A Late Pueblo II Period "Surge" of Kayenta Ceramics into Southern Utah?

Bill Lipe
Washington State University
and
Donna Glowacki
University of Notre Dame

with contributions by
Jesse Clark, Washington State Univ.

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Sosi B/W Jar

Arizona State Parks Volunteer Program web site
Does the Kayenta-dominated Clay Hills Phase represent:

- Population movement from south of the San Juan?
- Or a shift in pottery procurement by an already resident population?

Why did the Clay Hills phase begin and end when it did?

How widely do similar pottery complexes occur north of the San Juan River?

We shall examine these questions from both Cedar Mesa and regional perspectives.
The widespread presence of late Pueblo II Kayenta tradition pottery north of the San Juan has been discussed for years (e.g., Lister and Lister 1961; Lister 1964; Aikens 1966; Lipe 1970, 1981; Geib 1996; Lyneis 1996, McFadden 1997; Baadsgaard and Janetski 2005; Allison 2010)

The late PII Clay Hill Complex on Cedar Mesa is dominated by Sosi and Dogoszhi B/W, with lesser amounts of Black Mesa and Flagstaff B/W. Also, Tusayan B/R with lesser amounts of Citadel and Tusayan Polychrome. This complex also occurs in a number of other locales in southern Utah.

Pueblo III period Kayenta pottery has a much reduced spatial distribution in SE Utah
Presence-absence occurrences of diagnostic PII-III Kayenta types at sites N. of the San Juan. Data aggregated by section.
Occurrences, by ceramic tradition, in IMACS sites that have any Kayenta pottery. Kayenta relationships appear strong with M.V. tradition sites to the east and Virgin tradition sites to the west.
Some locations (in blue) where late PII Kayenta pottery is common. We’ll start with Cedar Mesa and Piute Mesa.
Cedar Mesa Compositional Analysis

Donna Glowacki is using temper and INAA to compare samples of Sosi B/W and Tusayan Corrugated from Cedar Mesa and Piute Mesa, as well as clay samples from those two areas.

Very Preliminary Results:

• Temper is more similar within than between the CM and PM pottery samples.

• Both areas had access to Chinle clays as well as other sources.

• Preliminary statistics yield groups with members from both CM and PM, as well as groups confined predominantly to one or the other area.

• At present, we cannot exclude the possibility that the same Kayenta types were manufactured locally on both Cedar Mesa and Piute Mesa.

• The results show promise for finer-grained inferences based on more rigorous statistical analyses.
Closest late PII Kayenta population centers (e.g., Piute Mesa) lie to the SW. However, on Cedar Mesa, Clay Hills sites and Kayenta sherds have a “center of gravity” NE of other occupations.
End of Clay Hills phase coincides with the mid-1100s drought

Reconstructed stream flow for Colorado River at Lees Ferry (Meko et al. 2007)

Cutting and near-cutting tree-ring dates from Cedar Mesa and Natural Bridges
What was happening in the Kayenta home area at the time of the Kayenta “surge” on Cedar Mesa?
Late PIII Kayenta Population Boom, S. of San Juan

Population, N. Black Mesa
(Powell 2002; after Plog 1986)
What was happening in Late PII in the Red Rock Plateau?
The Red Rock Plateau occupation was even more episodic than for Cedar Mesa.

Ceramics of the RRP Klethla phase of the RRP and the CM Clay Hills phase are similar, but C.H. includes some Mesa Verde tradition pottery as well.

Both phases have Sosi and Dogoszhi B/W w/lesser amounts of Black Mesa and Flagstaff B/W. Tusayan B/R common; lesser amounts of Citadel and Tusayan Polychrome.
The Red Rock Plateau, Glen Canyon Area

- No Early PII Pueblo occupation; little evidence of Fremont occupation
- Klethla phase (AD 1100-1150) represents repopulation of the area
- Klethla has virtually no Mesa Verde tradition pottery
- Probable occupational hiatus mid-to-late 1100s

Inference: Population that occupied the RRP in late PII came from Kayenta area; made and/or imported Kayenta pottery

Site in Moqui Canyon
Next, the Kaiparowits Plateau
Kaiparowits Plateau (view from Glen Canyon)

- Pueblo II sites with Fremont, Virgin Branch, and Kayenta pottery present in region, with Fremont earliest
- In late PII, many small new sites established on higher parts of the Plateau
- Pottery at these sites dominated by Sosi-Dogozhii styles; how much assignable to Kayenta versus Virgin Branch types is disputed
The Boulder Valley and Circle Cliffs Area

- Bluff
- Cedar Mesa
- Red Rock Plateau
- Natural Bridges
- Needles District
- Coombs and Lampstand Sites
- Kaiparowits Plateau
- Red Rock Plateau
- Cedar Mesa
- Comb Ridge
- Bluff
- Utah
- Arizona
- The Boulder Valley and Circle Cliffs Area

Map showing locations such as Bluff, Cedar Mesa, Red Rock Plateau, Natural Bridges, Needles District, Coombs and Lampstand Sites, Kaiparowits Plateau, Blanding, Comb Ridge, Bluff, Utah, and Arizona.
Coombs Site, Boulder, Utah—ca. 6700 ft. elevation

- Black Mesa, Sosi, Dogoszhi B/W styles; some Flagstaff
- Tusayan B/R, some polychromes
- Local igneous temper for majority of vessels
- Small amounts Fremont  B/W (Ivie Creek); Mancos and McElmo B/W
- 9 T-R dates cluster in late 1160s; latest is 1169+vv
- Was Boulder Valley a refuge during the mid-1100s drought?

Coombs settlers were familiar w/ making Kayenta pottery
Lampstand Ruins

- 6400 ft. elevation, Circle Cliffs area, ca. 25 km ENE of Coombs
- B/W predominantly Sosi and Dogoszhi; smaller amounts of Black Mesa
- Orange ware predominantly Tusayan B/R, small amount of polychrome
- Gray ware up to 50% “Coombs Variety”; also a few C.V. white and O.W. sherds
- No intrusive Fremont, Virgin Branch or Mesa Verde sherds
- Radiocarbon dates consistent with AD 1100s occupation
- Fremont Durfey site 25 km N; dating may slightly overlap w/Lampstand

Strong case for brief settlement by a Kayenta group

Portion of the Lampstand Ruins (Baadsgaard and Janetski 2005)
Concluding Comments

• Reliable precipitation in the 1000s--early 1100s promoted population growth S of the San Juan; dispersed settlement led to rapid territorial expansion to N.

• Red Rock Plateau, Cedar Mesa, and Boulder-Circle Cliffs area received late PII Kayenta immigrants.

• Earlier populations either were absent, withdrew, were integrated into new Kayenta settlements, and/or occupied complementary adaptive niches.

• L. PII Kayentans interacted with M.V. groups to the E. and Virgin groups to the W.

• During the mid 1100s drought, the “northern Kayenta” retreated or merged with neighboring Mesa Verde, Virgin Branch or Fremont populations.
Postscript
(for Steve Lekson)

This sash, of Mexican macaw feathers, yucca fiber cordage, and a Southwestern Abert’s Squirrel pelt, was found in the Needles district, in or near Canyonlands National Park. An AMS date of 920+/−35 years calibrates to AD 1101+/−49 years (late PII)

Was this cached en route from Chaco to a Fremont group, carried perhaps by a Kayenta courier?

Photo courtesy of Kent Frost and the Edge of the Cedars State Park Museum
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