Summary and Conclusions

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In the "Preliminary Considerations" at the beginning of this report, I attempted to explore some of the more probable theoretical formulations which could be used to explain a number of observed phenomena at Draper, including its large size as a site, its relatively lengthy longhouses, and the differential use of the interiors of longhouses. These ideas were formulated and written before any of the detailed analyses which followed, and if nothing more, they were meant to serve as a structuring device for the analysis and presentation of the data recovered. They were not being proposed as definitive conclusions or even major probabilities. Rather, they were probings of the possible and the probable, given current information. Nevertheless, at this point a brief assessment and resume is in order; the detailed analyses will be compared to the questions initially asked. It should be clearly understood that these assessments are very preliminary, for we only have the analysis from one structure to go on, and many more are really required before anything can be said with any degree of confidence. I would also emphasize that these interpretations are my own and that some of the participating analysts may disagree on specific points.

Site Location

From the excellent ecological studies by Bowman and Mulstein, it is clear that Draper and White site locations were largely determined by the location of preferred horticultural soils. Other determinants were proximity to streams, areas of high game density, and very probably defendable positions on the landscape. Defense was most obviously a consideration at Draper where there is sharp relief and palisade-like lines of postholes at the boundaries of the site. On the other hand, the White site appears more "hidden" in its position. Its approximate contemporaneity with Draper and its location within, but close to the periphery of Draper horticulture clearings seems to confirm it as a specialized activity site. The high proportion of fish remains and human remains, the scarcity of other mammalian remains, the high proportion of bird remains, and differences in the floral assemblages between White and Draper, all indicate a special activity nature of the site. As

Burns notes, only 2% of the faunal remains at the White site represent large game, and of the deer remains, fully 50% were worked, while 25% of the beaver and dog remains were worked. Thus, in contrast to Draper, there seems to have been very little large game taken or consumed at the White site.

The discovery of a number of structures at the White site during subsequent excavations is extremely interesting. It will be very valuable to compare their contents and intrastructure stylistic patterning to the contents and nearest neighbor analysis of sweeping middens of structure 2 at Draper. The presence of structures at White seems to indicate that the site may have been occupied for extended periods of time: perhaps the entire summer growing season. They may also have been much more open along side walls; thus architectural comparisons between Draper and White should also prove interesting.

Village Patterning

Although few structures have been excavated at Draper, their positions and orientation so far largely adhere to the general pattern noted for the Late Ontario Iroquois, i.e. northwest/southeast orientation of the long axis, resulting in roughly parallel structures, (Norcliffe and Heidenreich 1974) with occasional perpendicularly oriented structures near the site peripheries. Thus far, the only exceptional characteristic of Draper structures appears to be their unusual length. Because so much is known about structure positioning and orientation, and because Draper provides essentially redundant information to data from other sites, this was, and is considered to be the least important aspect of the settlement pattern information at the site. Of much greater value was the settlement pattern information found within structure 2. One unusual non-structural feature we uncovered appeared to be a large open air activity area involving great quantities of ash.

Intra-structure Patterning

One of the most unexpected and significant results of

Ferguson's spatial analysis of structure 2 debris was the striking fashion in which activity areas and tool kits segregated out - usually into areas approximately the size of nuclear family residential areas. Even more surprising was the general lack of redundancy of activities and tool kits within the structure: it appears as though every family was engaged in a different specialized activity, with only a minimal number of activities common to all hearth living areas. The immediate implications of this data are equally striking. Aside from one or two possible group activity areas, one must face the relatively high probability that there was considerable economic specialization occurring within the confines of structure 2, and that this specialization was effectively orchestrated. This, in turn, tends to imply someone in a managerial capacity, directing economic activities and undoubtedly serving as representative of the group in intra- and inter-site relationships. Thus, one of the most probable inferences which emerges from the analysis concerns the essentially economic corporate nature of the structure 2 residential unit.

Both Burns' analysis of faunal remains and Arthurs' ceramic analysis bring out important lines of evidence to support Ferguson's identification of activity areas and tool kits. The former identifies 3 areas of bone with cut marks on them; these areas are for the most part identical to areas Ferguson isolated as bone working or butchering locations. Arthurs documented an important lack of ceramics in an area designated by Ferguson as a play or recreation area.

In further support of the above inferences, it is possible to cite the clustering of post holes and pits, the large hearth and a concentration of pipe fragments in the northwest end of the house. Although pipes appear to have been commonly used throughout the house (as were post holes and pits), these concentrations all suggest a relatively important resident at this location with feasting responsibilities. We can probably equate these data with someone acting as a representative of the group, and as a managerial person of relatively high social power and authority.

As for the source of such power and authority, and ultimately, probably the underlying cause of the development of longhouses and their resident corporate groups, I am increasingly coming to believe that economics (in the form of needed or highly desired trade goods) provided the underlying welding and ranking force.

It is worth noting that at least one previous excavator at Draper observed that adzes were very abundant at the site, and postulated that they might well have been manufactured at Draper for trade and export (Latta: personal communication). This seems possible, and if it should be demonstrated by future excavations, it is highly significant that the adze manufacturing area was in close proximity to the residential location of the hypothetical high-status individual in structure 2 — power keeping closest to itself

what is most important for maintaining power.

What were the compositions of these corporate groups? In structure 2, Arthurs has developed an excellent argument, with due reserve, that the occupants formed a core lineage, with many women staying with the group after marriage; although the group also incorporated other females apparently more distantly related, if related sanguinally at all. Here, we tread on very dangerous ground and our assumptions may not be entirely justifiable although I think in this case they are reasonable. In particular, Stanislawski (1973) has shown that there are other sources which may determine ceramic styles besides kinship ties; e.g. neighborhood teaching situations, or other "ad hoc" working groups. On the other hand, David and Henning (1972) show that at least in some cultures, common archaeological assumptions regarding the social contexts of ceramics are relatively accurate. Even granting that potential masking factors may exist, there is still reasonable ground for justifying Arthurs' interpretations. For instance, even granting Stanislawski's other sources, there is fairly clear indication that someone not sharing the pottery minitradition of the west end was brought in, for in the east, differences are fairly pronounced. The west end, on the other hand, holds together as a cluster, and there is little indication of substantial change from the bottom to the top of the deposits. This long term homogeneity at one end of the structure, it seems to me, is more readily explainable as due to kinship bonds, (or something equally as strong as kinship bonds). Especially significant are the very strong similarities of debris from a number of hearth-residential areas. In this context, anomalous or relatively unrelated debris can only be seen as intrusive (possibly women brought in by important or high ranking sons of the dominant family), i.e. patrilocality of sons with important economic stakes in the household; for, economic determination of residence appears to be the dominant reason for non-adherance to prescribed residence rules among other primitive societies.

Thus, around a core lineage it would appear that other, perhaps even unrelated nuclear families attached themselves, particularly in the east end, where ceramic variability within the structure is at its greatest. It is also interesting to note that there is a difference between lithic point types in the west and east ends, although the sample is very small, and this may be illusory. 1 Nevertheless,

Ferguson raises an important point when she suggests that these "points" may have actually served as knives within the structure. Knife functions for points have been demonstrated elsewhere (Ahler 1971), and the fact that readily identifiable knives at Draper occur in the same general size and shape range tends to support the interpretation. The number of points — broken or

these slim indications are consistent with the relatively loose residential practices sketched for the Late Ontario Iroquois in the introductory remarks of this report. The patterning which emerges from the nearest neighbor analysis of hearth related debris fits well with the notion expressed by Sahlins that physical distance reflects social distance. The corollary that differences in ceramic styles also reflect social distance might be restated as well.

The character of the hearths in the east end reflect much more ephemeral residents than those in the west end and thus reinforce the notion of peripherally linked and less permanent families taking up residence with a stable core lineage. That these hearths were regular residence localities is evident from the associated sweeping middens, and the identical sherd sizes and size distributions in the east and west ends (see page). Thus I think we can at least make a good argument for the structure 2 residents consisting of a lineage core, which attempted to keep as many of its female (and male) offspring in the house as possible to provide the loyal corporate core. In addition, peripherally related other families, including possibly closely related sublineages, and/or miscellaneous nuclear families, which because of real or fictive kinship ties, friendship, or simply want of a better place to go, were attached to given corporate groups and longhouses. The choice would have been mutual, the corporate group gaining productive and therefore trading potential, and individual families sharing benefits from successful head men

Of interest is the hypothetical position of a hearth area immediately to the west of the large trees occupying the centre of the structure (ca. 34–6 N/56–58 E). No evidence of a hearth was reported in the field notes or noted by myself, but numerous other indications all point to the existence of a hearth at this location at one time. In the first place, following the spacing of other hearths there should be a hearth at this location. In addition, numerous ash-filled pits occur in the immediate vicinity. Moreover, Burns and Arthurs both independently postulated the existence of this "invisible" hearth on the basis of concentrations of burned bones and the occurrence of sweeping middens perpendicular to this location (these features are associated with all other hearths). It seems that indeed there was a hearth at this location which we failed to record. The reasons for this failure may be numerous: use of low temperature fuels at this location resulting in little if any sand reddening; obliteration of fire-reddened

sand and ash due to pits dug in the area after the residents moved away (pits were numerous in the area); house-cleaning and obliteration of hearth traces by sweeping after the hearth residents moved elsewhere; carelessness and neglect by excavators. It is interesting to note, that despite such accidents of preservation or excavation, adequate field and analysis records permit one to establish the existence of such features.

As a minor point, it should be noted that Arthurs is convinced that hearth A does not belong to structure 2 occupation on the basis of its location in the wall line. Although I agree this positioning is most peculiar, all other excavation evidence indicates that it was, in fact, contemporaneous with the other house hearths: its spacing, central alignments, position beneath the surface, the undisturbed nature of its ash layers and the undisturbed large sherds left on top of the ashes, together with the very high similarity of hearth A and B ceramic debris, all argue for it as an integral part of structure 2 life. There is virtually no other evidence of an earlier or later occupation. I am inclined to view it as a seasonal hearth, perhaps used in the summer when end wall posts may have been removed to increase ventilation. The smaller than average sherd sizes along the axis line of the structure and on either side of this hearth, lend considerable credence to this spot as a passageway where trampling activity was more intense than elsewhere (see page). The alternative is to assume an addition was made on the northwest end; we found absolutely no other evidence for this.

Site Size

One of the most prominent features of settlement patterns is the size of sites. In the introductory pages of this report, I summarized a theoretical context for explaining the jump in site size which occurred at the beginning of the Late Ontario Iroquois, as exemplified by the Draper site. Two models were initially developed and a third was hinted at. The first model was of inherent population and settlement growth whenever the possibility presented itself. The second model was of coalescing groups due to external pressures, such as warfare. The analyses produced only a few, rather inconclusive results regarding the "testing" of these models. For instance, Arthurs did note stylistic differences between structure 1 at the north end of the site and structure 2 at the south end. In addition, even more pronounced stylistic differences have been tentatively identified in an area immediately to the south of structure 2. These differences are more consistent with a model of coalescing groups, although the sample is so small that the presumed implications may turn out to be illusory. Also of interest is the tendency, documented by Arthurs, for

whole — is certainly in no way proportional to the rich faunal remains, and one may legitimately wonder if the vast majority of Iroquoian arrows were not merely tipped with hard wood, in the fashion of New Guinea arrows.

ceramic variability to decrease over time in structure 2. Below level 6, there were 15 different types; maximum occupation intensity occurred at level 5. One explanation, although by no means not the only one, of such a trend is that when different groups coalesce, the combination of styles creates a greater number of styles than were present in either group previously. As time goes on, one would normally expect this variation to gradually be reduced. Thus the trend toward reduction of variability in ceramic types is at least consistent with what one would expect under constructs of the second model. More excavation and comparisons are definitely needed at Draper before this issue will be resolved.

The third model, which because of its complexity was not fully developed initially, involved increases in settlement size due to the development of trade and locally intensified centres of wealth (in the form of head men, big men, lineage heads, chief traders, corporate group managers, or whatever else one wishes to call them). These localized concentrations of wealth attracted people interested in material, status and/or leisure, thereby creating larger total aggregates. Competition between corporate groups (or corporate managers) for manpower, skills, and/or trade routes may well have led to the internicine conflict characteristic of the era and region; and this in turn conceivably accelerated settlement nucleation and increases in size.

At the present, this model has not been fully developed or tested for the Iroquois region. However, it is the one which I now tend to favor as being most useful and explanatory. It is at odds with the traditional view of the importance of trade in the area.

Furthermore, I think we are in a good position to discard model number one on the basis of comparative data from upper New York State. There, during the equivalent of the Middle Ontario Iroquois Period (1400–1500), maize, beans and squash were introduced, as they were in Ontario. However, in spite of this, there was little or no population increase in New York, and settlements stayed small (Noble 1968:310–11). Obviously, something besides the inherent tendency of groups to increase in size was responsible for the changes in Ontario at this same time.

Site Relocations

In the introductory sections of this report, it was hypothesized that settlement movements have occurred primarily because of the exhaustion of game resources in the vicinity of settlements. Burns' analysis of the change in hunting patterns over time in structure 2 indicate a relatively unchanging pattern of faunal exploitation, inconsistent with the exhaustion of major faunal resources and

subsequent intensive exploitation of less desirable game. It would therefore appear that the traditional assumption of land exhaustion as a principle cause for settlement movement is more likely correct. Of interest, it also appears that Draper was occupied, at least by some people, during the entire year as inferred from faunal, floral and ceramic data.

Techniques

In our excavations, we adopted relatively refined data recording techniques, both vertical and horizontal. In retrospect, the vertical controls provided us with important data in terms of changes in faunal exploitation (or the lack theref), and on changes in ceramic styles during the occupation of the structure, as well as indications regarding relative contemporaneity and lifespans of the various hearths excavated inside the structure. Further refinement of the vertical controls, both in terms of recording and in terms of statistical adjustments, is feasible and would probably be profitable. For the most part, we employed unadjusted correlations.

The use of horizontal controls was equally, if not more rewarding. The entire spatial analysis was remarkably productive, and in particular, Ferguson's delineation of activity areas, supported at various points by faunal, ceramic and floral distributions. There is obviously great potential for the application of spatial analysis to future data from Draper, and probably White. However, it must be stressed, that we were only able to scratch the surface. In all of our analyses, only the rather "loose" two metre square units were used. This was largely because with the time and resources available, we were simply not able to create or adopt any computer programs which would adequately deal with spatial analysis, and we were thus forced to rely on manual techniques. The vast size of the subsquare data matrix was totally unmanageable using manual techniques, and we were thus forced to use larger recording units. When satisfactory programs are developed for use with small cell grids, I am sure that even more detail will emerge from the debris patterning in structure 2. However, that is the work of another project and another year. As an excavation technique, it should be mentioned, that the use of subsquares in dealing with midden material was much more satisfactory than traditional techniques. The technique permitted detection and recording in the field of localized differences in material, which probably reflect changes in debris content of the various baskets of refuse that were thrown on the midden. And in fact, a square about .5 metres on a side is about the area one might expect refuse dumped from a basket to cover.

Epilogue

Draper and White are both relatively uncommon phenomena of preservation in the realm of Ontario archaeology. Opportunities exist in their contents for studying culture change and for constructing the social fabric of prehistoric Ontario groups which simply are not available anywhere else. Given a stimulating theoretical context, the informational yield from both of these sites is potentially tremendous. I hope that in some part, we have been able to generate such a context and demonstrate the unusual

theoretical importance of these sites; that we have been able to retrieve a small portion of their detailed data before all context is lost; and that we have been able to begin to fit some of the detailed data into a meaningful conceptual matrix. The information in these sites, is incredibly varied, and it is obvious that as much of it should be recovered as possible. Looking back at the project, irrespective of how successful we have been in achieving these goals, it has certainly been exciting making even this small attempt at a contribution, and I wish to thank everyone, again, who joined in the intellectual fracas and made it possible.

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DRAPER AND WHITE SITES



