A MISSISSIPIAN HOUSE BASIN AT THE STEPHAN-STEINKAMP SITE (12 PO 33), POSEY COUNTY, INDIANA

The excavation program of the 1987 Indiana University, Glenn A. Black Laboratory of Archaeology Field School at the Stephan-Steinkamp site (12 Po 33) continued the excavation of a Mississippian house basin (Feature 8) begun during the 1986 field school. The basin fill was excavated in four arbitrary 0.2 ft. levels, designated Levels 2 through 5, from the base of plowzone to the house floor. Within each level, excavation units were 2.5 by 2.5 ft. Because of inclement weather, a portion of the lower basin fill was left unexcavated in the southern half of the house, and none of the subfloor features was excavated completely.

Feature 8 measured about 22.5 ft NNE-SSW by 20.0 ft ESE-NWN, magnitudes which yield a maximum floor space of ca. 450 sq. ft. within the postholes marking the outer walls. "Fragments" of wall trenches were observed along the northern edge of the basin and as a discontinuous band of mottled soil around a series of postholes in the southwestern corner of the basin. Thus, it is probable that the wall posts were set in trenches, but these trenches generally were not observed during excavation, because they were for the most part filled with sterile soil. A set of cut-off hearths, or a hearth and associated fired floor areas were centered just east of the basin center, and to the east of this feature were what would probably have been one or two subfloor pits. The edges of the basin were fairly sharp in the northern half and sloping and shallow in the southern half of this structure. This shallow area of the basin may have formed 2 low earthen bench or a "porch" area.

Two samples of wood charcoal from Feature 8, one a large log lying horizontally approximately 0.2 ft. above the basin floor and probably a wall timber or rafter and one of what appeared to be a vertically-set post, gave radiocarbon dates of 670 +/-90 BP (Beta-22087), corrected to AD 1315 +/-95, and 640 +/-100 BP (Beta-22088), corrected to AD 1325 +/-90. These dates are about 250 years later than thermoluminescense dates on two shell-tempered sherds from a large, basin-shaped pit (Feature 2) located north of Feature 8 and excavated in 1986. We believe that both sets of dates accurately date each feature, and the 250-year difference represents overlapping but temporally distinct Angel phase components in this portion of the site.

The distributions of artifacts on the floor level (Level 5) of Feature 8 at the Stephan-Steinkamp site is different from that in two minimally-disturbed houses at a second Angel phase village, the Southwind site (12 Po 265). Artifacts in Feature 8 tended to be clustered in the central floor area around the hearth. Artifacts in the Southwind houses tended to be clustered along the walls, not in the central floor area, which as a major activity area was kept relatively free of debris. Based on the interpretations of the Southwind houses and observations made during the excavation of the Stephan-Steinkamp house, it is posited that these differences reflect the differences between a primary floor assemblage (in the Southwind houses) and a secondary erosional deposit (Feature 8). The spatial distributions for total grams of shell-tempered ceramics, > 1/2 inch screened residue, fire-cracked rock, and total number of chert flakes in Levels 3, 4, and 5 were evaluated using Moran's I, an areal spatial statistic which evaluates spatial autocorrelation in ordinal or interval areal data. Within Feature 8, artifacts tend to be more clustered in Level 5 and generally increasingly dispersed, approaching a random pattern in two cases, as one moves up through Level 4 to Level 3. This trend is interpreted as the result of erosion of artifacts into a basin which was slowly filling.