Settlement Composition and Actual Condition of Grave Festivals in Aso Caldera Settlements

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Abstract
Using customs such as grave festivals, we analyzed the composition of settlements in Aso Caldera, and the following results were obtained. (1) Although the Aso religion is now rare, many expressions that originated in settlements that refer to the back of the outer rim of the volcanic crater are used in Aso Valley. (2) Although grave festivals are rarely performed in Aso Valley, they are still performed by more than half of the Nango Valley settlements. (3) Grave festivals, which consist of cleaning a grave, offering sacred sake and dining together in front of the grave, express gratitude to an ancestor and are considered to be the most important settlement festivals. (4) In Nango Valley, each cemetery is owned by a family, or by a head family and portion family, and no pattern of cemetery positions was observed. However, in Aso Valley, cemetery ownership is designated by place of residence, and cemetery positions are distant from places of residence and have a tendency to be located in a certain direction and on the side facing the outer rim of the volcanic crater. (5) Although the deceased's house is clearly distinguished from others in Aso Valley as a feature of the space used in the observation of funeral customs, this feature is not observed in Nango Valley.

Keywords: Aso caldera; grave festival; local feature; settlement composition; arrangement of constituent factors

1. Introduction
The Aso District is located in the northeastern part of Kumamoto Prefecture. Its characteristic scenery is the perimeter of the outer rim of the volcanic crater, centered on Mt. Aso. The north side of the caldera is called Aso Valley, the south side is called Nango Valley; both areas have many settlements.

The grave festival, or hakamatsuri, is performed annually in the Nango Valley settlement on August 7. Research into local folklore indicates that the festival was initially observed by blood-related groups, and consists of the cleaning of the graves on or before the celebratory day, the offering of sacred sake (rice wine), and dining together in front of the graves. Social aggregations that perform such communal tasks still exist in the Aso District. These social connections can be based on a family member or blood relative, shared territorial bonding, and so on, and have names such as han, kumi, ku, buraku, which appear to be strongly related to the spatial composition of a settlement.

In the present study, it was found that the distribution of customs in caldera settlements, such as grave festivals, and the constituent factors of settlements and premises clearly reflected local features and localities. Moreover, by grasping the actual condition of the grave festival based on the associations between social aggregations and considering the settlement from the arrangement composition of constituent factors, this study aims to clarify the features of caldera settlements with respect to the performance of grave festivals.

2. Study Method
First, settlements in the present Aso administrative district were classified from the features of their locations. Settlements were locally classified as either in Aso Valley or Nango Valley, and by geographical features such as the slope at the foot of a mountain, the base at the foot of a mountain, plateau and flat ground, which are classified by a topographical map and a field survey.

Next, in order to capture the distribution feature of the elements which constitute settlements and premises, as well as customs, we administered a questionnaire to the heads of the 183 Aso administrative districts. The contents of the questionnaire consisted of the constituent elements of settlement (e.g., production region, water system and shrines, etc.), the constituent elements of premises and house (e.g., buildings to
constitute premises, building's position and plan of the main building, etc.), and the funeral custom performed in the settlement, and we captured these distribution features for each classification of the abovementioned areas and locations. (Table 1.).

Furthermore, the actual conditions of the grave festival were clarified by interviews of the heads of the administrative districts and field surveys, and the spatial composition features of the settlements were determined by field surveys for eight settlements. The contents of the field survey are the location positions and the areas of settlements (e.g., positions of major thoroughfares, rivers, water system, cemeteries, and shrines), the composition of each premises (e.g., roof shape, direction of the main building), and the contents of the interviews (i.e., historical form of the settlement, road and river positions, place names, worship of Mt. Aso, names and locations of social aggregations, etc.). Based on the results, each feature was clarified by comparing and analyzing the composition of each settlement and premises, and the contents and areas of social aggregations.

3. Features of Aso Caldera Settlement Locations

The area surrounded by the Aso Caldera is divided into the northern Aso Valley and the southern Nango Valley, centering on Mt. Aso. In Aso Valley, lowlands in the shape of an alluvial fan spread, inclining gently toward the north wall of the outer rim of the volcanic crater from the foot of the Aso central cone as a whole. The altitude is 510 m at Kitasakanashi at the easternmost end of the valley; in Akamizu at the westernmost end, it is 470 m. This altitude difference is smaller than that of Nango Valley. It is considered that settlements first formed at the end of the alluvial fan at the eastern end of the valley, which had abundant spring water, or at the talus cone end directly under the outer rim of the crater; later settlements were founded on the flat ground at the foot of the outer rim, which had better drainage. In contrast, Nango Valley is a crater basin, and has the geographical feature of a river terrace. Since the altitude is 750 m in Sosogawa, at the easternmost end of the valley, and 300 m near the Ayukae waterfall at the westernmost end, the vertical drop is large, and many settlements were founded between the slope and the base at the foot of mountains (Table 2.).

4. Distribution Features in the Customs and Constituent Factors of Settlements

4.1 Customs

On the question regarding the existence of courtesies performed at graves, approximately 51% of settlements in Nango Valley and only 6% in Aso Valley answered "yes". Thus, a locally different tendency was found. Moreover, all grave festivals (ancestor festivals) in Nango Valley are performed on August 7; in the Akamizu settlement which answered "yes" uniquely in Aso valley, located at the northwestern foot of Mt. Aso, the festival is performed on April 1 (Fig.1.).

Table 1. Questionnaire

| Place        | numbers of distribution | numbers of resumption | %   |
|--------------|------------------------|-----------------------|-----|
| Aso Valley   | 114        | 48                    | 42  |
| Nango Valley | 37         | 21                    | 57  |
| total        | 181        | 85                    | 46  |

Table 2. Classification of Settlements

| Settlement | numbers\(^1\) of settlements | slope at the foot of a mountain\(^1\) | base at the foot of a mountain\(^1\) | plateau and flat ground |
|------------|-------------------------------|--------------------------------------|--------------------------------------|-------------------------|
| Aso Valley | 89                            | 8                                    | 41                                   | 40                      |
| Nango Valley | 76                  | 23                                    | 42                                   | 11                      |

\(^1\) : number s of the small settlements in a settlement with the present administration place-name

\(^2\) : In the settlement at the foot of a mountain, the geographical feature to locate is defined with the difference in the altitude exceeding 30m as "slope", and less than 30m as "base".
Regarding the observation of funeral customs, there is a tendency for cremation to be performed before the funeral, and performing the burial procession even after cremation is observed throughout the region.

To the question regarding the order of funeral customs, 80% of settlements replied "cremation before the funeral". Locally, this response was 87% in Aso Valley and 67% in Nango Valley. Moreover, for the response of cremation after the funeral, there were additional comments such as "not all cremations are performed afterwards", "cremation can be done first, if the crematorium is willing", and no settlements practiced later cremation exclusively.

To the question regarding the practice of burial processions, a little over 40% of all respondents replied "yes", and it was shown that about half of settlements continue the practice of burial processions. As a local feature, 32% of settlements in Aso Valley replied "yes", while 61% of settlements, more than a half, still perform burial processions in Nango Valley. In addition, the distribution feature of the physiographic conditions by which a settlement locates was not seen.

Next, to the question regarding the worship of Mt. Aso, only 16% of respondents replied "yes". Moreover, this distribution feature was barely visible, either locally or topographically. According to previous studies, in this practice, called oikemairi, a man and a woman climb Mt. Aso during the equinoctial weeks, and it is related to the Aso religion. The practice of sanjou hondou ("mountain climbing worship") was also reported in one settlement in Aso Valley. Moreover, customs such as "praying toward Mt. Aso with hands joined in the morning", "worship of Mt. Aso every morning by elderly people three generations ago" were reported in subsequent interviews in more than two settlements, and it appeared that vestiges of the Aso religion still remain.

4.2 Constituent Factors of Settlements and Premises

A relationship between the district or geographical features of a settlement location and the distribution features of the constituent factors of settlements and premises was not observed. Most premises consisted of a main building facing south and a stable facing east and located to the west of the main building. Moreover, the plan composition of the main building was usually a yotsuma (four-rooms) type (Fig.2. and 3.).

However, expressions that originated within Aso Valley settlements for describing the outer rim of a volcanic crater, such as hashibe, tobata ("house end") and obone, suggests that residents were conscious of the back outer rim of the crater.

5. Actual Condition of the Grave Festival

5.1 Outline of the Grave Festival

According to previous studies, the grave festival performed in Nango Valley, also called hakasarai and hakasarai, consists of offering sacred sake at the grave, visiting the grave, and dining together in front of the grave, but the grave cleaning performed before these activities occupies most important position in the festivities. Moreover, these studies indicate that grave festivals in almost all settlements involve the
offering of sake and are not attended by priests. The absence of priests suggests that Shintoism is generally more prevalent than Buddhism in Nango Valley⁶. In addition, although this festival was initially confined to the blood-relative group, it is also clear that the grave festival is positioned to bind a shared-territorial group (in this case, sharing a cemetery) to address influxes of new residents.

5.2 Grave Festival in Murayama Settlement in the Nango Valley

The Murayama settlement is located at the southeastern foot of the outer rim of the crater. The shrine, which is located on a large peak at the center of the settlement, is constructed for a tutelary deity, and houses line the incline from the shrine to the base of the peak. Three cemeteries are located in the surroundings of the habitation region, and production regions, such as rice paddies, fields and pasture, extend to the perimeter of the settlement (Fig.4.).

The grave festival is performed in the cemetery at the northernmost end of the settlement. This cemetery is the oldest in the settlement, and the households that own it are usually the head families. In the beginning, 16 households in Kamimura of the settlement participated in the festival, and one household has since moved out. Interviews indicated that residents believe that their existence is the result of ancestral favor, and thus this event is the most important settlement festival.

Of the 15 participating households which own the cemetery, 3 to 4 households are assigned to a group, of which one acts as a touban ("group on duty")⁴. One household of this group becomes the nenban ("household on duty")⁴, and manages the grave festival. Moreover, in cases of rain, the festival is performed at the house of the nenban.

The supplying of funds for managing the grave festival has a complicated structure. The head family that owns the cemetery originally loaned 20,000 yen to each participating household; each year, participants pay an advance of 2000 yen as 10% interest on the original loan. Thus, the annual fund for grave festival management is 30,000 yen.

Although grave cleaning has traditionally been performed on August 6, since some residents now work outside the settlement, the grave cleaning is now finished by the morning of August 7.

On the morning of August 7, all members of each household gather in the cemetery, arrange flowers on the votive pagoda at the center of the cemetery, and offer joss sticks. In addition, the name of the master of the 15 households at the time of its construction is carved on the pagoda, and represents the shared bond of all households.

Sutra recitation is performed by an invited priest at 10:00 a.m. As stated previously, it is very rare to invite a priest; only three settlements⁵, including Murayama, follow this practice. At this time, people follow the priest and pray with their hands joined (Photo 1.).

The luncheon party is then held in one corner of the cemetery. Since graves increase over time, the dining area is not set, and is performed at different areas of the cemetery each year. However, there is a set seating arrangement, with the priest seated first at the highest point in the luncheon party location. The men face each other and sit on a lower part, based on a seniority-based system, and women and children sit on an even lower part. In addition to alcohol and drinks, tofu and

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Fig.4. Murayama Settlement

Photo 1. People Follow the Priest and Pray

Photo 2. Luncheon Party
other vegetarian dishes are usually served, although there are no strict rules, and sweets have been served in recent years. Since the party is considered to be taking place before one's ancestors, it is assumed that topics of conversation should be pleasant and lighthearted (Photo 2.).

The meal usually lasts an hour, after which cleaning duties are performed by the touban, and finally the nenban burns the waste in the cemetery and the grave festival is concluded.

6. Local Features of Settlement Compositions

Since grave festivals are practically absent in Aso Valley, we considered the background for eight settlements in Nango Valley and Aso Valley by analyzing the positions of cemeteries and the contents of the observation of funeral customs related to the grave festival. The object settlements of Nango Valley and Aso Valley have different geomorphic characteristics. In Nango Valley, they are located in Nagano at the foot of Mt. Aso; in Kishino, which is southwest of Mt. Aso at the foot of outer rim of the volcanic crater; and in Murayama, which was described previously. For Aso Valley, the settlements are Sanno, located at the foot of the northwest outer rim of the crater; Nishiyunoura, similarly located in the northwest outer rim; Nagakusa, located on the northeastern foot of Mt. Aso; and Nakadoori and Yakuinbaru, which are located on the level ground of the central caldera. In particular, the compositions of Sanno in Aso Valley and Murayama in Nango Valley, symmetrically-located settlements centering on Mt. Aso with similar location conditions, are compared and discussed (Fig.1.).

6.1 Murayama Settlement and Sanno Settlement

In Murayama, a habitation region follows a section of national highway No.265 and the parallel alley of it, which cross the center of the settlement from north to south in accordance with the geographical feature at the foot of the outer rim of the crater. The premises are located in the shape of rice terrace between in fields of 2 or 3 lots. Sobo Shrine is located at the highest point of the region, on the side of the outer rim of the crater. Although the rice paddies and fields are intermingled and extend from the foot of the outer rim at the front of the habitation region to the flat ground, this settlement originally lacked a water supply, and all the present rice paddies were previously fields. Moreover, there are pastures on the upper part of the outer rim. Although two rivers flowed into the settlement, there was little water and many premises had wells. There were three public cemeteries in the perimeter of the habitation region, none of which have a common orientation. One cemetery is located along a major thoroughfare at the northernmost end of the settlement, one is located at the foot of the outer rim at the easternmost end of the habitation region, and the last is in the western part of the habitation region, inside the production region. As previously stated, they are owned by each head family and portion family(Fig.4.).

The Sanno settlement is located at the foot of a mountain slope on the eastern side of Kojyougahana, which juts out from the northern foot of the outer-rim. The main road follows the terrain of the outer rim, and a road that branches off from it extends down the slope of the outer rim, along which premises are located. Although spring water exists within the habitation, this amount is decreasing, and Sanno depends on other settlements for water. There is no shrine in the settlement, and early graves are located on the outer-rim above the premises of each group. Rice paddies extend towards the southwestern perimeter, while pastures extend towards the northeast perimeter. That is, the production region (rice paddies), roads, habitation region, graves and production region (pasture) are located from the foot of the volcanic crater to the outer rim, and that the composition of this settlement is in layers (Fig.5.).

As mentioned earlier, although the settlement compositions of Murayama and Sanno have formed a layered shape based...
on common geographical features, only the positions of the cemeteries differed. Although the cemetery is located on the mountain side of the outer rim and comprises part of the layers in Sanno, this regularity is not seen in Murayama.

6.2 Differences in Settlement Compositions in Nango Valley and Aso Valley

We indicate the constitutional features for each settlement. In Nagano, a habitation region follows two major thoroughfares, centering on Nagano Aso Shrine, and most of the head family is around this shrine. A production region mostly spreads around the habitation region. The cemeteries are located in the habitation region or its end. In Kishino, a habitation region follows the major thoroughfare from the outer rim of a volcanic crater to the base, centering on Douan (temple). Mostly, the head family is around southern end of the habitation region. In Nishiyunoura, the settlement has the constitution in layers based on Douan, and the portion family is at the outer rim side. The cemeteries are located at the northern and geographical feature such as Murayama and Sanno. The cemeteries are located in the end of the habitation region. The portion family is located in the outer rim side from the head family. In Nakadoori, a thoroughfare passes in a line, a habitation region follows it, and a production region spreads around them. Most of cemeteries are located in the west or north end of the habitation region. In Yakuinbaru, the Shimomiya Shrine located on the south of the settlement is the tutelary deity, and most of head family is around this shrine. A production region spreads around the habitation region. Cemeteries are located on the north side distant from the habitation. In Nagakusa, constitutional regularity is not found in this investigation.

As mentioned above, the settlement located at the foot of the outer rim of a volcanic crater is the constitution in layers based on geographical features. Murayama, Sanno and Nishiyunoura except for Kishino are such constitutions, but the settlement at the foot of Mt. Aso is not. On the other hand, the settlement located on flat ground and plateau, mostly is the constitution of a concentric circle centering on a shrine etc.

When examining grave positions in Aso Valley, except for Nagakusa settlement, which has many graves in premises, cemeteries are usually limited to a certain area, and many are located on the side of the outer rim, and have a tendency to be distant from the habitation region. Moreover, the ownership pattern for each premises location is divided in a manner similar to that for the Sanno settlement. However, in Nango Valley settlements, there are no rules on the direction of the location of a cemetery, and they are located in both the perimeters and interiors of each habitation region, and the ownership pattern also tends to be divided between head families and portion families (Fig.6).

6.3 Local Features Observed

We consider the local features of the observation of funeral customs from the composition of the funeral group holding the funeral, and the relation of the actions and location of the deceased and the family, funeral group, and an attendant.

So we indicate the flow of funeral customs in the Aso district.

① vigil: When death is confirmed in nando, the dead body is laid down with the north pillow in zashiki, and a funeral group chiefly prepares. The vigil is performed in zashiki. At this time, the men of the funeral group do the receptionist and women prepare the meal.

② cremation: In the morning of the funeral ceremony, letting the hearse leave home through omote from zashiki, the family goes to a crematory. In the meantime, the funeral group does preparation of the ceremony, making of the meal, and grave cleaning.

③ ceremony: After cremation, the ashes are laid in zashiki passing through omote, and the ceremony is held.

④ burial: Let the ashes leave home through omote from zashiki, the family goes to a crematory. In the meantime, the funeral group does preparation of the ceremony, making of the meal, and grave cleaning.

As mentioned above, it is common that cremation is performed before the ceremony on the second morning of the vigil, and a ceremony is held in the state of ashes. And in many cases it is held at the house by mutual aid of the funeral group which consists of each two every house from a neighborhood group.
Moreover, it is not rare to hold both the burial procession and subsequent burial on the same day. In addition, grave cleaning before the ceremony is the vestiges of digging grave while burying.

Meanwhile, differences in the use of space at vigils and funerals were observed as local features. In Aso Valley, these included the communal preparation, clearing and preparing a priest's waiting area, the attendant's luncheon party, the tendency to borrow a neighboring or relative's house, and the avoidance of using the deceased's house. Moreover, the cooking pot used at funerals, a large iron pot known as the okamasama, is used every day for making food for oxen and horses. This practice indicates that the deceased's house and the spaces and objects which living human being use must be distinguished; however, this practice is not observed in Nango Valley. All rituals and communal activities are held in the deceased's house, and indicates a consciousness of the dead different from that in Aso Valley (Fig.7).

7. Conclusions

The following conclusions on the composition of settlements in Aso Caldera were obtained, mainly through examination of the grave festival.

1. Using a questionnaire, it was clarified that one settlement performs the grave festival in Aso Valley, and 19 (about 50%) settlements in Nango Valley. Thus, this could be considered a local feature.

2. Although the Aso religion now is rare, vestiges still exist, and many expressions originating within the settlements which refer to the back of the outer rim of a volcanic crater are still used in Aso Valley. Thus, this could be considered a local feature.

3. A grave festival consists of cleaning a grave, the offering of sacred sake and dining together in front of the grave, and there is a rule that conversation should be pleasant and lighthearted at the luncheon party before the ancestral graves. Thus, the grave festival expresses gratitude for existence as an ancestral favor, and is thought to be the most important festival of a settlement. Moreover, priests do not usually join these festivals.

4. Although cemeteries are usually distant from places of residence and are concentrated and located in certain directions (primarily towards the outer rim of a volcanic crater) in Aso Valley settlements, these tendencies are not seen in Nango Valley settlements. Moreover, although cemeteries are owned according to fixed places of residence in Aso Valley, they are owned by the same family, or by head families and portion families in Nango Valley.

5. Regarding features of the space utilized in the attendance-at-a-funeral courtesy, although the deceased's house is clearly distinguished from others in Aso Valley, this tendency is not observed in Nango Valley.

As mentioned previously, the concept of the dead is different in Aso Valley and Nango Valley, and these differences have clearly affected the spatial composition of settlements. In addition, the origins of grave festivals, and the reason these festivals are seen only in Nango Valley are considered as subjects for future investigation.

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Notes

1 Mr. Ito indicates "han" as the self-governing unit and "kumi" as the branched unit in "han" clearly (ref. 2)). But in Aso caldera settlements, the name is various and is not uniform, so we merely mentioned the unit name.

2 Eight settlements are three in the Nango Valley and five in the Aso Valley.

3 We were hardly able to indicate distribution features of the physiographic conditions. For a few examples, about the water supply system, the tendency was indicated that there are many settlements for which it depends on spring water at the foot of a mountain, and depends on the well at the flat ground or plateau.

4 touban: group in 3-4 households which own the cemetery, manages the grave festival nenban: one household in touban, controls the grave festival.

5 Other two settlements except for Murayama are Shikimi of Takamori Town and Nakamatsu of Minami-Aso Village according to interviews to the priest.

6 A portion family is a family which was divided from a head family and has been dependently.