“Recipes of Disaster:” Northern Iroquoian Shell-Temper Practices in the Early Contact Period (A.D. 1615-1650)

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Introduction

Scholars increasingly recognize that fine-grained studies can help archaeologists understand broader questions of knowledge transmission, culture change, and social interaction (Michelaki 2007; Roddick 2016). In this poster, I use petrography to explore variations in tempering practices during a period of great social change. Two Neutral Iroquoian sites, Christianson and Hamilton (Fig. 2, 3), researchers have found that before the late 1500’s and early 1600’s A.D. Iroquoian potters in Southern Ontario and New York State only used “grit” (a broad typology for a rock and mineral paste) in manufacturing vessels. By the terminal Neutral period (term. 1651 A.D.), shell tempering appears common. For instance, shell tempered vessels represented 64% of the Hamilton assemblage and 63% of the Bingley A assemblage (Lecomte 1981, 1984: Figure 1). In my MA research, I explore this trend and consider how the tempering typologies of shell and grit might mask local historical processes that emerged as a result of European disease epidemics, regional violence, and forced migrations that characterize the Iroquoian Early Contact Period experience (A.D. 1615-1650). The Christianson (A.D. 1600-1632) and Hamilton (A.D. 1632 – 1651) sites provide a useful sequential chronostratigraphic to track historical changes of these potting practices at local scales.

Findings

Shell and Shell Inclusions (Mixed 1)

- Largest inclusion variation: 4.2-0.3mm
- Angularity: angular to sub-rounded
- Sorting: poor
- Inclusions: Shell
- Volume: 6%

Shell and Intermediate Gravels (Mixed 2)

- Largest inclusion variation: 4.5-2.5mm
- Angularity: angular to sub-rounded
- Sorting: poor
- Inclusions: Shell
- Volume: 6%

Felsic Gravels (Grit)

- Largest inclusion variation: 3.8-1.1mm
- Angularity: angular to sub-rounded
- Sorting: poor
- Inclusions: Felsic
- Volume: 16%

Intermediate-Mafic Gravels

- Largest inclusion variation: 3.0-2.0mm
- Angularity: angular to sub-rounded
- Sorting: poor
- Inclusions: Mafic
- Volume: 8%

Sands (Grit)

- Largest inclusion variation: 2.0-1.0mm
- Angularity: angular to sub-rounded
- Sorting: poor
- Inclusions: Grit
- Volume: 16%

Background & Methodology

The sites of Christianson and Hamilton are located in the Spencer-Brooke Creek Neutral site cluster, in Hamilton, Ontario (Fig. 2). They are within 5km of each other and thus potters had access to similar raw materials. Calcium rich sedimentary bedrock is superseded by glacially formed gravels, and metamorphic and gneissic bedrock. However, clay till deposits such as drift, lenses, and silt (March 2010). I collected multi-authenticated samples and created thin sections from a smaller subsample at both Christianson (n=96) and Hamilton (n=94). I analyzed the thin sections for the Laboratory for Interdisciplinary Research of Archaeological Ceramics (LIRAC) and Sustainable Archaeology (McMaster University). I ordered my representative thin sections into 11 different paste groups using qualitative and semi-quantitative techniques (Quinn 2013), specifically comparing the volume of inclusions, the angularity/roundness of shapes, the inclusion, and the sorting of material. I also considered mineral colours (tektism) to be a meaningful boundary for my raw material findings and for Iroquoian potters choice.

Conclusions

In this study, I found that qualitative assessments of thin-sections breaks can determine the grit versus shell dichotomy in Early Iroquoian Neutral Iroquoian assemblages. These petrographic studies provide spatial levels at both the Christianson and Hamilton sites (Fig. 3). Embedded in the spatial distribution of practices might be micro-histories of aligned learning frameworks and a differing adoption of alternative tempering practices such as shell and grit. I suggest that the possible "blending" of raw material choices in the two shell vs grit mixed pastes highlights an historically contingent emergence of the practice through time within these communities of potters.

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Works Cited


