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Spatial Composition of Intermountain Settlements on Slopes with High Wintertime Precipitation in Eastern and Southeastern Anatolia of Turkey: Case Studies of Çevre Village in Bitlis and Aran Village in Mardin

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Abstract: To understand the spatial composition of intermountain settlements on slopes with relatively high winter precipitation in the Eastern and Southeastern Anatolia Regions of Turkey, document searches and field surveys were conducted in the Çevre Village in Bitlis and in the Aran Village in Mardin and discussed my results. I found similarities between the settlements, including the locations of the primary school, many two-storied houses, and many ground floors partly under slopes. However, I also identified many differences of spatial composition that probably reflects the differences between farming and pastoral settlements, the architecture of the regional cultures, and such area histories as the forced migrations in Çevre.

1. Introduction

For designing, constructing, and conserving desired living environments, I have focused on the spatial compositions of intermountain settlements located on slopes. Appleton (1975) proposed the following prospect-refuge theory: aesthetic satisfaction from landscapes stems from the spontaneous perception of environmental conditions favorable to survival; the ability to see and the ability to hide are important for the survival of both humans and animals; aesthetic pleasure in landscapes is derived from both prospects corresponding to the ability to see and refuge corresponding to the ability to hide.

Actually, people have lived in the settlements of Silk Road countries from Japan to Turkey since the dawn of recorded history. Many of them have prospects provided by sloped ground or refuges surrounded by mountains. Almost all of them were formed before the industrial revolution and have high sustainability that has been confirmed by centuries of history. Therefore, understanding the spatial compositions of the settlements is crucial for the clarification of safe, comfortable and sustainable living environments in coexistence with nature.

However, extraordinarily diverse intermountain settlements on slopes are found in Silk Road countries because of various natural conditions, local communities and culture. We have to study various settlements in the Silk Road countries to understand their entire scope. Even in Turkey, the settlements and houses vary widely by region (Güney, 1998; Hara et al., 1973, 1976). Some have studied the settlements on slopes in Turkey (Hara et al., Maruyama, Anezaki, Yasuda and Hatsumi, 1997; Yamazaki, Hidaka, Suda and Hatsumi, 1999; and Hidaka, Yamazaki, Suda and Hatsumi, 1999). They focused on surveys of the spatial compositions of houses in the settlements, but did not clarify their overall compositions.

Therefore, we first focused on three villages (Bolkuş, Çiğdemlik and Demirdağ in Fig 1) in the Black Sea and Central Anatolia Regions and conducted document searches and field surveys of them (Suzuki & Okazaki, 2012a, 2012b). Each of the villages fulfills all of the following requirements: (1) it is surrounded by mountains and visually separated from the surrounding villages, towns and cities; (2) its settlement is located on a slope; (3) spatial composition of the entire settlement is easy to understand because of comparatively small population; (4) its documents are available on the Internet or elsewhere. We clarified their spatial structure, which is centered around a mosque or square that supports community formation, houses with mixed structures that effectively use slopes, and a sense of unity in the landscape created by sharing similar shapes, aspects, scales, and roof colors. These three settlements have many two-storied houses with masonry downstairs, wood structures upstairs and pitched roofs.

Then, I focused on the Eastern and Southeastern Anatolia Regions of Turkey, whose settlements and houses are widely different from the Black Sea and Central Anatolia Regions. To clarify the spatial compositions of settlements in them, I visited four intermountain villages (Konaklı, Besler, Çevre and Aran in Fig 1) on slopes and conducted field surveys and document searches on them.

This paper reports the results and discussions of Çevre Village in Bitlis Province and Aran Village in Mardin Province. Both of the settlements are south of Lake Van, which is the largest lake in Turkey. Çevre Village is located in the highlands near Lake Van. In contrast to this, the Aran Village sits at a lower altitude and is comparatively close to the Syrian border. This would seem to explain the many historical and cultural similarities to Syria. Clarifying and comparing the characteristics

Fig 1. Locations of settlements under study in Turkey (Google Earth, 2013). Çevre and Aran are reported in this paper.

of the settlements is important for understanding architectural culture around the Silk Road. In this paper, I discuss the relationships among climates, topographies, roads, buildings, and the lives of residents to determine the characteristics of their spatial composition.

2. Methods

As previously noted, I studied two villages in the Eastern and Southeastern Anatolia Regions: Çevre Village in the Tatvan District of Bitlis Province in the Eastern Anatolia Region and Aran Village in Mardin District of Mardin Province in the Southeastern Anatolia Region (Fig 1). Each village has a settlement (hereinafter Çevre and Aran Settlements) on a slope and is surrounded by mountains with a few trees. I conducted document searches and field surveys in them. In the document search, from the Internet I gathered information about the temperature and precipitation of the city or town near the settlement, aerial photography, topography and outlines of each settlement. In my field surveys conducted on August 26 and 27 in 2012, many photographs were taken, and residents were interviewed when possible.

3. Results

3.1. COMPARISONS OF TEMPERATURES AND PRECIPITATION

I compared the monthly mean temperatures and precipitation of Bitlis Town (altitude of around 1,500 m, about 23 km west-southwest of Çevre Village), Mardin City (altitude of around 1,080 m, about 15 km south of Aran Village), and other previously reported cities (Suzuki & Okazaki, 2012a) (Fig 2, 3).

Bitlis, which is located in the Eastern Anatolia Region, has lower temperatures than the areas previously reported and is categorized near the boundary of a Mild Temperate Climate and Continental Climate by the Köppen Climate Classification (1918). Çevre has an altitude of around 1,810 m, which is almost 300 m higher than Bitlis. Because temperature decreases by 0.65°C with each 100 m of altitude (International Civil Aviation Organization, 1993), Çevre's temperature is estimated to be about 2°C lower than that of Bitlis and corresponds to a Continental Climate.

Mardin, which is located in the Southeastern Anatolia Region, has mostly higher temperatures than Bitlis and the areas previously reported. Especially in July, its temperature reaches 30.1°C (Turkish State Meteorological Service, 2013). However, in January, it sinks to 3.1°C, lower than in Istanbul.

The mean annual precipitation in Bitlis (1,217 mm, Turkish State Meteorological Service, 2013) almost equals Osaka (1,279mm, Japan Meteorological Agency, 2013). The mean annual precipitation in Mardin (633 mm, Turkish State Meteorological Service, 2013), which is near Syria, equals Istanbul (633 mm). In each area, the precipitation is especially low in winter and high in summer. This is completely opposite of Osaka. As previously reported (Suzuki & Okazaki, 2012a), summer precipitation seems to affect the mountain vegetation.

Bitlis is categorized near the boundary of a Mediterranean Climate and Humid Continental Climate by the Köppen Climate Classification. However, if Çevre's temperature is about 2°C lower than that of Bitlis, Çevre is categorized as a Humid Continental Climate. Mardin and Aran are both categorized as Mediterranean Climates.

Below are the results of my document searches and field surveys for each settlement.

3.2. ÇEVRE

3.2.1. Document Search (GeoMapApp, 2013; Google Earth,

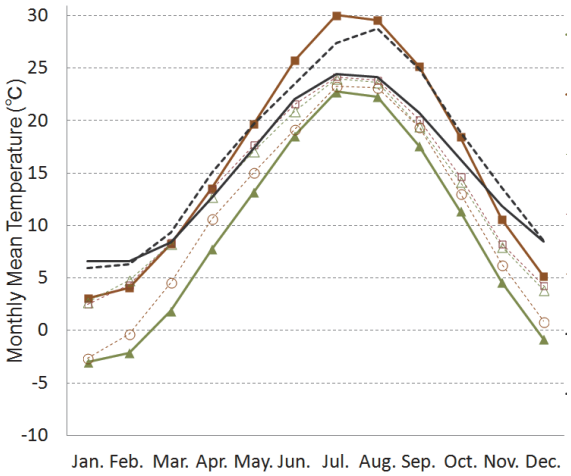

Fig 2. Comparisons of monthly mean temperatures in Bitlis, Mardin and other cities. Bitlis has lower temperatures than the areas previously reported. Mardin has mostly higher temperatures than Bitlis and the areas previously reported.
Bitlis, Mardin, Karabük, Amasya and Istanbul (1970-2011): Turkish State Meteorological Service (2013)
Divriği (1964-1990): WorldClimate (2013)
Osaka (1981-2010): Japan Meteorological Agency (2013)

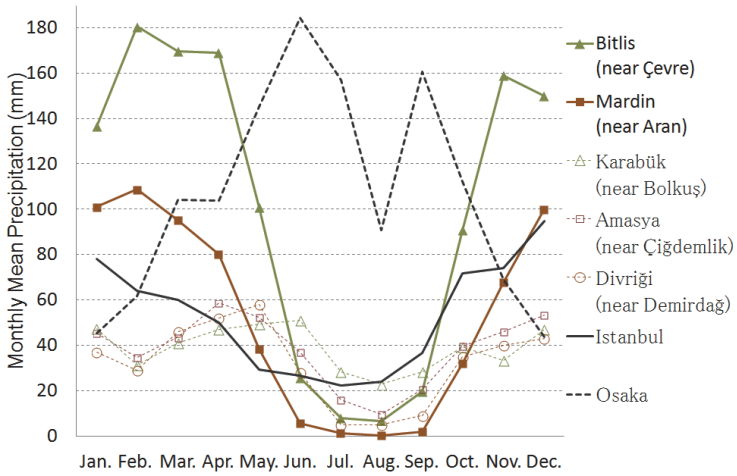

Fig 3. Comparisons of monthly mean precipitation in Bitlis, Mardin and other cities. Mean annual precipitation in Bitlis (1,217 mm) almost equals Osaka (1,279mm). That in Mardin (633 mm) equals that in Istanbul (633 mm).
Bitlis, Mardin, Karabük, Amasya and Istanbul (1970-2011): Turkish State Meteorological Service (2013)
Divriği (29 years): CantyMedia (2013)
Osaka (1981-2010): Japan Meteorological Agency (2013)

2009; Google Map, 2013; Vikipedi, 2013b)

Çevre Village is about 8 km east-southeast of Tatvan City and about 3 km south of Lake Van. The settlement, called Ez in Kurdish (Wîkîpediya, 2012a), has an altitude around 1,810 m and is on the east side of a valley in a small basin enclosed by mountains on three sides (Fig 4). Low trees are found on the surrounding mountains. Houses are spread around a south-facing slope at about 10º (Fig 5). There are oak, poplar and apple forests around the settlement. State Road D300, which is about 1 km south of the settlement along the valley, connects Van and Tatvan. The settlement was emptied three forced migrations. In 2000, its population increased due to government efforts called the "Return to Village and Rehabilitation Project". Many of its residents are elderly or children. Many young people have already migrated to big cities like Istanbul. The village's population was 10 in 2000 (FrmSinsi.com, 2012) and 82 in 2012 (Turkish Statistical Institute, 2013).

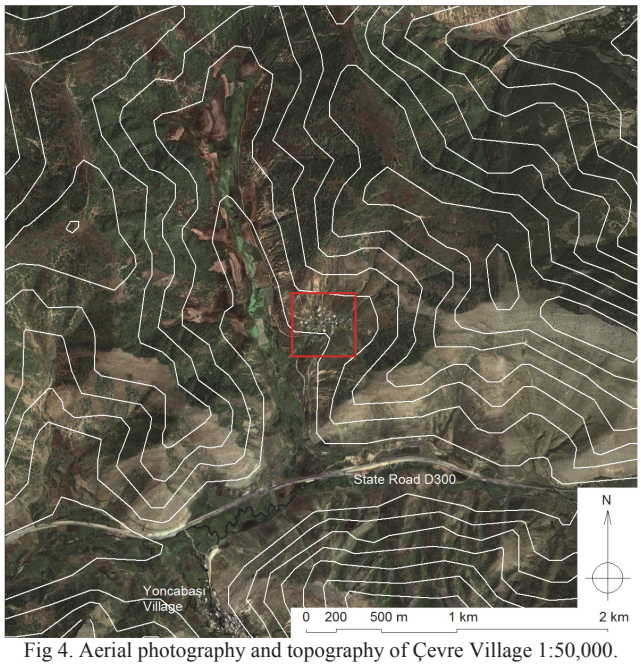

Fig 4. Aerial photography and topography of Çevre Village 1:50,000. See Fig. 5 for closeup in framed rectangle.
Aerial photography in 2009: Google Map (2013) © 2013 Google, Image © 2013 GeoEye, © 2013 Cnes/Spot Image
Contours (50 m intervals): GeoMapApp (2013), Ryan et al. (2009) http://www.geomapapp.org

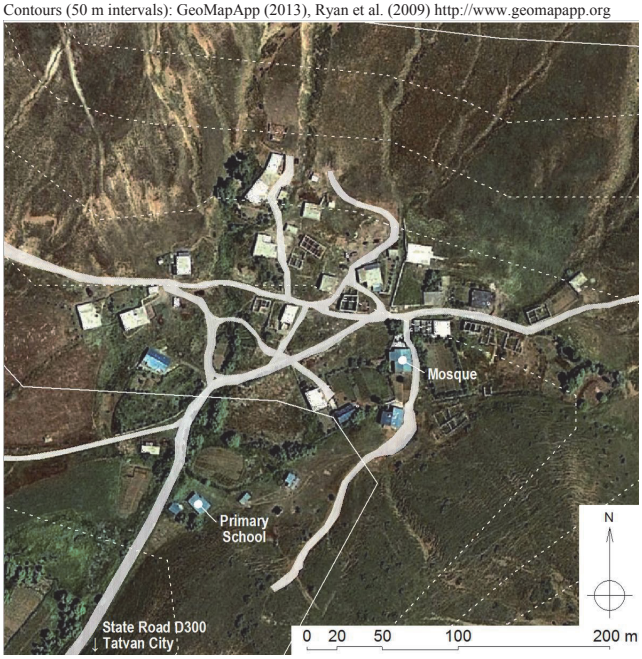

Fig 5. Closeup aerial photography, contours and map of Çevre Settlement 1:5,000.
Aerial photography in 2009: Google Earth (2009) © 2013 Google, Image © 2013 GeoEye
Contours (10 m intervals): GeoMapApp (2013), Ryan et al. (2009) http://www.geomapapp.org

3.2.2. Field Survey (August 26, 2012)

Entire Settlement: I reached the settlement after walking on a path along the valley from State Road D300 (Fig 4, 6). Mountains hid it from the road (Fig 7) and separated it from Lake Van on the north and Tatvan City on the west.

A primary school was located at its entrance (Fig 8). A

Fig 6. Appearance of Çevre Settlement to the south.

Fig 7. Path from state road to Çevre Settlement. Because the settlement was surrounded by mountains, it was invisible from the state road

Fig 8. Primary school at entrance of Çevre Settlement.

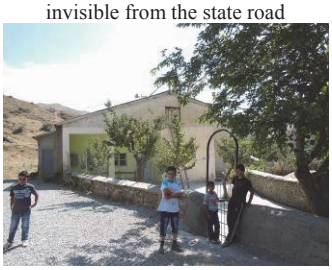

Fig 9. Mosque at center of Çevre Settlement with simple gabled building and a different appearance from other houses.

Fig 10. Houses spread on a slope facing south in Çevre Settlement.

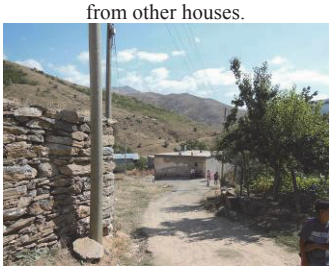

Fig 11. Path in Çevre Settlement.

Fig 12. Crofts found everywhere in Çevre Settlement.

mosque was located at its center from which paths branched out (Fig 9); houses spread along the paths (Fig 10, 11). The settlement's spatial compositions were centered around the mosque. Crofts were found everywhere in the settlement (Fig 12) where such crops as cucumbers and watermelons were cultivated.

Buildings: Most of the houses in the settlement were two stories, which is common in Turkey. There were a few one-storied houses, which is common in many settlements of the Eastern Anatolia Region. The traditional houses had downstairs of stone masonry construction and upstairs of brick masonry construction (Fig 13). Many houses had collapsed roofs due to the past forced migrations (Fig 14), but some had been repaired (Fig 15). There were only minimal land formations with low retaining walls because many houses had downstairs, parts of which were under slopes (Fig 16, 17). Many houses had flat roofs and rectangular windows. Few livestock barns were found, which are common in many Eastern Anatolia Region settlements.

The mosque, a simple gabled building built in 1978, before the forced migrations, had a different appearance from the other houses (Fig 9). It was approached through a courtyard enclosed by low walls and had no minaret.

The settlement's population was increasing due to the government's "Return to Village and Rehabilitation Project". However, some traditional houses, which had collapsed, in the settlements had been abandoned, and some completely different new houses were built on the settlement's outer side (Fig 18).

3.3. ARAN

3.3.1. Document Search (GeoMapApp, 2013; Google Earth, 2011; Google Map, 2013; Vikipedi, 2013a)

Aran Village, which is about 15 km north of Mardin City, has an altitude of around 1,000 m. It is in a valley surrounded by low mountains (Fig 19). The settlement was called Zonê in Kurdish (Wîkîpediya, 2012b), and a road penetrates it. Most of its houses are spread on a southeast-facing slope at about 10º located on the mountainside from the road, and plowlands are spread on the valley side (Fig 20). The village has many walnut trees and vineyards, and its population was 1,395 in 2000 (Vikipedi, 2013a) and 1,101 in 2012 (Turkish Statistical Institute, 2013).

3.3.2. Field Survey (August 27, 2012)

Entire Settlement: The village was approached by a road that directly penetrated it (Fig 20). Most of the settlement's houses were spread on a southeast-facing slope located on the mountainside (Fig 21). The valley side with plowlands was hidden by leafy trees (Fig 22). In the settlement, I found several rows of houses located on a slope. Winding contoured paths and steep slope paths perpendicular to the contours threaded through the houses and sometimes diverged (Fig 23, 24, 25). Most of the paths were dirt. There were a mosque and shop in the rows of houses around the bottom of the slope (Fig 23, 26, 27). Few paths branched from the mosque or square, and the settlement's spatial composition lacked a well-defined center unlike the previously reported settlements (Suzuki & Okazaki, 2012a, 2012b). A primary school was located on the east outside of the settlement (Fig 20).

Buildings: Many houses were two stories, and some had three stories. The traditional houses were stone masonry construction, and many had arched windows (Fig 28, 29). I only found minimal land formations with low retaining walls because many buildings had ground floors, parts of which were under slopes (Fig 30). Many of the semi-underground floors were used for livestock like horses and chickens (Fig 29), but some were used as garbage dumps (Fig 31). Many houses with extensions or reconstructions had existing stone ground floors and added brick or concrete upper floors (Fig 30, 31). The upper floors had

Fig 13. Traditional stone house downstairs and brick upstairs in Çevre Settlement.

Fig 14. House with roofs collapsed in Çevre Settlement.

Fig 15. Traditional house converted and reused in Çevre Settlement.

Fig 16. Houses with downstairs partly under slope in Çevre Settlement.

Fig 17. Houses partly under slope in Çevre Settlement.

Fig 18. Completely different new house from traditional houses on outer side of Çevre Settlement.

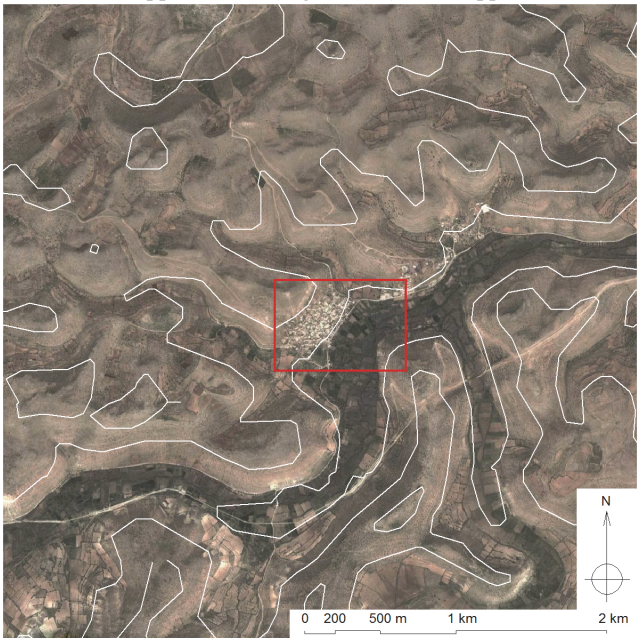

Fig 19. Aerial photography and topography of Aran Village 1:50,000. See Fig. 20 for closeup in framed rectangle.
Aerial photography in 2011: Google Map (2013) © 2013 Google, Image © 2013 GeoEye, Image © 2013 DigitalGlobe
Contours (50 m intervals): GeoMapApp (2013), Ryan et al. (2009) http://www.geomapapp.org

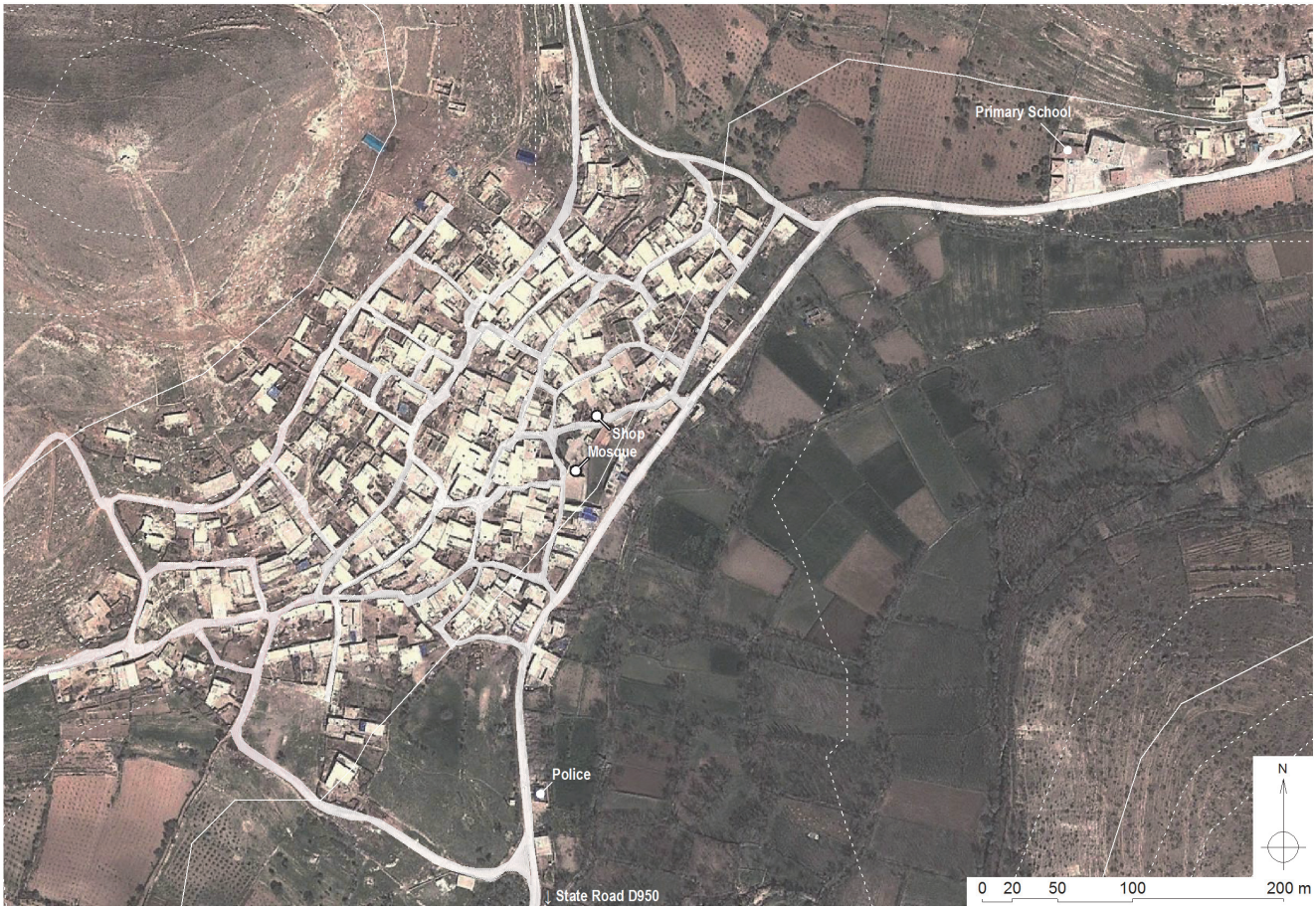

Fig 20. Closeup aerial photography, contours and map of Aran Settlement 1:5,000.
Aerial photography in 2011: Google Earth (2011) © 2013 Google, Image © 2013 GeoEye, Contours (10 m intervals): GeoMapApp (2013), Ryan et al. (2009) http://www.geomapapp.org

Fig 21. Appearance of Aran Settlement to the south. Houses with colored walls and flat roofs lined up on slopes created a sense of unity and composed a unique landscape when viewed from outside the settlement.

Fig 22. Road directly penetrated the Aran Village. Plowlands on right were impenetrable because of leafy trees.

Fig 23. Contoured path in Aran Settlement.

rectangular windows, and some had walls painted various colors (Fig 32, 33). The settlement's houses had flat roofs; no pitched roofs were found. Some of their rooftops were used as terraces (Fig 34). Houses with colorful walls and flat roofs lined up on slopes created a sense of unity and composed a unique landscape when viewed from outside the settlement (Fig 21).

The mosque had a walled courtyard. It was entered from a path higher than it and through the wooded courtyard and had a downstairs (Fig 35). The mosque's minaret was very high (Fig 23). However, the mosque itself looked very short from the path because it had only one story and was semi-underground (Fig 26).

4. Discussion

4.1. SIMILARITIES BETWEEN THE TWO SETTLEMENTS

The document researches and field surveys showed the following similarities of spatial compositions between the Çevre and Aran Settlements:

4.1.1. Similarity between Entire Settlements

(1) Primary schools with playgrounds are on the outer side of the settlements (Çevre: Fig 5, Aran: Fig 20) as with the previously reported settlements on slopes (Suzuki & Okazaki, 2012a, 2012b).

4.1.2. Similarities between Buildings

(2) Many of the houses have two stories, as in many Turkish

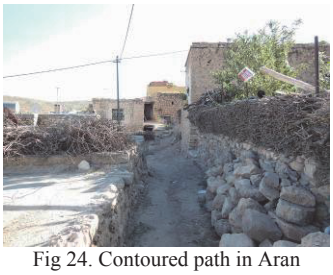
Fig 24. Contoured path in Aran Settlement.

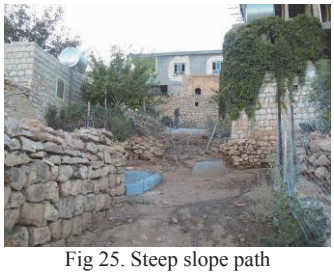
Fig 25. Steep slope path perpendicular to contours in Aran Settlement.


Fig 26. Mosque around bottom of slope in Aran Settlement.


Fig 27. Shop around bottom of slope in Aran Settlement.

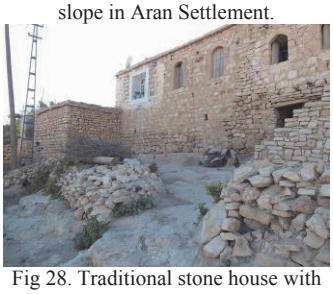
Fig 28. Traditional stone house with arched windows in Aran Settlement.

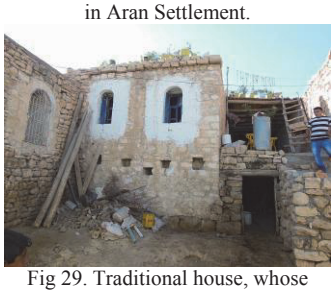
Fig 29. Traditional house, whose semi-underground first floor was used for livestock in Aran Settlement.


Fig 30. Concrete extensions or reconstructions to upper floor in Aran Settlement.


Fig 31. Semi-underground first floor used as dump in Aran Settlement.


Fig 32. Upper floor partly extended or reconstructed and painted white in Aran Settlement.


Fig 33. Upper floor and wall painted burgundy in Aran Settlement.

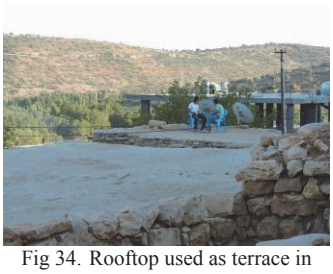
Fig 34. Rooftop used as terrace in Aran Settlement.

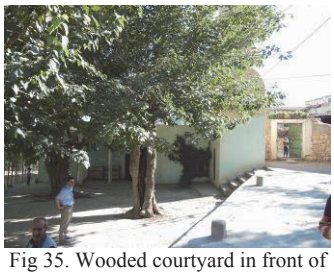
Fig 35. Wooded courtyard in front of mosque in Aran Settlement.

settlements including the Black Sea and Central Anatolia Regions (Suzuki & Okazaki, 2012a, 2012b). On the other hand, there are many one-storied houses in Erzurum and Ağrı Provinces on the north side of Bitlis Province with Çevre Settlement, even though Erzurum and Ağrı are in Eastern Anatolia Region like Bitlis. Bitlis is separated from the provinces on the north-east side by the vast Lake Van and steep mountains, and seems influenced by the Southeast Anatolia and Central Anatolia Regions on the west. I also found some three-storied houses in Aran Settlement.

(3) I only observed minimal land formations with low retaining walls because many houses have ground floors, parts of which are under slopes (Çevre: Fig 16, 17, Aran: Fig 30). I also found such houses in the previously reported settlements of the Black Sea and Central Anatolia Regions.

(4) Many houses have flat roofs, unlike settlements where pitched roofs are popular as in the Black Sea and Central Anatolia Regions. Even in the Eastern Anatolia Region, many settlements have pitched roofs in Erzurum and Ağrı Provinces. However, they are less common in Çevre and Aran Settlements.

(5) The mosque is approached through a walled courtyard (Çevre: Fig 9, Aran: Fig 26, 35). However, the houses have no such courtyards. I found no walled courtyards in front of mosques in the previously reported settlements of the Black Sea Region.

4.1.3. Discussion about Similarities

I found some similarities of spatial compositions between the two settlements. (1) in Section 4.1.1 and (2) and (3) in Section 4.1.2 are shared with those in the Black Sea and Central Anatolia Regions, but not (4) and (5).

4.2. DIFFERENCES BETWEEN THE TWO SETTLEMENTS

The climate, history, lifestyles, and cultures of the two settlements differ, and the following differences of spatial composition were found:

4.2.1. Differences between Entire Settlements

(1) There is only one main road for approaching Çevre Settlement (Fig 4). In contrast, Aran settlement can be approached by more than one road directly penetrate it (Fig 20, 22). In each of the previously reported farming or forestry settlements (Suzuki & Okazaki, 2012a, 2012b) like in Çevre, the surrounding plowlands or forests are connected by roads, but the settlement can only be approached by one main road.

(2) In Çevre Settlement, paths branch from its center around the mosque (Fig 5). However, contoured winding paths and steep slope paths perpendicular to the contours thread through the houses in Aran Settlement (Fig 20, 23, 24, 25), and its spatial composition has no well-defined center. It is centered around the mosque or a square in the previously reported farming or forestry settlements.

(3) Even though crofts were found everywhere in Çevre Settlement (Fig 12), few were found in Aran Settlement. But in Aran, plowlands are gathered outside of like in the previously reported farming or forestry settlements. Çevre was deserted three times during forced migrations but its population has increased due to a government program called “Return to Village and Rehabilitation Project”. I found no relationship between the crofts and these migrations.

4.2.2. Differences between Buildings

(4) In Çevre Settlement, traditional houses have downstairs of stone masonry construction and brick upstairs (Fig 13). However, both are stone masonry construction in Aran Settlement (Fig 28, 29). In the settlements of the Black Sea and Central Anatolia Regions, the upstairs were wooden construction (Suzuki & Okazaki, 2012a, 2012b).
(5) Most of the houses in Çevre Settlement have rectangular windows as the previously reported settlements, but many arched windows were found in Aran Settlement (Fig 28, 29). Even in Aran, upper floors have extensions or reconstructions in recent decades whose windows are mostly rectangular (Fig 30, 31, 32, 33).
(6) In Çevre Settlement, the traditional houses that have collapsed remain, and completely different new houses have been built on the outer side (Fig 14, 18). In contrast, in Aran Settlement, many houses with extensions or reconstructions have existing stone ground floors and added brick or concrete upper floors (Fig 30, 31). Some of the upper floors have walls painted various colors (Fig 32, 33). However, houses with such walls and flat roofs lined up on slopes create a sense of unity and compose a unique landscape when viewed from outside the settlement (Fig 21).
(7) In Çevre Settlement, finding livestock barns is difficult. Both upstairs and downstairs of the houses in Çevre seem to be inhabited as in the previously reported settlements of the Black Sea and Central Anatolia Regions. On the other hand, many houses in Aran Settlement use their ground floors for livestock or garbage and seem uninhabited (Fig 29, 31).
(8) The mosque in Çevre Settlement is a simple gabled building whose appearance is different from the other houses (Fig 9). In the previously reported settlements of the Black Sea Region, the forms and colors of the mosques were completely different from the houses. The mosque in Aran Settlement only has one story, but it has a flat roof and a semi-underground floor like other houses (Fig 26, 35).

4.2.3. Discussion about Differences

(1) and (2) in Section 4.2.1 and (7) in Section 4.2.2 seem to reflect differences between the Çevre Settlement for farming and the Aran Settlement for pastoralism. (4) and (5) seem due to cultural differences in architecture between Cevre around Lake Van and Aran in the Southeastern Anatolia Region. (6) probably reflects Çevre's forced migrations.

5. Conclusions

To understand the spatial composition of intermountain settlements on slopes with relatively high winter precipitation (Fig 3) in Turkey's Eastern and Southeastern Anatolia Regions, I conducted document searches and field surveys in the Çevre Village in Bitlis and the Aran Village in Mardin and discussed my results. I clarified the following:
(1) I found the following similarities of spatial composition between the two settlements and previously reported settlements in the Black Sea and Central Anatolia Regions: (a) primary schools on the outer side of the settlements (Çevre: Fig 5, Aran: Fig 20); (b) many houses with two stories; and (c) only minimal land formations because a lot of buildings have ground floors, parts of which are built into the slope. (Çevre: Fig 16, 17, Aran: Fig 30).
(2) I found these two differences in spatial composition of the two settlements from the previously reported settlements: (a) many houses with flat roofs and (b) a mosque approached through a walled courtyard (Çevre: Fig 9, Aran: Fig 26, 35).
(3) I found many differences of spatial composition between Çevre as a farm settlement and Aran as a pastoral settlement: (a) Çevre has only one main approaching road (Fig 4), but Aran is penetrated by a road and has approaches from two directions (Fig 20, 22); (b) in Çevre, paths are branched around the center of the mosque (Fig 5); but in Aran, contoured winding paths and steep slope paths perpendicular to the contours can be found (Fig 20, 23, 24, 25); (c) in Çevre, it is difficult to find livestock barns; but in Aran, a lot of houses have ground floors for livestock (Fig 29). Because the features of Çevre in (a) and (b) were also found in the previously reported settlements of the Black Sea and Central Anatolia Regions, they seem to be characteristics of farm settlements on the slopes.
(4) In Çevre, crofts were found everywhere (Fig 12). However in Aran, there are plowlands outside and few crofts were found inside the settlement.
(5) In Çevre, traditional houses have stone downstairs and brick upstairs (Fig 13); however, in Aran their downstairs and upstairs are stone masonry construction (Fig 28, 29). In Çevre, almost all houses have rectangular windows like the previously reported settlements; however, in Aran many arched windows were found.
(6) In Çevre, the traditional houses have collapsed, and completely different new houses have been built on the outskirts (Fig 14, 18). In contrast, in Aran many houses have existing stone ground floors and added brick or concrete upper floors (Fig 30, 31). Some of the upper floors have walls painted in various colors (Fig 32, 33). However, houses with colorful walls and flat roofs on slopes create a sense of unity and compose a unique landscape when viewed from outside the settlement (Fig 21).
(7) In Çevre, the mosque is a simple gabled building whose appearance is different from the other houses (Fig 9). In Aran, the mosque is only one story, but it has a flat roof and a semi-underground floor like the other houses (Fig 26, 35).

I found many differences of spatial composition between the two settlements. They seem to reflect differences between farming and pastoral settlements, regional cultures in architecture, and their histories, such as the forced migrations in Çevre.

As stated in the introduction, I also conducted document searches and field surveys on two other settlements. Next I must comprehensively clarify the spatial compositions of the intermountain settlements on slopes in the Eastern and Southeastern Anatolia Regions by discussing the four settlements.

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