

## Comment on Varley and Cannon's "Historical Inconsistencies: Huron Longhouse Length, Hearth Number and Time."

Mima Kapches

Before reading the Varley and Cannon article I analyzed the longhouse patterns for Wiacek House 2 and Carson House 3 following procedures I present elsewhere (Kapches 1990, 1993). The analysis of Wiacek House 2 revealed well-established bench lines along both sides of the house at approximately 1.5 m, and the presence of five partitioned apartments approximately 4.5 m in linear length. The apartments are bilaterally symmetrical along the length of the house. Each apartment is opposite an apartment of equal linear length. Hearths, where present, are situated in the centre of these apartments, and where a hearth is not present there is a plethora of the small post moulds typical of the area around a hearth.

The analysis of Carson House 3 also revealed the presence of well-delineated bench lines on both sides of the house at approximately 1.5 m in depth. Several apartments were defined, but unlike Wiacek there was a variability in the linear length of these apartments. The seven identified apartments were 6 m, 5 m, 6 m, 6.5 m, 6.5 m, 6.5 m, linear length and they were bilaterally symmetrical along the length of the house. In the central area of each apartment there were hearths and/or clusters of small post moulds indicative of hearth areas. In one of the central apartments a semi-subterranean sweat-lodge was present, which, together with greater apartment size, suggests a special function of this area of the house and special use of this structure in the village.

Based on the interior placement of permanent and semi-permanent architectural attributes (Kapches 1990), I believe that both houses were matrilineally organized. The Wiacek house was a residence where familial ceremonies occurred, while the house from Carson, as well as being a residence, likely served a ceremonial purpose in the clan segment and the village. The lengths of the houses are different, with the Carson house being longer.

The partitioned apartments are variable in length, and this variability leads to the difference in hearth spacing because it is directly dependent upon the size of each specific apartment.

Much work has been conducted on hearth spacing on Iroquoian longhouses, beginning with Dodds (1984) major synthesis and culminating with Warrick's (1990) seminal study. My study (Kapches 1993) led to the identification of partitioned apartments, an identification that is necessary for any subsequent studies of hearth spacing.

After I read the Varley and Cannon article I concluded that their paper was of limited interest since it did not further the study of Iroquoian longhouse architecture. They address the variability in hearth spacing on Middleport and Lalonde period sites in Simcoe county. They argue that there is not a direct relationship between house length and hearth number, and that this variability may be a reflection of social change and differences between house use. I could not agree more. As can be seen from my analytical procedures, however, I argue that variability in hearth spacing is due to the differences in apartment lengths inside the house. This is a more detailed type of analysis than that of Varley and Cannon. This analytical approach offers greater insight into the changes of the use of structures over time. I discuss this further in another paper (Kapches 1994a) in which I argue that the central partitioned apartments in Iroquoian longhouses are the ceremonial core of such houses. Basically, the larger, linear-length central apartments may have been the location of Mid-Winter rituals, political meetings, and other occasions such as the Condolence ritual.

A second point in the Varley and Cannon paper is that the longer longhouses may be a reflection of status and social power. I agree with this and have discussed the concept of long longhouses as examples of monumental

architecture in an earlier paper (Kapches 1993).

Papers on Iroquoian architectural research have gone beyond studies of hearth spacing to theoretical discussions concerning the origins of the "People of the Longhouse" (Kapches 1994b). Although I laud Varley and Cannon for addressing Iroquoian architecture, I do not think that their approach in this paper is innovative. I do look forward to more detailed studies by them in the future.

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## Comment on Varley and Cannon's "Historical Inconsistencies: Huron Longhouse Length, Hearth Number, and Time"

Gary Warrick

Colin Varley and Aubrey Cannon claim that fifteenth-century Huron longhouses contained central hearths spaced three to four times farther apart than hearths in earlier or later houses. If house length reached its zenith late in the fifteenth-century (Dodd 1984), Huron houses in the 1400s were large but relatively empty - the first "monster homes" of Ontario. Exaggerated house length is explained as "representing a symbolic competition for status and status recognition among intra-village lineages."

Varley and Cannon's paper is premised on the preservation of all hearths in the Wiacek, Baumann, and Carson sites. All of these sites are in sandy loam soils that have been extensively ploughed over the last 100 years. It has been my personal experience that ploughing eradicates many central hearths in an Iroquoian house because the features are so shallow (often only 15 cm or less below the topsoil). Most ploughs disturb approximately 25 cm of topsoil and subsoil. Furthermore, two of the sites in question (Wiacek and Carson) were salvage excavations (Lennox et al. 1986; Varley 1993); topsoil was removed by heavy machinery. In fact, Varley and Cannon admit that one of the Carson hearths was only four centimetres deep. Despite some doubts about the total preservation of hearths on these sites, independent evidence appears to substantiate the hearth spacing observed by Varley and Cannon at Carson and other fifteenth-century Huron sites.

The report on the late fifteenth-century Draper site settlement pattern contains several examples of unploughed house floors (Finlayson 1985:122,130,150,205). These house floors were carefully excavated by hand and presumably contain the full original complement of hearths. Draper Houses 6, 9, 12, and 20 have a hearth spacing of 7.4 m, 6.5 m, 9.3 m, and 6.8 m respectively. This is not quite the Lalonde

spacing but is considerably greater than the 3.6 m that I (following Dodd 1984:274) used in my dissertation on Huron-Petun population (Warrick 1990:226-228).

I do believe that Varley and Cannon have discovered something new in the archaeological record. While I agree with their assertion that there appears to have been a dramatic increase in hearth spacing in fifteenth-century Huron houses, their explanation for this increase has some problems. First of all, Varley and Cannon suggest that fifteenth-century houses were deliberately constructed with large hearth spacing to "have space readily available to accommodate any new members." This implies that new members would be incorporated by infilling between the original hearths without expanding original house size. Unfortunately, this fails to explain why 30 percent of fifteenth-century houses have at least one end extension (Dodd 1984:358). If the fifteenth-century Huron deliberately built their longhouses extra long to accommodate future inhabitants, *why* are there so many houses with end extensions? In other words, it would appear that households were added to an existing house by enlargement and not by squeezing more people into a large, empty house.

Another problem with Varley and Cannon's explanation is that they fail to discuss the disadvantages of building, maintaining, and living in large houses that are relatively empty. Construction and repairs would have been a continual task for the relatively small work force of a large longhouse, even if they were built of cedar (Warrick 1988). Also, large, empty houses would have been very difficult to heat in the winter. Few occupants and few heating hearths would have resulted in a cold, miserable winter for the inhabitants of large longhouses. What promises or gifts could have been made by household lineage heads to

their families to mitigate the obvious discomfort of living in thermally inefficient dwellings? Large longhouses as conspicuous status symbols would have been difficult to justify in seventeenth-century Huron society (Trigger 1990:141-145). What peculiar social conditions existed in fifteenth-century Huron society that permitted lineage leaders to convince their housemates to work harder and spend the winter in cold but palatial dwellings?

Lastly, assuming the Carson site houses were built extra large to attract more families, why were none of the Carson households successful at attracting more members? I find it inconceivable that some of the Carson houses of 50 m contained only two central hearths when they were first constructed. If they contained a more believable four or five, why were no new hearths added? Presumably, as new families moved in, they would have infilled with additional hearths between the original hearths. This does not seem to have happened at Carson. Consequently, the construction of large, empty houses at Carson seems to have been for nothing. I doubt that the Huron were that bizarre in their behaviour.

Perhaps the path to an alternative explanation for large hearth spacing in fifteenth-century Huron longhouses lies in the proxemics and social space of Huron longhouse life. It is possible that the rapid population growth of the fourteenth-century Huron created a chaotic social environment in the late fourteenth and early fifteenth centuries, as recently suggested by Mima Kapches (1994). Larger household populations were accommodated in very large houses. An increase in the number of people under one roof, particularly unrelated adult males, may have increased the frequency of within-house disputes. One solution to the negative effects of close personal interaction and overcrowding in large populous houses would be to provide a greater amount of floor space per person. Hence, an attempt to preserve the peace and to satisfy a need for individual and nuclear family space, activity areas, storage spaces, or socializing areas may have led to increased house sizes.

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## Reply to Kapches' and Warrick's Comments

Colin Varley and Aubrey Cannon

Our paper developed from a set of observations about hearth spacing. We accept Kapches' assertion that more complex methods could be applied to the presentation and analysis of data, but our interest was simply in the identification and interpretation of an example of historically-interesting material patterning. The greater value of our paper, we hope, would be to encourage recognition and acceptance of historical change in place of assumed behavioural norms or archaeologically-imposed standardized observations. Apart from concerns about the validity of the observations, our view differs from that of Kapches and Warrick in the stress we place on historical changes within the lifetime of households and villages.

Warrick raises a number of concerns regarding hearth preservation and the practical difficulties of living in empty longhouses. Beyond the evidence we present to indicate that hearths were well preserved and easily identifiable, we question the assumption that hearths will be missing in ploughed sites and point to the lack of any obvious evidence for hearth destruction at the Carson site in particular. All the houses, with the exception of House Five, and possibly House One, show regular hearth spacing throughout the length of the house. We would expect systematic destruction to produce a much less regular pattern.

As for the potential disadvantages of building, maintaining, and living in large houses, it was never our suggestion that this was the most practical living arrangement. In fact, it was the apparent *impracticality* that suggested to us a symbolic purpose in building such large, and largely empty, houses. At the same time, we cannot know whether heating was a particular problem. Baffles hung from roof rafters, the overall quality of house construction, and a tolerance for lower temperatures inside houses may all have contributed to offset the problems Warrick anticipates.

The advantages of more complex analyses of Huron architecture should be judged on the

strength of support they provide for alternative interpretations. Kapches' analysis of House Three at the Carson site purports to demonstrate variability in apartment length, but the difference in linear length of six of the seven identified apartments is no more than .5 m. In this case, the interpretation of special ceremonial function is not supported by any indication of greater apartment size, and features interpreted as evidence of sweat lodges are present in the majority of houses in the village. We do not, however, discount the possibility that more open interior space may have allowed room for the performance of ceremonies.

Our objection is that arguments that long-house length was planned either to provide ceremonial space or room for disputatious males presume that households were essentially static arrangements. We argue that the Huron could have anticipated and planned for dynamic changes in household composition and expressed confidence in the inevitability of future growth. That confidence may or may not have been justified. The provision for growth through the use of longhouse extensions (as cited by Warrick) is more of an ad hoc accommodation to change rather than an anticipation. We assume that in the context of "rapid population growth" the Huron could expect and plan for their future spatial needs. This is borne out by the general lack of extensions on Carson site longhouses.

We believe we have identified evidence of an interesting period of social change in Huron history. While our paper addressed itself to a specific geographic location and temporal period, Warrick's observations about the Draper site suggest that this may be a more widespread development in the fifteenth century. Clearly, there is greater opportunity for recognition of historically-specific patterns when regularities are not assumed and imposed. The challenge now is to provide further evidence to support competing explanations for the patterns archaeologists observe.