TOOLKIT STRUCTURE AND SITE USE:  
Results of a High-Power Use-Wear Analysis of Lithic  
Assemblages from Solutré (Saône-et-Loire), France  

William E. Banks, Ph.D. Department of Anthropology,  
December 2004 University of Kansas  

ABSTRACT  

Upper Paleolithic groups used the open-air site of Solutré as a location to intercept  
and hunt horse and reindeer herds. While it is clear that killing and butchering these  
animals were the principal site activities, differences in the composition of the  
recovered lithic assemblages from the different cultural components indicate  
variability in secondary site activities and lithic tool use over time. A high-power  
use-wear analysis evaluates the relative extent of the variability in tool use to test this  
interpretation. The analysis of high-resolution epoxy casts of sampled artifacts is  
described, use-wear attributes that function as proxy measures of curation are  
identified, and temporal differences in secondary site activities and toolkit structure  
are documented. The use-wear results demonstrate that tool function and typology  
are closely correlated and do not change over time. The results of statistical  
evaluations of tool use, use-wear curation signatures, and metric attributes indicate  
that some time periods are characterized by more versatile curated lithic toolkits than  
others. Temporal differences in toolkit structure and secondary site activities appear  
to be the result of changes in mobility and changes in how Solutré was incorporated  
into subsistence systems during the Upper Paleolithic.