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To cite this article: A. Rongna & Jiuxia Sun (2020) Integration and sustainability of tourism and traditional livelihood: A rhythm analysis, *Journal of Sustainable Tourism*, 28:3, 455-474, DOI: [10.1080/09669582.2019.1681437](https://doi.org/10.1080/09669582.2019.1681437)

To link to this article: <https://doi.org/10.1080/09669582.2019.1681437>



Published online: 30 Oct 2019.



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Integration and sustainability of tourism and traditional livelihood: A rhythm analysis

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ABSTRACT

This study presents a theory of rhythm analysis to illustrate how tourism livelihoods integrate with traditional livelihood in rhythm to achieve sustainability. Considering the case of the homes of herders in West Ujumqin Banner, China, this research involved participants' observations, in-depth interviews during off- and peak seasons in 2018, and a visual methodology. First, this study identifies the annual rhythm of tourism and pastoralist livelihoods and the daily polyrhythms, which are the basis for synergizing livelihoods, during the peak tourism season. Second, the integration process of the two livelihoods is considered a process of arrhythmia–recuperation–eurhythmia supported by a series of time strategies to achieve rhythmic harmony. The theory of rhythm analysis is helpful in explaining the embedding process of tourism livelihood from the household perspective; as a supplementary livelihood, tourism operation is affected by individuals' cultural time habits, which are shaped by the traditional pastoralist livelihood. This article contributes to the theoretical concept of temporal rhythm in the tourism context and offers new avenues for time management.

ARTICLE HISTORY

Received 22 June 2019
Accepted 10 October 2019

KEYWORDS

Homes of the herders; pastoralism; rhythm analysis; sustainable livelihood; tourism

Introduction

Tourism livelihoods represent an important issue in tourism sustainability research (Luo & Bao, 2019; Nyaupane & Poudel, 2011; Su, Wall & Xu, 2016a, 2016b; Tao & Wall, 2009b). Scholars have applied the sustainable livelihood approach to tourism to discuss the livelihood sustainability of communities; this approach is outcome oriented and emphasizes the technical dimension of livelihood support systems (He & Sun, 2016; He, Yang, Chen, & Wang, 2014; Shen, Hughey, & Simmons, 2008; Su, Wall, & Xu, 2016a). As a holistic and people-centred approach to sustainability, the modular structure of the framework cannot adequately address the embedding process and sustainability patterns of tourism livelihoods that have infiltrated the destination livelihood system. Although the SL approach heavily emphasizes the transforming process, this process is defined as the policies, institutions, legislation, culture, and power relations that shape livelihoods (DFID, 1999) and still refers to the change in supportive conditions; however, livelihood practice is not fully discussed. According to Chambers and Conway (1992), the sustainability of livelihood is assessed by its ability to contribute “net benefits to other livelihoods in short and long term.” When considering short-term coping mechanisms and long-term adaptive strategies, the assessment of livelihood sustainability can be complex, and to date, no thorough supportive

evaluation framework has been developed (Helmore & Singh, 2001; Su, Wall, Wang, & Jin, 2019). For individuals, tourism is seldom their only source of subsistence, and many people may support themselves through multiple means. These means may vary across seasons and involve a mixture of activities that span the subsistence, barter, and cash economies (Tao & Wall, 2009a). Academic research concerning the compatible relationship between tourism livelihoods and other traditional economic activities, especially discussions related to how to achieve sustainability between livelihood means, is limited.

Tourism livelihood sustainability involves two aspects. First, a time paradox exists between the sustainability of tourism livelihoods and the seasonality of tourism. Seasonality is defined as the “temporal imbalance in the phenomenon of tourism” and is among the most prominent characteristics of tourism (Butler, 1994). The seasonal pattern of tourism is widely viewed as a “problem” to be “tackled” at the operational level (Baum & Lundtorp, 2001). The seasonal pattern is regarded as an uncontrolled situation resulting in several negative effects, including the endangerment of the survival of residents and microbusinesses participating in tourism (Banki, Ismail, & Muhammad, 2016). Some strategies used to remedy the negative effects attributed to tourism seasonality have received particular attention in the literature, including product diversification, staging event and festivals, promoting pricing differentiation, and market segmentation (Brännäs & Nordström, 2006; Getz, 2010; Turrión-Prats & Duro, 2018; Wang, 2011). Most strategies are proposed from the demand perspective and do not adequately consider supply side constraints, such as the availability of labor and alternative use of land or facilities (Koenig-Lewis & Bischoff, 2005), especially in remote areas. A remote tourism destination is unlikely to transform from an area with a high seasonal dependency into a 12-month resort (Baum & Hagen, 1999); thus, tourism livelihood is impossible to sustain year-round. The fluctuation during the off-peak season forms the time rhythm within the tourism industry and directly affects tourism livelihood survival. Therefore, the question of how to sustain tourism livelihoods in the context of the periodic tourism industry in peripheral destinations should be studied.

Second, the introduction of tourism livelihoods may result in conflict with other economic activities. Tourism development influences other sectors, such as agriculture, fishery, forestry, animal husbandry, food processing, and handicrafts (Muresan et al., 2016; Su, Sun, Jiao, & Min, 2018; Su, Wall, & Wang, 2017). Some scholars support the alternative role of tourism livelihoods (Lee, 2008; Mbaiwa, 2011; Simpson, 2007) and believe that the tourism-oriented “specialized” livelihood model is better than the “diversified” livelihood model of nontourist farmers (Xi & Zhang, 2016). Tourism may cause traditional livelihoods to be abandoned because of the greater and faster cash flow (Mbaiwa, 2011). Instead of replacing traditional economic activities, some academics affirm that as a single means of livelihood, tourism is risky and argue that tourism livelihoods should become an additional livelihood option for rural residents to increase their livelihood portfolio (Fabinyi, 2010; Kheiri & Nasihatkon, 2016; Muresan et al., 2016; Su, Wall, & Jin, 2016). Acknowledging the importance of the links between tourism and other activities leads to the conclusion that a balance between tourism and other existing and potential activities should be sought. However, existing research advocates integration within tourism livelihoods and traditional livelihoods by multipurpose activities (Su, Wall & Wang, 2019), and an in-depth discussion of the forms in which livelihoods achieve compatibility with each other in practice is lacking.

Regarding both the contradiction with seasonality and the conflict with other means of livelihood, implementing tourism livelihood sustainability involves human time allocation and adjustment. A critical factor in exploring the integration of the means of livelihood is the temporal synergy between livelihood types. Rhythm analysis is particularly useful in investigating the patterns of a range of multiscale temporalities (Edensor, 2010) when such temporalities are mutually implicating structures of time (Adam, 1998). The rhythmic harmony is the basis for the harmonious operation of individuals, groups, and society. Whether new affairs that occur in everyday life can be “normalized” or sustainable depends to some extent on the integration between old and new rhythms. According to Lefebvre, rhythm is something inseparable from

understandings of time, particularly repetition. Analyzing the use of time segments enhances our understanding of the structure and rhythm of livelihoods. Therefore, this study considers the case of the homes of the herders of West Ujimqin Banner, Inner Mongolia, China, focuses on the "actor" of tourism livelihood, and uses Lefebvre's theory of rhythmanalysis to explore how tourism operators can achieve compatibility among tourism livelihoods and existing traditional livelihoods at the time level to enhance sustainability.

Literature review: the theory of rhythmanalysis

Early research concerning rhythm focused on anthropology and sociology. In 1924, the French anthropologist Marcel Mauss proposed that "Each social function probably has a rhythm of its own" (Mauss, 1979). Durkheim refers to the time category in rhythm as follows: "A calendar expresses the rhythm of the collective activities, while at the same time its function is to assure their regularity" (Durkheim, 1954). Evans Pritchard divides rhythm into physical, natural, and social rhythms and analyzes how the Nuer consider time (Evans-Pritchard, 1969). In the twentieth century, Malinowski (1984), Hall (1983), Descola (1996), Durand (2004), Turner (2005), Bourdieu (2006), and other scholars conducted anthropological and ethnographic explorations of rhythm. Zerubavel (1985) illustrated the rhythm hidden in the timetable and calendar in social life. Adam (1995) highlighted the importance of rhythm by noting that "the rhythmic study of the subject of consciousness is a study of the interaction between nature and culture, mind and body, life and death." Goodman (2010) presented the philosophical background of rhythmanalysis theory. Iparraguirre (2016) divided the rhythm of culture into daily seasonal and annual rhythms, communicative rhythm, economic and political rhythms, the rhythm of work and production, and the rhythm of ritual and religion. In most studies, rhythm has been used based on a holistic definition, and the composition of rhythm and the kernel are rarely discussed (Iparraguirre, 2016).

Following these scholars, Lefebvre proposed rhythmanalysis in his first introduction to the third volume of *The Critique of Everyday Life* (Lefebvre, 1981). In 1992, Lefebvre published his book *Éléments de rythmanalyse* in French, and this book was translated into English in 2004. The central idea of the book is the following definition of rhythm: "Everywhere where there is an interaction between a place, a time and an expenditure of energy, there is rhythm" (Lefebvre, 2004). In the book, activities, pause, and repetition are discussed as important elements of the Rhythmic model. Many scholars, such as Mels (2004), Edensor (2012), and Simpson (2012), commenced a series of empirical studies concerning human geography based on Lefebvre's theory of rhythmanalysis and published essay collections (Cresswell & Merriman, 2011; ', 2010).

The empirical use of rhythmanalysis in the existing literature mainly involves two aspects. The first aspect comprises rhythm and embodiment. Lefebvre believes that rhythmanalysis first needs to be perceived through an individual's body based on the following: breathing, pulse, duration of the cycle, and different stages. Scholars show different movements by analyzing dance (Hensley, 2010), horse riding (Evans & Franklin, 2010), walking (Vergunst, 2010; Wunderlich, 2008), and cycling (Spinney, 2010). The rhythm attribute needs to be internalized by different methods of "domestication," which plays a certain role in the formation of the relationship between human beings and land. The second aspect is an analysis of rhythm and mobility considering three key points. First, internal movements become local characteristics, such as a marathon or a festive space; the flow pattern forms the space-time characteristics of a place regardless of whether the pattern is dynamic or static and fast or slow, creating a unique rhythm and special meaning (Duffy et al., 2011; Edensor, Kärholm & Wirdelöv, 2018). Second, regular movement rhythms, such as commuting (Edensor, 2000), running (Edensor & Larsen, 2018), and traveling, create a sense of flow (Rantala & Valtonen, 2014). The speed, tempo, and cycle of these movements are influenced by external factors, such as the shape of the railway or road and the quality of the vehicle, forming an extended, linear, dynamic understanding of the place that

differs from a static perspective. Third, moving vehicles or other vehicles become a special space with its own rhythm, such as a subway (Jirón, 2009). In addition to physicality and mobility, rhythm analysis is used in the marketplace (Borch et al., 2015) and shopping (Kärholm, 2009).

In these studies, the theoretical application of Lefebvre's rhythm analysis is mainly carried out from three perspectives: The first perspective involves regarding rhythm as a holistic concept or unit of analysis for measuring the body, movement, and so on, and determining whether there is rhythm, pace, or speed. This perspective also substitutes for the second perspective, which further considers the subject's polyrhythmia, arrhythmia, and eurhythmia. In explaining the above concepts, Lefebvre uses the body as an example. In understanding the body as a bearer of rhythm and an organic whole, each different organ has a different rhythm. Thus, the organic whole of the body comprises various organs. This rhythm comprising different rhythms is called polyrhythmia. When the organs of the body are coordinated with each other and operate normally, the body maintains a balance. The rhythm during this time is eurhythmia. Additionally, when this rhythm is destroyed, such as through illness or sickness, the rhythm is unbalanced and messy, which is called arrhythmia. This rhythm changes how we observe the world and is used to analyze some social phenomena based on multiple rhythms. The different types of rhythms illustrate not only different states of mobility as indicated in the previous studies but also different stages of transformation, which is lacking in this research. The third perspective involves explaining the process of rhythmic dressage. Lefebvre uses the word "dressage" as a means of rhythm control by domesticating outside knowledge, value, and thought through internal repetition and circulation, such as the pretraining of marathon runners. Rhythmic dressage represents a balance among the internal activity of control, cessation, and rewards (Lefebvre, 2004).

In Rhythm analysis, daily life is an important part of Lefebvre's discussion and is an effective approach to recognizing social time. Most existing studies focus on the rhythmic understanding of space and place, whereas the other aspects of everyday life have not been effectively studied to date. Albeit rhythm analysis is a combination of time and space, the bias toward spatial analyses in empirical research results in a lack of attention to the time dimension. Time becomes a *fait accompli* or a background condition, and the fact how time rules and synergy of rhythm are formed is insufficiently discussed. Therefore, this study attempts to broaden the application of Lefebvre's theory to the analysis of daily livelihoods. As many livelihoods possess seasonal activities, such as fishing, farming, hunting, and pastoralism (Briske et al., 2015; Clark, 2010; Gill & Gerard, 1991; Vliet & Nasi, 2008), the cyclical repetition forms a distinctive livelihood rhythm. When a household diversifies its livelihood means, the family challenges polyrhythmia and needs to achieve rhythmic harmony among different livelihoods to be compatible and sustainable. The theory of rhythm analysis is suitable for an analysis of polyrhythmia and the rhythmic transformation occurring during the embedding process of new livelihoods.

In this study, we pay attention to the temporal rhythms of the home of the herders, who possess both tourism and pastoral livelihoods. The transhumant movement of people and their livestock between summer and winter pastures establish the annual rhythm of pastoralism (Cleary, 1988; Fernandez-Gimenez & Le Febre, 2006; Palladino, 2018). Although livestock have been sedentary in Inner Mongolia with localized fodder production, stall feeding and grazing (Wang, Brown & Agrawal, 2013), the pastoralists' activities maintain a seasonal cycle. Owing to the widespread rangeland degradation in Inner Mongolia, pastoralists suffer from poverty, and the pastoral livelihood has become vulnerable (Wang & Zhang, 2012). Low incomes force pastoral households to change their livelihood strategies (Waldron, Brown, & Longworth, 2010), and the tourism livelihood is considered a supplemental option. By operating both tourism and pastoral livelihoods, the homes of the herders in Inner Mongolia reflect a distinctively Mongolian form of tourism that encourages herder families to gain economic benefits by hosting or serving visitors using their existing pastoral resources and local knowledge, and hence sharing their lifestyle and pastoralist culture with tourists. How pastoral households face livelihood polyrhythmia and

allocate their time to these livelihoods to become sustainable in the long term after introducing a tourism livelihood should be explored. This article clarifies the multiple rhythms of the home of the herders and explores the complex process of rhythm harmony.

Research methodology

Context of the case area

In this study, owing to its distinct tourism seasonality and preserved traditional livelihood, we choose the following tourism community within the pastoralist area in China: the West Ujimqin Banner. The case place is the core area of the Xilin Gol Prairie and is located in the Inner Mongolia Autonomous Region of China, bordering the Republic of Mongolia to the north. The rural residents mainly live on grassland grazing and animal husbandry (Xu, Kang, & Jiang, 2012). Livestock support human livelihoods and welfare, and the herders make decisions about how to manage the landscape to support human welfare in the future (Robinson, Ping, & Hou, 2017). Under high latitudes, the sunrise and sunset times vary throughout the year, rising at 07:44 am in the winter and 04:25 am in the summer, providing a “time reference” for Mongolian pastoralists to organize their social and daily lives. Similar to other places in the Xilin Gol Prairie, the temperatures in the West Ujimqin Banner are characteristic of continental climates with mild summers but may decrease to -40°C in cold, dry winters (Zhang, 1990). The temperature conditions result in a short growing season that extends from June to September, which heavily influences the local tourism industry, but livestock typically graze throughout the year (Briske et al., 2015). Because of the natural resources and holiday entitlement, the peak season of local tourism lasts for 2 months as follows: from July to August. Although the government has attempted to prolong the season of the tourism industry by organizing various festivals and developing cultural tourism, the effect has not been obvious. Although located in a peripheral remote area, the grassland scenery and traditional nomadic culture of the West Ujimqin Banner attract visiting tourists. In 2018, the whole banner received 920,000 tourists, and more than half of the visitors were automobile tourists, most of whom were from Beijing, Tianjin, and Hebei province. Except for several sight-seeing spots, such as Mongolian Khan City, Yol Hairhan Mountain, and the Wu Lan Wutai temple, numerous homes of the herders are operated in this area as follows: many herdsman families work as self-employed tourism operators who use their family’s pasture, living facilities, and other products to provide accommodation, food, beverage, and some entertainment services and host tourists in their homes, allowing them to experience the life of Indigenous herdsman. According to tourism bureau statistics, in 2018, the total number of homes of the herders was 68. These original pastoralist households attempt to operate both tourism and livestock livelihoods to increase their family income. In this article, the family-owned microtourism business, that is, the homes of the herders of West Ujimqin Banner, is targeted as the research object to understand how these self-employed tourism operators cope with the seasonal fluctuation and integrate their tourism and pastoralist livelihoods (Figure 1).

Data collection and analysis

A predominantly qualitative research approach has been widely adopted in livelihood research concerning tourism and communities (Snider, 2012; Tao & Wall, 2009a; Xiang, 2009) and rhythm-analytical examinations of multiple practices (Edensor, Kärrholm, & Wirdelöv, 2018; Edensor & Larsen, 2018; Rantala & Valtonen, 2014). Accordingly, to obtain a detailed and empirically grounded understanding of the various rhythms involved in tourism communities, a qualitative research approach was adopted in this fieldwork. The fieldwork undertaken provided an approach to analyze the life rhythm of Indigenous interlocutors, particularly their involvement in everyday practices, which enabled the researchers to experience a rhythm differing from that



Figure 1. Sight-seeing spot: Nomad tribe.

imposed by the hegemonic temporality (Iparraguirre, 2016). The reason for this choice is based on the established notion that qualitative research designs are more applicable than quantitative research designs in examining the intricacies of tourism phenomena (Jennings, 2010). Moreover, phenomena are better examined and understood within their context using qualitative data (Henderson & Bialeschki, 2002).

The data from the primary and secondary sources were collected during two fieldwork investigations that attempted to cover the off-season and peak season of tourism in the case area. The first investigation (12 days) was conducted in January 2018 and provided a comprehensive overview of tourism and livestock during the winter along with the collection of local documents. Interviews with the tourism bureau's officers and herders who participated in tourism were also conducted during the first survey. The second investigation (21 days) was concentrated in the homes of the herders to observe their involvement in tourism and interview relevant people.

Face-to-face in-depth interviews were adopted as the primary research method and were conducted with key government officials of the West Ujimqin Banner, members of the homes of the herders, tourists, and local residents. During the winter, the respondents were selected using snowball sampling. According to Yin (2003), snowball sampling techniques represent a form of purposeful sampling used when a researcher has limited knowledge of the location of the respondents to be sampled and the phenomenon of interest. The homes of the herders were all closed during the off season, and information regarding their location in West Ujimqin Banner were very limited. Therefore, first, the researchers identified individuals with knowledge to help locate other respondents. Based on the recommendation of the local tourism bureau, this process was achieved by identifying an informant who is involved in the business and has the capacity to provide insight regarding issues pertaining to family-owned tourism businesses; this informant helped locate another home of the herders. The main weakness is this sampling technique is that it can be nonrepresentative, but in this instance, with <70 homes of the herders in the case area, this approach allowed us to quickly identify potential respondents. During the summer, random sampling was used to collect the data. As most scenic spots are located along the road from Mongolian Khan City to the Yol Hairhan Mountain scenic spot, most homes of the

herders were spread along both sides of the road. By random entry, information were collected through nonparticipants' observation and interviews. The questions asked about the tourism operators primarily concerned their annual time allocation, daily routine, and active duration to explore the common interruptions and temporal differences among other emergent issues, local policies that influence pastoralism and tourism, and traditional cultural events and leisure activities. Tourists were also asked questions regarding their experience at the home of the herders, interaction with pastoralists, and time use in travel. The government officials provided a general picture of local tourism development and tourism seasonality. The interviews were all conducted in Mongolian, which is the native language of the local residents. The duration of the interviews with the microbusiness operators was between 35 and 60 min, and the duration with the other respondents was between 20 and 35 min. In total, 21 home of the herder households, 9 local herdsman families, 5 tourism-related government official, 4 scenic spots workers, and 10 tourists were interviewed, which was considered sufficient for the data analysis. To capture a full interview, audio recording is acceptable to many people, but their permission to record must be given, and there may be those who do not wish to be recorded (Matthews & Ross, 2014). Therefore, in this study, we sought the consent of the participants to record their interviews with a digital recorder, and they all agreed to its usage. Thus, all interviews were recorded, and verbatim transcription, which required another 6 weeks, was performed at the conclusion of the interviews primarily to understand and interpret the statements expressed by the respondents. Then, a thematic analysis was applied to understand the words of each respondent and place them alongside the words of other respondents to enable us to describe the data and explore their meanings. All interview transcripts were manually coded and categorized into emerging themes and subthemes using the concept of the autocoding function in NVivo 11.

A series of observation studies were performed. Based on participants' observations during the summer in five homes of the herders and four single-livelihood pastoral households, which were supported by photograph recording, time diaries were conducted to determine the daily routine activities and time allocation. A pilot observation was performed to gain an overview of a local cultural event. Local cultural events, such as the Ovoo ceremony and Nadam festival, were viewed as exceptional occasions to gain an understanding of the importance of the cultural rhythm to the residents as the cultural rhythm affected their regular, everyday livelihood rhythms (Iparraguirre, 2016). This study explored three different cultural events, during which three spots were observed for a total of 10 h.

To enhance the traditional data collection methods in this study, we also used a visual methodology. It is easy to recognize that images could be useful in backward mapping to explore the past (Prosser, 1996). The ability of the camera to record details accurately without tiring can be considered an advantage. As cultural inventories, images (Collier & Collier, 1986) can provide records of events and places, allowing researchers to leisurely but carefully consider minutia, which may provide an insight into relationships and activities. In this study, we surveyed video materials offered by local television and radio stations to examine ideas regarding the sources of the Indigenous culture and everyday life. From the perspective of the local reporters, the videos provide an overview of the local society and cultural value, which contribute to an understanding of the life of pastoralists.

Findings

Polyrhythmia of the homes of the herders

Annual rhythms of tourism livelihoods and pastoralist livelihoods

Pastoralism is the primary livelihood in the area and has existed for hundreds of years (Robinson et al., 2017). The homes of the herders follow the local livelihood time system to organize their animal husbandry work. In contrast to traditional livelihoods, such as agriculture, fishery, or

hunting, pastoralist livelihoods have different social rhythms in which time intervals are divided in completely different ways (Sorokin & Merton, 1937).

The annual schedule of pastoralists is based on the characteristics of the animal husbandry work model formed under the influence of natural and biological rhythms. The busiest time for local herdsman during the year is the period between February and April. Herd production mostly occurs in the spring. New-born livestock are kept in captivity with the sheep, and the moutons require the careful attention of the herdsman. Starting in May, the herdsman work in spontaneous groups, helping each other to shear wool in batches. The summer, especially July and August, represents an annual pause time for herdsman. Herdsman have free time to participate in various leisure and entertainment activities, such as the Ovoo ceremony, the Nadam festival, horse racing, and wrestling competitions. After the leisure time, normally starting at the end of August, the herdsman harvest forage and prepare for the “winterization” of the pasture (e.g. storing winter feed and reinforcing winter barns). Currently, the local harvest time is postponed until September 1 because of the local government’s regulations regarding the pastoral ecology. As the mechanization of animal husbandry has increased, instead of manually cutting grass, herdsman households use a grass mower to cut the grass, saving a considerable amount of time. However, the period of harvesting forage is still a busy time for pastoralists and is not completed until early October. After grazing the grassland all summer, the cattle and sheep have grown fat and fleshy, and autumn has become the season of livestock trade. From Mid-November to January of the following year, owing to the cold weather, the livestock are mainly captive, and the work involves preparing feed in the pen, cleaning manure, and so on. Compared to the spring and autumn, the work is relatively quiet. The herdsman hold a birthday banquet, and the banner government organizes the winter Nadam festival, which is mainly attended by local residents who travel to the town to watch or participate in the competition. In summary, it can be observed that in the traditional pastoral time system of the herdsman, the



Figure 2. Building yurt in the summer campus.



Figure 3. Showing visitors how to make dairy product

two busy seasons and the leisure season alternate, constituting an activity–pause–repetition rhythmic model of pastoral livelihood (Figure 2).

The tourism livelihoods and pastoralist livelihoods of the homes of the herders belong to different livelihood rhythms. The tourism livelihood is operated only during the summer. July and August constitute the peak season of tourism in the West Ujimqin Banner. The homes of the herders offer Mongolian specialties for lunch or dinner, accommodation yurts, and entertainment items in the pasture, such as horse riding and archery. During the period of tourism operation, the herdsmen of the pastoral families also engage in animal husbandry. The dairy food and meat consumed by the tourists are mostly the products of the herdsmen (Figure 3). In September, the number of local tourists sharply decreases, and the off season begins, which is mainly affected by the institutional time of primary and secondary schools as follows: on the one hand, the number of family-based self-driving tourists immediately decreases in the autumn; on the other hand, the summertime part-time students at the pastoral area return to school. In September, the homes of the herders cease their tourism operation one-by-one according to the time schedule of harvesting forage. Then, the off season of tourism lasts for 9–10 months. The pattern of two busy operating months followed by 10 months of suspension shapes the local tourism livelihood annual rhythm.

Local tourism and pastoralism have formed a repetitive cycle of relatively stable continuous action and suspension, which is a unique annual industrial operation rhythm. It can be observed that summer becomes an overlapping season of the tourism and pastoralist livelihoods. The two livelihoods should be managed compatibly. Thus, the tourism livelihood is not an alternative livelihood for the homes of the herders but rather is a supplementary livelihood. In West Ujimqin, although the busy season of tourism is ideally matched with the idle time of animal husbandry, it is still a substantial challenge for the homes of the herder to achieve a balance in the livelihood rhythm of everyday life (Figure 4).

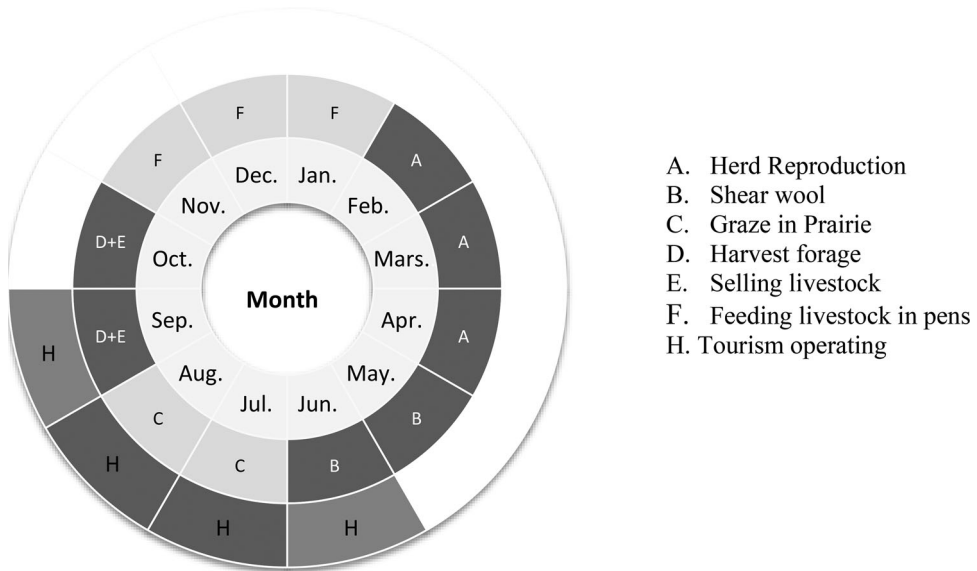


Figure 4. Annual rhythm of pastoralist livelihoods and tourism livelihoods.

Daily polyrhythmia of the homes of the herders

While operating two livelihoods “simultaneously,” the home of the herders shows polyrhythmia during the summer. According to the theory of rhyhmanlysis, polyrhythmia can be analyzed based on the typology of the individual rhythm, collective rhythm, and cultural social rhythm.

Individual rhythm. Lefebvre regards the body as a bearer of rhythm and the organic integration of all organs. During the summer, the individuals in the homes of the herders awake at 5 am and go to bed at approximately 10 in the evening. Herders often describe their available time within a day as “a long day.” With the early summer sunrise, the time to awaken is also advanced. This work schedule, which is based on natural rhythms, has not changed since their entry into tourism livelihoods. Individuals’ physical rhythm of waking and sleeping defines the time available to the actors during the day while dividing the time categories and boundaries of operational tourism and pastoralist livelihoods.

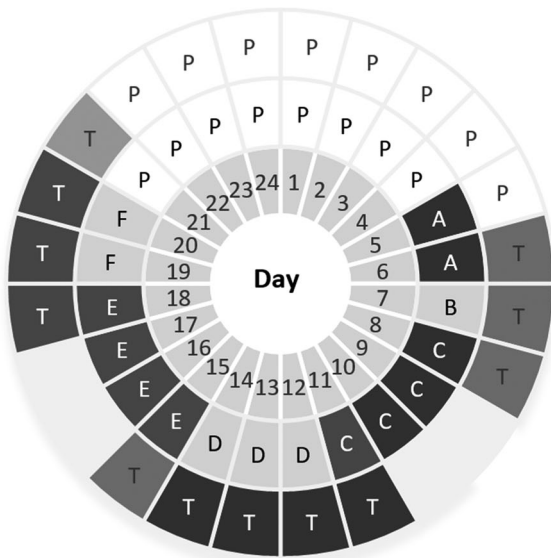
Collective rhythm. For both the animal husbandry and the tourism reception, all members of the family work together, requiring a common time rhythm for the internal operation of the homes of the herders. This collective rhythm can be examined based on the common time used by the family members. Here, members include not only family members but also the sheepherder, waiters, chefs, and so on. During the early morning, the animal husbandry work is relatively heavy. Tasks, such as milking and rushing the cattle and sheep into the pasture, all need the division of labor among the family members. Breakfast is usually arranged after 7:00, which is the collective rest time after the morning’s pastoral work. Then, breakfast is prepared, and everyone sits and drinks morning tea for half an hour to an hour. The preparation of breakfast also involves caring for overnight visitors. A meal is prepared for the visitors, but they do not eat together. After breakfast, the members of the family continue to work separately as follows: in general, the male family members engage in animal husbandry, transporting drinking water, making purchases, or receiving entertainment for horseback riding, archery, and so on, whereas the work of the women in the family is biased toward housework and logistics. In addition to milking the mares and making dairy food, it is necessary to clean the yurt and clean after the meal. The herders usually do not spend a great deal of time preparing for lunch, which often

consists of fast food, such as milk tea and noodles. This type of dining habit is related to the time of traditional animal husbandry work. For example, livestock, such as sheep, and tasks, such as watering, are not suspended at noon. The herders simply take the time to return home to eat; thus, mealtime is not uniform. The development of the tourist reception has made lunch easier and faster. During the day, noon is the peak time for receiving tourists. The women and chefs in the family are responsible for preparing vegetables and cooking, whereas the work of slaughtering sheep is completed by the men. During the summer, the grassland has a high temperature and strong light at noon. Tourists avoid these high temperatures and the glare in the yurts and leave the pasture after dining. One person of the team stays to cater to the guests, whereas the other team members take a short lunch break. During the afternoon, the males or shepherders care for the cattle and sheep in the ranch and the supply of drinking water, whereas the female members and waiters clean the yurts after the guests leave and prepare their dinner. The sun sets at approximately 19 or 20 o'clock, and the cattle and sheep are corralled into a pen. After caring for the animals, the members of the homes of the herders return home to cook and eat. Dinner is carefully prepared and lasts for a long time, representing the beginning of the rest time after a busy day. The members of the household chat, rest, and even have drinks. If tourists dine and stay in the yurts during the evening, only one person, usually a male, provides services. After dinner, the family members watch TV and play on their mobile phone to spend time and go to bed at approximately 10 o'clock. Based on the time of day, we can observe that the regular division of time into work, rest, and entertainment forms the unique daily collective rhythm of the family. Among these times, the longest working hours constitute two periods of time before and after breakfast. Additionally, the rest time includes breakfast and dinner time. These two time points form a border, announcing the official start and end of the day's work. The simplified lunch is intended only to meet the needs of individuals' physical functions; the short break is a state of being on-call and does not form a real rest time. The entertainment time occurs only at night after dinner. In addition to the early morning, during the remaining working hours, the two livelihood types are intertwined, and the two aspects of animal husbandry and tourism reception together form an integrated whole. The internal part-time work is based on the traditional male–female division of men and women, which is also the case in terms of the tourism livelihood as follows: the women tend to “indoor” things, such as dairy food production, preparation, catering, and cleaning, whereas the men tend to “outdoor” things, such as purchasing, slaughtering sheep, and grazing (Figure 5).

Social and cultural rhythm. The social rhythm is the institutional rhythm of the local society, including schools, industry, and activities. The cultural rhythm is based on the habitual rhythm generated by ethnic groups and the local culture. In the annual Ovoo festival, especially the “ten families” Ovoo, which is the local Ovoo festival, the herdsmen in the community earnestly participate in the preparation work and even deliberately reduce the tourist reception volume. In the traditional competition organized by local governments each summer, especially horse racing, the herdsmen who raise horses often respond positively. During this time, the animals staying in the household are basically cared for by the women and seasonal workers in the family.

Transformation of rhythmic forms

The compatibility of the two livelihoods requires a rhythmic harmony between the livelihoods. When herdsmen whose livelihoods have long been based on pastoralism adopt tourism as a second way of life, the two livelihood types need to be redistributed in terms of time resources, material resources, and human resources, affecting the overall work and life rhythm of the homes of the herders. Lefebvre believes that the harmony of rhythm needs to progress through the following three stages: arrhythmia, recuperation, and eurhythmia. From the early stage to



- A. Milking ; Rushing the cattle and sheep into the pasture
- B. Breakfast and pause
- C. Animal husbandry and housework
- D. Quick lunch and rest
- E. Animal husbandry and housework
- F. Dinner
- T. Receiving guests
- P. Pause and Sleep

Figure 5. Daily collective rhythm of the pastoralist in tourism season.

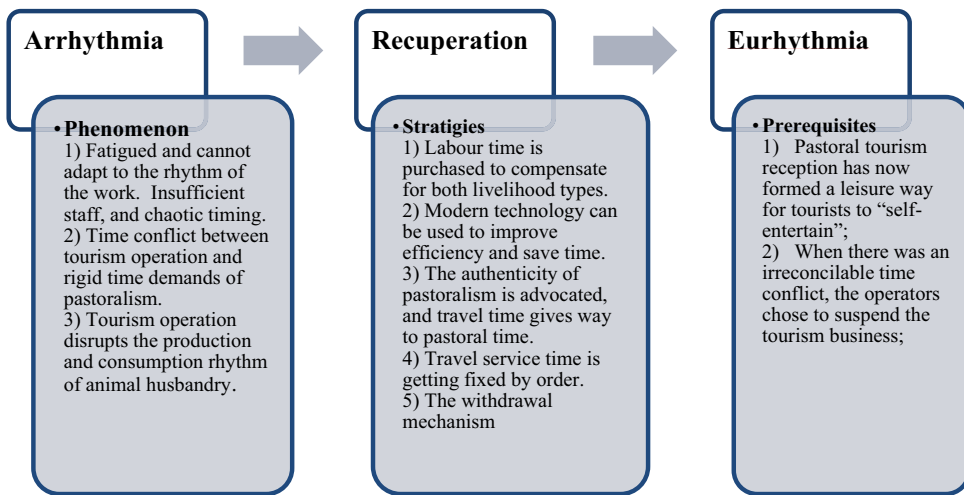


Figure 6. Transformation of two livelihoods rhythmic forms.

mature operation, the homes of the herders also experience a process from imbalance to balance (Figure 6).

Arrhythmia of livelihoods in the homes of the herders

In arrhythmia, the rhythms separate, alter, and bypass synchronization (Lefebvre, 2004). During the early stage of the operation of the homes of the herders, the embedding of tourism livelihoods to some extent disrupts the daily life rhythm of the herdsmen based on their pastoralist livelihoods. The time of the natural world is the reference standard of traditional pastoralism. The livelihood rhythm varies with the natural rhythm of the four seasons. However, tourism management is based on the interaction between people. Relying on institutional time, tourism management represents fast-paced labor during the day. The difference in the two livelihood types in the reference time system leads to a disharmony in the rhythm.

Rhythmic disharmony is reflected in a series of consequences caused by the misconception of the overall workload and time allocation of the home of the herder operators.

First, after carrying out the work of both the tourism livelihood and the traditional pastoralism livelihood, the individual is greatly fatigued and cannot adapt to the rhythm of the work; alternatively, there is insufficient staff, and the timing is chaotic. Some tourism operators describe themselves as “busy as a bee.”

Second, although the pastoralist livelihood is constituted by the interaction between people and nature, it can self-regulate the time arrangement, but there are still rigid time demands that pose a challenge to the concurrent tourism livelihood. For example, a herd that focuses on horse milk management should both serve tourists and milk the mares. Mare milking has a natural physiological rhythm and rigid requirements for time and people.¹ A tourism operator stated that “If some guests come, I have to let them await because my mare cannot wait. If they go, let them go.” When the rigid time demand of mare milking conflicts with the service time of the tourists, it is difficult to achieve both objectives at once.

Moreover, tourism livelihoods affect the rhythm of pastoralist livelihoods. In terms of material resources, the livestock and cattle tourism business consumes self-produced cattle and sheep, reducing the cost of tourism operations and increasing the profit of animal husbandry income. However, the time when cattle and sheep are slaughtered has advanced from autumn to summer, disrupting the production and consumption rhythm of animal husbandry. “Moutons fatten up (*Doson targa*) in the late summer; traditionally, pastoralists don’t slaughter until the ceremony of Aobao. but if guests demand to eat in July, we still offer.”

Livelihood rhythm recuperation of the homes of the herders

In the face of multiple rhythmic disharmony in coordinating the two livelihood types, the homes of the herder operators use a variety of time-use strategies to recuperate their rhythm. These strategies reveal that for the operators, the key is “how to use and operate time” (Lefebvre, 2004).

First, labor time is purchased to compensate for both livelihood types. When the pastoralist family’s labor force cannot meet the needs of the two livelihood types, seasonal employees, such as shearers and seasonal workers, are hired to overcome the problem of insufficient manpower caused by the conflicts between the two livelihood types. An operator stated that “normally, we hire college students during their summer vacation to help, who eat and live in my home. They do not have so many things to do at home in the pastoral area and come out to earn some tuition.” The rhythm responds to the pressure from pastoralism and the tourism industry.

Second, modern technology can be used to improve efficiency and save time. On the one hand, the use of modern means of transportation to improve work efficiency frees more available time for secondary distribution. To both purchase necessary items in town and take water from the surrounding wellhead, the use of cars and motorcycles has accelerated the speed of work completion, and the amount of work that can be completed in 1 day has increased, allowing time to perform tourism-related activities. On the other hand, modern communication equipment and mobile phone and network coverage have made herders take more initiative in the tourism business. By disseminating network information and taking telephone reservations, the homes of the herders have a more predictable time schedule.

Third, the authenticity of pastoralism is advocated, and travel time provides pastoral time. By advocating for an authentic experience, herders persuade tourists to abandon the time rhythm of the “I,” accept the local culture, and adapt to the “other” rhythm of pastoralism. For example, overnight visitors are encouraged to wake early to observe how the herdsmen milk and catch sheep and carry out other tasks related to animal husbandry, but other substantive services are not provided in the morning, and breakfast can be enjoyed only after the herdsmen complete

their animal husbandry tasks. A herdsman stated that “In fact, I am reluctant to let visitors near my cows in the morning. They will frighten the cows and make them return their milk physiologically for days.” Furthermore, the service time for visitors provides time for milking the mares, which makes the rhythm of tourism services closer to the rhythm of pastoralist livelihoods, and the synchronized work rhythm is easier to manage.

Fourth, there is the order of the travel service time. Some pastoral rules require visitors to have lunch or their lunch break in the yurt, which needs to be completed before 4 pm; otherwise, there will be a charge. The link between time and money makes the service of the pastoral property time sensitive, which differs from the “not disturbing” and “not active” service methods that the homes of the herders are used to, and there is enough free space for the tourists. Furthermore, an active time intervention system has been adopted, limiting the time boundary of the service.

Fifth, there is a withdrawal mechanism. If an encounter is not possible, especially in the case of herdsmen participating in a festival, ceremony or a birthday banquet, the operator voluntarily relinquishes the tourist reception on that day.

As a work unit, the herdsmen increase the number of people, increase the efficiency of work, synchronize the two livelihood types, and promote the institutionalization of working hours and other strategies to cope with the situation in which the transactions double following the adoption of the two livelihood types of tourism and animal husbandry. However, based on the strategy, we find that the pastoralist livelihoods and tourism livelihoods are not the same for all pastoralists.

Eurhythmia of livelihoods in the homes of the herders

Eurhythmia refers to the harmony in rhythms composed of diverse rhythms and maintains the rhythms in a metastable equilibrium (Lefebvre, 2004). After tweaking, the tourism livelihoods and pastoralist livelihoods of the herdsmen reach a certain harmony, and the livelihoods coexist as an alliance. Seasonal embedding and the exit of tourism livelihoods are subject to certain prerequisites.

First, the West Ujimqin Banner’s pastoral tourism reception has become a leisure activity for tourists to “self-entertain.” The herdsmen do not have much contact with tourists during the provision of catering, accommodation, and entertainment. Visitors have sufficient time and space to “not be disturbed.” Through the observation, it is found that the travel service of the pastoralists occurs backstage, and there is less interaction time with the guests at the frontstage, which also makes it possible for the herders to intersperse the work of the two livelihood types backstage. The casual nature of this type of tourist “self-entertainment” is difficult to describe because of the stage of local tourism development or the influence of pastoral culture. This “natural stocking” style of hospitality is also consistent with the core of animal husbandry.

Second, in the investigation, it was found that when there was an irreconcilable time conflict, the operators chose to suspend the tourism business. For example, the herdsmen may not participate in a traditional event because the animal husbandry work is unsupervised; however, they do participate in events when no one is watching the tour. Despite the high economic benefits brought by the tourism livelihood, the current tourism reception of the homes of the herders in the West Ujimqin Banner is relatively random and passive. In sparsely populated pastoral areas, the insufficiently stable number of tourist receptions has affected the status of the tourism livelihoods of the pastoral households.

The two livelihood types of the pastoral experience the process of arrhythmia, rhythmic recuperation, and eurhythmia. For pastoralism, animal husbandry still dominates the rhythm, especially the everyday life rhythm of the herdsmen. Tourism livelihoods are dominated rhythms based on the material resources and human resources of the pastoralist livelihoods. In practice, this type of passiveness is reflected not only in the rhythm of daily animal husbandry but also in

the rhythm of the regional tourism industry. The embedding and development of tourism livelihoods promote the change in the organizational structure of the homes of the herders, the institutionalization of the working hours and improvement in work efficiency. The coordinated operation of the multirhythm of multiple actors makes the herdsmen gradually embody the temporal characteristics of modern society from the coordination of traditional human and natural time to the coordination of human and external social time. In pastoralism, the balance is between nature and the social rhythm.

Discussion

Considering the case of the homes of the herders of West Ujumqin, Inner Mongolia, China, this article contributes by exploring how pastoralists integrate tourism and pastoralism in rhythm to achieve the sustainability of both livelihoods means. The existing literature has discussed livelihood sustainability from the perspective of the sustainable livelihood framework. Given the multifaceted nature of the sustainable livelihood problem, this study underlines the temporal issue of livelihood synergy and examines the rhythmic integration between the tourism livelihoods and the traditional livelihoods of destination residents by applying three key aspects of the theory of rhythm analysis.

First, the operation of the homes of the herders shows an organic combination of pastoral livelihoods and tourism livelihoods. This combination may be based on the different rhythms and temporal logics of the two livelihood types. From the perspective of the annual rhythm, the two livelihood types show different time occupancy characteristics (Figure 3). The tourism peak season is also a slow season for pastoralism, allowing the herdsmen to have both the manpower and the material resources to “simultaneous” care for the operation of the two livelihoods. The stability and complementarity of the annual rhythms of the two livelihoods is the basis for the herdsmen’s tourism. If the two livelihood rhythms are synchronized and consistent with the duration of the activities and the pause, the possibility that the two livelihood types cooperate with one another is greatly reduced.

Second, the operation of the homes of the herders demonstrated polyrhythmia from individual rhythms and collective rhythms to social cultural rhythms, greatly influencing the rhythmic harmony. The individual rhythm is shaped by the rhythm of the body, which draws the boundary of action time and rest time in everyday life. Because of the time pool of the team, it is possible for the home of the herders to operate both tourism and livestock raising during the summer. The temporal synchronization of the group mealtime in the morning and evening acts as a “rhythmic dressage,” dividing the wake time into livelihood activity time, rest time and entertainment time, and hence forming collective rhythms. However, when the mealtime is a rest time for herding, it is also a busy time for receiving visitors, especially during lunch and dinner. The cultural dining habits allow the herdsmen households to receive tourists. The extension of tourism operations to the night time shows the change in the natural rhythm owing to modern social technology and socio-economic reasons (Lefebvre, 2004). The rhythm of culture shows the importance of traditional festivals for the use of time of the herdsmen. This rhythm also shows the attitudes and strategies adopted by the herdsmen based on cultural habits for different livelihoods.

Third, the embedding process of tourism livelihoods can be considered a process of arrhythmia–recuperation–eurhythmia to access rhythmic harmony (Figure 6). The introduction of the tourism livelihood makes the leisure summer of the herdsmen a busy season not only by increasing the amount of issues per unit time but also by breaking the rhythm of the everyday life of the pastoral life and affecting the rhythm of the annual production and consumption of animal husbandry. Through a series of time strategies, the rhythmic disharmony after the entry of tourism livelihoods is repaired.

It should be acknowledged that the integration between the two livelihood types has certain preconditions and is based on the cultural background. On the one hand, the herdsmen are not literally forced to prolong the tourism operating time with respect to seasonality. Therefore, the appreciation for the seasonal cycles in the pastoral region has been developed in Mongolian culture (Waldron et al., 2010); on the other hand, tourism operators prefer to work backstage and do not actively interact with tourists, promote other services and products, or disturb the “self-entertainment” of tourists. These seemingly “learned” modes of operation are in fact closely linked to long-term pastoral activities. Influenced by “nomadic thought” of transhumance (Palladino, 2018), the herdsmen respect and obey the laws of nature, allow nature to take its course, and lack competitiveness. The recognition and attention to the national culture also enable the herdsmen to respect the cultural rhythm and make temporal choices when traditional cultural activities and tourism business activities conflict in time.

Conclusion

Based on the evidence in this study, livelihood rhythms are composed of livelihood activities, a pause, and cycle repetition. The rhythmic model applies regardless of whether we consider the annual or daily livelihood rhythm or individual or collective rhythm. Although Lefebvre defined rhythm as a combination of space, time, and energy, it is difficult to grasp the idea of energy and use it in an empirical study. Instead, the three components of the rhythmic model are pragmatic for diagnosing various problems regarding rhythm.

It has been shown from case studies that the theory of rhythm analysis is suitable for analyzing not only place-centred mobility but also human-based periodic activity. In addition to seasonal livelihoods, seasonal events can be considered rhythmic activities of individuals or groups that might confront time conflicts with the local social time system. From the collective rhythm perspective, according to Katz, holidays, anniversaries, and other days of importance have the power to result in the “consensual interruption” of daily life (Katz, 1998). Rhythm analysis could be an appropriate toolkit for resolving these problems.

The embedding of tourism livelihoods has changed the original time structure of the herdsmen, suggesting that the time view of modern society penetrates through other ways in addition to technology and media, and tourists arrive at the tourist destination, that is, a traditional community, directly as carriers of modern times. The formation of the West Ujimqin Banner summer tourism peak period is also partially caused by the institutional time of modern society. The process of recuperating the everyday life rhythm of the pastoralists from broken to harmonious reflects the time politics between traditional society and modern society. Through the persistence of the traditional rhythm of life and the time of traditional cultural activities, as the main body of traditional culture, the herdsmen take the initiative and retain the traditional form of their social time. The use of mass media and modern technology and governmental policy interventions have also penetrated the modern aspects of the herders’ life. The gaze of tourism on the native culture of the destination offers the possibility of a balance between traditional time and modern time.

It was also found that even if tourism livelihoods lead to a faster cash flow, the pastoralists still regard their pastoralist livelihoods as the livelihood with the dominant rhythm, and the tourism livelihood is still the dominated livelihood. This finding may be related to the development mode of prairie tourism and the strong seasonality of tourism, making it impossible for operators to regard their tourism livelihood as their only source of livelihood. However, this finding may also be related to the cultural habits that have long existed in pastoralist livelihoods. A livelihood must work with culture and traditions (Daskon & Binns, 2010; Ellis, 2008). Lefebvre believes that “the growth of knowledge (and people in social life) and the corresponding activities have their own rhythms, which are created by habits. That is, those repetitive, periodic more or less

harmonious interactions between the endless transactions” (Lefebvre, 2004, p. 74). Under the potential influence of local cultural habits, the operators make choices about how to operate the two livelihoods, what strategies to adopt, and how to act when time conflicts.

This study makes conceptual and practical contributions. From a theoretical perspective, Lefebvre’s theory of rhythmanalysis broadens the scope of the tourism inquiry, which helps us better understand the temporal integration and sustainability of diverse cyclical activities in tourism industries. This study further illustrates the connotation of polyrhythmia and the three stages of the transformation of rhythmic forms regarding tourism livelihoods, which could be used as a basic framework to analyze other tourism periodic issues, such as sporting seasons (hunting, surfing, skiing, golfing, etc.), annual events, festivals, and so on. From a practical perspective, this research sought to contribute to time management in the tourism industry, including time allocation, time strategies, and temporal decision making. Time management is heavily influenced by the time norms of organizations. Thus, there is a need to consider the person–environment fit (Edwards, Cable, Williamson, Lambert, & Shipp, 2006) from a temporal perspective (Francis-Smythe & Robertson, 2003; Kaufman, Lane, & Lindquist, 1991). Instead of managerially reducing the influence of the tourism season, it is more approachable to adjust tourism toward the destination economic and social system, make tourism seasonality more stable.

Note

1. During the daytime, the horses need to be milked every 2–3 h five to six times a day. If the horses are not milked, the horse milk naturally flows or the milking time of the mares is disrupted. In addition, the mare is more aware of birth and produces milk only for a person familiar with milking. Otherwise, there is a great impact on milk production. The work of milking horses is often performed only by the women in the family.

Acknowledgments

The authors would like to thank the anonymous reviewers for their valuable comments, and Xie Jia, Yang Xihao at the School of the tourism management of Sun-yat Sen University for their kind suggestion.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was supported by National Social Science Foundation of China under Grant [No. 15ZDB118], National Natural Science Foundation of China under Grant [No. 41961022] and Inner Mongolia Autonomous Region Philosophy and Social Science Planning Project under Grant [2016NDC106].

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