USING THE GINI COEFFICIENT TO DETECT SOCIAL INEQUALITY IN PREHISTORIC BASIN-PLATEAU POPULATIONS

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The factors that allow social inequality to emerge remain poorly understood. This is partially due to the limited ability of archaeologists to quantify variation in past inequality. Recently, Kohler and colleagues introduced a proxy for household wealth using house size to calculate the Gini coefficient, a common measure of inequality. In this research, I build on their approach by testing the validity of the method and evaluating prehistoric inequality across formative period sites, from Basketmaker to Pueblo III (500 BC – 1290 AD), in the Bears Ears National Monument. The area is characterized by well-preserved architectural archeology due to the dry climate. This research yielded results displaying a fluctuation in the Gini coefficient through time in an inter-site analysis. A preliminary correlational test showed a positive relationship between mean annual precipitation and the Gini coefficient. This could suggest that as the landscape became more productive, inequality increased. The next steps are to obtain a larger data set in order to produce Gini coefficients for an inter-site and intra-site analysis and to run more correlational tests with environmental variables. Further testing on the relationship between environment and inequality will be conducted to comprehensively explore the ways environmental change can impact social inequality.