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## SPACE OPTIMIZATION OF HISTORICAL LANDSCAPE OF THE GREAT WALL VILLAGES BASED ON LANDSCAPE ECOLOGY: A CASE STUDY OF CHICHENG AREA IN ZHANGJIAKOU

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## Abstract

The protection system for urban historical and cultural heritage is well-established, while the safeguarding of rural cultural heritage lags behind. Consequently, the historical landscape space of the Great Wall village has been overlooked for an extended period. Drawing on the principles of landscape ecology, this study presents the "patch-corridor-matrix" model. By utilizing the Great Wall village in the Chicheng region as a case study, the historical landscape of the village is analyzed through three distinct structural levels: 'multi-type historical landscape patch', 'multi-type historical landscape corridor', and 'historical landscape matrix within the county'. In addition, a spatial quantitative model is created using the landscape index analysis approach, and the landscape index is utilized for analyzed the specific defensive qualities of the Great Wall village's historical landscape space. The optimization of the historic landscape space of the Great Wall villages is suggested for consideration in conjunction with the existing state of the landscape space along the Great Wall in the Chicheng area. From the three aspects of patches, corridor and matrix, spatial optimization thinking is carried out. For patch space, it is proposed to enhance the difference of patch space by improving the proportion of historical landscape patch space, emphasizing its historical and cultural connotation. For the corridor space, the cultural connotation of artificial, natural and sight corridors is explored and the physical space is improved, and the three corridor types are integrated to realize the win-win situation of rural development and historical landscape space protection. For the matrix space, the historical landscape network within the county is constructed to ensure the stable and dynamic development of the Great Wall village patches and corridor space and promote the harmonious coexistence of the Great Wall village economy and the historical landscape area.

Key words: Great Wall villages, historical landscape, landscape index, space optimization

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