BUILT TO MEASURE: RECONSTRUCTING AN ANCIENT MEASUREMENT SYSTEM FROM EXTANT ARCHITECTURE AT CASAS GRANDES

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ABSTRACT

The standardization hypothesis purports that goods manufactured by specialists exhibit less variation than products manufactured by more generalized, household-level producers. V. Gordon Childe posited that as specialization increases in a society, mensuration systems grow more accurate as precision becomes a paramount concern. I apply both of these hypotheses to the extant architecture of Paquimé, the cultural center of the Casas Grandes region of Northern Mexico and the American Southwest, in order to determine if the gridded, planned nature of the site was the product of specialist architects and builders using a formalized unit of measure. Statistical analysis of three architectural features at Paquimé – the Mound of the Cross, the I-shaped ballcourt and the assemblage of rooms designated Unit 12 – shows that a clear unit of measure of approximately 70 cm can be identified at the site. I therefore conclude that specialized production of architecture did indeed exist in the Casas Grades culture, reflecting a culture with substantial political complexity, and further possibly reflecting a diffusion of measurement systems from Mesoamerica.