# HISTORICAL INCONSISTENCIES: HURON LONGHOUSE LENGTH, HEARTH NUMBER, AND TIME

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Data from three Middle Ontario Iroquoian period villages in Simcoe County reveal an anomalous pattern of hearth spacing. They show greater variability and longer average spacing than is normally assumed for Ontario Iroquoian longhouses. We interpret this as an exaggerated expression of the symbolism of power and prestige normally associated with large lineages and longer houses.

### INTRODUCTION

One of the standard assumptions of Iroquoian archaeology is that there is a more or less constant relationship between house length and hearth number. It is generally recognised that as longhouse size increases, so do the number of hearths located along the central corridor of the house. As an empirical generalization this relationship is well established, and Dodd (1984:256-257) has demonstrated its validity from the Early Ontario Iroquois period through to the Historic period Huron. Dodd's (1984:274) analysis showed that average hearth spacing, while low in the early period (1.9 m), was relatively consistent after A.D. 1450 (3.6 m in A.D. 1450-1609, and 2.9 m in A.D. 1609-1650). Only in the Middle Iroquoian period was there a significant deviation from this pattern, when average hearth spacing increased to 5.3 m.

Unfortunately, there has been a tendency to use these observed regularities in efforts to make empirical data conform to standard expectations. When hearths are not actually observed they are sometimes "inferred" on the basis of an assumption that hearth spacing was generally consistent throughout Iroquoian prehistory (e.g., Finlayson 1985:107). The problems inherent in this practice are compounded when hearth numbers are used to infer population levels based on the ethnographic observation of two families per hearth and an assump-

tion of uniform family size (e.g., Finlayson 1985:107,109).

In criticizing the assumption of a constant relationship between house length and hearth number Warrick (1990:89-90, 225-228) outlines several factors which can influence the number and location of hearths within a given residence area. These include variable hearth preservation (particularly poor in sites that have been subject to ploughing), "hearth drift" (single hearths changing locations over their period of use), and contemporaneity of hearths (multiple hearths in use at different times). The problem with predicting hearth number from house length, however, goes beyond the potential for error in making hearth counts or infer-ring population size. The imposition of standard assumptions on the archaeological record also precludes the recognition of non-conformities which may be among the more informative aspects of the archaeological record. By way of illustration, we document deviations from the standard relationship between house length and hearth number which appear to represent social distinctions individual villages and suggest a period of significant social change during the late Middleport and Lalonde periods in Simcoe County (circa A.D. 1380-1520).

#### DATA

Houses from the Carson, Baumann, and Wiacek sites in Simcoe County (Figure 1) illustrate a distinctive pattern of hearth spacing within longhouses. The earliest village of the three is the Wiacek site, a late Middleport village south of Barrie (Lennox et al. 1986). Portions of five houses were excavated, but only two houses were completely uncovered (Figure 2). House One measures 41 m in length and shows evidence of seven hearths, al-though two are sufficiently close to be consid-

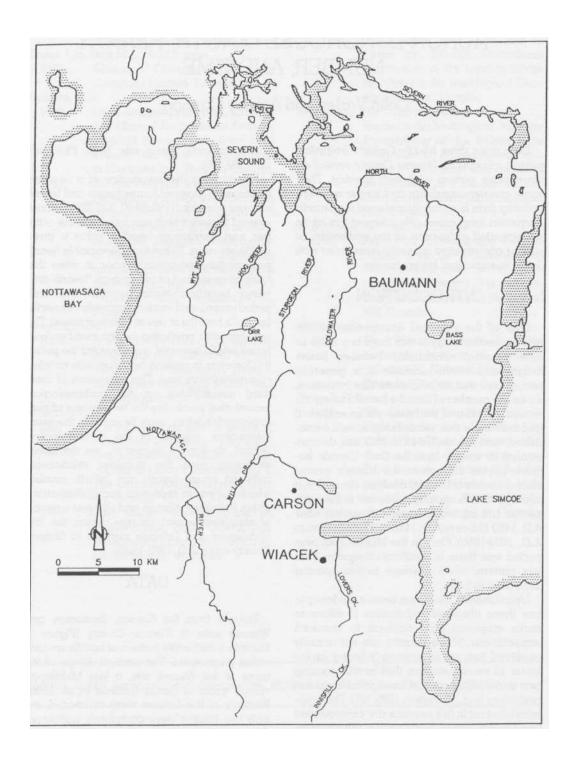
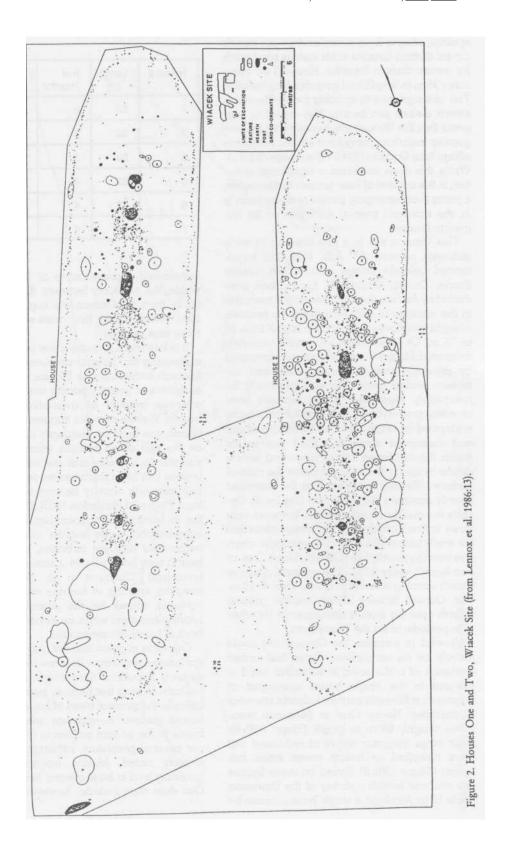


Figure 1. Location of Wiacek, Carson, and Baumann Sites.



ered a single hearth cluster. Average hearth spacing ranges from seven metres per hearth for six distinct hearths to six metres per hearth for seven distinct hearths. House Two measures 36 m in length and contains four hearths. The average hearth spacing for this house is seven metres per hearth. The evidence suggests that the Wiacek site houses tend to have greater hearth spacing for a Middle Iroquoian village than (1984:274) average of 5.3 m. While this does not seem a significant deviation, in the context of later houses in the region, it points to an emerging period of disconformity in the standard pattern documented for Iroquoian houses.

The Carson site is a late fifteenth or early sixteenth century (C'4 A.D. 1507±27) unpalisaded Lalonde village located just outside Barrie, Ontario (Figure 3). Excavations conducted by Archaeological Research Associates in the summer of 1989 uncovered the remains of eight longhouses, ranging in length from 52 to 75 m. Of these eight, six were completely excavated. House Four was severely damaged by previous gravelling operations, and the season ended before House Eight could be completely excavated. House features have excellent preservation, and hearths are clearly evidenced by large areas of fire reddened soil and numerous small ash filled post-molds within the reddened areas. Recorded hearth depths range from 4 to 22 cm below the subsoil surface. We are confident that the recorded hearth numbers are accurate (Figure 4). De-spite the quality of preservation, however, only three to five individual hearths were recorded for each house (Table 1). The minimum aver-age hearth spacing is evident in House One at one hearth every 8.7 m. The greatest average hearth spacing is found in House Two, at 13 m. The Carson houses clearly exhibit greater hearth spacing than is documented for other time periods, or for the Wiacek site.

Viewed in isolation the Carson site could merely be an anomalous village, but further evidence of a discernable historical trend is present in the single house excavated at Baumann, a fifteenth century Lalonde site near Warminster. House One at Baumann measures roughly 66 m in length (Stopp 1985:6). Four large irregular areas of reddened soil were identified as hearth areas within this house (Stopp 1985:8). Based on these figures the average hearth spacing at the Baumann site is 13 m. Although a single house cannot be

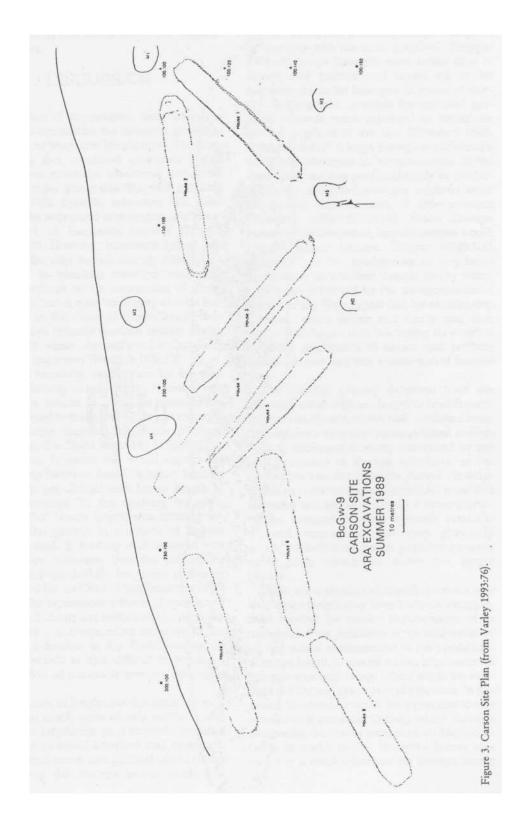
Table 1. Carson Site Houses.

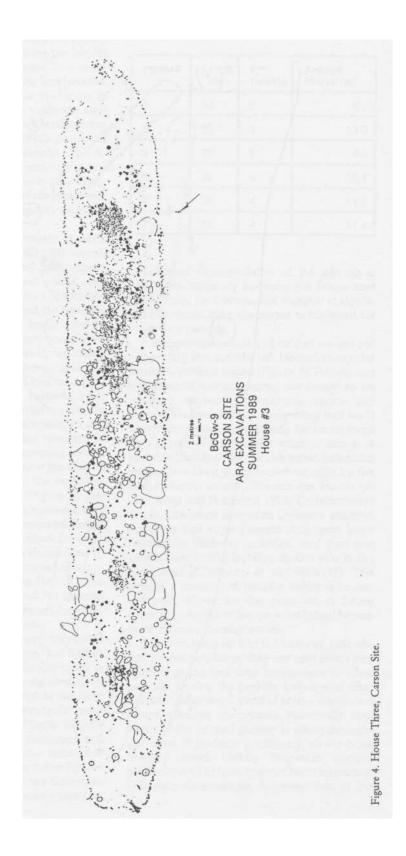
House #	Length (m)	# of Hearths	Average Interval (m)
1	52	5	8.7
2	52	3	13.0
3	59	5	9.8
5	52	4	10.4
6	57	4	11.4
7	57	4	11.4

considered representative of the site as a whole, the similarity between this house and those from the Carson site suggest a significant deviation from the norms established for other time periods.

It is important to make clear that we are not suggesting that hearths are located at regular intervals within a house (Figure 5). Rather, our estimates of hearth spacing are based on an average amount of available space per hearth. We are also not suggesting that each hearth was used as frequently (or for as long) as the rest of the hearths within a house. A variable history of hearth use within individual houses has been documented recently for the late sixteenth century Benson site Huron village (Fogt and Ramsden 1993). Evidence from the St. Lawrence Iroquoian Lanoraie site also suggests that some hearths may have been centres for different activities, and that one hearth may have played a central role in the household (Clermont et al. 1983:133). The irregular spacing of hearths within a house, however, allows for the potential of future hearth placement within an established frame-work of house arrangements.

Our data suggest that not only are Lalonde era houses very large, they are also much less densely populated than longhouses in other periods. During the periods before and after Lalonde, the general trend of house length and hearth number co-variance essentially con-forms to the normal pattern in effect through-out most of prehistory, although as we have already noted, Middle Iroquoian villages generally tend to have greater hearth spacing. Our data demonstrate, however, that in the





Lalonde period there is a very distinct disconformity in the relationship between hearth number and house length that requires explanation.

### DISCUSSION

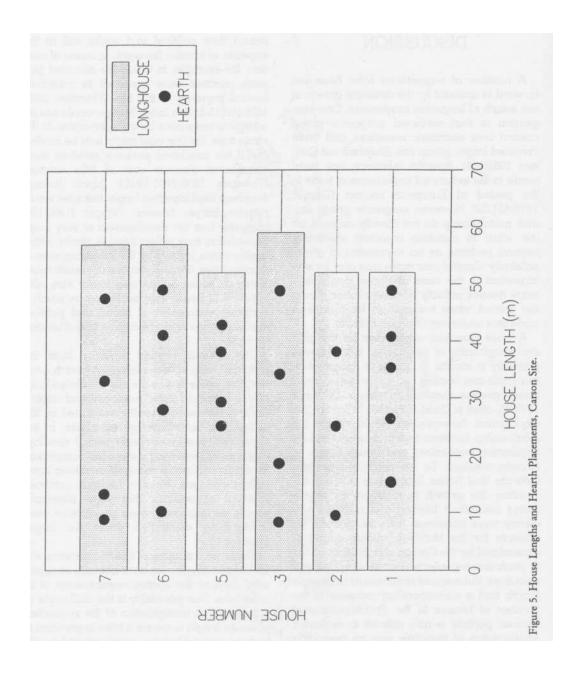
A number of suggestions have been put forward to account for the dramatic growth in the length of Iroquoian longhouses. One suggestion is that restricted corporate group control over economic resources and trade favoured larger group size Can-non 1982:149). and reference has been made to the enhanced importance of trade in the period of European contact (Trigger 1976:421-23). However, corporate group size and membership do not directly account for the effort to maintain common residence, beyond perhaps as an expression of group solidarity. Control over trade may also be less important in the case of Huron longhouses since houses actually become shorter during the period when competition for European trade was underway (Warrick 1984:75).

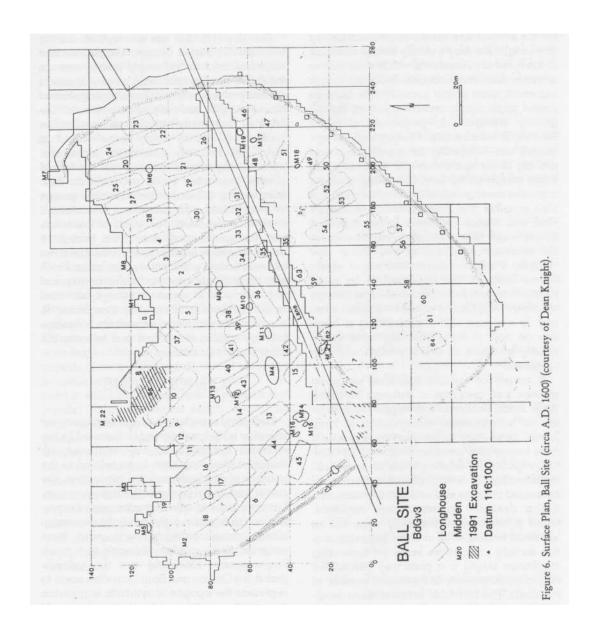
A more mundane explanation for the general lengthening of longhouses is that it was primarily a means to conserve construction materials and heating fuel, while managing to house greater numbers of people (Wallace 1971:86, cited in Dodd 1984:216). In light of this explanation, however, we would expect the relationship between hearth number (and by implication population) and house length to remain constant. To the contrary, our data indicate that house length was actually exceeding the growth in numbers of people being housed. If heating and material efficiency were concerns, then the pattern we observe for the Middle Iroquoian period in general and for the and Baumann sites in particular represents a waste of space and resources. Subsequent reduction of longhouse length and a corresponding increase in the number of houses in the Protohistoric and Historic periods is also difficult to explain if conservation of materials was an overriding concern.

The pattern of longhouse development may have been much more closely related to the role of the longhouse as a symbolic material expression of social structure and dynamics. An important social and political unit of Huron society was the lineage group which was known historically to reside together in one house. There is also evidence to suggest that greater social and political prestige was given to lineages with the most members (Trigger 1976:57). Large lineages were better able to assert their political and social will at the expense of smaller lineages. In cases of murder, for example, in which the accused person's relatives were expected to contribute toward payment of the fine (Thwaites 1896-1901:10:215-217), a large lineage would ensure adequate resources for compensation. At the same time, the fine paid might only be moderate if the murdered person's relatives were considered obscure and of little account (Thwaites 1896-1901:13:15). Since lineage members lived together, larger lineages would require longer houses. Trigger (1990:126) suggests that the development of very large households may reflect lineage rivalry within communities formed by the amalgamation of smaller ones. We suggest that the relationship between house length and family size also resulted in house size becoming as much a symbolic expression of social and political status or power as it was a reflection of lineage size.

The fifteenth century deviation from the standard ratio of house length to hearth number can be viewed as the use of inflated long-house length to assert socio-political aspirations in excess of a reality warranted by the actual number of lineage members. In essence, we see the Lalonde period developments as representing a symbolic competition for status and status recognition among Houses infra-village lineages. became symbolic material expressions that were physically empty, as individual house populations were more thinly distributed within the larger houses.

There are a number of specific reasons why longhouse length may have become exaggerated beyond the spatial requirements of its members. One possibility is the deliberate or subconscious manipulation of the symbolism of house length to create a false impression of lineage size and status, which might be sufficient to enhance prestige and influence. In this sense, longhouses would be equivalent to any ostentatious material display, which through competition becomes exaggerated beyond its basis in social reality. However, house size alone is a weak substitute for lineage status





and power, which is more directly related to the actual size of lineage membership.

Alternatively, longer houses may have been built with the anticipation or intention of actually increasing the size of household membership. As Fogt and Ramsden (1993) have shown for the Benson site, the developmental history of a longhouse may typically involve changes in the number of residents, with houses built to accommodate such changes. The much longer but much more empty houses of the Lalonde period might simply represent though overoptimistic honest. grossly projections of future household membership. Clearly, if all lineage groups are competing for membership and making house available for anticipated future members, the inevitable result would be a greater average volume of empty space. It is also possible that the impression of lineage size and status conveyed by exaggerated house length was intended as an inducement for would-be members to join. Since new villagers would be more attracted to established lineages that appeared to be more prestigious, and if competition for new lineage members was high, it would be a good strategy to enhance the impression of a large lineage and at the same time have space readily available to accommodate any new members.

A variety of specific individual or group motives can generate a common historical trend. In this case, we have suggested deliberate or subconscious manipulation of long-house symbolism to produce essentially false impression, an honest but overly optimistic projection of future growth in household membership, or a symbolic enhancement of household prestige and real spatial accommodation designed to attract members. Other possibilities undoubtedly exist, but an essential feature of all of these suggestions is the socially competitive basis for increasing longhouse length to a point well beyond the spatial requirements of the actual number residents. The inevitable result of these developments was that when houses could no longer increase in size, and when the disparity between ideal and reality was readily apparent, they eventually returned to dimensions more suited to residents' needs.

By the Historic period, villages are not just larger in area, but contain significantly more (and shorter) houses than in earlier periods (Figure 6, cf. Warrick 1984:60-61). In this period

there is a return to the normal relationship between house length and hearth number, which, if the considerations outlined above hold, suggests that longer houses were no longer effective as symbols of social or political prestige.

Steckley (1987:21) has shown that, among the Historic period Huron, suggesting that someone lived in "an empty house" was an insult. We see this as the historical outcome of earlier, prehistoric trends toward exaggerated house length and unfounded aspirations toward lineage membership and power. The insult "to live in an empty house" would, in effect, be mocking unfounded social and political aspirations applied to household groups that either could not maintain their membership in competition with other groups or were seeking to create an unwarranted material impression. The effect of this insult, and the social conditions which brought it about, may have been to re-establish the norm of house length to hearth number ratio, which was increasingly important given the physical constraints of increases in village size and house numbers. In this context, it would not be surprising if the material expression of lineage prestige without foundation had become the subject of public ridicule.

#### CONCLUSIONS

Iroquoian house length and its changes over time may have been strongly influenced by the essential symbolism of the longhouse, al-though it also may have been related to the number of residents and, by implication, the status and social power of the lineage group. In our view, the Middle Iroquoian period represents an elaboration of the symbolic dimension alone, since according to hearth counts there were the same number of people in a much larger space. Extending into the Lalonde period, the Carson and Baumann sites seem to represent the apogee of symbolic expression through the medium of longhouse length. At this point the exaggerated extremes of house length and the redundancy of expression between lineage groups had diminished the symbolic value of longhouse length. The result was a rapid return to the normal ratio of hearth number to house length and a dramatic de-crease in overall length into the historic period.

Moreover, we suggest that the pattern of increase and decrease in Iroquoian house length is typical of a general pattern that occurs when material culture is used as an expression of status (Cannon 1989). A material medium that is used to express distinctions of status will typically go through a period of elaboration in response to competitive pressures, represented in this case by the lengthening of houses. This culminates in a peak of ostentation, which for longhouses is the point at which house length goes well beyond its normal relationship to the number of occupants. The result of reaching this point of expressive redundancy (Cannon 1989:437-438) is that the medium loses its expressive value and rapidly goes out of use as a symbolic expression, represented in this case by the decrease in house size. The final stage typically involves the use of public ridicule to keep laggards from socially inappropriate and anachronistic expressions of would-be status. Similar instances of symbolic elaboration and collapse can be found in examples ranging from English gravestones (Cannon 1989) to Neolithic pottery decoration (Hodder 1990).

Beyond furthering our understanding of Huron prehistory we hope that this paper also encourages others to re-examine the particular aspects of the archaeological record which are neglected when the greater concern is with establishing general patterns and trends. To move beyond simply reinforcing what we think we already know about Huron prehistory we must be willing to examine deviations in the archaeological record as important subjects in themselves. Nonconformities are not simply accidents or historical anomalies; they are valid and important historical developments. If we are to understand the past we must be willing to accept and wrestle with the variable realities we observe instead of imposing the normative generalizations we construct.

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