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Dear Prof. Bettinger,

We wish to submit an original research article entitled “Cultural Transmission and the Social Contexts of Technological Transitions during the Late Paleolithic of Korea” for the consideration by *Archaeological Research in Asia*.

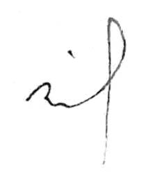
Previous research about the Late Paleolithic archaeology in Korea has mainly focused on individual assemblages and the timing of appearance of new types of artifacts such as stemmed points and blades. What is missing from the previous works are 1) rigorous quantitative investigation of social contexts and transmission process associated with the appearance of these new tool types, and 2) analyses of large dataset that shows full spectrum of human behaviors during this time.

Our research aims to fill the gap using a sample of 152 stemmed points from 20 sites located across Korea dated to 40-17 ka. Inspired by your work with Eerkens on transmission biases and bow and arrow technology in the Great Basin, we examined the influence of guided variation and indirect bias on the appearance of stemmed points.

Our key finding is that the dominant mode of cultural transmission for the stemmed points, the first composite tool in Korea, was guided variation indicating local development through trial and error. We also found a slight increase in correlation coefficients and a decrease in coefficients of variation between the stemmed points over time, indicating a shift towards a greater reliance on copying an existing model. This change seems to be related to the choice of more easily manageable raw materials. We assume that individuals or groups developed stemmed points by experimenting with blade technologies and different raw materials and then copied crucial parts of a successful model to ensure the quality to optimize tool usage. As a result, the shape of stemmed points became more standardized among their social groups.

We believe our findings would appeal to a broad range of audiences across Asia and around the world, such as the readership of *Archaeological Research in Asia*, as a wide-reaching journal publishing original research on archaeological inquiry from the earliest human presence in Asia.

We confirm that this manuscript has not been published elsewhere and is not under consideration by another journal. All authors have approved the manuscript and agree with submission to *Archaeological Research in Asia*. We have read and have abided by the ethical guidelines for the publication submitted to *Archaeological Research in Asia*. The authors have no conflicts of interest to declare.

Warmly,

Ben Marwick, Gayoung Park