epistemic assumptions.)

(F) Accordingly, BIx', and then BDIx'.

(G) BDIx' → ADI^o.

(H) As a result of the above process, BDI[ADI^o].

To consider the validity of this inference, we need to start by considering the slogan "fight the law with the law, fight force with force." This slogan became well known with the construction of the "Hachinosu Castle." Its intent is clearly stated by Mr. Murohara: "Even if the Expropriation of Land Act is amended and a new River Act enacted, unless the promoters of the project change their fundamental approach they will not be able to quell my opposition, and it is unlikely that future public-works projects will be able to advance either. This will lead to the appearance of a second or third 'Hachinosu Castle,' as attempts to prevent such force" (Murohara 1972, p.526). He also said, "The Ministry of Construction, which plays a critical role in this case, does not appreciate the vital component of democracy that calls for policymakers to

make an effort to obtain the understanding, with a sympathetic attitude, of those affected by their policies—particularly those who would lose their livelihoods as a result of the policies. To put it another way, the fundamental reason why we need to continue our opposition is due to the arrogance of those in positions of authority who refuse to tolerate any criticism” (Murohara 1960, p.14). In these statements we see that his primary demand for Kyushu Bureau and the Ministry of Construction was self-criticism and reform of their high-handed attitudes under the name of public welfare.

The above-mentioned Mr. Murohara’s attitude might be fixed from the stage at which he decided to oppose the project. The first piece of evidence for this understanding can be found in Matsushita (1989, pp.44–50), which recalls remarks that Mr. Murohara told his younger brother Tomohiko at the time of the decision to oppose the project. With a long-term prospect that opposing the national government would involve a difficult and lengthy battle, from which residents of the settlement necessarily would drop out, he said “If the government hides behind the law then we should fight it with the law; if it uses money then we should fight it with money.” The second piece of evidence is more objective. It concerns his actions during this period. After the decision to oppose the project, in July 1958, when a movement toward cooperation on terms arose in the villages to be submerged on the Oita Prefecture side in response to Kyushu Bureau’s efforts of persuasion, Mr. Murohara immediately launched protests in opposition. In addition, when a committee was formed on the Oita Prefecture side at the end of August to respond to the dam proposals, he held spectacular demonstrations repeatedly at the beginning in the following month to undermine those who supported a cooperative approach ¹⁰. These were his first public actions after the decision to oppose the dams.

It is Kyushu Bureau that brought this situation; that is why he never act on his own, but he would response to Kyushu Bureau’s every move to undermine it, sticking to his high road (Kyushu Bureau’s reform of approach). This stance was held consistently through the subsequent legal dispute and the “Hachinosu Castle” struggle as well. We see several testimonies suggesting when the dam plans first became known, Mr. Murohara was looking for sites for group relocation (Matsushita 1989, pp.44–45). Numerous reasons have been proposed for his change of course toward resolute opposition, including feelings of distrust and humiliation inspired through the process of the preliminary studies and briefings, a sense of responsibility to protect the loggers as the landowner, a leadership struggle with the Kitazato family, and the understanding of current conditions from observation of precedents of dam construction (Shimouke and Matsubara Dams Study Group 1972, pp.29–32; Kansai University Shimouke and Matsubara Dams General Academic Survey Group 1983, pp.321–325; Matsushita 1989, pp.44–48). However, these tend to emphasize somewhat emotional aspects. We should add to these the reason of *having ascertained the points at issue*. The fact that he had a long-term prospect, as seen above, on the subject and shape of the battle—that is, on the value and strategy of the dispute—is an important factor that must not be overlooked as a contributor to Mr. Murohara’s resolution to oppose the project.

If we consider Mr. Murohara's initial strategy of rejecting negotiation and maintaining steadfast opposition already to have been in line with his own approach, then it is difficult to conceive of forcing the Kyushu Bureau to apply the Expropriation of Land Act and instituting a legal battle as his *positive intention*. Of course he must have been prepared to face such an outcome, and in fact his statement "fight the law with the law" might be intended to convey such strong resolve (i.e, being prepared for a legal dispute). (The fact that he had a rally meeting right after this statement is consistent with this interpretation.) In this way, the following hypothetical inference is posited in opposition to Inference 1 (the notation has basically the same meanings as in Inference 1):

■ Inference 2

- (A) BI[DIp] (p: reforming the approach of Kyushu Bureau [Ministry of Construction])
- (B) B believed "If B ceases to negotiate and remains steadfastly in opposition (x), then A will conduct p."
- (C) Accordingly, B_Ix, and then BDI_x
- (D) However, BDI_x → ADI_p (D_p represents restraint from conducting p)
- (E) As a result, B believed "If B clearly states, 'fight the law with the law' (x), then A will conduct p (upon learning of the steadfastness of B's resolution in opposition)."
- (F) Accordingly, B_Ix', and then BDI_x'
- (G) However, BDI_x' → ADI_o
- (H) As a result of the above process, BD[ADI_o]

Under this inference, Kyushu Bureau's application of the Expropriation of Land Act (o) is interpreted to be a result counter to Mr. Murohara's intention. (Note that the ultimate result is not BDI[...] but BD[...].)

On the other hand, there is no doubt that the intention of Kyushu Bureau was to enlist the cooperation of the local community in dam construction (q). What shall be in question is its epistemic assumptions based on this intention. Kyushu Bureau's failures in taking local residents into consideration in the initial stage can be surmised from unauthorized tree felling and trampling on fields during the preliminary survey and use of haughty, threatening speech and behavior during the briefings (Shimouke and Matsubara Dams Study Group 1972, pp.26–30; Matsushita 1989, pp.28–33, 45–46). While lower-profile persuasion was attempted after Mr. Nojima, who believed in blending in with the local community, was appointed director of the Shimouke and Matsubara Dams Survey Office (probably it was unfortunate for him that his appointment took place after Mr. Murohara had resolved to oppose the project), even that was merely a show of good faith based on the assumptions of the existing plan, and he was not conscious (at least publicly) of any alternatives such as reconsideration and renegotiation from a clean slate. Overall, the fundamental epistemic assumption of Kyushu Bureau is that residents would (or should) cooperate if the public necessity of the project were presented to them clearly, backed by the authority of the state.

Thus, the following hypothetical inference can be drawn. (While normally the counterparty B would consist of all residents of the submerged villages, here it is narrowed down to Mr. Murohara alone. y includes briefings and discussions [^{ABC}a₅, ^{ABCDE}a₁₃, ^{AD}a₁₇, ^{AB}a₄₁], apology for secondary matters [^Aa₁₈], and persuasive efforts through related prefectures and towns [^Aa₂₉, ^Aa₃₆, ^Aa₄₃] [only in connection with Shiya]. o, x, and x' have the same meanings as above.)

■ Inference 3

(A) AI[DIq]

(B) A believed “If A clearly presents the public necessity of the project backed by state authority (y), then B will conduct q.”

(C) Accordingly, AIy, and then ADIy

(D) However, ADIy → BDIx

(E) Accordingly, ADIy again

(F) However, ADIy → BDIx'

(G) BDIx' → A revised its epistemic assumption:

“If A decides to apply the Expropriation of Land Act (o), then B will conduct q”

(H) Accordingly, AIo, and then ADIo

(I) As a result of the above process, AD[BD[ADIo]] (However, q did not occur until Mr. Murohara's death.)

Under this inference, application of the Expropriation of Land Act by Kyushu Bureau (o) was led to as a result counter to Kyushu Bureau's own initial intention, through the process of revision of epistemic assumption of itself counter to Mr. Murohara's intention.¹¹ (Note that the ultimate result is not ADI[...] but AD[...].)

The inferences above are no more than hypothetical because the resulting acts p and q did not actually occur; however, if inferences 2 and 3 are correct then the results would be counter to the intentions of both Mr. Murohara and Kyushu Bureau. Why is this so? Put it game theoretically, first of all as the belief of the opposing player Kyushu Bureau saw Mr. Murohara as ‘an opponent who wanted larger compensation’ or merely as ‘an embittered, peevish opponent,’ but it failed to have a belief to see him as ‘an opponent seeking a reform in the authorities’ attitude.’ Secondly, while the attitudinal reforms sought by Mr. Murohara included starting from a new slate on the Shimouke and Matsubara dam plans and reconsidering the Chikugo River improvement plans, it is not likely that Kyushu Bureau had recognized these as choices because it was inconceivable at that time that the national government returned its plans to a clean slate. Namely, while Kyushu Bureau was playing Game G which lacked these choices, Mr. Murohara was playing another game, Game G', which included them. Probably Mr. Murohara was aware of Game G; however, he took the bold strategy of sticking to Game G' and trying to draw Kyushu Bureau into his game. However, Kyushu Bureau (unconsciously) countered these strategies within Game G, arriving as a result at a provisional equilibrium that probably was not the best solution for either side: application of the Expropriation of Land Act.

Viewed in this way, the process toward intensification of the dispute in the initial stage was not necessarily irrational but it neither in line with intentions of players. Rather, it resulted mainly from the inability to build an opportunity for reconciliation in a meta game that includes both G and G' where understanding of the intentions of the actions are passing each other ¹².

Conclusions

In this paper we have reconsidered the effectiveness of CN especially as the methodology for secondary analysis. The semantical investigation of narrative identified in this paper would appear at first glance to be in the opposite direction of Abell's orientation toward generalization. But it would be possible to create a narrative having a higher level of consensus through such exploration with absorption and refusal of actions as necessary and reviewing 'leads to' relationships between them. Our analysis in this paper did not reach refining the abstractions in Table 1 and Figure 1; however, it is quite meaningful that we confirmed whether the points of revision in intentions and epistemic assumptions were identified in the process of abstraction. Confirmation of this kind would be more important when we raise the level of abstraction based on more of an overall narrative. In secondary analysis, it is vital to proceed with comparative generalization while correcting as much as possible for ambiguities and biased points of view. To increase the effectiveness of CN in doing so, it would be preferable to locate it more consciously within the analytical framework of [semantic exploration \Leftrightarrow abstraction \Leftrightarrow generalization].

The method of semantic exploration proposed in this paper is a tentative exploration, and there is considerable room for improvement. At first, there are problems involved in inference of intention. In Abell's local explanation intention normally is handled under the assumption that the resulting action in question was intended in fact. However, when a researcher hypothetically posits intentions assuming resulting actions that did not actually occur, as in this paper, the possibility of alternative positing would be widely open. While this paper sought solely material support for the validity of the assumptions on which it focused, it would be preferable to narrow down the possibilities through a somewhat more logical approach. In addition, this paper assumed uniformity of intention and limited its analysis to a narrative within a domain in which the assumption would be feasible (namely, the initial stages of the dispute). We also tried to look at the changes over the longer term; however, what had changed was an intentional assumption or an epistemic assumption was often too complicated to determine which. Guidelines on this point are required as well.

Secondly, inferences regarding Mr. Murohara's side and Kyushu Bureau's side were conducted separately. It was because grouping of instrumental actions that are similar in terms of intention made it more difficult to conduct combined inferences. To complement this point we introduced an interpretation based on game theory in the end of the paper; however, it might be possible to superimpose both sides more faithfully to the narrative. Inversely, it might be possible to deploy game theory more formally, by hypothetically positing utility functions for instance. These are issues to be addressed in further studies.

Lastly, when addressing aggregated actors as in this paper, it must be noted that their internal compositions might change over time. In the case considered in this paper as well, the persons responsible in Kyushu Bureau changed several times, and in the medium and latter periods of the dispute some residents drifted away from the opposition movement and joined the movement calling for conditional support. Although they were left out of the present analysis, in fact these changes had more than a little impact on the course of events. It would be interesting to effectively incorporate transformations of aggregated actors into CN, instead of delegating them to the individual level.

Despite the abovementioned remaining problems, by positioning it within the analytical framework of [semantic exploration \Leftrightarrow abstraction \Leftrightarrow generalization] described above, CN should have considerable possibilities for secondary analysis through not only extracting general processes buried in secondary materials, but also elucidating the hypothetical inferences and counter hypotheses used for such generalization, and thus putting validity of support documents in open discussions.

Acknowledgment: Study of this paper was supported by Grants-in-Aid for Scientific Research (Basic Research [B][1], “Inheritance and innovation in sociological traditions through formalization”; 1999-2001, principal investigator: Kazuto Misumi).

Notes

- 1) See Abell (1987) for details. For different summaries of and introductions to the individual points, see Abell (1984, 1993a), Kosaka (1992), and Misumi (2000).
- 2) See Franzosi (1998, pp.519-524) for a stricter review of the narrative concept,.
- 3) However, Abell suggests a point of view that would recognize intention in the ritual action and the habitual action as well (Abell 1984, pp.315–316). Philosophical debate on recognition of the intention of an action is out of scope here. See, for example, Abell (1987, pp.23–34) and Anscombe (1957).
- 4) When attempting to explain one action using another preceding action, there is an issue of how far back to go. Abell (1987, pp.15–22) argues that depending on the purpose of analysis one naturally would go back to the basic action; however, there are likely to be cases in which identifying the basic action would be actually difficult.
- 5) Concerning these terms, see, for example, Scott (1991) and Fararo (1973, Chap.4).
- 6) Assume that in the sequence of actions $a_1 \rightarrow a_2 \rightarrow a_3$, a_1 and a_2 are grouped into c_1 and a_2 and a_3 are grouped into c_2 (that is, by mapping a_2 to c_1 and c_2 through overlapping, the narrative is changed to $c_1 \rightarrow c_2$). In this case:

$$\psi(a_1 * a_2) = c_1$$

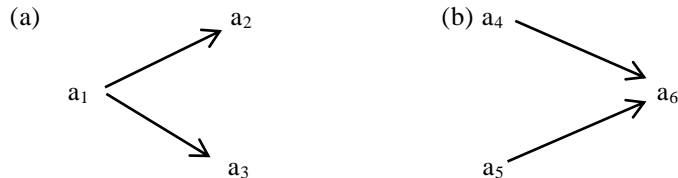
$$\psi(a_1) * \psi(a_2) = c_1, c_2$$

Accordingly, formula (1) satisfies inclusion, but does not satisfy equality. While Abbott (1993) is critical of the ambiguity of Abell’s not demanding equivalence, this cannot be said to apply uniformly, in accordance with the nature of the narrative and the objectives of analysis (also see Abell 1993b). For example, this condition will make it easier to focus on the roles of actions positioned as turning points in a narrative.

While we previously explained the mapping as those between groupoids, in the action set A and C it is an issue of mapping between multi-groupoids. See Bruck (1958) for details. Also see Fararo (1973, Chap.5) regarding groupoids and Boyle (1969), Lorrain and White (1971), Everett

and Nieminen (1980), and Lehnert (1981) concerning network analysis related to manipulation to create an equivalence class on a graph and relevant technical discussions.

- 7) Cases that require caution in abstraction are those such as that in Figure (a) below in which one preceding action branches off to lead to two separate actions and that in Figure (b) below in which two preceding actions individually lead to a single action. Since in a digraph the direction of a path must be uniform, no concatenation takes place in the paths of a_2 and a_3 in (a) or the paths of a_4 and a_5 in (b). These are ‘nuclear narratives’ (Abell 1987, pp.74–79) for which no further reduction is possible using the mapping ψ .



- 8) Matsushita (1989, pp.77–78) depicts the circumstances of the time as follows: “A man ran up, shouting with panting breath, ‘Kyushu Bureau is cutting down our trees!’ . . . The men ran toward the scene. As they crossed the Hachinosu Bridge after running through their settlement, they stopped abruptly, stupefied. The beautiful green cedar woods that had stood there had suddenly disappeared, exposing the bare rocky surface of the mountains. Already the tree-felling work, which had begun on the 13th, had continued for several days, except for the 15th when the work was suspended due to rain. Ninety-seven full-grown cedar trees and 600 scrubs had been chopped down. . . . To the men of Shiya, this appeared to be a blatant criminal act under the heavy-handed direction of the state.” Similar views are expressed in the comments in Shimouke and Matsubara Dams Study Group (1972, p.40) as well.
- 9) Shimouke and Matsubara Dams Study Group (1972, p.34) describes the circumstances in which the statement “fight the law with the law” was made as follows: On October 31st, the director [Director Nojima of the Shimouke and Matsubara Dams Survey Office] met with Kazuhiko Murohara, Mr. Murohara’s younger brother, . . . to request his mediation with Mr. Murohara. Kazuhiko, however, refused to speak with him, noting, “There’s nothing we can do to stop (an authorized) survey” Leaving no stone unturned, the director sought leads for contacting Tomoyuki Murohara. He later happened to run into Mr. Murohara for a very short time around the end of December. He then quickly asked Mr. Murohara about his intentions, Mr. Murohara answered laconically, “We’ve got no choice but to fight the law with the law.”

On the other hand, Matsushita (1989, p.68) describes this meeting as follows: Near the end of the year. . . . Mr. Nojima in a moment noticed that Tomoyuki’s front gate, usually closed, was open. He quickly stopped his Jeep, backed up, and walked up the stone steps. . . . Tomoyuki gave him a suspicious expression because he could not understand the situation immediately, but this suddenly changed to a look of anger as he dashed out in the rain. “Don’t you have any manners? Didn’t you see the placard out front that says ‘No meetings’? Get out of here!” Mr. Nojima replied, “You don’t understand. I didn’t come here today to talk about the dam. As I was driving by it looked like you were home so I just stopped by to say hello” Tomoyuki answered, “I don’t need to hear any greetings from you. I’ll oppose the dam in my own way. We’ll fight in our own way” Of course, this cannot be relied on as a word-for-word transcript; however, it at least is notable that there was no clear remarks along the lines of “fight the law with the law.” In fact, it is only in the words of Tomohiko, who refused to be an intermediary, that any mention of the “law” is recorded.

- 10) It is said that the number of demonstrators grew from 130 in the first demonstration march to 400 in the fifth. In addition, one chairperson of the dam response committee was Mr. Murohara’s younger brother-in-law. According to Matsushita (1989, p.64), during the first march Mr. Murohara stopped by his younger brother-in-law’s house and told his younger sister, “Don’t worry. I’ve got my own way. We’ve got our own way.” This would seem to provide a glimpse of his reasoning behind the

decision to oppose the project at that time.

- 11) There is a possibility that the application of the Expropriation of Land Act as an instrumental action had been included among Kyushu Bureau’s epistemic assumptions from the start. However, since there is no clear documentary evidence of Kyushu Bureau suggesting such a step in advance, at moment we assume here that its epistemic assumption was revised.
- 12) Due to the carryover of this gap, the exchange of opinions in the court case was centered entirely on authorization for the project and cannot be considered to have served as an opportunity for reconciliation. A settlement was reached in 1970 after Mr. Murohara's death. His wife Yoshi commented movingly at the time, “Mr. Director (of the Kyushu Bureau) bowed deeply before the altar, praying that ‘Mr. Murohara’s lesson will be put to use in future dam construction.’ I hope that these were the words that my late husband, who for thirteen long years left aside his home and his family to persevere to the end, fighting a lonely battle without any help from anybody, would have wanted to hear” (Yoshi Murohara 1972, p.553).

Appendix A: Initial Narrative Table of the "Hachinosu Castle" Dispute

Actors:

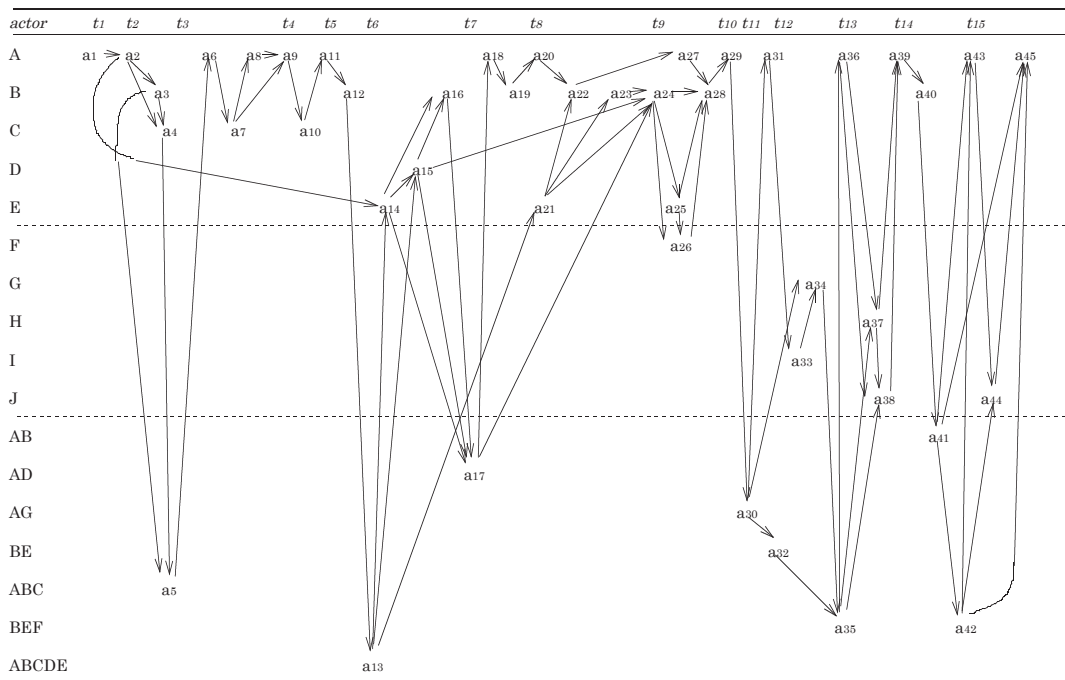
- A: Kyushu Bureau [Kyushu Regional Construction Bureau] (including the Hita Survey Office, the Shimouke and Matsubara Dams Survey Office, and their individual directors)
- B: Tomohiro Murohara [a distinguished resident of Shiya in Oguni town, and a central figure in the opposition movement (including his younger brother Tomohiko)]
- C: Other dam site landowners besides Mr. Murohara (Takao Anai, Akiyoshi Kawano)
- D: Prefectural assembly member Kitazato [a member of the Kumamoto Prefectural assembly from a distinguished family in Shiya, living in Kumamoto city]
- E: Residents of the settlement of Shiya [the central settlement in the opposition movement]
- F: Opposition party (other than Shiya; on the Kumamoto Prefecture side: Asase and Imouno in Oguni town; on the Oita Prefecture side: Warabino in Nakatsue village)
- G: Residents of villages planned for submersion on the Oita Prefecture side (not including the opposition party)
- H: Kumamoto Prefecture (including the governor and prefectural offices)
- I: Oita Prefecture (including the governor and prefectural offices)
- J: Oguni town (including the mayor, town council, and chairperson of the Kurobuchi district council)

Time	Preconditions	Act	Results of act
t ₁	1953 Chikugo River disaster	^A a ₁ : Kyushu Bureau established Hita Survey Office and began preliminary studies. Investigation of disaster traces was conducted in the Shiya as well.	
t ₂	Opposition to movement to initial planned dam sites. ^A a ₁	^A a ₂ : Kyushu Bureau conducted a triangulation survey of both banks of the Shimouke Dam site, felling trees and damaging crops that were in the way of the triangulation work.	Siya residents had impression of Kyushu Bureau's brazenness and doubt about dam construction.
	^A a ₂	^B a ₃ : A landowner (Mr. Murohara) protested the felling of the trees.	Kyushu Bureau learned of the obstacles.
	^A a ₂ , ^B a ₃	^C a ₄ : A landowner (Mr. Kawano) protested the felling of the trees.	
	^B a ₃ , ^B a ₄	^{ABC} a ₅ : Kyushu Bureau negotiated with both landowners and reached agreement on compensation.	Kyushu Bureau considered the obstacles resolved.
t ₃	^{ABC} a ₅	^A a ₆ : Kyushu Bureau conducted a topographical survey of the Shimouke district. It requested permission from Mr. Kawano for trial excavation work.	
	^A a ₆	^C a ₇ : Mr. Kawano granted the permission.	
	^C a ₇	^A a ₈ : Kyushu Bureau conducted a boring survey.	
t ₄	The Chikugo River basic river improvement plan was formulated. A decision was made to switch to Shimouke and Matsubara as candidate sites. ^C a ₇ , ^A a ₈	^A a ₉ : Kyushu Bureau again requested permission from Mr. Kawano for trial excavation work.	
	^A a ₉	^C a ₁₀ : Mr. Kawano granted the permission.	
t ₅	^C a ₁₀	^A a ₁₁ : Kyushu Bureau conducted a boring survey. It requested permission from Mr. Murohara for trial excavation work.	
	^A a ₁₁	^B a ₁₂ : Mr. Murohara refused permission and encouraged a briefing to be held on the plan for residents of the Shiya settlement.	Kyushu Bureau learned of the obstacles.

t6	B _{a12}	ABCDE _{a13} : Briefing held in Shiya, attended by most residents and prefectural assembly member Kitazato. Kyushu Bureau explained the Ministry of Construction's views on the dam plans and its necessity, based on the Chikugo River basic river improvement plan.	Shiya residents learned of the dam plans and submersion.
	ABCDE _{a13} , A _{a2} ABCDE _{a13} , E _{a14}	E _{a14} : Shiya residents protested damage to crops resulting from the preliminary survey. D _{a15} : Mr. Kitazato expressed his opposition in the briefing.	Kyushu Bureau and Mr. Murohara learned of the opposiotn and protests of Shiya residents, and Mr. Kitazato.
	E _{a14} , D _{a15}	B _{a16} : Mr. Murohara remained silent.	Kyushu Bureau recognized room for negotiation.
t7	E _{a14} , D _{a15} , B _{a16}	AD _{a17} : Kyushu Bureau and Mr. Kitazato discussed the damage to crops.	
	AD _{a17}	A _{a18} : Kyushu Bureau visited individual households to apologize for the crop damage.	
	A _{a18}	B _{a19} : Mr. Murohara expressed his regard for the Kyushu Bureau's apology.	Kyushu Bureau considered the matter resolved.
t8	B _{a19}	A _{a20} : Kyushu Bureau requested permission from Mr. Murohara for trial excavation work.	
	ABCDE _{a13}	E _{a21} : Settlement residents (loggers) expressed their opposition to the dam to Mr. Murohara.	Mr. Murohara learned of the suffering of settlement residents.
	A _{a20} , E _{a21}	B _{a22} : Mr. Murohara said, "I don't feel well today. Let's discuss this later."	
	E _{a21}	B _{a23} : Mr. Murohara inspected precedents of dam construction	Mr. Murohara learned of the actual state of preceding dam sites.
t9	Struggle for authority between the Murohara and Kitazato families.	B _{a24} : Mr. Murohara hanged a wooden placard on his front door stating, "No meeting with the Ministry of Construction and its related parties."	
	D _{a15} , AD _{a17} , E _{a21} , B _{a23}	E _{a25} : Shiya residents simultaneously announced their opposition to the dam.	
	B _{a24}	F _{a26} : Other members of the opposition party simultaneously announced their opposition to the dam.	
	B _{a24} , E _{a25}	A _{a27} : Kyushu Bureau visited Mr. Murohara again.	Kyushu Bureau learned that the liaison point for negotiations had closed.
	B _{a24} , E _{a25} , F _{a26} , A _{a27}	B _{a28} : Mr. Murohara turned them away at the door.	
t10	Plans changed to multipurpose dams for compensation	A _{a29} : Kyushu Bureau established the Shimouke and Matsubara Dams Survey Office and requested mediation by the prefectures and towns involved.	

		against Kyushu Electric Power CO. ^B a ₂₈	
t ₁₁	^A a ₂₉	^{AG} a ₃₀ : A meeting was held on the Oita Prefecture side (in Nakatsue village, which had the largest number of residents whose land would be submerged). Kyushu Bureau explained its thinking on compensation. Discussions proceeded toward cooperation with the terms.	Kyushu Bureau recognized the possibility of a breakthrough. The opposition party learned of the softening on the Oita Prefecture side.
	^{AG} a ₃₀	^A a ₃₁ : Kyushu Bureau asked the Oita Prefecture governor to persuade local residents to cooperate.	
t ₁₂	^{AG} a ₃₀	^{BE} a ₃₂ : Shiya residents resolved to oppose the project absolutely and made their case through hanging banners and other means.	Kyushu Bureau learned of the pressure from the opposition party.
	^A a ₃₁	^I a ₃₃ : The Oita Prefecture governor asked residents of Nakatsue village to cooperate.	The opposition party learned of the support from the Oita Prefecture side.
	^{AG} a ₃₀ , ^I a ₃₃	^G a ₃₄ : Four villages on the Oita Prefecture side formed a committee on responding to the dam and declared their conditional support.	Kyushu Bureau and related parties learned of the opposition party's staunch attitude.
	^{BE} a ₃₂ , ^G a ₃₄	^{BEF} a ₃₅ : The opposition party in Oguni called for opposition through repeated demonstrations targeting the four villages on the Oita Prefecture side.	
t ₁₃	^{BEF} a ₃₅	^A a ₃₆ : Kyushu Bureau again asked Kumamoto Prefecture and the town of Oguni to persuade local residents.	
	^{BEF} a ₃₅ , ^A a ₃₆	^H a ₃₇ : Kumamoto Prefecture refused this request.	Kyushu Bureau recognized that negotiations through local governments had broken down.
	^{BEF} a ₃₅ , ^A a ₃₆ , ^H a ₃₇	^J a ₃₈ : The town of Oguni refused this request.	
t ₁₄	^H a ₃₇ , ^J a ₃₈	^A a ₃₉ : Kyushu Bureau asked Mr. Murohara's younger brother Tomohiko to mediate.	
	^A a ₃₉	^B a ₄₀ : Tomohiko refused this request.	
	^B a ₄₀	^{AB} a ₄₁ : Kyushu Bureau discussed the matter with Mr. Murohara for a short time. Mr. Murohara said, "all we can do is fight the law with the law."	Kyushu Bureau determined that it had no choice but to commence legal proceedings.
	^{AB} a ₄₁	^{BEF} a ₄₂ : The opposition party held a solidary rally of 400 people.	
t ₁₅	^{AB} a ₄₁ , ^{BEF} a ₄₂	^A a ₄₃ : Kyushu Bureau asked the chairperson of the Kurobuchi District Council in Oguni town to mediate.	
	^{BEF} a ₄₂ , ^A a ₄₃	^J a ₄₄ : The chairperson refused this request.	Kyushu Bureau determined that negotiations had broken down finally.
	^{AB} a ₄₁ , ^{BEF} a ₄₂ , ^J a ₄₄	^A a ₄₅ : Kyushu Bureau commenced proceedings for application of the Expropriation of Land Act.	

Appendix B. Digraph of Initial Narrative of "Hachinosu Castle" Dispute



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Postscript: This is the English version of the author’s Japanese paper originally published in 2001, in “Riron to Hoho” (『理論と方法』). The author himself has faithfully translated it. Over the past twenty years, methods of qualitative data analysis have rapidly developed. Comparative Narratives proposed by Peter Abell is a pioneering method that focuses on sequential structures of narratives for formal comparison. However, except for Bayesian approach and some devices by Abell, development of the method itself has not cumulated and even empirical applications have been limited. The present paper applied it to interpretively explore what actions determined a turning-point in the sequence structure by examining plural narrative documents, and then suggests the utility of Comparative Narratives for unique secondary analysis. The author hopes that English reprinting of this paper will make a chance to open a discussion to reconsider the possibility of Comparative Narratives as a formal method of secondary analysis. The author also hopes that the discussion field may involve various disciplines of human and social sciences that utilize qualitative data. That is why the author has contributed the present paper to this journal, *Bulletin of the Graduate School of Integrated Sciences for Global Society, Kyushu University*, that insists integrated interdisciplinary approaches.