DENISE KENYON

COUNCIL FOR NAME STUDIES IN GREAT BRITAIN AND IRELAND

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- 4. Entries should in some way make an original contribution to the subject.
- One copy of the essay should be submitted to the Secretary of the Council in clear typescript, double-spaced, and should include a bibliography of sources of material used and of books and authors cited.
- 6. Entries will be judged by a panel appointed by the Chairman of the Council, and may be considered for publication in NOMINA, the Journal of Name Studies relating to Great Britain and Ireland.
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THE ANTIQUITY OF HAM PLACE-NAMES IN LANCASHIRE AND CHESHIRE

Twenty years ago John Dodgson was one of a group of onomasticians who resoundingly attacked the traditional chronology of English place-names, i.e. that the earliest English place-names comprised those in -ingas (-inga-), those containing reference to places of pagan worship, and those containing archaic personal-names (Dodgson 1966). He showed conclusively that -ingas place-names could no longer be listed amongst the earliest names used by the English in England since they were clearly not associated with the earliest pagan burials: the -ingas names belonged to a phase of secondary expansion away from the original settlement areas. At around the same time, Margaret Gelling argued convincingly that the pagan place-names scattered around the country represented late survivals of pockets of pagan worship and were not necessarily of such great antiquity as had been suggested (Gelling 1961, 1973). Doubts have also been cast on the significance of supposedly archaic personal-names (Gelling 1978:11, 162-90).

The vacuum left by the dismissal of these groups of names was speedily filled by new candidates for antiquity: \underline{ham} , $-\underline{ing}^2$ (especially in the palatalized and assibilated form argued to represent the use of the archaic locative inflection), and simple topographical elements such as \underline{eg} , \underline{feld} and \underline{ford} (Dodgson 1966, 1967a, 1967b, 1968, 1973; and Gelling 1974, 1978). This current paper reports the results of recent research on the distribution and nature of one of these elements, \underline{ham} , in an area consisting of the north-western counties of Lancashire and Cheshire (post-1974 boundaries) and considers the implications for settlement studies (cf. Kenyon 1984).

Hām (distinguished from hamm, halh and holmr [Gelling 1960, 1984:41-52; Dodgson 1973; and Sandred 1976]) was put forward as an early (pre-A.D. 650) English place-name element by Dodgson on the grounds that the proximity of hām names to Roman roads had a causal significance. According to Dodgson, the English settlers recognized and settled within the existing Romano-British settlement framework (Dodgson 1967c, 1973). These conclusions were based primarily on a study of the place-names of the south-eastern counties of Kent, Surrey and Sussex and those of Cheshire in the North-West. They were subsequently reinforced independently by the work of Cox (1973) and Kuurman (1975) on hām and -ingahām names in the Midlands and East Anglia, and by Gelling's work on wīc-hām names (1967, 1977). The two inescapable conclusions were:

- i. that ham place-names lay on or close to Roman roads or sites;
- ii. that this proximity was deliberate and causal, not fortuitous.

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The consequent chronological primacy of ham place-names, largely based on this perceived relationship to Roman landscape features, has been widely accepted despite the fact that little attempt was made to quantify the nature of the relationship. 'Near' has been used to mean anything from coincidence of location, as in the case of a Roman villa within a ham-named village like Aylesham, Lopham, and Snettisham (Norfolk) (Cox 1973:40), to as much as an 'average' distance of three miles in the Midlands as a whole. Such an average can, of course, conceal wide variations. Nor has any determined attempt been made to test the significance of the relationship in statistical terms, a vital exercise to eliminate chance effects. Unwin (1982), who actually did tabulate the mean distances between conjecturally early English place-names and Roman features and rivers in Derbyshire and Nottinghamshire, commented on the fact that the relationship to rivers was frequently closer than that to Roman roads, but did not examine the significance of his statistics. The proximity of rivers is, of course, crucial in cases of names with a suspect derivation from ham because of the possibility of confusion with hamm, the topographical element which can refer to settlements located in the bend of a river or surrounded by marshy ground.

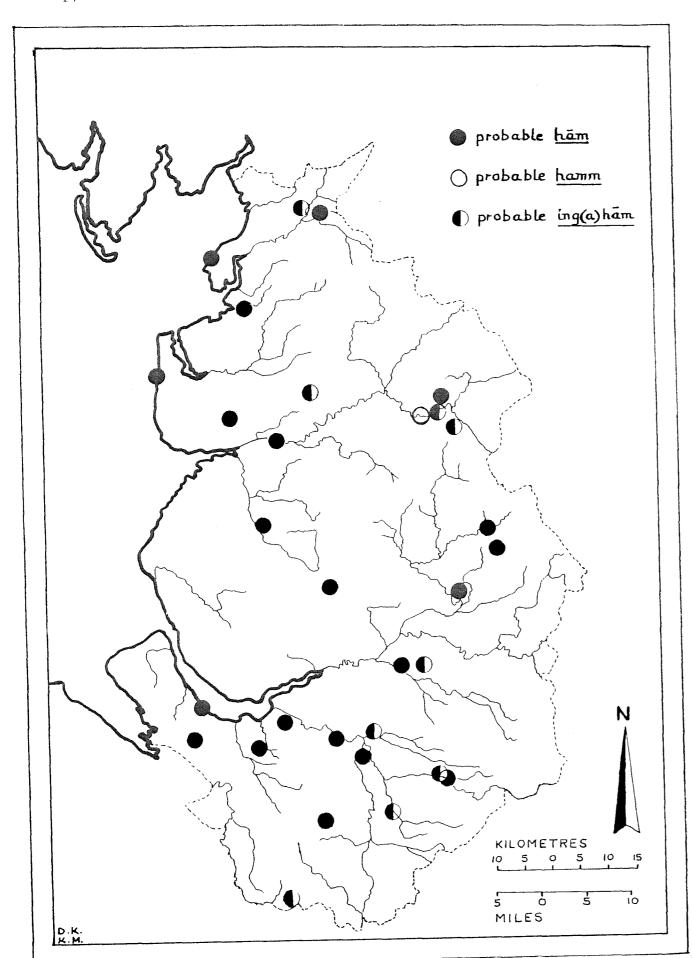
The difficulties in arriving at a quantifiable relationship should not be underestimated. Not only have onomasticians to identify their ham place-names, carefully distinguishing them from names in hamm, etc., but they have also to procure an up-to-date distribution map of Roman material for their particular region. They must be constantly aware of the inherent bias in the archaeological record as well as in their own place-name material. In both cases they are dealing with a partial survival of an original distribution. The respective distributions as recoverable in the late twentieth century may be heavily influenced by the methods of recovery. Furthermore, there is the problem of establishing contemporaneity. Does one consider all Romano-British features or only those known to have been still in use after c.A.D. 350? Does one consider all ham place-names, bearing in mind that such names could be coined at any time during the vogue for these name-types? Does one include those examples with obviously late specifics such as Kirkham? This seems to be derived from the Scandinavianized form of OE cirice 'church', though perhaps this is only a replacement of an unidentified first element, of either English or British origin. Margaret Faull has addressed herself to these particular issues in her study of English settlement in Yorkshire, pointing out the need for caution in the use of distribution maps for reconstructing actual settlement patterns

(Faull 1983).

There is also the problem of assigning a spot location on a map for a place-name which may have had a wider territorial application. In order to overcome these hurdles a measure of compromise is essential but, providing the difficulties are recognized, perfectly valid results can still be achieved.

The regional study reported in the present article was only possible after the collection and manipulation of specific sets of data. Firstly, the $h\overline{a}\text{m}$ place-names in Lancashire and Cheshire had to be identified and listed. This has been done with reference to the relevant EPNS volumes for Cheshire (PNCh) and to Ekwall's book on Lancashire place-names (Ekwall 1922). The latter work is now rather out-dated and additional forms had to be gathered to supplement it (see Kenyon 1985). The relevant names are listed in Appendix 1, below. Secondly, a workable locus for the 30 names thus obtained had to be established (Fig.1). The most satisfactory solution was to use a six-figure O.S. grid reference based on the focus of settlement as recorded on nineteenth-century maps. Settlement mobility undoubtedly occurred in former times but it is most likely to have been restricted to locations within the territory of an ancient township. Given the overall poorer quality of the land in the North-West when compared with counties to the south and east, there was less freedom of choice and it is therefore less likely that locations on the sand and gravel ridges, terrace deposits, sandstone or boulder clay outcrops favoured by the settlements with ham names were changed very much over time (Kenyon 1984:185-8). Thirdly, a comparable sample of locations had to be compiled to enable significance testing of apparent correlations between \underline{ham} sites and Roman features (Fig. 3). Thus a group of 30 locations, whose six-figure grid references were picked from a standard random numbers table, was plotted to give another distribution map (Fig.2). This enabled the compilation of two sets of measurements, the distances between places named in $\underline{\underline{\text{ham}}}$ and Roman roads and sites; and the distances between random locations and Roman roads and sites (Appendix 2). These two sets of measurements were compared using standard statistical tests (chi-squared and the G-test [Sokal and Rohlf 1969]), the calculations being done on a microcomputer.

The results of this comparison, set out in Appendix 2, below, were rather unexpected. Statistically, the proximity of $\underline{h}\underline{a}\underline{m}$ sites to Roman roads was what might have been expected if the settlements named in $\underline{h}\underline{a}\underline{m}$ had been distributed randomly across the landscape of Lancashire and Cheshire. There is thus



no need to postulate a causal relationship and indeed there is no statistical basis for doing so. The relationship between names in $h\bar{a}m$ and Roman sites could also be coincidental according to the results of these statistical tests. The discovery of new sites in the future is unlikely to affect these results significantly since they should have the same effect on the random as on the place-name distribution pattern. It is worth noting, however, that $h\bar{a}m$ -named settlements are much closer to major rivers and watercourses (including the coast) than would have been expected if the distribution were random. This prompts the suggestion that the distribution has been affected by the inclusion of names derived not from $h\bar{a}m$ but from $h\bar{a}mm$, an element associated with riverine locations. Certainly at least three of the place-names involved, Eastham, Frodsham (see Gelling in foreword of EPNS 1977), and Weaverham have late spellings suggesting hamm (PNCh):

<u>Easthamm</u> 1499, <u>Estom</u> 1599, <u>Eastome</u> 1670, <u>Eastom</u> 1717; <u>Frotheshamme</u> 1206, <u>Fradsome</u> 1640; Weverhamme 1546.

Heysham also has a form in -om, but this is a late isolated form: <u>Heysom</u> 1701 (Ekwall 1922).

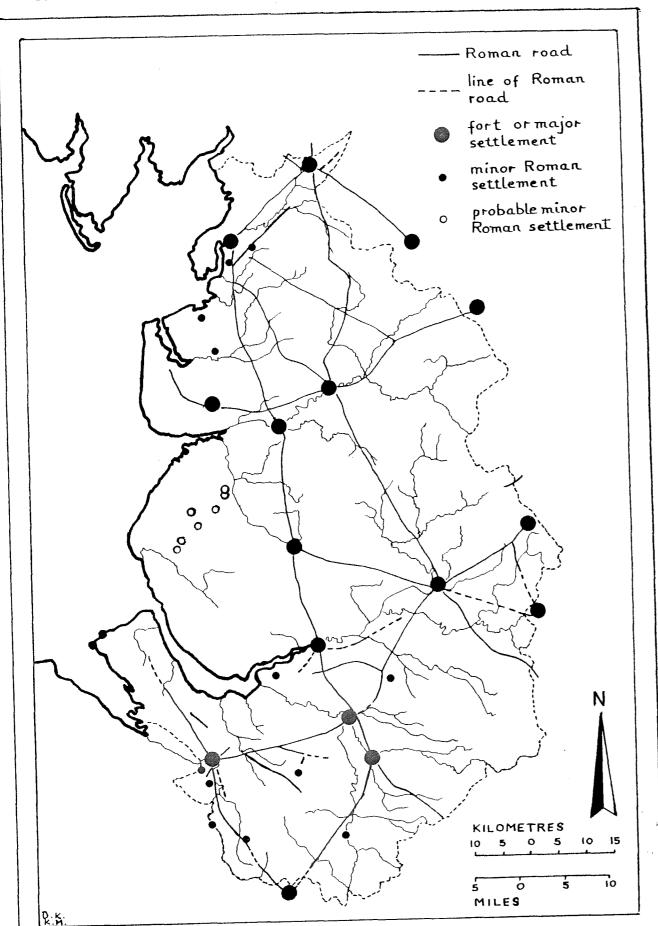
It is difficult to know how much reliance to give to these late forms since $\underline{\text{Ham}}$ (ME $\underline{\text{home}}$, OE $\underline{\text{ham}}$) is found as $\underline{\text{Hom}}$ in the forms $\underline{\text{Homcristilton}}$ 1290, $\underline{\text{Homecristelton}}$ 1317, 1318, and $\underline{\text{Hom}}$ Cristulton 1343, alternating with $\underline{\text{Hamcristilton}}$ 1200-50, 1301-6, and $\underline{\text{Hamcristelton'}}$ 1296 for Christleton near Chester (PNCh IV, 107-8). A similar usage occurs in the form $\underline{\text{Homsutton}}$ 1288 for Great Sutton in Wirral ($\underline{\text{ibidem}}$, 193). Such spellings indicate that there was considerable overlap between the two forms in the Middle English dialects of the North-West.

Furthermore, whilst it is true that many of the $h\bar{a}m$ -named settlements, including Bispham (south-west Lancashire), Cockerham, Davenham, Gressingham, Penwortham, Rochdale (formerly Recedham), Tatham, Warmingham and Weaverham, could be considered to be on land in a river bend or on drier land surrounded by or projecting into marsh, and Heysham and perhaps Eastham could be considered as coastal promontory sites, it must be emphasized that this is by no means unusual for the North-West. Sites most suited to settlement, such as the brown soils overlying terraces and glacial sands and gravels, tend to be found in exactly these kinds of situations. The soils of Lancashire and Cheshire belong predominantly to the gleyed soil groups and well-drained sites with access to good agricultural land are at a premium. The fact that such locations were

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typical of hamm places may have contributed to the confusion of spelling traditions found at Eastham and Frodsham. It may well be that geographical factors are especially important in the North-West. The land in this part of England has a lower carrying capacity than that in the more fertile, more productive South and East. Environmental factors are therefore inherently more likely to be determinants in initial settlement location and, more especially, they will be a vital factor for the survival of a settlement site. It is certainly no accident that settlements with ham names in Lancashire and Cheshire occupy the best land in the area. An analysis of major settlement sites (based on the territory of the associated township) according to the four criteria of soil, drift geology, climatic regime and altitude shows this most clearly. On a simple numerical scale, places with ham names scored consistently high, with typical values lying in the 18 or 19 range (out of a possible 20) in Cheshire, and usually above 16 in Lancashire (Kenyon 1984:404-14). It is noteworthy that places with -inghām names tended to achieve a slightly lower value. In Cheshire, for example, Kermincham, Tushingham, Warmingham and Wincham scored 17 compared with the 18 of Davenham, both Dunhams, Eastham, Ledsham, Swettenham and Weaverham, and the 19 of Alpraham. These scores were significantly higher than could have been predicted for a random distribution (see Appendix 2, below). If geographical location is accepted as an indicator of the probable age of a settlement, and therefore, by implication, the age of its associated place-name (e.g., Cameron 1965, 1970, 1971; and Fellows Jensen 1972, 1978), then places with $h\bar{a}m$ names qualify as being amongst the oldest named settlements in Lancashire and Cheshire.

The antiquity of hām sites is further supported by the high status enjoyed by so many of them. In Cheshire, Eastham, Frodsham and Weaverham, for instance, were all large and important Domesday manors held by Earl Edwin in 1066 (Morgan 1978). In both counties, hām-named settlements tend to be ancient parish centres: Cockerham, Heysham, Kirkham, Penwortham, Rochdale (Recedham), and Tatham in Lancashire, and Davenham, Frodsham, Warmingham and Weaverham in Cheshire were listed as parish centres in 1291 (Taxatio). Eastham, although not listed in 1291, had had an appurtenant priest in 1086 according to Domesday Book (the parish centre was located at nearby Bromborough in the post-Conquest period). Only one of the places with a name in -inghām, Warmingham, seems to have had ancient parish status, which confirms the impression given by the geographical locations that -inghām sites were slightly later than simple hām-named sites. Over the two counties 43% of the places named in hām (excluding



-ingham names) had ancient parish status. This can be compared with figures of 9% for $t\overline{u}n$ names and 5% for $l\overline{e}ah$ names.

Unfortunately, there is very little identifiable and verifiable archaeological material from the region which can be attributed to the pagan Anglo-Saxon period and therefore used to corroborate the above findings. None of Meaney's four possible Anglo-Saxon burials from Lancashire can be accepted unreservedly: Hasty Knoll (Blackrod) and Crossmoor (Inskip) may be prehistoric; the finds in the Ribchester Museum do not appear to originate from the locality; and the Manchester (Red Bank) urn is suspiciously isolated (Meaney 1964). However, the recent discovery of what may be pagan period sunken-featured buildings, located within the defences of the Roman fort a mile away, does lend some credence to the latter (Morris 1983:6). The Quernmore burial, discovered during the construction of a car part at a local beauty spot high up on the fells above Lancaster, is the most convincing pagan period burial from the county (Edwards 1973; Radiocarbon XVI, 1974). No burials have yet been noted from Cheshire and, apart from possible squatter occupation within the fortress area at Chester (Strickland 1985), there is no settlement evidence for the period other than that provided from the beach-head trading site at Meols on the tip of the Wirral peninsula (Hume 1863; Bu'lock 1960). The earliest Anglo-Saxon material which can certainly be associated with any of the ham sites is the small headland chapel with its associated cemetery and sculptured stones from Heysham. These have an eighth-ninth century date (Bu'lock 1967; Potter 1979). Several other hām sites have surviving pre-Norman stone crosses. These include Frodsham, Gressingham and probably Rochdale, Swettenham and Weaverham (Bu'lock 1958; Edwards 1978; Ormerod 1882:3.72).

There is therefore, at least at present, an insufficient amount of pagan Anglo-Saxon archaeological material for comparison with the place-names. The Roman material, which has been recovered on a larger scale, appears to have a distribution similar to the distribution of names in \underline{ham} but this is not necessarily significant. The prime settlement locations and ancient parish status enjoyed by so many of the \underline{ham} -named settlements are certainly of major significance, however, and they confirm the antiquity of the usage of this element in Lancashire and Cheshire. \underline{Ham} must be amongst the earliest group of nameforming elements used by the English in the North-West. The precise date of this element in the region is more difficult to fix. The use of the 'Christian' specifics \underline{biscop} (two examples in Lancashire) and \underline{cirice} (Scandinavianized to \underline{kirk} -) imply that the compound names concerned were not coined until after the

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time of the grant of lands <u>iuxta Rippel</u> to the church at Ripon in the 670s (Colgrave 1927:34). Certainly there is little reason to suppose that Lancashire as a whole had been brought under the control of the English kingdom of Northumbria before the middle decades of the seventh century, though acculturation of the Lune valley area could have begun in the first half of the century (Kenyon, forthcoming). Cheshire probably came under English influence during the first half of the seventh century as well. Assuming, as seems most likely, that the $h\bar{a}m$ names belong to this period of English takeover of the North-West, then the period during which $h\bar{a}m$ was used to name major settlements or estates must extend at least into the second half of the seventh century and possibly into the eighth century in what were some of the more remote reaches of the English kingdoms of Northumbria and Mercia.

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APPENDIX 1 - Hām place-names

| Major place- names | Derivation of first part | Earliest documentation | Reference |
|------------------------|--|---------------------------|-----------|
| CHESHIRE | | | PNCh |
| Alaraham | OE fem. pers.n. Ealhburh | 1086 | III,300 |
| Alpraham Altrincham | OE masc. pers.n. Aldhere with -ing ² | 1290 | II,7-8 |
| Davenham | river-name, Dane | 1086 | II,203-4 |
| Dunham (Massey) | dūn 'hill' | 1086 | IIÍ,19-20 |
| Dunham on the | dun 'hill' | 1086 | III,253-4 |
| Eastham | east 'east' | 1086 | IV,187 |
| Frodsham | OE masc. pers.n. Frod | 1086 | II,221-3 |
| Kermincham | OE masc. pers.n. Cenfrið with -ing² | 1086 | II,281-2 |
| Ledsham | OE fem. pers.n. Lēofede | 1086 | IV,217 |
| Swettenham | OE masc. pers.n. Sweta | 1200 | II,283-4 |
| Tushingham | OE masc. pers.n. Tunsige with -ing ² , or OE *Tussing 'tufty place' | 1086 | IV,47 |
| Warmingham | OE masc. pers.n. Wærmund or *Wærma, with -ing² | 1259 | II,262 |
| Weaverham | river-name, Weaver | 1086 | III,205 |
| Wincham | OE masc. pers.n. Wigmund with -ing ² | 1086 | II,136 |

| LANCASHIRE | | | and | Ekwall 1922 Kenyon 1985 |
|-----------------------|--|---------------|-----|----------------------------|
| Abram | OE fem. pers.n. Eadburh | 1199 | | p.102 |
| Bispham (Fylde) | OE biscop 'bishop' | 1086 | | p.156 |
| Bispham (S.W. Lancs.) | OE biscop 'bishop' | <u>c.1190</u> | _ | p.136 |
| Cheetham | Pr Welsh *çed 'wood' | late 12t | :h | p.33 |
| Cockerham | river-name, Cocker | 1086 | | p.170 |
| Gressingham | OE gærsing 'grazing, | 1086 | | p.178 |
| | pasture', or OE græs, gærs | | | |
| Habauaham | 'grass', with -ing' | 10/0 | | 00.0 |
| Habergham | OE <u>heabeorh</u> 'mountain', with | 1242 | | pp.82-3 |
| Heysham | -ing ² OE hæs 'brushwood' | 1000 | | and p.263 |
| Higham | OE heah 'high' | 1086 | | p.178 |
| Kirkham | | 1296 | | p.80 |
| KIIKIdii | OE cirice 'church', with Scandinavianization > kirk- | 1086 | | p.152 |
| Padiham | OE masc. pers.n. Pada, or | 1251 | | nn 70_90 |
| 1 ddf idii | OE pade 'toad', with -ing ² | 1271 | | pp.79-80 |
| Penwortham | Brit *penno 'hill' and (?) | 1086 | | p.135 |
| 1 Chwot Chain | OE word 'enclosure' | 1000 | | p.133 |
| Rochdale | OE reced, ræced 'hall' | 1086 | | pp.54-5 |
| (Recedham) | Table Hall | 1000 | | pp. 54 5 |
| Tatham | OE masc. pers.n. Tāta | 1086 | | p.182 |
| Thornham | OE Forn 'thombush' | 1230 | | p.53 |
| Whittingham | OE masc. pers.n. Hwita or | 1086 | | p. 149 |
| | hwīt 'white', with -ing2 | | | r |
| | | | | |

APPENDIX 2

TABLE 1

Hām characteristics

| Place-Name | Distance (km.) from: | | | Locational | T |
|--------------------|----------------------|------------|------------|------------|-------------|
| Tace Name | River | Roman road | Roman site | Value | Topography* |
| CHESHIRE | | | | | |
| Alpraham | 1.0 | 0.5 | 2.5 | 19 | |
| Altrincham | 3.0 | 0.5 | 7.0 | 18 | |
| Davenham | on | 2.0 | 2.0 | 18 | a,b |
| Dunham Massey | 1.0 | 2.5 | 7.5 | 18 | , |
| Dunham on the Hill | 1.0 | 0.5 | 6.0 | 18 | |
| Eastham | coast | 3.0 | 12.5 | 18 | c ? |
| Frodsham | 0.5 | 0.5 | 4.5 | 17 | b |
| Kermincham | 0.5 | 8.0 | 8.0 | 17 | |
| Ledsham | 6.0 | on | 8.0 | 18 | |
| Swettenham | 0.5 | 8.0 | 8.0 | 18 | |
| Tushingham | 2.0 | 1.5 | 2.5 | 17 | |
| Warmingham | on | 2.5 | 4.0 | 17 | a,b |
| Weaverham | on | 3.0 | 4.0 | 18 | a,b |
| Wincham | 2.5 | 0.5 | 2.0 | 17 | b |

| Place-Name | | istance (km. Roman road |) from: Roman site | Locational Value | Topography* |
|---------------------|--------|----------------------------|-----------------------|------------------|-------------|
| LANCASHIRE | | | | | |
| Abram | 3.0 | 2.0 | 3 . 5 | 14 | b |
| Bispham (Fylde) | coast | 4.0 | 13.0 | 16 | С |
| Bispham (S.W. Lancs | .) 1.0 | 7.0 | 4.0 | 16 | Ъ |
| Cheetham | 1.0 | 0.5 | 2.0 | 17 | |
| Cockerham | on | 1.0 | 5.0 | 15 | a,b |
| Gressingham | 0.5 | 1.0 | 7.5 | 16 | a,b |
| Habergham | 1.0 | 12.0 | 18.0 | 9 | d |
| Heysham | coast | 7.0 | 6.0 | 17 | С |
| Higham | 2.0 | 8.0 | 16.0 | 10 | d |
| Kirkham | 5.0 | on | 1.0 | 17 | |
| Padiham | on | 9.0 | 15.0 | 11 | |
| Penwortham | 0.5 | 4.0 | 2.0 | 17 | a,b |
| Rochdale | on | 0.5 | 10.0 | 15 | а |
| Tatham | on | 0.5 | 6.0 | 18 | a,b |
| Thornham | 2.0 | 6.0 | 9.0 | 13 | d |
| Whittingham | 5.0 | 2.5 | 6.0 | 12 | |

a - land in a river bend, water meadow b - dry land partly surrounded by marsh

c - coastal promontory d - enclosed plot of marginal land

TABLE 2

Random characteristics (ham)

| | Distance (km.) f | |
|------------|------------------|------------|
| River | Roman road | Roman site |
| on | 1.5 | 2.5 |
| 4.0 | 2.5 | 8.0 |
| 2.0 | 5.0 | 6.0 |
| 2.5 | 5.0 | 4.0 |
| 1.0 | 6.0 | 4.0 |
| 4.0 | 1.5 | 15.0 |
| 1.0 | 2.5 | 1.0 |
| 2.0 | 3.0 | 8.5 |
| 2.5 | 3.0 | 9.0 |
| on | on 1 0 | 3.5 6.5 |
| 1.0 3.0 | 1.0 0.5 | 11.0 |
| 0.5 | 1.0 | 3.0 |
| 1.5 | 0.5 | 1.0 |
| 1.0 | 2.5 | 11.0 |
| 0.5 | 0.5 | 10.0 |
| 1.0 | 2.0 | 5.0 |
| 2.0 | on | 12.5 |
| 4.0 | 3.0 | 5.0 |
| 0.5 | 1.0 | 5.5 |
| 4.0 | 8.5 | 11.0 |

| | Distance (km.) f | rom |
|-------|------------------|------------|
| River | Roman road | Roman site |
| 2.5 | 2.0 | 16.0 |
| 2.0 | 5.0 | 11.0 |
| on | 10.0 | 18.0 |
| 2.0 | 0.5 | 6.5 |
| coast | 4.5 | 5.0 |
| 3.5 | 2.0 | 8.0 |
| on | on | 8.5 |
| 2.5 | 1.0 | 11.5 |
| 2.0 | 4.0 | 3.0 |

Ham: distance from Roman roads TABLE 3

| Distance (km.) | stance (km.) Number four | |
|----------------|--------------------------|--------|
| | Hām | Random |
| within 2 | 15 | 16 |
| 2-4 | 7 | 7 |
| 4-6 | 1 | 5 |
| 6-8 | 5 | 0 |
| over 8 | 2 | 2 |

No statistical difference can be shown between the distributions: when standard statistical tests are used to compare the distributions (chi-squared, G-test) the value of P is 0.9.

TABLE 4

 $H\overline{a}m$: distance from Roman sites

| Distance (km.) | Numbe | er found |
|----------------|-------|----------|
| | Hām | Random |
| within 2 | 5 | 2 |
| 2-4 | 6 | 6 |
| 4-6 | 6 | 5 |
| 6-8 | 6 | 4 |
| over 8 | 7 | 13 |

When standard statistical tests (chi-squared, G-test) are used to test the distributions the value of P is 0.3.

TABLE 5

Ham: distance from Rivers

| Distance (km.) | Numbe | r found |
|----------------|-------|---------|
| | Hām | Random |
| within 1 | 21 | 13 |
| 1-2 | 3 | 7 |
| 2-3 | . 3 | 5 |
| over 3 | 3 | 5 |

The difference between these distributions is probably significant in statistical terms.

TABLE 6 Locational Values

| | Number of s | settlements |
|-------------|-------------|-------------|
| Value | Found | Expected |
| 19 | 1 | 0 |
| 18 | 9 | 4 |
| 17 | 9 | 5 |
| 16 | 3 | 4 |
| 15 | 2 | 4 |
| 14 | 1 | 3 |
| 13 | 1 | 3 |
| 12 | 1 | 1 |
| 11 | 1 | 1 |
| 10 | 1 | 1 |
| 9 | 1 | 1 |
| less than 9 | 0 | 3 |

When standard statistical tests (chi-squared, G-test) are applied the results are highly significant, the value of P lying beyond 0.001.

For the purposes of the statistical testing, \underline{ham} sites from both counties have been considered together to give a sample size of 30 which is the bare minimum suitable for statistical testing. Even with 30 it may not be possible to demonstrate conclusively that there are significant differences between e.g. the distribution of \underline{ham} sites and rivers and a random distribution of locations in relation to rivers.

There is a possibility that when distributions are combined differences will be masked, i.e. the results from one county cancelling out the results from the other. This does not happen with the $h\bar{a}m$ distributions, except perhaps in the case of Roman sites in Lancashire. Ham names in this county appear to be more closely related to Roman sites than might have been expected if this were a random distribution, $5\ h\bar{a}m$ names lying within 4 km. of a site compared with an expected 1, but since the numbers involved are so small it is difficult to prove.

The figures for the individual counties are set out below. They show that the ham place-names in each county behave similarly.

 $\frac{\text{TABLE 7a}}{\text{H$\overline{a}m: Roman roads}} \qquad \frac{\text{Break-down by individual county of the figures in Table 3-}}{\text{H$\overline{a}m: Roman roads}}$

| | CHI | ESHIRE | LANCASHIRE | |
|----------------|------------|--------|------------|--------|
| Distance (km.) | <u>Hām</u> | Random | Hām | Random |
| within 2 km. | 8 | 7 | 7 | 9 |
| 2-4 km. | 4 | 4 | 3 | 3 |
| 4-6 km. | 0 | 3 | 1 | 2 |
| 6-8 km. | 2 | 0 | 3 | 0 |
| over 8 km. | 0 | 0 | 2 | 2 |

TABLE 7b Break-down by individual county of the figures in Table 4 - Hām: Roman sites

| | <u>CHI</u> | ESHIRE | LANCASHIRE | |
|----------------|------------|--------|------------|--------|
| Distance (km.) | Hām | Random | <u>Hām</u> | Random |
| within 2 km. | 2 | 2 | 3 | 0 |
| 2-4 km. | 4 | 5 | 2 | 1 |
| 4-6 km. | 2 | 1 | 4 | 4 |
| 6-8 km. | 5 | 2 | 1 | 2 |
| over 8 km. | 1 | 4 | 6 | 9 |

 $\frac{\text{TABLE 7c}}{\text{H$\overline{\mathtt{a}}\mathtt{m}}: \text{ Rivers}} \qquad \frac{\text{Break-down by individual county of the figures in Table 5 -}}{\text{H$\overline{\mathtt{a}}\mathtt{m}}: \text{Rivers}}$

| | CHESHIRE | | LANCASHIRE | |
|--------------------|----------|--------|------------|--------|
| Distance (km.) | Hām | Random | <u>Hām</u> | Random |
| within 1 km. | 10 | 6 | 11 | 7 |
| 1-2 km. 2-3 km. | 2 | 3 | 1 | 4 2 |
| over 3 km. | 1 | 2 | 2 | 3 |

In the case of locational values (see Table 6) $h\bar{a}m$ sites have better locations in the individual counties than they would if they were randomly distributed. Therefore 8 out of the 14 Cheshire $h\bar{a}m$ sites have a value of 18 or 19 when only 3 would have been expected, and none have values below 15 (3 expected). In Lancashire 8 $h\bar{a}m$ sites have a value of 16 or higher, when 4 would have been expected, and only one $h\bar{a}m$ site has a value of 9 or less (4 expected).

ABBREVIATIONS AND BIBLIOGRAPHY

Bu'lock, J. D. 1958: 'Pre-Norman crosses of West Cheshire and the Norse settlement around the Irish Sea', LCAS, LXVIII, 1-11.

Idem 1960: 'Celtic, Saxon and Scandinavian settlement at Meols in Wirral', HSLC, CXII, 1-28.

Idem 1967: 'The pre-Norman churches of Old Heysham', LCAS, LXXVII, 30-7.
BZN = Beiträge zur Namenforschung.

Cameron, K. 1965: 'Scandinavian settlement in the territory of the Five Boroughs: the place-name evidence', Inaugural lecture, University of Nottingham, repr. EPNS 1977.

Idem 1970: 'Scandinavian settlement in the territory of the Five Boroughs: the place-name evidence, pt. II, place-names in Thorp', Medieval Scandinavia, III, 35-49, repr. EPNS 1977.

Idem 1971: 'Scandinavian settlement in the territory of the Five Boroughs: the place-name evidence, pt. III, the Grimston hybrids', in P. Clemoes and K. Hughes (eds), England Before the Conquest: Studies in Primary Sources Presented to Dorothy Whitelock, Cambridge, 147-63, repr. EPNS 1977.

Colgrave, B. 1927: The Life of Bishop Wilfrid by Eddius Stephanus, Cambridge.

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Cox, B. H. 1973: 'The significance of the distribution of English place-names in hām in the Midlands and East Anglia', JEPNS, V, 15-61, repr. EPNS 1977.

Dodgson, J. McN. 1966: 'The significance of the distribution of the English place-names in -ingas, -inga- in South East England', Medieval Archaeology, X, 1-29, repr. EPNS 1977.

Idem 1967a: 'The -ing in English place-names like Birmingham and Altrincham', BZN, n.f. II, 221-45.

Idem 1967b: 'Various forms of Old English -ing in English place-names', BZN, n.f. II, 325-96.

Idem 1967c: 'The English arrival in Cheshire', HSLC, CXIX, 1-37.

Idem 1968: 'Various English place-name formations containing Old English -ing'. BZN, n.f. III, 141-89.

Idem 1970-81: The Place-Names of Cheshire, EPNS, XLIV-IX (PNCh).

Idem 1973: 'Place-names in ham distinguished from hamm names in relation to the settlement of Kent, Surrey, and Sussex', Anglo-Saxon England, II, 1-50.

EPNS = English Place-Name Society.

EPNS 1977: Place-Name Evidence for the Anglo-Saxon Invasion and Scandinavian Settlement, Nottingham (first published 1975 and subsequently reprinted).

Edwards, B. J. N. 1973: 'A canoe burial near Lancaster', Antiquity, XLVII, 300-1, with C14 date in Radiocarbon, XVI (1974), 3.

Idem 1978: 'An annotated checklist of pre-Conquest sculpture in the ancient county of Lancaster', Lancashire Archaeological Journal, I, 53-82.

Ekwall, E. 1922: The Place-Names of Lancashire, Chetham Society, n.s. LXXXI.

Faull, M. L. 1983: 'Roman and Anglo-Saxon settlement patterns in Yorkshire: a computer-generated analysis', Landscape History, V, 21-40.

Fellows Jensen, G. 1972: Scandinavian Settlement Names in Yorkshire, Copenhagen. Eadem 1978: Scandinavian Settlement Names in the East Midlands, Copenhagen.

Gelling, M. 1960: 'The element hamm in English place-names: a topographical investigation', Namn och Bygd, XLVIII (1-4), 140-60.

Eadem 1961: 'Place-names and Anglo-Saxon paganism', University of Birmingham Historical Journal, VIII, 7-25.

Eadem 1967: 'English place-names derived from the compound wic-ham', Medieval Archaeology, XI, 87-104, repr. EPNS 1977.

Eadem 1973: 'Further thoughts on pagan place-names', in F. Sandgren (ed.), Otium et Negotium: Studies in Onomatology and Library Science Presented to Olof von Feilitzen, Stockholm, 109-28, repr. EPNS 1977.

Eadem 1974: 'The Chronology of English Place-Names', in T. Rowley (ed.), 'Anglo-Saxon Settlement and Lancscape', British Archaeological Reports (British series), VI, 93-101.

Eadem 1977: 'Latin Ioan words in Old English place-names', Anglo-Saxon England, VI, 1-13.

Eadem 1978: Signposts to the Past, London.

Eadem 1984: Place-Names in the Landscape, London.

HSLC = Historic Society of Lancashire and Cheshire, Transactions.

Hume, A. 1863: Ancient Meols, London.

JEPNS = Journal of the English Place-Name Society.

Kenyon, D. 1984: 'Archaeology, place-names and settlement in Lancashire and Cheshire c.400-1066', unpubl. University of Manchester Ph.D. thesis.

Eadem 1985: 'Addenda and Corrigenda to E. Ekwall The Place-Names of Lancashire', JEPNS, XVII, 20-106.

Eadem forthcoming: 'Notes on Lancashire place-names: I, The early names', JEPNS, XVIII.

LCAS = Lancashire and Cheshire Antiquarian Society, Transactions.

Kuurman, J. 1975: 'An examination of the -ingas, -inga- place-names in the East Midlands', JEPNS, VII, 11-44.

Meaney, A. L. S. 1964: A Gazetteer of Early Anglo-Saxon Burial Sites, London.

Morgan, P. 1978: Domesday Book, Cheshire, Chichester.

Morris, M. 1983: The Archaeology of Greater Manchester, 1, Medieval Manchester, Manchester.

Ormerod, G. 1882: History of Cheshire, 2nd edn (T. Helsby, ed.), London. PNCh: see Dodgson 1970-81.

Potter, T. 1979: Heysham Excavation Summary in Report of the sixth Annual Archaeological Conference, University of Lancaster, 8-9, London.

Sandred, K. I. 1976: 'The element hamm in English place-names. A linguistic investigation', Namn och Bygd, LXIV (1-4), 69-87.

Sokal, R. R. and Rohlf, F. J. 1969: Biometry, San Francisco.

Strickland, T. J. 1984: 'The Roman Heritage of Chester: The Survival of the Buildings of Deva after the Roman Period', Jnl Chester Archaeological Society, LXVII, 17-36.

Taxatio = Taxatio Ecclesiastica Angliae et Walliae c.1291, Record Commission,

London, 1802.

Unwin, P. T. H. 1982: 'The Anglo-Saxon and Scandinavian occupation of Nottinghamshire and Derbyshire', JEPNS, XIV, 1-31.