23

The Emergence of Elite Tombs in the Southern Maya Area

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Elite tombs provide evidence that indicates the social inequalities, stratifications, differentiations, and power negotiations of specific individuals or groups in societies, as well as centralized polities in human history. This paper examines more than 630 burials found at 61 sites to understand when and how elite tombs emerged in the Maya highlands and the southern Pacific Coast. Known as "Southern Maya Area," it has long been recognized as one of the important arenas for the emergence of social complexity in Mesoamerica. To provide a comparative baseline for future research, this study uses the analytical concept of "energy expenditure" for mortuary practices (e.g. Carr, 1995; Tainter, 1978) to determine the processes for the emergence of elite tombs in the early development of social complexity in Mesoamerica. I focus on diachronic change between grave form and the quantity and kinds of grave goods, which is often reflective of vertical social positions. In the Middle Preclassic, there is a slight correlation between grave form and types of grave goods, indicating that different statuses emerged among specific individuals or groups as demonstrated in mortuary practice at that time. Elaborate grave forms with many kinds of grave goods and with sumptuous goods such as jade, shell, pyrite and obsidian begin to appear in the Late or Terminal Preclassic. Importantly, elite tombs were embedded in sacred landscapes constituted by public constructions and the erection of stone monuments with rulers' images and inscriptions. Thus, the emergence of elite tombs could synchronize with these elements, which are indicators of political power. In the subsequent Early Classic period, social differentiation became more rigidly stratified as indicated by a clear correlation between grave form, kinds of grave items, and possession of sumptuary goods. In addition, for comparative purposes, this study analyzed approximately 880 burials found at other Maya sites. As a result, I identified multiple variations in correlation between grave form and types of grave goods. It could suggest that "elite tombs" did not appear suddenly, rather they were part of ongoing social relations among group members through time that shaped specific individuals or groups with political power. These processes varied through the time across the cultural and historical environment.

Las tumbas de las élite proporcionan evidencia de las desigualdades sociales, estratificaciones, diferenciaciones y negociaciones de poder en individuos o grupos específicos en las sociedades, así como políticas centralizadas en la historia humana. Este artículo examina más de 630 entierros encontrados en 61 sitios, para comprender cuándo y cómo surgieron las tumbas de élite en el área Sur Maya. A la vez que

se ha reconocido por mucho tiempo como una de las importantes áreas para comprender el surgimiento de la complejidad social en Mesoamérica. Este estudio utiliza el concepto analítico de "energía invertida" para las prácticas mortuorias con el objeto de comprender los procesos para el surgimiento de las tumbas de élite en la trayectoria temprana en la complejidad social en Mesoamérica; ya que al reunir el cambio diacrónico entre la forma de entierro, la cantidad y tipo de ofrendas, reflejan generalmente posiciones sociales verticales. En consecuencia, durante el periodo Preclásico Medio, existe poca correlación entre la forma de entierro y los tipos de ofrendas, lo que indica que surgieron diferentes rangos sociales entre individuos o grupos específicos como se demostró en la práctica mortuoria en ese momento. Los entierros más elaborados con varios tipos de ofrendas y con objetos suntuosos como jade, concha, pirita y obsidiana comienzan a aparecer en el Preclásico Tardío o Terminal. Es importante destacar que las tumbas de élite estaban insertadas en paisajes sagrados constituidos por medio de construcciones públicas y monumentos esculpidos con imágenes de los dirigentes. Por lo tanto, el surgimiento de las tumbas de élite podría sincronizarse con los elementos de arriba mencionados, que son indicadores de poder político. En cuanto al período Clásico Temprano, la diferenciación social se estratificó de manera más rígida, como lo indica una clara correlación entre la forma de entierro, los tipos de ofrendas y la posesión de objetos exóticos. Además, para fines comparativos, este estudio analizó aproximadamente 880 entierros encontrados en otros sitios de áreas Mayas. Como resultado preliminar, se identificaron múltiples variaciones en la correlación entre la forma de entierro y los tipos de ofrendas. Sugiriendo probablemente que las "tumbas de élite" no aparecieron repentinamente, sino que formaron parte de las relaciones sociales en curso, entre los miembros del grupo a través del tiempo que formaron individuos específicos o grupos con poder político. Estos procesos variaron a través del tiempo a través del entorno cultural e histórico en Mesoamérica.

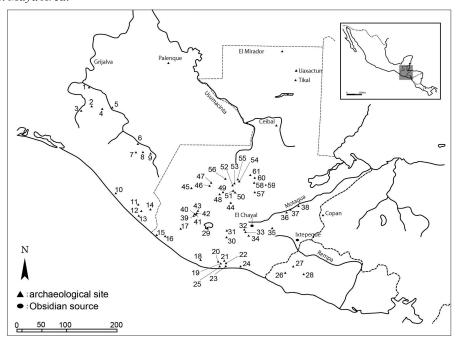
Introduction

The "Out of Eurasia" project (Project leader: Naoko Matsumoto, Professor of Okayama University, Japan) aims to develop an inter/multidisciplinary and comparative study across and beyond the region to understand the process and mechanism of development of civilization in the world through long-term perspective. Group A03 "Growing complexity of social groups and warfare", to which I belong, aims to reconstruct the formation processes of huge, stratified, and complex societies focusing on warfare. The presence of an "elite" is evidence of specific individuals or groups in societies who sometimes play important role in warfare. Although there are several indicators of elite

status, the "elite tomb" would be a feature of paramount importance for understanding early civilizations and social complexity around the world. This paper focuses on examining when and how elite tombs emerged in the Southern Maya Area (Figure 23.1), where it has long been recognized as an important indicator for the emergence of social complexity in Mesoamerica. The "Out of Eurasia" project is also aimed at developing new methodologies for comparative study, so this paper utilizes, as comparative baseline, the analytical concept of "energy expenditure" for mortuary practices, and provides preliminary comparative analysis with the larger Maya region.

Figure 23.1.

Map of Southern Maya Area.



Note: 1. San Isidro, 2. Ocozocoaulta, 3. Mirador, 4. San Agustín, 5. Chiapa de Corzo, 6. Don Martin, 7. Santa Rosa, 8. Laguna Francesa, 9. Ojo de Agua, 10. Pampa del Pajon, 11. Vivero, 12. Paso de la Amada, 13. Altamira, 14. Izapa, 15. La Victoria, 16. Ujuxte, 17. Talalik Abaj, 18. Sin Cabezas, 19. Los Chatos, 20. Manantial, 21. Balberta, 22. Marinala, 23. San Jose, 24. Chquiuitan, 25. Paraiso, 26. Ataco, 27. Chalchuapa, 28. El Cambio, 29. Chukmuk, 30 Alameda, 31. Urias, 32. Kaminaljuyu, 33. El Murato, 34. Canchon, 35. El Chaguite, 36. Los Llanos, 37. Antomblan, 38. La Reforma Huite, 39. Checajá Urbina, 40. El Instituto, 41. Las Victorias, 42. Chovicente, 43. Monte Bello, 44. Zacualpa, 45. Zacleu, 46. Los Cimientos Chustum, 47. Nebaj, 48. La Lagunita, 49. Chiramos, 50. Zurin, 51. Pasmolon, 52. El Jocote, 53. Chicruz, 54. Las Tunas, 55. Los Encuentros, 56. Chiguay, 57. El Morino, 58. El Porton, 59. Santo Domingo, 60. Los Mangalres, 61. San Andres Sacabaj

The definition of "elite" or "elite tomb" varies depending on the study area and culture. In the case of the Maya, it is relatively easy to identify elite tombs during the Classic period (A.D. 250-900/1000) for following reasons: First, there are textual and iconographic representations regarding elite, king, ruler and royal families. Sometimes these representations are associated with mortuary context. Second, elite tombs have different contexts and contents of offering goods than other burial contexts. On the other hand, it is hard to identify "elite tombs" during the Preclassic period (2000 B.C.-A.D. 250) because it is an early in the formation process of complex societies with only modest differences among burials. Therefore, to identify "elite tombs" in the early stages of the formation process of ancient civilizations, we need to compare all types of burials and focus on a diachronic perspective to identify when and how elite tombs emerged in the study area.

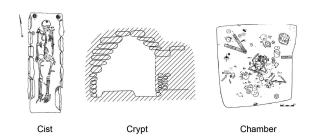
Analytical concept of "energy expenditure" for mortuary practices

For the purposes of comparative analysis, I will use the concept of "energy expenditure" for mortuary practices (e.g. Carr, 1995; Tainter, 1978). In general, the "death" or "loss" of a community member is a special event and the

Figure 23.2.

Burial samples. Cist: Agrinier, 1964; Crypt: Smith, 1955;

Chamber: Kidder, et al., 1946



energy expended on mortuary practices and burials reflects the social status of the deceased individual (e.g. Binford, 1971; O'Shea, 1981; Pearson, 2008; Wason 1994). Christopher Carr (1995) provided comprehensive ethnographical data about mortuary practices based on the Human Relations Area File (HRAF) to test the basic premise that mortuary practice used reflected social organization. He provided several indicators of vertical social position of individuals. According to his study, overall energy expenditure is a strong indicator that reflects vertical social position (Carr, 1995, p.179). Overall energy expenditures are difficult to detect archaeologically because mortuary practices included immaterialized components such as song and dance. Carr points out, however, that grave form and kinds of grave furniture can be a strong indicator of vertical social position and more archaeologically detectable (Carr, 1995, p.180).

These analytical and theoretical concepts mentioned above are out of date in recent mortuary archaeology. Furthermore, there are many criticisms, including that these studies are simplistic, static, and unworkable for seeing social complexity and overlook the importance of "death" in a society (e.g. Gillespie, 2001). In addition, mortuary practice is not necessarily related to social status or political power nor indicative of the presence of an elite (e.g. Hodder, 1982). However, the concept of energy expenditure is a key component in the studies of monumental architecture as a comparative baseline (e.g. Burger and Rosenswig, 2012), and as such, I believe that the concept of energy expenditure for mortuary practices could be still useful as discussed below.

Dataset and Methods

This study collected data from 639 burials found at 61 sites in Southern Maya Area dating from the Early Preclassic to Early Classic period (Figure 23.1 and Table 23.1). For comparative analysis, this study included 890 burials found at another six sites in Maya rea, which have a long history and will help document diachronic change. My database contains several attributes related to mortuary practice such as size of graves, location, context, body location and orientation, body treatment such as cranial deformation and so on. This study focuses on only correlations between grave form and kinds of grave furniture because these attributes may reflective of vertical social position in ancient society.

According to the general classification of grave form in the Maya area (Ruz, 1968; Welsh, 1988), four main grave types are identified; Simple, cist, crypt and chamber tombs (Figure 23.2). Simple graves are dug directly in the soil and an individual is interred directly in the pit. Cist graves are composed of stone slabs and have space for one or two individuals. Crypt toms are constructed by cutting stone

of material extraction. If so, the crypt and chamber reflect higher energy expenditures than simple and cist graves.

Funerary urns are eliminated from the analysis because

Chamber style tombs are big rectangular graves excavated into bedrock that have space for one or more individuals and many offerings. The size difference might reflect the cost of material extraction. If so, the crypt and chamber reflect higher energy expenditures than simple and cist graves.

blocks and have space for more than two individuals.

the majority of them are often interpreted as dedicatory to public constructions or other special meaning, that is, may

not reflect on vertical social position.

Grave furniture mainly includes ceramics, jade or green stone artifacts, shell ornaments, obsidian, hematite/pyrite objects, stone artifacts (e.g. Metate and Mano), clay artifacts (e.g. figurines and ornaments), bone artifacts, and animals. To identify elite tombs, this study focuses on items to which people had limited access, for instance, jade, shell, obsidian, hematite/pyrite items or other prestige goods.

Table 23.1. *Burial samples in this study.*

Southern Maya Area

Terminal Classic

Early Preclassic	8	-	-	-	8
Middle Preclassic	93	2	1	-	96
Late Preclassic	232	7	3	-	242
Terminal Preclassic	116	14	15	6	151
Early Classic	88	24	17	13	142
Tikal					639
Period	Simple	Cist	Crypt	Chamber	Total
Middle Preclassic	6				6
Late Preclassic	6	2	5	1	14
Terminal Preclassic					0
Early Classic	13	10	4	3	30
Late Classic	138	25	12	2	177
Terminal Classic	14				14
Copan Period	Simple	Cist	Crypt	Chamber	241 Total
Middle Preclassic	13	-	-	-	13
Late Preclassic	4	-			4
Terminal Preclassic	-	-	-	-	0
Early Classic	34	8	2	-	44
Late Classic	36	11	12	-	59
Terminal Classic	-	-	-	-	0
Piedras Negras					120
Period	Simple	Cist	Crypt	Chamber	Total
Middle Preclassic	-	-1	-	-	0
Late Preclassic	-	-	-	-	0
Terminal Preclassic	20	₩.	-	-	0
Early Classic	1	2	1	8	4
Late Classic	19	17	4	-	40

Period	Simple	Cist	Crypt	Chamber	Total 34
Middle Preclassic	34	¥	9	-	
Late Preclassic	-	-	-		0
Terminal Preclassic	-	-	-		0
Early Classic	64	19	6	-	89
Late Classic	86	12	6	-	104
Terminal Classic	57	8	-	-	65
					292
Altar de Sacrificio					
Period	Simple	Cist	Crypt	Chamber	Total
Middle Preclassic	8	-	-	-	8
Late Preclassic	12	2	-	-	14
Terminal Preclassic	6	-	-	-	6
Early Classic	21	-	-	-	21
Late Classic	15	1	1	-	17
Terminal Classic	61	1			62
					128
Dzibilchaltun					
Period	Simple	Cist	Crypt	Chamber	Total
Middle Preclassic	5	-	-	-	5
Late Preclassic	16	1	-	-	17
Terminal Preclassic	-	-	-	-	0
Early Classic	1	2	-	-	3
Late Classic	2	37	1	- 40	
Terminal Classic	-	-	-	-	0
					65

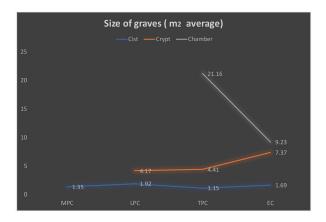
289

These items have special meaning in the Mesoamerican world and were obtained or exchanged through long-distance trade probably under control of the elite as prestige goods, which play an important role in the development of social stratification (e.g. Aoyama, 2001; Brumfield and Earle, 1987).

To find correlations between grave form and grave furniture, I counted the number of different kinds of grave furniture in each grave form and controlled for time. For example, when a burial contains 5 ceramic vessels, 2 figurines, and 1 jade artifact, I record it as 3 kinds of grave furniture. Moreover, I examined how many burials had prestige goods in each grave to identify another indicator of an elite tomb.

Some limitations of this study are, first, that it is based on only accessible data from research reports, papers, and books. Furthermore, some sites have limited information and lack necessary information. Second, especially in the case of crypt or chamber graves, there is the possibility of looting or that it was re-entered in a later period, which does not reflect the original context. Third, this analytical method might ignore variability of cultural and social meanings of mortuary practices in each site.

Figure 23.3. *Diachronic change of size of grave.*



Results

Grave form and size

Figure 23.3 shows the size of grave forms through the time. It is hard to identify the size of simple burials because the majority of simple burials did not delimit clearly the boundaries of the burial. Nevertheless, size and energy expenditure for grave construction may be smaller than the other three grave forms. Cist burials first appeared in San Andres Sacabaj and Los Mangales during the Middle Preclassic period (1000-400 B.C.). The size of a cist does not change drastically through time and is approximately 1.5 m². The first known crypt burial was constructed in Canchon during the Middle Preclassic period, but the size of the crypt was not reported. During the Late and Terminal Preclassic (400 B.C.-A.D.250), the size of crypts is around 4 m². During the subsequent Early Classic period (A.D.250-600) the size of crypt graves grew, indicating that energy expenditures became higher than in previous periods. The chamber type grave appeared in Kaminaljuyu during the Terminal Preclassic period (100 B.C.-A.D. 250), and the size of this grave type is apparently bigger than other grave types.

Correlations between grave form and grave furniture

Overall, the number of different types of grave furniture increases over time and the number of burials with no grave furniture decreases over time (Table 23.2). In the Early Preclassic period (2000-1000 B.C.) it is difficult to identify clear difference between burials. In the Middle Preclassic the greater variation of mortuary practices appears but the difference of number of grave furniture among burial forms was unclear. In the Late Preclassic, crypt graves were slightly more prominent than other types.

While in the Terminal Preclassic, the chamber type grave form appears. The differences in the number of kinds of grave furniture between each grave type are bigger than the previous periods. Interestingly, in the Early Classic period polarization between chamber type and other grave forms occurred. The diversity of grave furniture in crypt graves drastically decreased and differences among crypt, cist and simple burials became minimal.

Correlations between grave form and limited access goods

During the Middle Preclassic, there is no clear correlation between grave form and the quantity of different kinds of limited access goods (Figure 23.4). During the Late Preclassic period, crypt graves with 3 kinds of limited access goods appeared. It is noteworthy that about 20% of simple burials generally categorized as "non-elite burial" have limited access goods during the Middle and Late Preclassic period. In the Terminal Preclassic, more than 50% of large and more elaborate graves contained limited access goods. 45% of chamber and crypt type graves have more than two kinds of limited access goods. In addition, graves with four kinds of limited access goods appear in the Terminal Preclassic period. For the Early Classic, there is a clearer correlation between grave form and kinds of limited access goods. Crypt and Chamber type graves contains 100% limited access goods. Furthermore, subsequent graves have more than three kinds of limited access goods: Chamber is 90%, Crypt is 50%, Cist is 10%, and Simple with 3%.

Comparative data with other Maya sites

Tikal, the most important Maya Lowlands center located in the Peten region of Guatemala, had almost the same pattern as the Southern Maya Area (Figure 23.5). In the Late/Terminal Preclassic elaborate graves with rich offering objects--"elite tomb"-- emerged. Evidence suggests that Early Classic Tikal might be more stratified than in previous periods. In the Late Classic, the polarization between crypt and other grave types occurs. This is the same pattern for the Early Classic Southern Maya indicating that powerful and exclusive rulers governed the greatest cities in the Maya area. At Altun Ha, Belize, elaborate graves appeared in the Early Classic and polarization follows in the Late Classic period. At Copan, in Western Honduras, apparent "elite tomb" appeared in the Early Classic period with major differences between grave forms, likely related to the foundation of the Copan dynasty. Unlike Tikal and Altun Ha, in Late Classic Copan the difference in quantity of grave goods and grave types is minimal, suggesting that the ruler's power had weakened and social differences among members changed.

In the Grijalva, Usumacinta regions, and Yucatan Peninsula there are different patterns from the other areas mentioned above. On the other hand, it could be difficult to identify a pattern, even though in the Late Classic, apparently different types of elaborate tombs appeared.

 Table 23.2.

 Correlations between grave form and kinds of graves furniture.

Period	No. Samples	Average	Burials no items	Simple	Cist	Crypt	Chamber
Early Preclassic	8	0.3	5 (63%)	0.3	(-)	(=(n=1
Middle Preclassic	96	1.1	40 (40%)	1.1	1.5	1	-
Late Preclassic	248	1.3	92 (37%)	1.1	1.8	4	-
Terminal Preclassic	145	1.6	40 (28%)	1.3	3.1	6.2	7.7
Early Classic	142	3.4	24 (16%)	2.2	3	3.9	11.9

Discussion

The results presented here provide patterns of mortuary practices in the Southern Maya Area for examining when and how the elite tomb emerged in the area. The complexity of grave form and diversity of grave furniture increased through time. This suggests that mortuary practices became more complicated, more energy was expended, and changes in the meaning and importance of the deceased for the community members occurred through time.

The development of social complexity in the Southern Maya Area begins from the Early and Middle Preclassic periods (e.g. Love, 2016). During these periods, large public buildings and stone monuments, often considered indicators of specific individuals or elites, appeared across the Southern Maya Area. However, during the Early/Middle Preclassic period there is no major difference among burials, indicating that the boundaries between elites and commoners were less marked than they were in

Figure 23.4.

Correlation between grave form and limited access goods in Southern Maya Area.

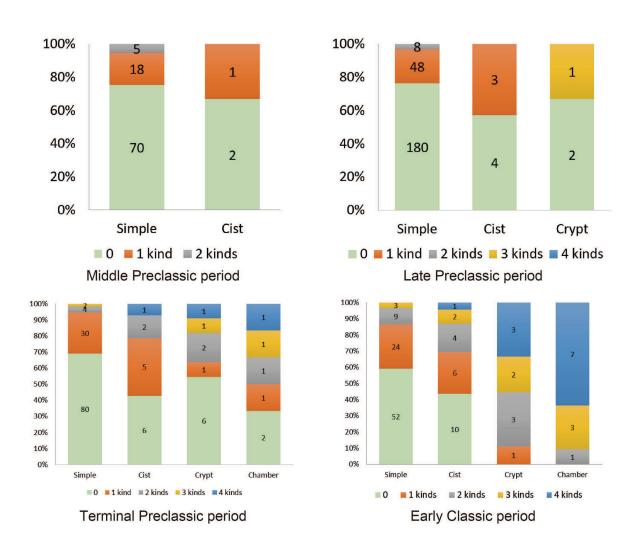
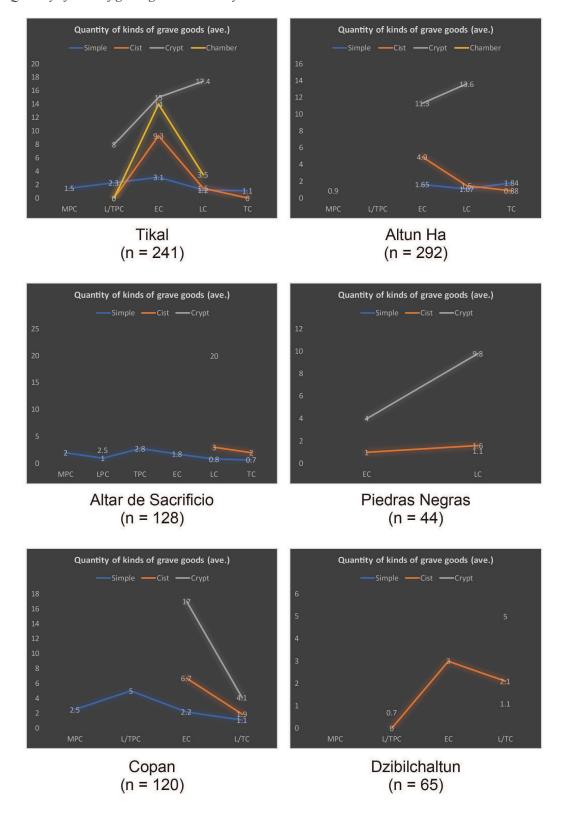


Figure 23.5.

Quantity of kinds of grave goods in the Maya Lowlands sites.



later periods. Another possibility is that burials or mortuary practices were not an appropriate context to reflect social position or political power in the society.

Elaborate graves with rich offerings, including limited access goods, appeared in the Late Preclassic period, suggesting that social differentiation, stratification, and inequality may have accelerated and materialized in this period. In addition, social differentiation among community members became even more rigidly stratified. Distinctly elite tombs totally different from other burials appear in the Terminal Preclassic. Elaborate graves have rich offering items, are embedded within a landscape constituted by monumental buildings, and stone monument that depicted ruler's image (Inomata and Henderson, 2016).

At the end of the Terminal Preclassic and first half of the Early Classic period there was a drastic social demise in the Southern Maya Area (Popenoe de Hatch, 1997), whose cause is as yet unknown. After this decline, clear polarization in the correlation between grave form and quantity of kinds of grave furniture appears in the Early Classic, suggesting that powerful and exclusive rulers or groups appeared in that period.

For comparative purposes, this study analyzed other Maya sites. As a result, the same pattern visible within the Southern Maya Area was identified at sites such as Tikal. In the Maya Lowlands, elite tombs appeared in the Late/Terminal Preclassic period (Fitzsimmons, 2002, p. 242). The data suggests that first, social stratification accelerated and probably shaped specific individual or groups such as the elite. Then, exclusive elite rulers emerge, indicated by the polarization of correlation of grave form and grave furniture. However, at sites in the Grijalva and Usumacinta regions, there are different patterns. These varying patterns represent differences in the concepts of death, social processes, and representations of elite power or social organization differ from other sites.

Conclusion

This study identified variation of patterns in correlation between grave form and types of grave goods in Southern Maya Area. In the Early/Middle Preclassic period there is no clear differentiation of elite tombs, although monumental buildings and stone monuments, which are other indicators of elite status, existed. Elite tombs in the Terminal Preclassic period could indicate the emergence of rigidly stratified society. Moreover, in the subsequent Early Classic, exclusive and powerful elite appeared. From the Terminal Preclassic period, death and related ritual actions would become vital forces to gain power or fertility. In the Early Classic, the power of elites was expressed in an exclusive manner in mortuary practices. These processes could suggest that "elite tombs" did not appear suddenly, but ongoing social relations among group members through the time shaped specific individuals or groups with political power.

This study provides data about when and how elite tombs emerged in the Southern Maya Area. However, it remains for us to understand why they emerged. Selfinterest to express authority? Or authority/interest of other living people? If so, why are they are interested? For this, the next step will be to study on a case-by-case basis with other indicators of elite status and examine other attributes related to mortuary practices. For example, warfare could be an important component to the emergence of an elite because it reinforced a sense of identity and opportunity to integrate society (also vice versa). Furthermore, it is worth mentioning that although simple burials are generally categorized as "non-elite" and often excluded from study, some of them have many quantities of grave goods including limited access goods. How are these burials designated as elite? intermediate class? or lower class?

Finally, this study found similarities and differences in correlation between grave form and kinds of grave furniture. Although the concepts and methods are simple, I believe that they are useful as a starting point or comparative baseline for understanding the processes and mechanisms of the rise of social complexity.

Acknowledgement

I am grateful to the Dr. Naoko Matsumoto and Dr. Sugiyama for inviting me to join the international meeting of project "Out of Eurasia" held on Mexico in February 2020. This research was supported by grants from the MEXT KAKENHI (JP19H05734). Finally, I am deeply grateful to Claudia Garcia-Des Lauriers and Errin Weller for editing this research paper and useful suggestions. Any mistakes and/or inconsistencies within this work are those of the author.

See project web site (http://out-of-eurasia.jp/)

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