Energy Research & Social Science 46 (2018) 262–273

Contents lists available at ScienceDirect

Energy Research & Social Science

journal homepage: www.elsevier.com/locate/erss

Original research article

Korean traditional beliefs and renewable energy transitions: Pungsu, shamanism, and the local perception of wind turbines

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ARTICLE INFO

Keywords:
Energy transition
Wind energy
Pungsu
Shamanism
Indigenous communities

ABSTRACT

Wind farms are constructed in mountainous rural villages where indigenous elderly people believe in Korean traditional beliefs such as pungsu (fengshui or geomancy) thought and shamanism. Built upon mixed qualitative methods, this research examines the relationship between traditional beliefs and local opposition to wind farms. First, the interpretation of mountains and wind based on pungsu clashes with favorable discourses on wind turbines. From the pungsu viewpoint, the wind turbine is considered similar to the iron stakes driven into renowned Korean mountains by Japanese imperialists to block the national spirit of Korea during the Japanese colonial era. A straight, strong wind with high-energy efficiency for wind power generation is considered inauspicious in terms of pungsu. Second, pungsu in local opposition to wind farms is prominent in clan communities in mountainous inland areas with a high proportion of elderly people. Third, senses are associated with shamanism in shaping the elderly's perception of wind turbines. The noise and lights of wind turbines is a reminder of past memories related to ghosts or dokkaebi (a Korean goblin). Thus, pungsu and Korean shamanism present a unique story that is absent in Western debates on wind farms.

1. Introduction

The gap between the low acceptance of wind farms and the popularity of wind power in national opinion is a key theme in energy transition research [1,2]. To deal with this gap, this article analyzes the relationship between Korean traditional beliefs and the local perception of wind energy. The reason we focus on traditional beliefs is related to the age composition of Korean rural society. According to Statistics Korea [3], the proportion of the elderly population aged 65 and over in 2016 is the national average of 13.2%, while the elderly proportion in rural villages is 40.3%. Most inland areas where onshore wind farms are constructed are near rural villages with low populations; the proportion of the elderly population in those areas is much higher than the rural average. However, the opinion of rural elderly people on wind energy is hardly reflected in public opinion surveys, likely because it was primarily conducted online. Even in telephone surveys, it is difficult to obtain responses from rural elderly people. This hints at a gap between national opinion and local acceptance.[1]

This article focuses on pungsu (fengshui) theory and dokkaebi tales as part of Korean traditional beliefs. Pungsu is the idea that because qi (氣), a type of energy, flows through nature, the geographic location and spatial structure of houses, tombs, and cities affect human happiness and luck [4–7]. This thought is not unique to Korea but prevalent in East Asia [6]. Dokkaebi (도깨비) is a Korean goblin and legendary creature from Korean folklore and mythology. While they may harass humans, they also bring good luck if people treat them well [8,9,10].

This study aims to understand wind turbines in the context of Korean traditional beliefs. Our research questions are as follows. How do pungsu and shamanism affect the local perception of wind turbines? How does the interpretation of mountains and winds in pungsu differ from the favorable discourse on wind turbines? What kinds of shamanistic beings do people imagine from the noise and lights of wind turbines, and why? Here we present the following argument. Pungsu is based on unique interpretations of the mountains and wind, and these interpretations conflict with favorable attitudes toward wind turbines. When hearing the noise or seeing the lights of wind turbines, old

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[1] According to a 2017 online national survey ([64]: 94), 93.2% of the Korean population favor wind energy and 72% favor placing wind farms near residences. These figures hide the existence of strong opposition to wind farms in rural villages [65].

https://doi.org/10.1016/j.erss.2018.07.024
Received 4 February 2018; Received in revised form 14 July 2018; Accepted 20 July 2018

villagers recall the ghosts and dokkaebi of Korean folktales. However, pungsu and shamanism in residents' perceptions of wind turbines vary according to residents' age, the type of community, and geographical location.

We begin with a research design built on qualitative interviews and content analysis. Second, we present a literature review and conceptual framework. Third, we introduce pungsu thought and dokkaebi folktales. Fourth, we examine the connection of residents' perceptions of wind turbines to the pungsu perspective of mountains. Finally, we explore how the interpretation of wind by pungsu differs from the discourse on pro-wind energy and how the noise and lights from wind turbines are associated with ghosts and dokkaebi.

2. Methods and materials

2.1. Semi-structured interviews

Our field sites are divided into four mountainous inland areas (Yeongyang, Uiryeong, Pyeongchang, and Yeongam) and three coastal areas (Buan, Yeosu, and Jeju) near wind farms because pungsu is related to high mountains. Dokkaebi folktales differ between the two areas [8] (see Fig. 1). From October 2016 to April 2017, the lead and second author conducted multi-site interviews with 23 people aged 34–79 (female ratio: 30%) in the mountainous inland areas (N = 17 people) and coastal areas (N = 6 people). In addition to geological rationales, the reasons for conducting multi-site interviews are as follows. First, the proportion of the elderly population is much higher in mountainous inland areas than in coastal areas [3]. Second, there are two forms of local communities in mountainous inland areas. Uiryeong (Gabul-ri) and Yeongam (Handae-ri) are indigenous villages, while Yeongyang (Gisan-ri) and Pyeongchang (Suha-ri) are villages composed of indigenous people and outsiders such as migrant farmers or patients flocking there for healing. Third, dokkaebi folktales have regional specificity that has only been inherited in Jeolla-do, Gyeongsang-do, and Jeju Island [8]. Our field sites are Jeolla-do (Buan, Yeosu, and Yeongam), Gyeongsang-do (Uiryeong, Yeongyang), Gangwon-do (Pyeongchang), and Jeju Island (see Fig. 1).

With the exception of Jeju Island, all interviewees were village representatives or local residents who opposed wind farms. Interviewees were identified through extensive online searches and telephone calls to find contacts. Subsequent respondents were identified through snowball sampling. Face-to-face interviews lasted between 30 min and two

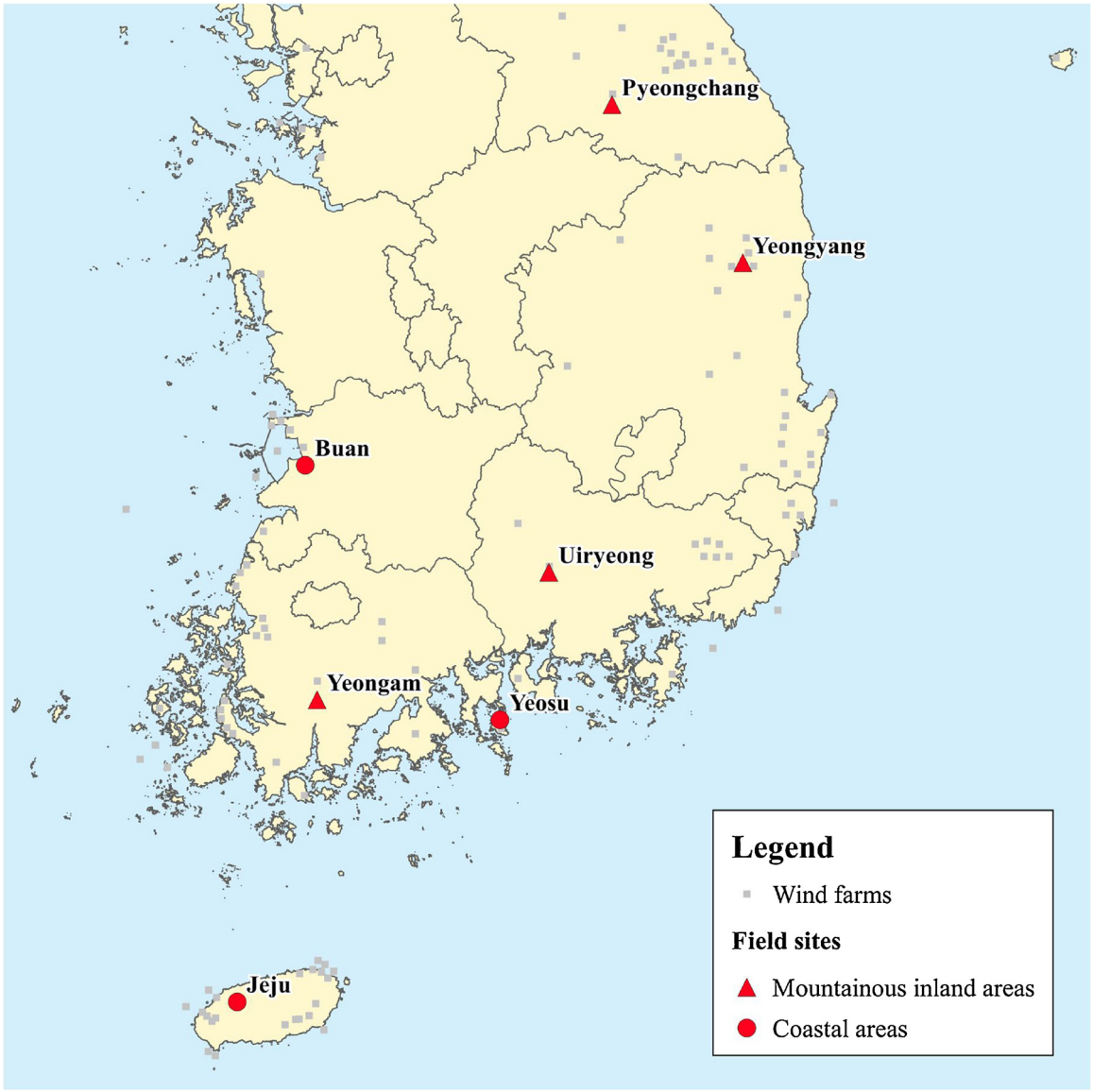

Fig. 1. The field sites of this study.