Reconsidering the Spatiality of Nomadic Pastoralists in East African Pastoral Society

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ABSTRACT

The spatiality of East African nomadic pastoralists has been considered mainly from the viewpoint of sedentarization. However, more recently, two products of globalization—assault rifles and mobile phones—have initiated another turning point in the spatiality of nomadic pastoralists in East Africa. This article explores transformations in the spatiality of semi-nomadic pastoralists and the impact of assault rifles and mobile phones on spatiality through an ethnographic case study of a conflict between two East African ethnic groups of semi-nomadic pastoralists.

The influx of assault rifles to the area increased sharply after the 1990s. The threat of assault rifles mobilized nomadic pastoralists who once preferred to settle down. Initially, pastoralists became more nomadic, when they evacuated. But, after that, they aggregated more densely than hitherto.

Mobile phones also added new factors to spatiality, by enabling the mobilization of many warriors from a wide area on short notice. The use of mobile phones expanded the conflict rapidly, at a speed never before experienced.

This case study indicates that sedentarization is not a unilinear and irreversible process, but rather is multilinear and reversible. The pastoralist is like a pendulum swinging between nomadism and sedentism. The mobile phone also transformed the spatiality of pastoralists from a ""fixed" to a "flexible" spatiality." The new spatiality afforded by mobile phone enabled them to recover this flexibility and prevent the expansion of the conflict.

INTRODUCTION

1) Changing Spatiality

In essence, nomadic pastoralism is the movement of people, herds or flocks pursuing scattered resources of mostly water and pasture, over vast, dry lands. However, since the colonial period, not only natural and environmental factors, but also social, economic and political factors, have come to affect the nomadic way of life of East African pastoralists. A typical illustration of this is

sedentarization. As Roth and Fratkin (2005: 17–18) have pointed out, "the shift to sedentism by East African pastoralists increased dramatically in the late-20th century as a result of sharp economic, political, demographic, and environmental changes." The introduction of sedentarization schemes, water supply projects, irrigation programs, ranching systems, wage labor, and formal education, promoted the sedentarization and concentration process of African pastoralists. Its impact on pastoralists has been substantial, and the spatiality of East African nomadic pastoralists has been considered mainly in view of this process.

However, more recently, two products of globalization—assault rifles and mobile phones—have initiated another turning point in the spatiality of nomadic pastoralists in East Africa. As Galaty (2005) found in his analysis of the historical impact of conflict in relation to the sedentarization process in Northern Kenya, conflict is one of the most critical factors that induces pastoralists to move. Frequently, the threat of assault rifles has caused pastoralists to relocate. Undeniably, assault rifles have exerted a substantial impact on the movement of nomadic pastoralists, who once tended to settle. Also, the introduction of the mobile phone has engendered new factors in spatiality. Although most pastoralists have no access to landlines, mobile phones have spread dramatically in the last decade. They have enabled pastoralists to exchange great amounts of information beyond the spaces in which they live, thereby transforming interethnic relationships.

The impact of assault rifles and mobile phones on the formation of a new spatiality among East African pastoralists must be reconsidered. Various studies on the impact of sedentarization were reviewed by Roth and Fratkin (2005). They listed five major factors that contribute to pastoral sedentarization in East Africa: (1) population growth, (2) drought and famine, (3) the loss of common property resources, (4) commoditization, sedentarization, and urban migration, and (5) political turmoil, civil war, and State intervention. The effect of political factors on nomadism was pointed out as early as 1980 by Dyson-Hudsons (1980). However, the impact of assault rifles and mobile phones on the spatiality of pastoralists has not been examined sufficiently.

In the context of globalization, this article explores transformations in the spatiality of semi-nomadic pastoralists and the impact of assault rifles and mobile phones on spatiality through an ethnographic case study of a conflict between two East African ethnic groups of semi-nomadic pastoralists. This case study goes beyond the simple model of sedentarization. Pseudonyms have been used for personal, group, and countries to protect the informants, whose human rights have been severely violated.

2) Theoretical Orientations: The Things-Centered Approach

Particularly in the East African context, nomadic pastoralism has been considered a form of subsistence that involves the interaction between humans, livestock and natural resources such as pasture and water. Consequently, human-centered and

environment-centered approaches have commonly been used in studies on East African nomadic pastoralists. These approaches are apt to overlook the role of "things," and even when things are examined in such studies, they are treated as examples of the traditional material culture of the pastoral subsistence economy.

However, recent anthropological theories of material culture have challenged previous human-centered approaches (Kopytoff 1986; Appadurai 1986; Descola 1996; Bird-David 1999; Miller 2005; Konaka 2010). A "things-centered approach" in contrast to a human-centered one has been proposed. The present author has argued also that the study of things must include not only objects from traditional material cultures, but also modern commodities (Konaka 2006). A focus on the things-centered approach and modern commodities are suitable for investigating the current situation of East African pastoralists, in which the impacts of commodities such as assault rifles and mobile phones is conspicuous. This article reconsiders the ongoing situation of East African nomadic pastoralists by using this new approach.

CONFLICT AND NOMADIC PASTORALISM

1) Outline of a Conflict

Conflict between Ethnic Groups A and B broke out in 2004 in Country C, which is located in East Africa, and inflicted heavy damage on local citizens. The author has published several articles in Japanese and presented several papers elsewhere on this conflict (Konaka 2013a; 2013b). Thus, this conflict is outlined only briefly here. The informants of this ethnographic research were conflict-induced internally displaced persons (IDPs) who are members of Ethnic Group A, an East African pastoral society. According to the author's own survey, the death toll from the conflict amounts to 567. The number of IDPs was estimated at more than 22,000 by IDMC, an international NGO, (IDMC 2006: 33). This conflict has been neglected both by national and international organizations with the exception of the IDMC and the Red Cross. The IDMC (2006: 33) lists a "lack of information" and the "neglect of conflict-induced IDPs" as distinguishing the conflict.

The media and international organizations have indicated various factors as primary causes of this conflict, including traditional cattle-rustling activities, ethnic clashes, and clashes over scarce resources owing to recurrent droughts related to global climate change. However, evidence obtained through the author's research contrasts sharply with these factors. The conflict was caused by a Member of Parliament, X, from Ethnic Group B, who inflamed the parochialism of the local people to win votes. He incited local people and administrative chiefs to violence. The more raids he initiated, the more politically popular MP X became. By contrast, the opposing candidate, who insisted on peaceful coexistence, was labeled a coward and consequently lost votes. In this sense, the conflict has arisen from simple identity politics (Kaldor 1999) that have been developing in Ethnic Group B.

2) Outline of Nomadic Pastoralism

In this article, the term "nomadic way of life" is not restricted only to the frequent movement of the residence. It means the loose tendency to move of the people and their herd or flocks. The term "spatiality" is use also with broad meanings. Ethnic Groups A and B belong to the same branch of a certain linguistic family, and the territories of both are adjacent. Both ethnic groups are composed basically of semi-nomadic pastoralists who mainly rear cattle, goats, and sheep in a semi-desert environment. Originally, these people were nomadic pastoralists who typically moved every few months. Following encapsulation by the colonial and post-colonial State, and particularly since the area was devastated by serious droughts and attracted international concern in the 1980s, both ethnic groups have shifted to a semi-nomadic residential pattern, although the tendency to settle differs significantly between areas. Local pastoralists have preferred to settle mainly to take advantage of the opportunities of the market economy, relief food rations, agriculture, water supply, and education. Now, most settlements move only every few years. During times of drought, they divide their residences into two: Permanent settlements that keep small numbers of livestock, and nomadic grazing camps with large numbers of livestock that move frequently. Prior to the conflict, it was evident that both ethnic groups preferred to settle, adapting to encapsulation by the State.

However, even since becoming semi-nomadic pastoralists, neither ethnic group can be said to have completely settled and established exclusive rights to natural resources. Land ownership is communal among ethnic group members. Until the outbreak of the conflict, all residents had the right of usufruct to the land across ethnic group boundaries.

3) The Conflict and Nomadic Pastoralism

Even after they became semi-nomadic pastoralists, it is not correct to say both ethnic groups have settled completely and established exclusive rights over natural resources. Their land has been registered on paper as group ranches, but ownership has been substantially communal among ethnic group members. The usufruct rights of land were inclusive for all local residents even beyond ethnic groups until the outbreak of the conflict. From July to August, pasture is available in the highlands of ethnic group A, because of the summer rainfall. The people of ethnic group B are allowed to migrate and graze within the territory of ethnic group A seeking pasture. In turn, from October to November, pasture is available in the lowlands of ethnic group B because of the autumn rains. The people of ethnic group A are allowed to migrate and graze within the territory of ethnic group B, also seeking pasture.

Contrary to the reality of nomadic pastoralism, the media and international organizations suggest that the environmental aggravation of dry land is the primary cause of this conflict. However, there is no evidence that the struggle over scarce resources, pasture, and water led to the conflict between ethnic groups

A and B.

One origin of the conflict was an environmental program brought by a European resident. In 2004, a European resident introduced an environmental program to conserve wild animals for the pleasure of foreign tourists visiting this area, mainly from Europe. The conservation area is located on the borders between the territories of ethnic groups A and B. Ethnic group B started to attack ethnic group A on the pretext of the introduction of this program: "Ethnic group A occupied the borderland." This incited ethnic group B to attack ethnic group A. Therefore, this conflict should not be regarded as a conflict over scarce resources, but a political conflict brought about by the demarcation of communal land.

THE IMPACT OF ASSAULT RIFLES ON NOMADIC PASTORALISM

1) Dissemination of Assault Rifles

Once, the primary weapons used in East African pastoral societies were spears and arrows. However, the influx of automatic rifles into East Africa increased sharply in the 1990s, when interstate and intrastate large-scale war broke out (Mkutu 2008; Sagawa 2010). Ethnic Group B smuggled modern weapons from civil war hotspots in the nearby west of the country. Ethnic Group A did the same from a nearby failed State in the east. These weapons, most of which are light assault and infantry carbines, were designed or manufactured in other countries, including the former Soviet Union, the USA, the UK and Middle Eastern countries.

2) Dispersion and Concentration

Assault rifles affected the residential patterns of Ethnic Group A. When the conflict broke out, all residents evacuated to the eastern side of their area to save their lives and property, because they were attacked from the western side. Subsequently, the area formerly inhabited by Ethnic Group A became a no-man's-land. The threat of assault rifles caused people to disperse to other areas. The IDPs took refuge mostly with relatives and friends, in-laws in particular.

However, had the IDPs of Ethnic Group A continued to live in the area they fled from, Ethnic Group B might have invaded their territory. Therefore, after several months, the IDPs agreed to the development of "clustered settlements" in order to return to their homeland (Figure 1). The construction of clustered settlements was a response to large-scale conflict that was determined by the culture of Ethnic Group A.

So far as the author could confirm, in 2010 there were 10 clustered settlements in the area, and the total estimated resident population of 6,700 (Table 1). Typically, the settlements of Ethnic Group A are composed of fewer than 20 households. By contrast, according to the author's research, the average number of households in clustered settlements amounted to 167.5. The clustered settlements are thus far larger than normal settlements.

Figure 1   Clustered settlement
(Photographed by the author in East Africa, August 28, 2009)

Table 1   The List of Clustered Settlement

Clustered settlement	Number of household	Estimated population
A	406	1,624
B	320	1.280
C	200	800
D	160	640
E	130	520
F	130	520
G	120	480
H	100	400
I	70	280
J	39	156
Amount	1,675	6,700

Source: Informants of ethnic group; period: 2008−2010

3) Role of Clustered Settlements

The clustered settlements have played several main roles, as summarized below.

Demonstration of the Territory

First, clustered settlements are at the frontlines of the conflict, and visibly demonstrate the territory of Ethnic Group A. Each clustered settlement is located in a border area adjacent to the territory of Ethnic Group B. No residents of Ethnic Group A live west of the clustered settlements.

Strongholds for Survival

Second, clustered settlements are strongholds established for survival; they are local, voluntarily formed IDP camps. The settlements have been formed voluntarily because national and international aid organizations seldom provide aid to these people.

Large Units in the Daily Subsistence Economy

Third, clustered settlements are large units in the daily subsistence economy, which is based on a collective mode of production. The grazing system used in clustered settlements differs from that used in normal size settlements. In the latter, the small herds and flocks owned by several households are grazed together. By contrast, in clustered settlements, all 3,000 cattle belonging to the clustered settlement are grazed simultaneously. Forty grazing guards, mostly young men, scout and patrol the cattle herd, followed by 50 boys. Four night watchmen guard the four entrances to the clustered settlement, each armed with an assault rifle. The work of guarding the daily grazing, grazing-related labor, and the night watch is allocated by daily rotation. The pastoral production of the clustered settlement can thus be characterized by the collective mode of production.

Weapons storage

Fourth, clustered settlements function as places for storing weapons. The population constructed the clustered settlement to protect themselves collectively with cooperation between residents. Settlements are large so as to ensure collective protection from enemies. Most assault rifles in the area are collected and stored in clustered settlements. In the clustered settlements, contributions from each household were collected to smuggle weapons from foreign arms dealers and the local police. Therefore, it can be said that assault rifles have facilitated collective living.

4) Effects of Concentration

Notably, members of Ethnic Group A consider the clustered settlement an unsuitable residential pattern for pastoral production. Pastoralists prefer widely dispersed settlements because pasture is scattered across vast, dry lands. Clustered settlements exerted a strong negative influence on their residents: An infectious disease, presumed to be cholera, spread in the clustered settlements because of poor sanitary conditions exacerbated by aggregation. The environment surrounding the clustered settlements was also damaged by excessive deforestation to provide firewood (Figure 2). Therefore, all clustered settlements had been dissolved by 2014.

Figure 2   Deforestation around clustered settlement (Photographed by
the author in East Africa in August 28, 2009)

THE IMPACT OF MOBILE PHONES ON NOMADIC PASTORALISTS

1) Mobile Phone Use among Nomadic Pastoralists

The second thing that has recently come to influence nomadic pastoralists in this
area is the mobile phone. This decade has seen the explosive spread of mobile
phones across Africa. Until 1998, the Post and Telecommunications Corporation
of Country C monopolized all telecommunication services. In 1998, Parliament
enacted the *Communications Act* to liberalize the communications sector. Mobile
phone services in Country C are now offered, and four mobile phone companies
have entered the market since 2000. The number of mobile phone users has risen
explosively. In contrast, the use of landlines has grown far less quickly. The
penetration rate of mobile phones in Country C rose from 2 percent in 2001 to 39
percent as of the second quarter of 2008. The penetration rate was forecast to
reach 67.5 percent in 2012 (Omwansa 2009). Most mobile phone users pay fees
using the prepaid system, which makes it possible for poor people to obtain
mobile phone service. In Country C, people can purchase a mobile phone of the
cheapest class for US$15, equivalent to the price of a goat for pastoralists.

Pastoralists in Country C adopted mobile phones enthusiastically. According
to a survey the author conducted in 2010 on 203 residents in a settlement, 77
percent of adults owned a mobile phone. Expensive, fixed landlines are
inappropriate for the nomadic lives of pastoralists; in contrast cheap, portable
mobile phones are far more suitable for communication (Stammler 2009: 72).

Pastoralists use mobile phones frequently. Mobile phone users continue to use
those on which the numbers and characters printed on the buttons are no longer
legible owing to heavy use, but they have memorized which buttons correspond

with which letter/number.

East African pastoral societies lacks a high literacy rate; this can be an obstacle to the use of mobile phones. However, they can be used by the illiterate. For example, an illiterate old woman, could recognize each person in a contact list based on the pictures adjacent to names. An illiterate young man created an alphanumeric combination (for example, "H8," "38," "Lf2," or "H18") to identify each contact listed in his phone.

2) Expansion of the Conflict with Introduction of the Mobile Phone

The introduction of the mobile phone has also greatly affected this conflict. Ethnic Group B initiated the conflict and Ethnic Group A has resorted to counter-violence and has repeatedly launched retaliatory attacks.

The use of mobile phones expanded rapidly the conflict, at a speed never before experienced in this area. Before their introduction people could do nothing but visit each settlement to organize combatants. Pastoralists live scattered over vast distances, and motor transport is not easily available because of their poverty. However, mobile phones enabled the mobilization of hundreds of combatants from a broad area on short notice; battle reinforcements could be requested from a wide area by using them. The mobilization of combatants is essential because the numbers of guns and bullets are decisive in battle. Before the spread of mobile phones, such expansion would have been unimaginable.

This expansion in the scale of battle was exemplified in one that took place in October, 2004. The death toll in both ethnic groups amounted to 53. At the outset, Ethnic Group B rustled 200 cattle and 3,000 goats and sheep. Ethnic Group A requested by mobile phone reinforcements from all surrounding areas, and 1,000 combatants from Ethnic Group A, wielding assault rifles, participated in the battle. The battle continued from early in the morning to the evening. Finally, Ethnic Group A succeeded in retrieving 190 cattle and 3,000 goats and sheep stolen from them.

Therefore, the mobile phone has changed completely the conflict style of nomadic pastoralists. Further, it has a strong influence on the number of assault rifles that is decisive to the outcome of a battle.

3) Controlling Expansion of the Conflict through Mobile Phones

In 2009, the conflict ended in most areas. However, given that mobile phones enabled its rapid expansion, subsequent minor skirmishes were potentially easily misunderstood, as attacks intended to reignite full-scale battle between the two ethnic groups. At a voluntary peace meeting in October, 2010, members of Ethnic Groups A and B discussed this issue and, through their own efforts, discovered a solution. They decided to construct an inter-ethnic information exchange network using mobile phones, to build peace in the area. They selected six interethnic liaison persons from each ethnic group. They exchanged mobile phone numbers. The liaison persons called periodically their counterparts to enable the exchange

of security information between the two ethnic groups. In the event of incidents, the liaison persons would keep in close contact with their counterparts via mobile phone.

The mobile phone inter-ethnic information network has demonstrated potential as a deterrent to conflict in the post-conflict period. Should a minor skirmish occur and invite the possibility that reinforcements are requested, the cause of the conflict is first calmly investigated and information is exchanged through the inter-ethnic mobile phone network. Consequently, each minor skirmish case is considered not the beginning of a larger conflict, but rather as a skirmish consequent to the last. Thus repeated retaliatory attacks have been halted.

In one area from January to June, 2011, this mobile phone inter-ethnic information network was used in six cases, and played an important role in conflict resolution. According to local residents, inter-ethnic conflicts have decreased remarkably since the introduction of the inter-ethnic information network.

On June, 2011, five raiders from Ethnic Group B robbed local residents of Ethnic Group A of 140 sheep and goats and 16 calves. After the incident, Ethnic Group A requested that Ethnic Group B search for the stolen livestock via the inter-ethnic mobile phone network. Both ethnic groups cooperated in the search. The stolen livestock were discovered and returned to their owner.

It also should be noted that mobile phone changed the inter-ethnic relationship, because it enabled pastoralists to exchange more information beyond their ethnic boundary. In a sense, the mobile phone transformed the spatiality of nomadic pastoralists.

In summary, at the beginning of the conflict, mobile phones fueled and exacerbated the conflict. However, by its end, local people came to use mobile phones to prevent further conflict.

CONCLUSION: RECONSIDERING THE SPATIALITY OF EAST AFRICAN PASTORALISTS

1) Assault Rifles and Spatiality

Assault rifles exerted a substantial impact on the spatiality of the pastoralists. Because of the threat of assault rifles, nomadic pastoralists dispersed for evacuation though they once preferred to settle down. Pastoralists returned to their land with the construction of clustered settlements that allowed them to protect themselves collectively with the power of assault rifles. However, this concentrated human and livestock populations. Evacuation allowed pastoralists to become more nomadic, but the construction of clustered settlements forced them to aggregate more densely than before, causing environmental and hygiene problems for residents.

Notably, before the conflict broke out, the pastoralists preferred to settle in a dispersed manner. They see the semi-nomadic residential pattern as desirable for
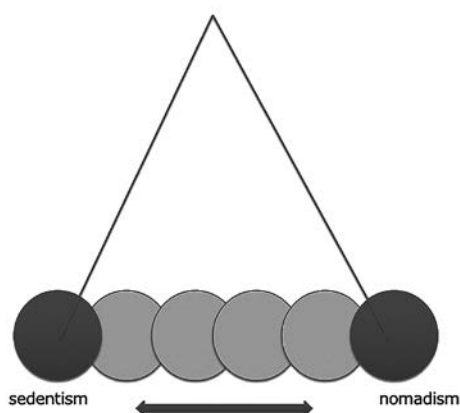
Figure 3   Nomadism and sedentism
(Drawn by the author)

pastoral production in the context of encapsulation by the nation-State. They became nomadic and evacuated because of the threat of assault rifles, and subsequently aggregated into clustered settlements. Neither action was voluntary. They were forced to aggregate to ensure their survival through the protection of assault rifles despite environmental and hygiene problems. This was not an adaption, but a maladaptation to the environment, and the residents themselves recognize the problems involved. As proof of this, following the end of the conflict, most of the clustered settlements have been dissolved and people have dispersed again.

It is clear that the introduction of assault rifles exerted a substantial impact on these movement processes, and was more essential in the transformation of the spatiality of pastoralists of this area than were environmental factors. This case indicates that sedentarization is not a unilinear and irreversible process, but rather a multilinear and reversible process. As Ingold (1987: 169) put it "If nomadism and sedentism are understood in behavioural terms, they could certainly be taken to denote poles on a continuum, between which individuals, groups and communities are continually oscillating back and forth." This view also reminds us of the pastoral continuum theory of Spencer (1998). The pastoralist is like a pendulum that swings between nomadism and sedentism (Figure 3). Nevertheless, these researchers have not given adequate consideration to modern factors. In the present case, assault rifles were responsible for a swinging back and forth. Assault rifles exerted a stronger influence in the transformation of the spatiality of nomadic pastoralists than did environmental factors.

2） The Mobile Phone and Spatiality

The mobile phone also exerted an impact on the spatiality of the pastoralists. It changed completely the style of conflict between the nomadic pastoralists. The

spatiality of East African pastoralists could be characterized originally by dispersion over vast, dry lands. Therefore, large-scale intensive warfare has never been common among them, except as part of national or international conflicts. However, with the introduction of the mobile phone, the number of combatants and assault rifles can be increased, which are decisive to the outcome of a battle. In a sense, the mobile phone has played an important role in controlling the collective power of assault rifles.

The mobile phone also transformed inter-ethnic relationships because it enabled pastoralists to exchange greater amounts of information across ethnic boundaries. Before the introduction of the mobile phone, it was almost impossible to exchange information beyond ethnic boundaries during wartime. However, it has transformed the spatiality of pastoralists from a "fixed" to a "flexible spatiality." As mentioned previously, the right of usufruct to land and pasture was originally flexible across ethnic group boundaries. The new spatiality afforded by mobile phone enabled them to recover this flexibility and prevent the expansion of the conflict.

Since the publication of the classic ethnography of the Nuer by Evans-Pritchard (1940) and its reanalysis by Sahlins (1961), warfare among East African pastoralists has been assumed to be, in essence, "predatory expansion." Initially, mobile phones were used to expand the conflict. However, in the end, mobile phones were used to reduce the scale of the conflict and promote peace. Evans-Pritchard depicted the "leopard-skin chief" as an arbitrator of conflict. The system by which conflict among pastoralists was reduced has not been clarified enough in the current context. However, this study demonstrates the potential of use of mobile phones to reduce conflict among East African pastoralists.

ACKNOWLEDGMENTS

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