

ity. Harris⁵ emphasizes the fact that retinal neurones seem to show directional pre-dilections almost anywhere when they are ectopically placed in the developing brain. Hence, he predicts that the positioning of cell-surface signals (or strength of a diffusible gradient) necessary for the guidance of particular axons are not restricted to decision points but are instead distributed to many neuronal locations.

Perhaps the two sets of interpretations could be reconciled by considering the absolute distances of the ectopically placed neurones from their normal targets. Are the dimensions of the developing *Xenopus* brain very much greater than those of the local environment deciphered by chick motor neurones?

In the examples we have described here (and in others; see, for example, ref. 13), the picture is beginning to emerge that the earliest neurones to project axons in the developing nervous system of vertebrates do so in a stereotyped manner. The mechanisms that underlie this form of

development, and their relationship to potentially analogous mechanisms of invertebrate systems, are fast becoming subjects of more than simple speculation. □

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P.H. Taghert and J.W. Lichtman are in the Department of Anatomy and Neurobiology, Washington University School of Medicine, Box 8108, St Louis, Missouri 63110, USA.

Archaeology

Beginnings of English village life

from Richard Hodges

TWENTY-FIVE years ago archaeologists generally believed that the first English villagers of the fifth to seventh century AD lived in 'pit-houses' in a primeval condition. Improved excavation techniques in the 1960s, however, brought a new image of the early English to light. By excavating large areas rather than trenches it became apparent that the remains of post-built halls existed alongside these sunken pit-houses. Moreover, the new excavation techniques revealed a material culture pertaining to daily life as opposed to the common picture of a barbaric society. Although contemporary cemeteries contained bodies inhumed with swords, shields and spears, the first excavated villages by contrast seem to have been places of rich tranquility. Such points have been revealed by one of the first of these village excavations, at West Stow, Suffolk¹.

This village, one of several discovered from this era, was situated in the Lark Valley, north of Bury St Edmunds. Excavations and survey show that the Roman villas in the area were falling into decay by about AD 400, well before the imperial government left Britain; it is equally clear that West Stow, like several other communities, was founded in the wake of this traumatic decision². The new report charts the sequence of the community from the early fifth and seventh centuries, when it was probably abandoned in favour of a nearby site. At any one time there were about three halls accompanied by up to about a dozen small

sunken huts. Each hall was constructed of posts set deeply into the ground with walls clad presumably with wattle and daub, whereas the sunken huts were smaller buildings, probably with lean-to roofs over a sunken floor. It is now thought that

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Reconstruction of the West Stow village (courtesy of Suffolk County Council).

the halls were for accommodation, while the sunken huts were used for domestic crafts and storage. The halls, however, are unlike contemporary German long-houses and much closer in style to the peasant farms of Roman Britain³.

The absence, until the seventh century, of ditched enclosures around each farm unit is also strikingly at variance with continental village patterns in this period^{4,5}. Yet the material culture is a classic early Anglo-Saxon assemblage. The stamp-decorated sixth century pottery, the bone combs and the jewellery are consistent, if poorer in quality, with the assemblage found in the cemetery at West Stow as well as other Anglian cemeteries. Faunal and botanical assemblages also show a pattern

of mixed farming with pigs making up a fairly high proportion of the livestock (about 20 per cent), while it appears that spelt, typical of Roman farms, had been replaced by wheats and rye (pages 86, 103 of ref. 1; and ref. 6). The subsistence strategy suggests a localized regime of low intensity compared with the more specialized, productive agrarian policies of Roman times. West Stow must have had a population numbering about 20–30 until the early seventh century when the village was abandoned. Note that ditches enclose the final-phase buildings, as if in the era of St Augustine and with the coming of Christianity, attitudes to property altered.

The survey of the Lark Valley indicates that West Stow was typical; similar villages existed at regular intervals following the desertion of the Romans. The material culture suggests that their occupants were English, whereas the buildings hint that they were descendants of Romano-British peasants adapting to the changes.

For almost two hundred years a largely domestic mode of production was sustained with involvement in regional exchange being only on a modest scale. At the same time, some elements of warrior status occur in the cemetery in the form of spears and shields despite the egalitarian agrarian character of the village buildings. Some time before AD 700 almost all the early Anglo-Saxon sites in the valley were deserted in favour of new loci, most of which are still occupied today (page 170 of ref. 1). These divisions look purely functional and economic, with river frontages, water meadows and arable land, backing onto high drier sheepwalks. However, other recent village excavations such as those at Raunds (Northamptonshire) and Wharram Percy (North Yorkshire) show that the parish church and its bounds were features of the tenth century and the socio-economic changes of that era^{7,8}.

The excavations at West Stow provide an image of the transitory age between the collapse of Roman Britain and the formation of the Christian kingdoms of the seventh century. It is too soon to challenge the traditional history, yet, just as these excavations reveal that Anglo-Saxon farmers did not inhabit pit-houses, it is clear that their agrarian way of life constitutes a significant chapter in the evolution of English medieval life. □

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Richard Hodges is Lecturer in Archaeology at the University of Sheffield, Sheffield S10 2TN, UK.