

Travel of Milarepa-Text Mining of Hundred Thousand Songs of Milarepa & The Life of Milarepa

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ABSTRACT

Milarepa is a Tibetan Siddha who was famous for the legendary story of revenge as a youth and becoming a Buddhist later in his life. He is one of the most influential Yogi of Tibet. This research focuses on his footpath throughout his life based on two books—the Life of Milarepa and The Hundred Thousand Songs of Milarepa. The first one is a biography written by Tsangnyön Heruka (1452–1507) in the 15th century, and the second book is a collection of Milarepa’s poets. This research follows the steps of Milarepa to reconstruct the role model’s life path when he was alive. Some of the places mentioned in the text no longer exist on the map, but we can still see the general relativeness between these places.

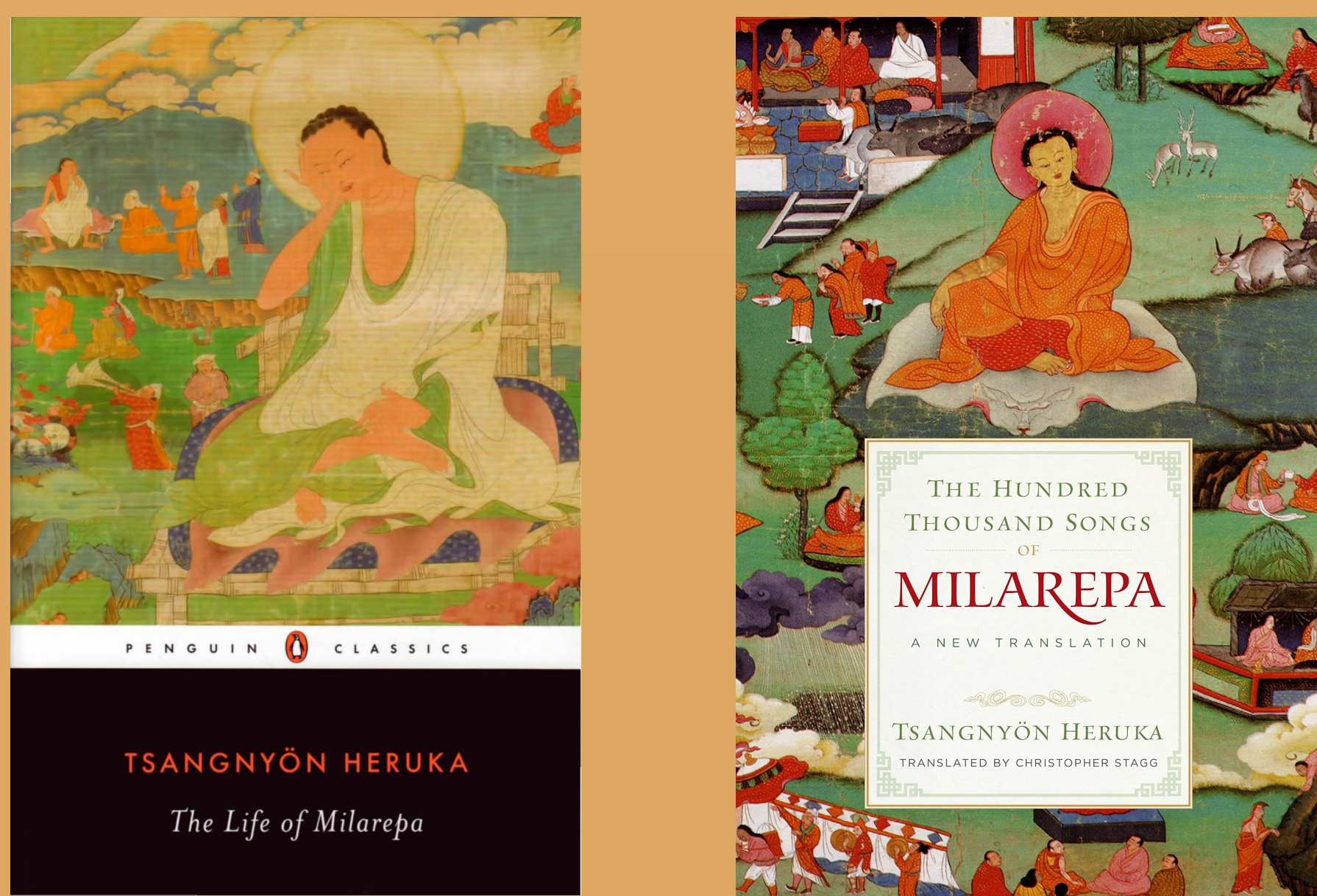


Figure 1. Book The life of Milarepa & Hundred Thousand Songs of Milarepa

Material & Method

This research used python to run text mining of the two books aiming to extract all the geographical locations mentioned in the books and to analyze the relational networks of the places and sentiments related to these locations. It employs the library for Natural Language Processing (NLP), spaCy, to assist the work.

First, observe original texts to create a “from. to...” language pattern to extract all the geographical locations mentioned by the texts.

Second, by using the (). sent method to locate the full sentence mentioning the location and create a file including these data.

Third, locate these places on the map and find the relational networks where Milarepa traveled.

REFERENCES

1. Lopez, Donald S, and Quintman, Andrew. 2014. *The Life Of Milarepa*. New York: Penguin Books.
2. Milaraspa, Gtsang-smyon Heruka, Christopher Stagg, and Dzogchen Ponlop. n.d. *The Hundred Thousand Songs Of Milarepa*. Shambhala.

Results

The first running text mining progress generated a list of 40 locations including locations—

“Chonglung Garuda Fortress, Lachi Snow Mountain, Lachi Nayön Chudo, Chuzang, Lachi Neythil, Lachi Chuzang, Nyanang, Lingpa Rock, Riwo Palbar, Rakma, Kyangpen, Tibet, Drakya Vajra, Drakya Vajra Fortress, India, Silk Cave, Mangyul Kyidrong, Jang Tago Snow Mountain, Gyalgyi Shri Mountain, Dingri, Dingri Khokna, Lachi, Tisé Snow Mountain, Tisé, Kyitang, Aryavarta, Bodhgaya, Chonglung, Nepal, Naktra, Palkhü, Betse Döyön Fortress, Poto, Poto Red Rock, Poto, Ü, Gampo Dar Mountain, Chuwar, Central Tibet, Tongla”

There are multiple names referring to the same places. For example, Drakya Vajra and Drakya Vajra Fortress, Poto and Poto Red Rock, and Tisé Snow Mountain and Tisé. By eliminating duplicates, there are 34 places mentioned.

“Chonglung Garuda Fortress, Lachi (Snow Mountain), Lachi Nayön Chudo, Chuzang, Lachi Neythil, Nyanang, Lingpa Rock, Riwo Palbar, Rakma, Kyangpen, Tibet, Drakya Vajra Fortress, India, Silk Cave, Mangyul Kyidrong, Jang Tago Snow Mountain, Gyal-gyi Shri Mountain, Dingri Khokna, Tisé (Snow Mountain), Kyitang, Aryavarta, Bodhgaya, Chonglung, Nepal, Naktra, Palkhü, Betse Döyön Fortress, Poto (Red Rock), Ü, Gampo Dar Mountain, Chuwar, Central Tibet, Tongla”

The running result shows that Milarepa were active in the Lachi region including *Lachi Snow Mountain, Lachi Nayön Chudo, Lachi Chuzang, and Lachi Neythil.*

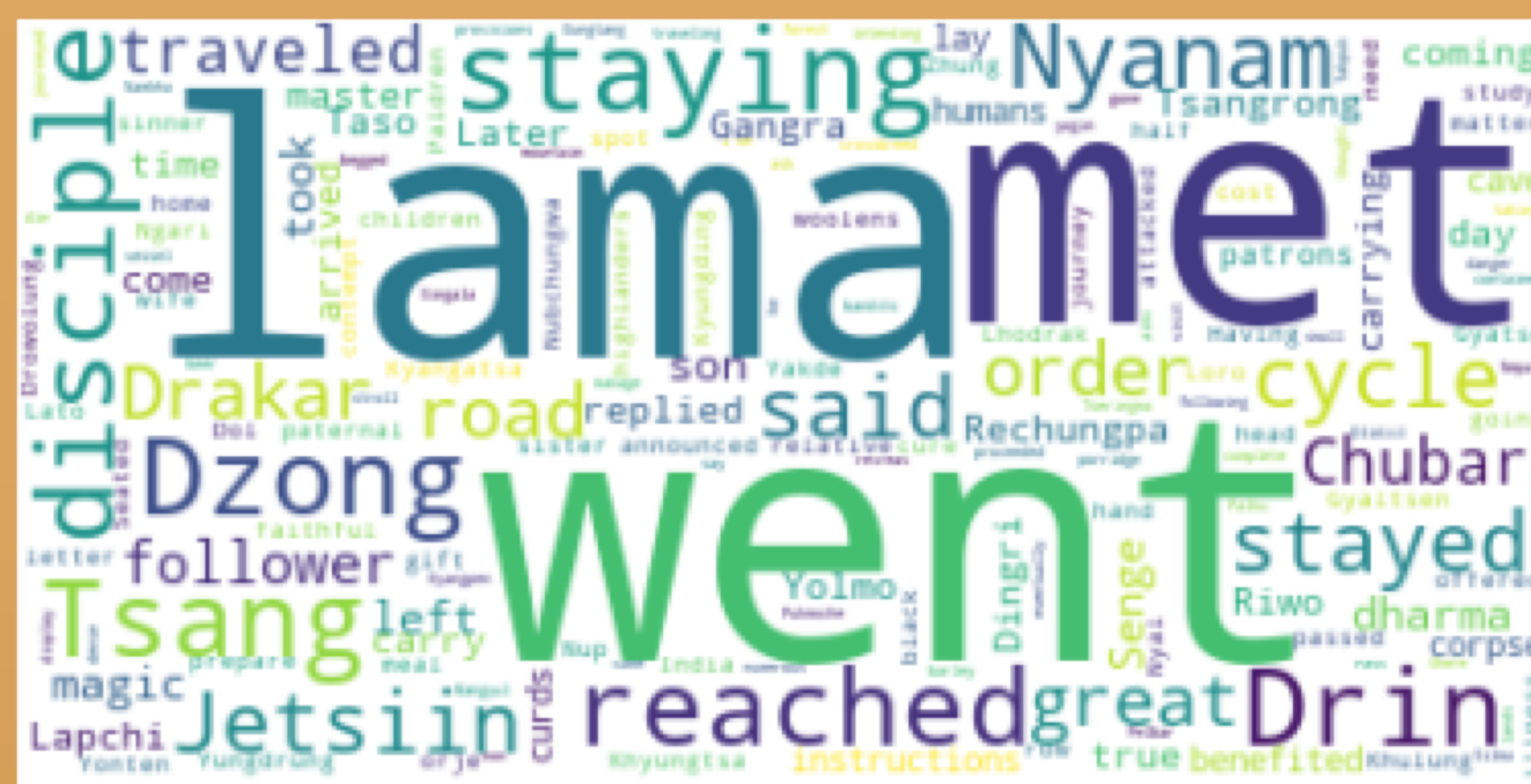


Figure 2. Word Cloud of sentences contain geographical locations in The Life of Milarepa

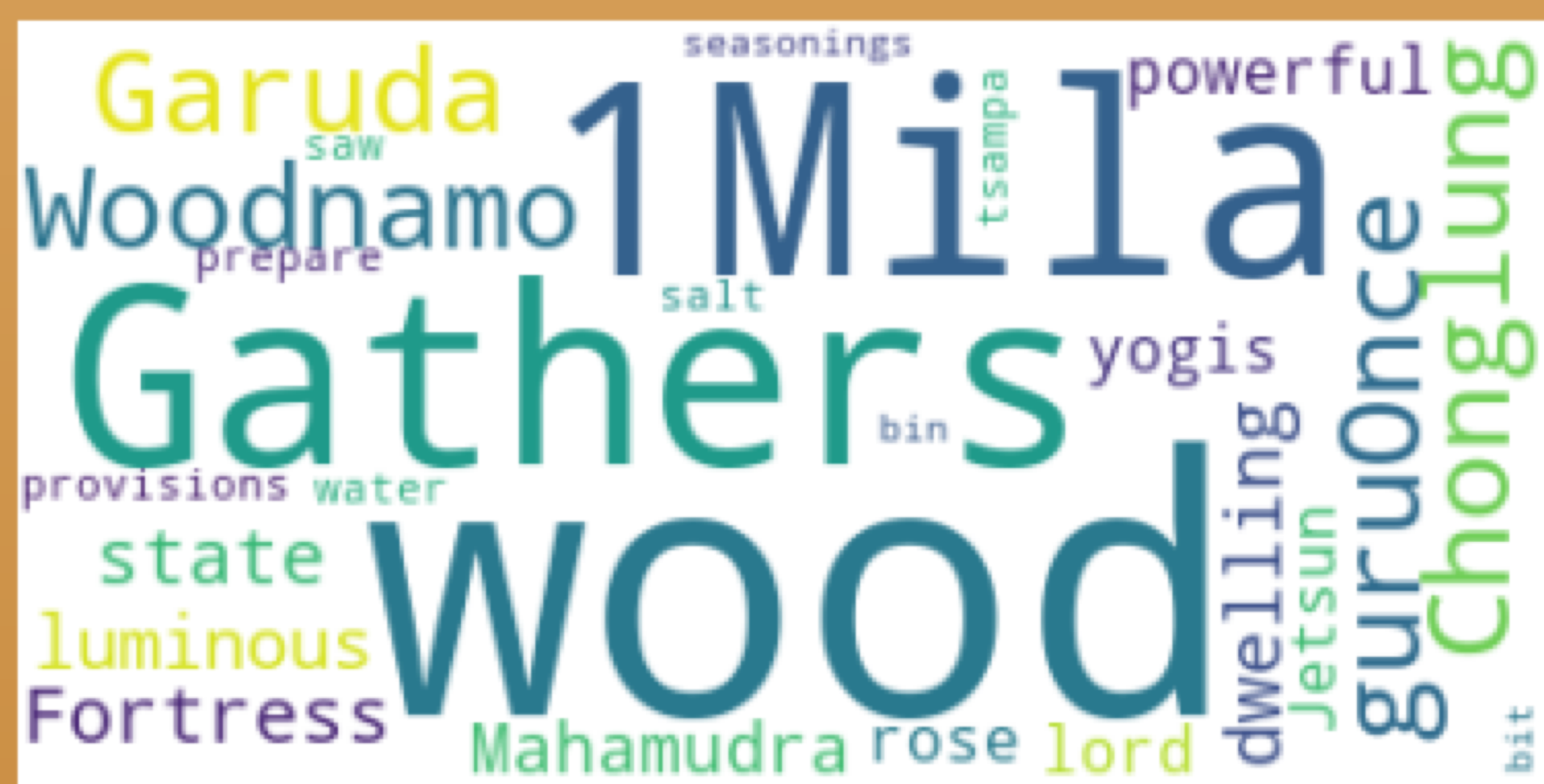


Figure 3. Word Cloud of sentences contain geographical locations in The Life of Milarepa

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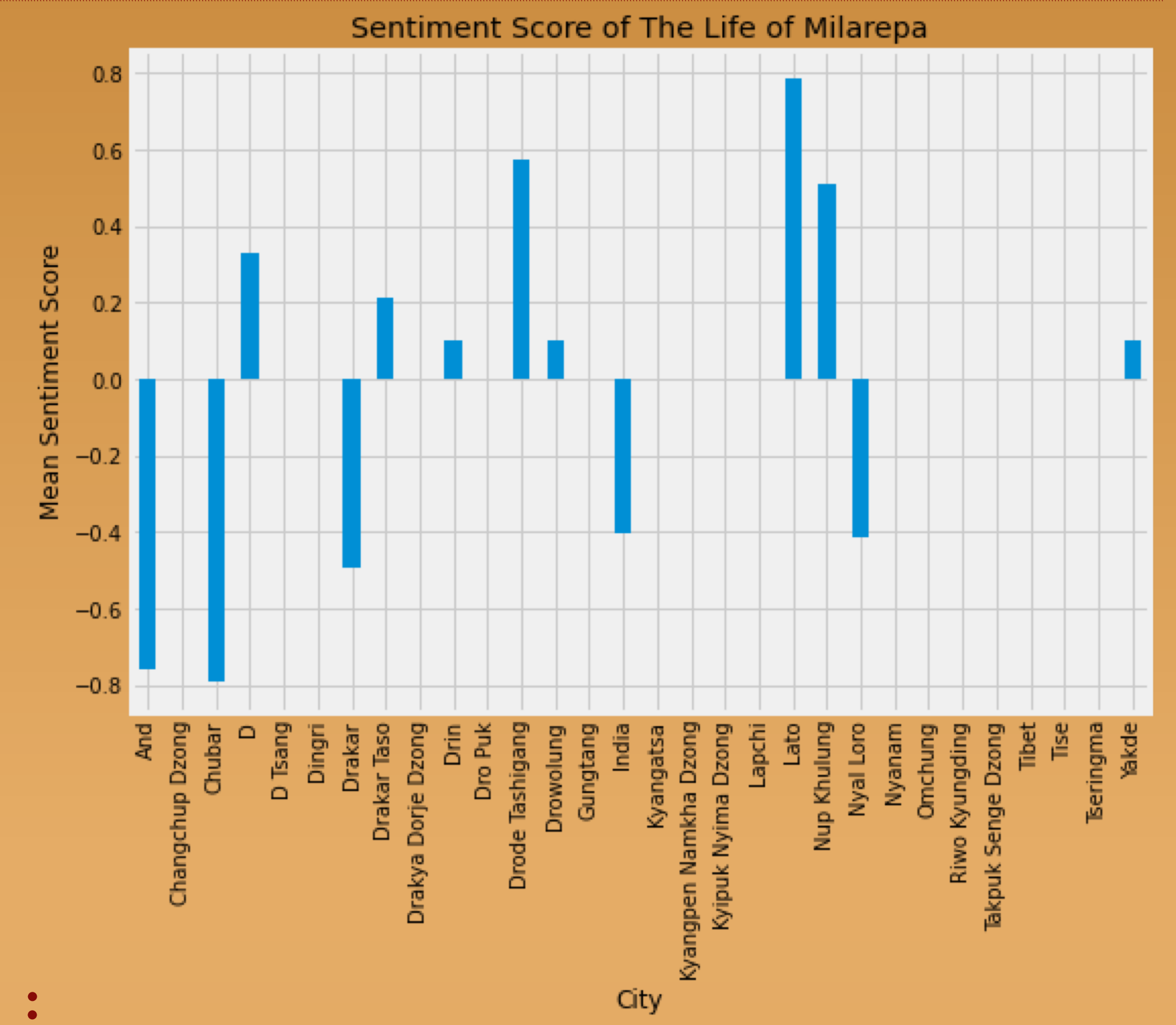


Figure 4 Sentiment Analysis of Cities in The Life of Milarepa

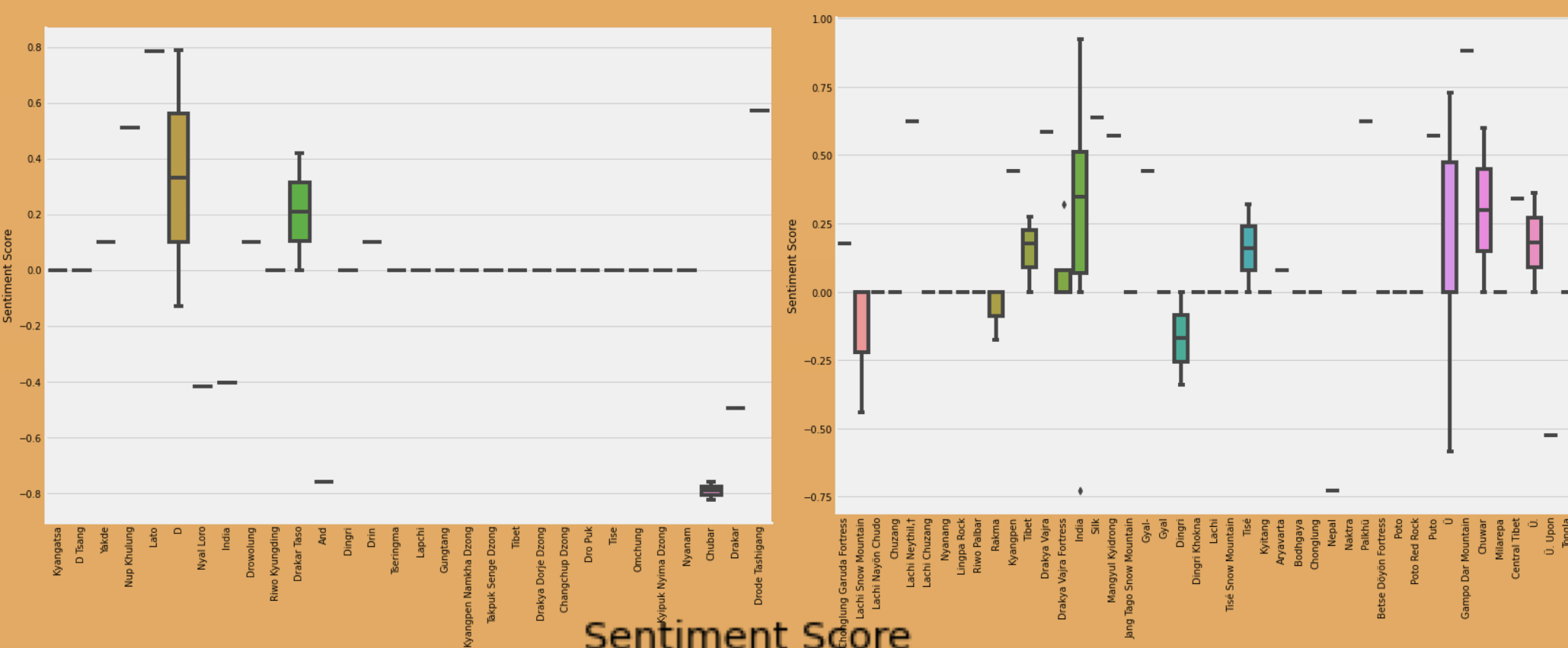


Figure 5. Sentiment Analysis of Cities in Hundred Thousand Songs of Milarepa

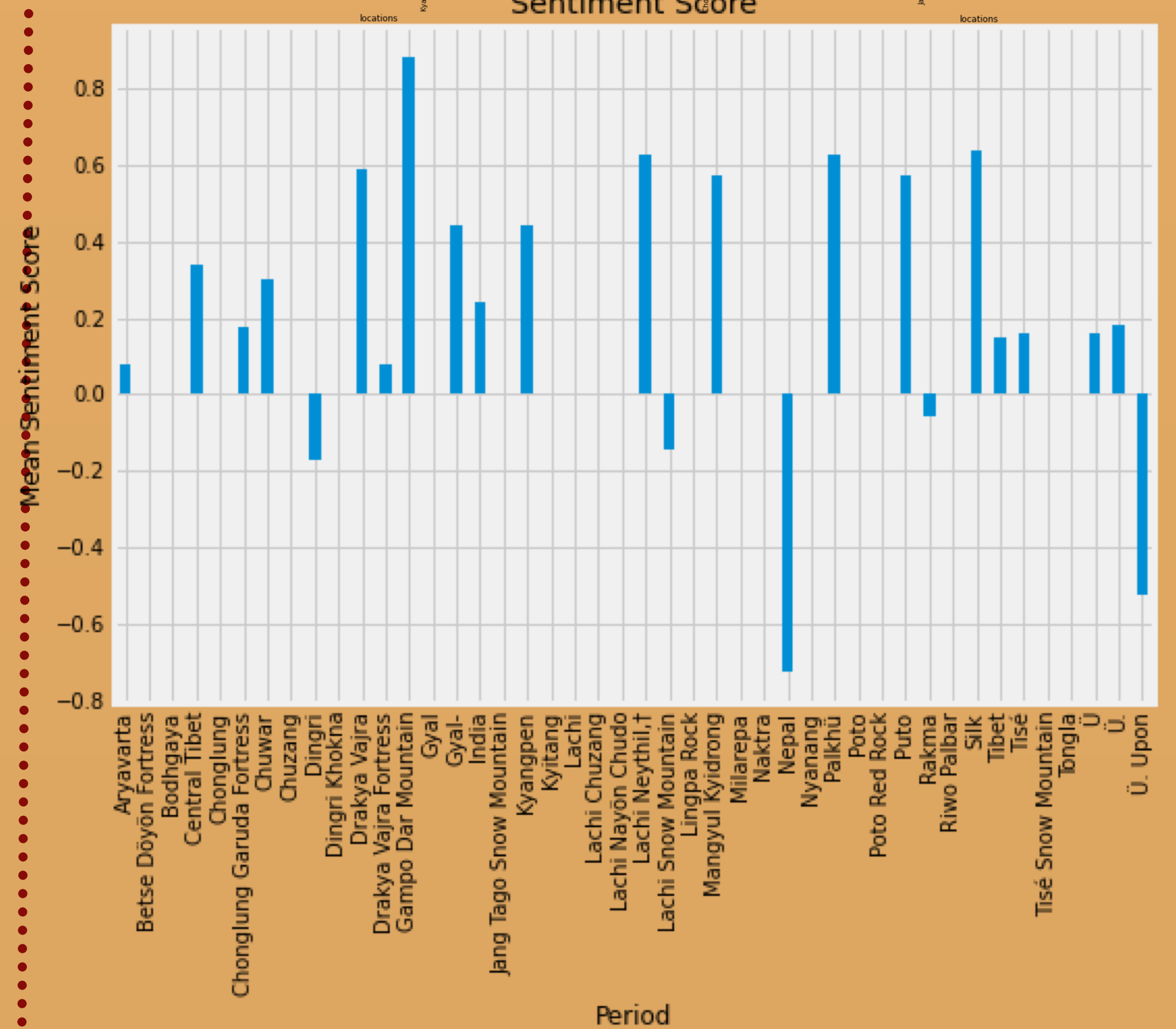


Figure 5. Sentiment Analysis of Cities in Hundred Thousand Songs of Milarepa

Discussion--Sentiment Analysis

The analysis employed sentiment lexicons in VADER in NLTK. It is composed of series of phrases and words coded with a positive or negative score according to their semantic orientation.

Sentiment polarity scores are the index of positiveness and negativity of texts. From -1 to 1, the degree of positivity increases, with -1 the most negative and 1 the most positive. Generally, many cities indicate a neutral sentiment between -0.5 to 0.5 with a few standout cities. In the book *The Life of Milarepa*, the sentiment polarity score of Chubar is the lowest -0.7579.

“When he reached Chubar he saw the resident disciples, students, and lay followers assembled at the Jetsiin’s cave, presenting offerings to the corpse in a deep state of grief.”

While in the book *Hundred Thousand Songs of Milarepa*, Nepal has the most negative sentiment polarity score, -0.7269.

“When he arrived in Nepal, Tipupa’s disciple Bharima clarified the faults of dharma of the jealous lotsawa and so forth.”