Historic Settlements Project - South Pembrokeshire

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Historic Settlements Project Report - South Pembrokeshire.

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This work is a study of the settlement pattern of South Pembrokeshire from the early medieval period onwards. It starts with a brief exposition of the methodology used to identify historic settlements and then reviews the history of these settlements over a long time span. A prominent, if not the dominant, theme of this research has been to identify the ways in which settlements have come into existence and the processes by which they have changed. As the forces at work amongst the population and within the landscape have changed over time so this essay has been broken down into a number of chronological sections. Each section contains detailed studies of individual settlements as well much more general material.

I: The selection of the historic settlements.

A prerequisite for the Historic Settlements Projects was a definition of the term historic settlement. This section aims to set out clearly the criteria that were used to decide whether or not any one specific settlement could be included within or excluded from the inquiry. As South Pembrokeshire is an area where villages are common it is possible to view the definition of historic settlement as, to some extent, complimentary to that of defining a village. The minor settlements of South Pembrokeshire which not do not fall within the general conception of a village and yet which are an important element of the landscape are also discussed below.

Geographers and landscape historians have already established, and frequently debated, criteria for the definition of villages. One of two key attributes is usually used: size or function. The former is usually a simple measure of population; the level of shopping and service provision comprise the latter. A comprehensive definition has been offered by Mick Aston,
"Almost any substantial group of buildings with perhaps a shop or village hall is today called a village and this leads to great confusion, both for researchers looking at earlier arrangements and for the inhabitants for whom finer definitions are not needed. ... We must recognise that villages in the past were nucleations of farms and cottages, generally in a discrete unit of land, with a separate field system, managed communally so that all farmers and landholders were interdependent on each other. An important factor also was the village's ecclesiastical independence, with its own church, generally medieval.
... Most villages today do not qualify by these standards - most are suburban or retirement centres, not more than half a dozen practice communal agriculture, and most do not even have working farms in them. Yet the definition is useful in drawing our attention to those agglomerations of more recent origin, those which have become important in post-medieval times." (1985: 82.)

Other scholars have been more succinct, but less specific. Brian Roberts - who thinks the whole question of definition is best "avoided"! (1987: 6) - proposes that three "units", presumably farms, make up a village. Christopher Taylor however regards "a settlement of twenty or more individual homesteads, or families" as a village (1983: 15.)

Planners have had to attempt to define villages as part of their work on local structure plans. South Pembrokeshire District Council use both population levels and other characteristics for this purpose. Population levels between 30 and 2,000 are examined alongside the level of public services and retail facilities present, the existence of one or more buildings of public signif-icance (for example, a church) and site and situation (for exam-ple, at a bridging point or key junction) in order to define a village. They readily admit that this is a "subjective judgment" which is complicated by settlements coalescing, villages being absorbed into towns and the need to prepare plans to resolve particular problems, (for example major road improvements near a small group of dwellings thought to be of some importance.) The Pembrokeshire Coast National Park Authority has no formal defini-tion of a village. It draws up local plans for settlements which are considered to have "a planning history" and within which there is both room and suitable facilities for development.

The Historic Settlements Project has taken Aston's approach by including all sizable nucleations regardless of origin or contemporary function. Indeed, the question of the varied origins of particular settlements is a key concern of the Project. A wide range of source maps were used to determine where the nucleations were and their approximate and relative size. The principal maps used were the Bartholomew's National Map series 1:100,000 sheet 11 (Pembroke and Carmarthen) and the OS Landranger 1:50,000 sheet 158 (Tenby and surrounding area.) These were supplemented by records made after an earlier examination of the OS County ser-ies, second edition, 25":1 mile maps drawn mainly in the first decade of this century. All nucleations shown on any of the maps were included in the study. The very small number of doubtful cases which occurred were resolved by consultation with the local plans. Hence it was ascertained whether or not certain possible contemporary nucleations should be included or excluded. A full list of these settlements is given with the accompanying map. Figure 1.

The approach outlined above was only partly successful as it excluded certain smaller settlements. It was likely that some of these may have had an important function as a central place in the Middle Ages. This function is likely to have been administra-tive/legal (as the caput of a manor or minor lordship,) eccle-siastical (the settlement in which the parish church lay) or commercial (the site of an annual fair, for example.) Sites of this nature are important for two reasons. First, the might be all that remains of earlier medieval villages. Thus they are potential sites of deserted and shrunken medieval villages. Second, they are important because, for whatever reason, they did not grow. Thus a comparative approach with sites which did grow may help to illuminate the conditions which led to and the pro-cesses of nucleation. Over thirty sites of this nature were

Figure 1.
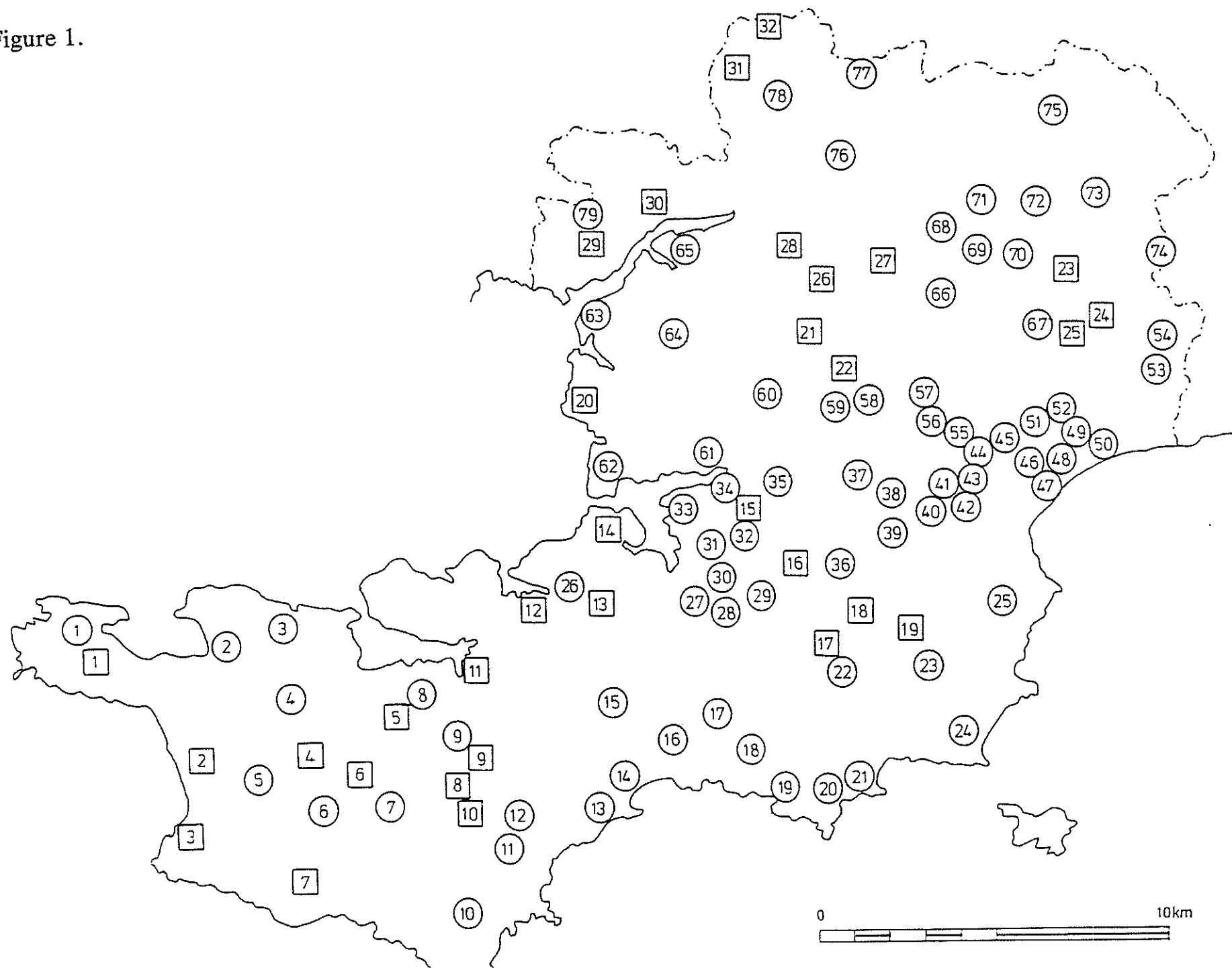
Figure 1: Historic settlements project - list of contemporary nucleations.

1 - Angle
2 - Rhoscrowther
3 - Pwllcrochan
4 - Walleston Green
5 - Castlemartin
6 - Warren
7 - St. Twynells
8 - Hundleton
9 - Maidenewells
10 - Bosherston
11 - Stackpole
12 - Stackpole Elidor
13 - Trewent
14 - Freshwater East
15 - Lamphey
16 - Hodgeston
17 - Manorbier Newton
18 - Jameston
19 - Manorbier
20 - Shrinkle
21 - Lydstep
22 - St Florence
23 - Gumfreston
24 - Penally
25 - New Hedges
26 - Cosheston
27 - Milton
28 - Carew Cheriton
29 - Sageston
30 - Carew
31 - Carew Newton
32 - Whitehill
33 - West Williamston
34 - Cresswell Quay
35 - Cresselly
36 - Redberth
37 - Jeffreyston
38 - Broadmoor
39 - East Williamston
40 - Wooden

41 - Temple Bar
42 - Pentlepoir
43 - Hill
44 - Kingsmoor
45 - Kilgetty
46 - Sardis
47 - Wiseman's Bridge
48 - Pleasant Valley
49 - Summerhill
50 - Amroth
51 - Stepaside
52 - Merrixton
53 - Llanteglos
54 - Llanteg
55 - Begelly
56 - Broom
57 - Thomas Chapel
58 - Reynalton
59 - Loveston
60 - Yerbeston
61 - Cresswell
62 - Lawrenny
63 - Landshipping
64 - Martletwy
65 - Minwear
66 - Templeton
67 - Ludchurch
68 - Camp Hill
69 - Cold Blow
70 - Princes Gate
71 - Crinow
72 - Llan-mill
73 - Lampeter Velfrey
74 - Tavernspite
75 - Llandewi Velfrey
76 - Robeston Wathen
77 - Bethesda
78 - Llawhaden
79 - The Rhos

Historic settlements project - centres of possible
importance in the medieval period which are not now nucleations.

1 - Bangeston
2 - Gupton
3 - Linney
4 - Corston
5 - Moreston
6 - Crickmarren
7 - Flimston
8 - Yerbeston
9 - Furzton
10 - St. Petrox
11 - Monkton
12 - Bangeston
13 - Nash
14 - Upton
15 - Piccaneraw
16 - Landigwinnet
17 - Jordeston
18 - Minerton
19 - Wedlock
20 - Coedcanlas
21 - Dynaston
22 - Carne
23 - Blaengwaithnoah
24 - Gelli-halog
25 - Blaencilgoed
26 - Mounton
27 - Molleston
28 - Newton
29 - Picton
30 - Slebech
31 - Cotland
32 - Drim

identified on William Rees's map <u>South Wales and the Border in the Fourteenth Century</u> (1932.) They are also listed and depicted on the map.

As a conclusion to this section the key points will be briefly restated. In South Pembrokeshire historic settlements can be equated with villages. These have been identified on a series of modern maps. A further group of settlements has also been thought worthy of inclusion. This group comprises smaller settlements which may have acted as central places for a variety of activity in the medieval period. Both sets of settlements are shown on the accompanying map. Hereafter this work is divided into chronological sections. The divisions reflect both the processes at work and the nature of the available evidence. The divisions are the centuries prior to the Norman Conquest, the years between the Conquest and <u>c.</u> 1300, the fourteenth and fifteenth centuries and, finally, the post-medieval period.

II: Monks and men: settlement patterns in the pre-Conquest period.

Much of the interval between the end of the Roman period and the Norman Conquest of Wales is exceptionally obscure. The usual Romano-British settlement in this area is the small, defended farmstead, perhaps displaying a modest degree of Romanisation; for example Walesland Rath, where second and third century pottery has been found and where it is thought that some of the buildings were constructed in this period. In the very late or post-Roman period (perhaps between <u>c.</u> AD 400 and 450) the Irish tribes of the Deisi and the Ui Liathain settled in the region. Their presence is indicated in the use of Ogham and Irish personal and place names. When taken together with the possible migration of some of the population to Brittany it can be stated that these years must have witnessed a thorough disruption of society (Lloyd-Jones, 1984: 8 - 72.)

In the South Pembrokeshire area the evidence for the early medieval period consists of two excavated sites, about a dozen monumental stones and a handful of references in the <u>Book of Llandaff</u>. Nevertheless when this evidence is considered carefully and studied in conjunction with the models of early settlement patterns developed by others, an approach can be made to understanding the Celtic landscape and the settlements that existed within it. This consideration of the settlement pattern begins with the larger units - the kingdoms, cantrefs and commotes - and works down the scale towards the individual estates and the settlements within them.

Early medieval cantrefs and commotes.
In the period prior to the Norman Conquest the modern district of South Pembrokeshire lay within four different administrative units. By far the largest part formed the cantref of Penfro; once perhaps an independent kingdom but by the sixth century part of the kingdom of Dyfed. The cantref stretched from the Castlemartin Peninsula eastwards along the shoreline of Carmarthen Bay and on the west it terminated on the eastern arm of the Cleddau. The north eastern part of South Pembrokeshire - the modern communities of Llandewi and Lampeter Velfrey - lay
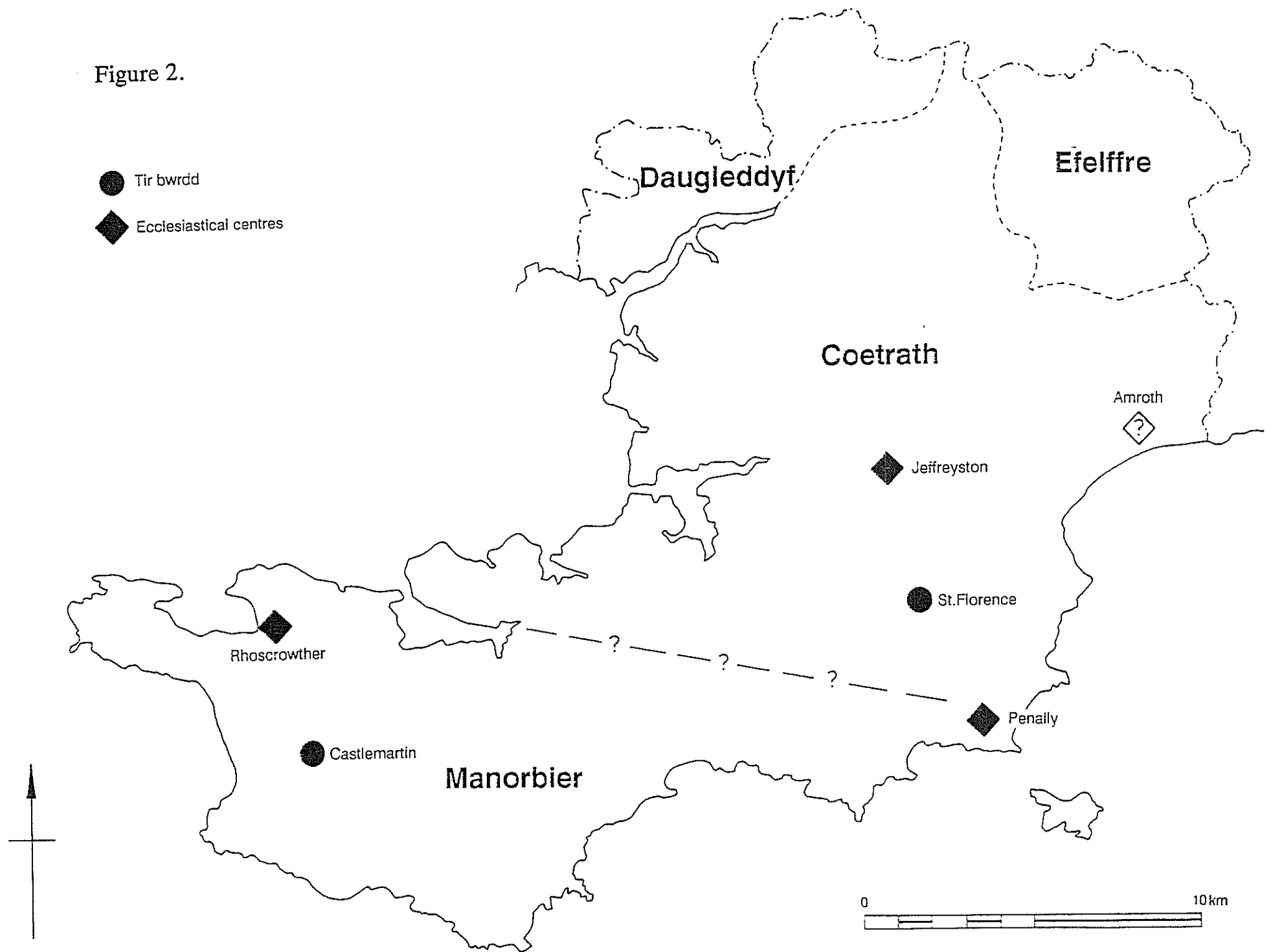
within the commote of Velfrey or Efelfre, a division of the cantref of Gwarthaf and only became part of Pembrokeshire after the territorial adjustments occasioned by the Acts of Union in 1536 and 1542. Small parts of the modern district also lay within Daugleddyf and Llawhaden which extended to the west and north of Penfro.

Penfro appears to have been divided into the commotes of Manorbier and Coetrath; the commote of Penfro itself is of late origin and has been dismissed as "spurious" by Charles (1992: 672.) With the identification of Manorbier and Coetrath as the principal divisions of the cantref it becomes possible to envisage a north-south split. However a dividing line cannot be drawn on the basis of this alone. One possible approach is to examine the lists of parishes and rural deaneries in the 1291 Taxatio Ecclesiaistica ... Pope Nicholai IV in the belief that the later church divisions preserve earlier civil ones. This has been done with some success for Carmarthenshire by J.W. Evans (1991: 241 - 22) but this author's attempt at a similar study for South Pembrokeshire was virtually fruitless.

Study of the function of certain settlements helps to advance the process of dividing the cantref into its constituent parts. It must however be noted that this method is not without its problems, principal amongst which would seem to be forcing the evidence to fit a twentieth century perception of a thirteenth century description of a ninth century ideal! In the Anglo-Norman period there were two demesne manors in the earldom of Pembroke: one in the extreme west at Castlemartin, the other close to the centre of the earldom at St Florence. (This author believes the demesne at Kingswood is a later development and therefore not relevant to this section of this paper; its origins will be discussed below.) It is commonly thought that the demesne manors of the Norman lords had originally been the tir bwrdd (literally table lands) of the Welsh kings and that the land along with their settled labour force were seized by the conquerors and turned to their own advantage (Davies, 1978: 109.) According to the models of settlement described in the medieval Welsh lawbooks one demesne ought therefore to lie in each of the commotes of Manorbier and Coetrath; hence St. Florence would have been within the northern commote of Coetrath and Castlemartin within Manorbier. The dividing line between the two could have been a physical feature and in this area the Ridgeway and the Pembroke River, rising close to its western end, divide the Castlemartin Peninsula from the rest of South Pembrokeshire. These two features may well therefore have marked the division between the two commotes. Figure 2.

There exists the possibility of confusing the pre-Conquest Commote of Coetrath with the later Forest of Coetrath (which is in fact sometimes termed as a commote!) In the post-Conquest period forest was a legal concept - land reserved to the king or lord for the purpose of hunting. This land need not have been wooded. No sources are known to exist describing the bounds of the forest. It seems to have covered parts of the parishes of Amroth and St. Issells and it is likely that Wiseman's Bridge and Bonevilles Court lay within it in 1324 (PRO: C 134/84 and 85.) Here it is proposed that the commote was an earlier and much

Figure 2.

- ● Tir bwrdd
- ◆ Ecclesiastical centres

Daugleddyf

Efelffre

Coetrath

Amroth

◆ Jeffreyston

● St.Florence

◆ Rhoscrowther

◆ Penally

● Castlemartin   Manorbier

0   10 km

larger entity, and that it was an administrative division of the cantref rather than a district reserved for a special purpose. In the later period the woodland was of considerable value: between 1378 and 1386 3000 oaks were felled and sold at a value of 200 marks (£133 6s. 8d.) along with 20 marks worth of underwood (PRO: C 145/237/3.)

Reconstructing the internal divisions of the cantref is not an easy task and no demonstrably certain result can be gained. Furthermore there is no reason to belief that they remain consistent over the centuries between the sub-Roman decades and the Norman Conquest. A reconstruction of sixth century boundaries and political landscapes may bear no relation to that of the tenth century. Following the Norman Conquest of south Wales the ancient Welsh divisions were "quickly obliterated or mangled" (Davies, 1991: 21) leaving behind little trace of the earlier patterns.

Early medieval estates.

Possible settlement patterns have been described by G.R.J. Jones in a complex series of papers and books extending back over forty years. He has analysed the evidence of the lawbooks of north Wales to develop an understanding of the local units of society. Jones candidly admits that,

"The lawbooks of south Wales present a ... sketchy outline of territorial administration (1976: 17.)"

This does not mean that his work can be ignored: the full corpus of his writings provides a series of models for the territorial organisation of early Welsh society. According to the Book of Iorwerth (a thirteenth century group of law texts from north Wales) each cantref or hundred was divided into two commotes and each commote comprised twelve multiple estates each of four vills. Within each commote there lay two "spare" vills which were for the support of the king, his senior officers - for example the reeve and the chancellor - and his dependents. These extra vills comprised the king's tir bwrdd.

The multiple estates lie at the heart of this model and the most succinct description of them has been advanced by Gregson (1985: 346.) Her definition of the multiple estate isolates from Jones's examples the spatial, social and economic characteristics and focuses on what are thought to be their fundamental attributes. A multiple estate is taken to be a group of linked upland and lowland townships which fall within the bounds of one unit - often a later parish or estate. Within this group there ought to be a recognisable central place or caput. The social structure of the estate is hierarchical; at the head stands a king, below him are the officials who run the estate, the freemen (who render light cash payments and minimal service obligations to the king) and, lastly, the bondmen (who bear onerous service demands.) There are additional criteria which Gregson uses to identify multiple estates: place-name evidence supporting the general pattern outlined above and archaeological evidence for settlement in the Romano-British period or the Iron Age. Jones himself has provided a schematised map of a pair of multiple estates which show their fundamental characteristics (1971: figure 1.) The descriptions of Jones and Gregson do not give sufficient attention to the nature of the economy of the multiple estate. Of critical importance was the specialised production by individual vills, followed by the redistribution of resources so that no one

vill went without a commodity produced somewhere in the estate.

Identifying the sites of the palace (llys) or the reeve's settlement (maerdref) within the multiple estates is not possible with any certainty. This is just one facet of the problem of identifying sites of any nature which belong to the medieval period in Wales. Early medieval sites would seem to be archaeologically invisible (Edwards and Lane, 1988: 1 - 15.) Air photography and geophysical survey have yielded little. There are no certain diagnostic artifact types or single settlement forms. Dating evidence is scarce and unreliable. The dates for the metalwork typologies tend to have been derived from the presumed date of sites, rather than the reverse. Radiocarbon dates suffer problems with sample error, analytical error and calibration error and can therefore be several centuries adrift from the true date. Satisfactory material for dendrochronology is rarely found. When sites have been found - for example, Longbury Bank (to date the best example of pre-Conquest site in this area) - it has been by chance not design.

Little progress can be made towards identifying the bounds of the individual multiple estates too. Elsewhere in south east Wales it has been possible to take the charters of the pre-Conquest ecclesiastical estates and to reconstruct from them the boundaries, settlement patterns and histories of multiple estates. This author has managed to do this in the area of Llandeilo Tal-y-bont on the Dyfed-West Glamorgan border (1990b: 162 - 164), on the Gower Peninsula at Bishopston, Oystermouth and Rhossili (1991a: 38 - 41) and in the Vale of Glamorgan. The principal source used for the identification of these estates was the Liber Llandavensis (or Book of Llandaff.) This is a twelfth century copy of a series of land grants to the church in the period from the sixth century onwards. Unfortunately there is no equivalent Liber Menevensis with similar details for south west Wales in the same period. The Book of Llandaff does mention certain properties in this area, the details are usually scant, sometimes late in date and, on occasion, the charters are themselves unreliable. The copies of charters 77 and 125b relating to lands near Tenby are in fact thought not to be based on a charters at all (Davies 1979: 95 - 96.) Likewise charter 253 (1979: 126) is thought to derive from a list of churches made in the mid-eleventh century rather than from an original charter.

The "pseudo-charter" - 253 - lists the properties of the Bishopric of Llandaff which lay within the Diocese of St. David's. It is thought to date to the period when Joseph was Bishop of Llandaff, that is from c. 1022 to 1045. The locations included are Penally (Penn Alunn), Trefloyne (Luin Teliau) and Manorbier (Mainaur Pir) and perhaps also Gumfreston (Eccluis Guiniau), Lydstep (Pwll Arda), Ivy Tower (Tref Carn) and St. Florence (Menechi) (Howells: 1964.) It is possible that this group of settlements formed the territorium of terra Pennalun which is the subject of the doubtful charter 77, dated c. 625. All the places mentioned lie on or near the River Ritec or southwards along the coast towards Manorbier; central to the distribution of places named is Penally, thought to be the birth place of St. Teilo. It is impossible to determine whether or not this list represents the constituent parts of a multiple estate. The area

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covered is larger than other lowland estates examined by this author, the charter is much later than those he has used to document these estates and the places mentioned do not fall within one later manor or parish. Furthermore if it is the description of an estate then there is very little place-name or field-name evidence which can be used to develop a framework within which the known sites and early Christian monuments can be placed. Maps and similar sources exist, but the plethora of English names they contain does not allow the identification of more than a few constituent parts of an estate. Only two names are of any interest: The Palace (a field name in Gumfreston) and Court Farm (a minor place name in Penally.) They might just possibly indicate the location of the former llys or maerdref of the estate. It should however be noted that these names were first recorded in 1772 and 1670 respectively (Charles: 1992: 492 - 493 and 706) and any association between them and an earlier estate could be quite spurious. Charles (1992: 697 - 698) also considers the meaning of Manorbier; he claims this means the "caput of an ancient territorial division." In conclusion, the Manorbier-Penally-St. Florence area is one of considerable interest, however the argument for a multiple estate here cannot proceed with certainty.

To his discussion of the place-name Manorbier Charles adds that the Old Castle, a promontory fort near Shrinkle, was the site of the llys of Aergol (otherwise Airhol Lawhir,) ruler of Dyfed in the sixth century and the donor of the lands in "charter" 125b. There is no certain evidence for this and Edwards and Lane do not include this site in their lists of definite, possible or negative early medieval sites (1988: 17.) Furthermore Doble (1971: 195) has dismissed Aergol as a "legendary figure." One site in this general area has produced evidence for early medieval activity. Longbury Bank is a definite early medieval site overlooking the River Ritec. Late fifth to seventh century pottery (including amphorae sherds) and glass, were recovered from a cave. They are presumed to have fallen here from an overlying ridge (Campbell: 1988: 88 - 89.) Although there were no visible surface features here speculative excavation revealed traces of structures, metal working debris and more early medieval material (Lane and Campbell, 1988: 22 - 24.) The only other excavated evidence for early medieval activity in the study area has been found at Drim Camp (in the extreme north.) The discoveries were unspectacular. Two building platforms lie with an Iron Age and Roman British enclosure. A post hole at the end of a timber slot aligned with one of these platforms yielded material which gave a radiocarbon date of AD 640 - 770 (calibrated and quoted within the 95% confidence level,) (Mytum, 1988: 68 - 69.)

Early medieval settlements.
Morphological study may offer greater opportunities for the discovery of pre-Conquest nucleations than the traditional approaches. According to Roberts's classificatory system (1987: 26 - 27) St. Florence is an irregular grid village with a small, peripheral green. Figure 3. The village lies on the edge of the River Ritec and the main routes running south from the village once forded the river; the route running east also forded the river close to the site of the mill. The westernmost route runs northwards towards Redberth whilst the other road runs parallel

Figure 3.

St.Florence In 1907.

The grid pattern is still
clearly visible.

Church

R. Ritec

0   100m

to it and together with east west roads give the village its gridded shape. Four roadways delimit the church and adjacent settlement whilst three roads and the river mark out a block of settlement immediately to the south of it. A triangular green fronted by the rectory and Glebe Farm stands at the northern end of the village; the tithe map shows that more settlement once stood close to the rectory, but has since disappeared, leaving only irregular surface traces and patches of nettles. Elsewhere in the world grid villages are thought to have originated in specific circumstances. In west Africa and in India it has been noted that once colonial rule was imposed native settlements changed their shape with "original, clustered, formless street plans" giving way to "grid iron patterns" (Hodder: 1979: 225.) It is possible that similar changes took place at St. Florence with a native, Celtic, bond community living in the area and working the estate lands which lay along the Ritec adapting to Norman colonial rule in this way. The exceptionally large number of gabulares or tenants owing substantial bond services here - thirty nine - in the thirteenth and fourteenth centuries (Rees, 1924: 144) is perhaps a reminder of the originally servile nature of tenure here in the pre-Conquest period.

The morphology of Castlemartin (the other demesne manor) does not conform to this grid pattern. It does however have a radial pattern, which has been stated to be characteristic Welsh form (see the discussion of Jameston and Jeffreyston for other examples and further discussion of this.) The principal elements of the contemporary village are the defended enclosure and the settlement which, including the new development of Lambton Court, clusters in front of it. Other properties lie on the northern side of the road leading west, where expansion has taken place from the late ninteenth century onwards. The church stands some distance from the village centre in a sheltered valley. Five roads converge a little east of the castle and the village pound stands at this junction. The morphology of Castlemartin may have changed in the medieval period; the years 1378 to 1386 (the minority of John Hastings, earl of Pembroke,) led to neglect of the manor and the wasting of some of the agricultural resources and of the manor house (PRO: C145/23/3.) Depredation may have taken place to the village too. Two platforms and two hollow ways lie at the southern edge of the village showing that at some time the village has been larger than its present extent.

It is proposed that, in the pre-Conquest period, the enclosure was the focus of the settlement. This circular, defended enclosure is of uncertain date and possibly has a prehistoric or early medieval date. There is no inherent reason why it should be solely a post-Conquest castle as many castles of this date utilised suitable earlier remains. Radiating from the earthwork were a number of strips, these are now most clearly visible on the northern edge of the settlement where recent building has not taken place. Figure 4. Once strips might have surrounded the whole diamater of the enclosure. It is possible that the pattern of radiating roads to the south and east preserve something of the pattern on these sides. The boundaries run from the edge of the earthwork out to a terminal boundary 200 to 250 metres away. This boundary runs beyond the limt of the strips on the west and south showing that strips surrounded at least a quarter of the

Figure 4.
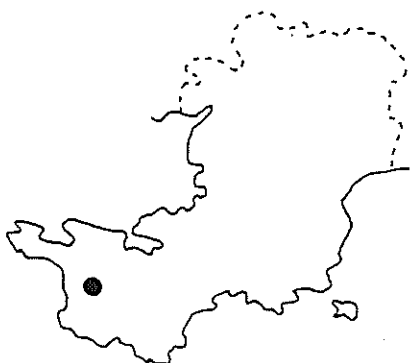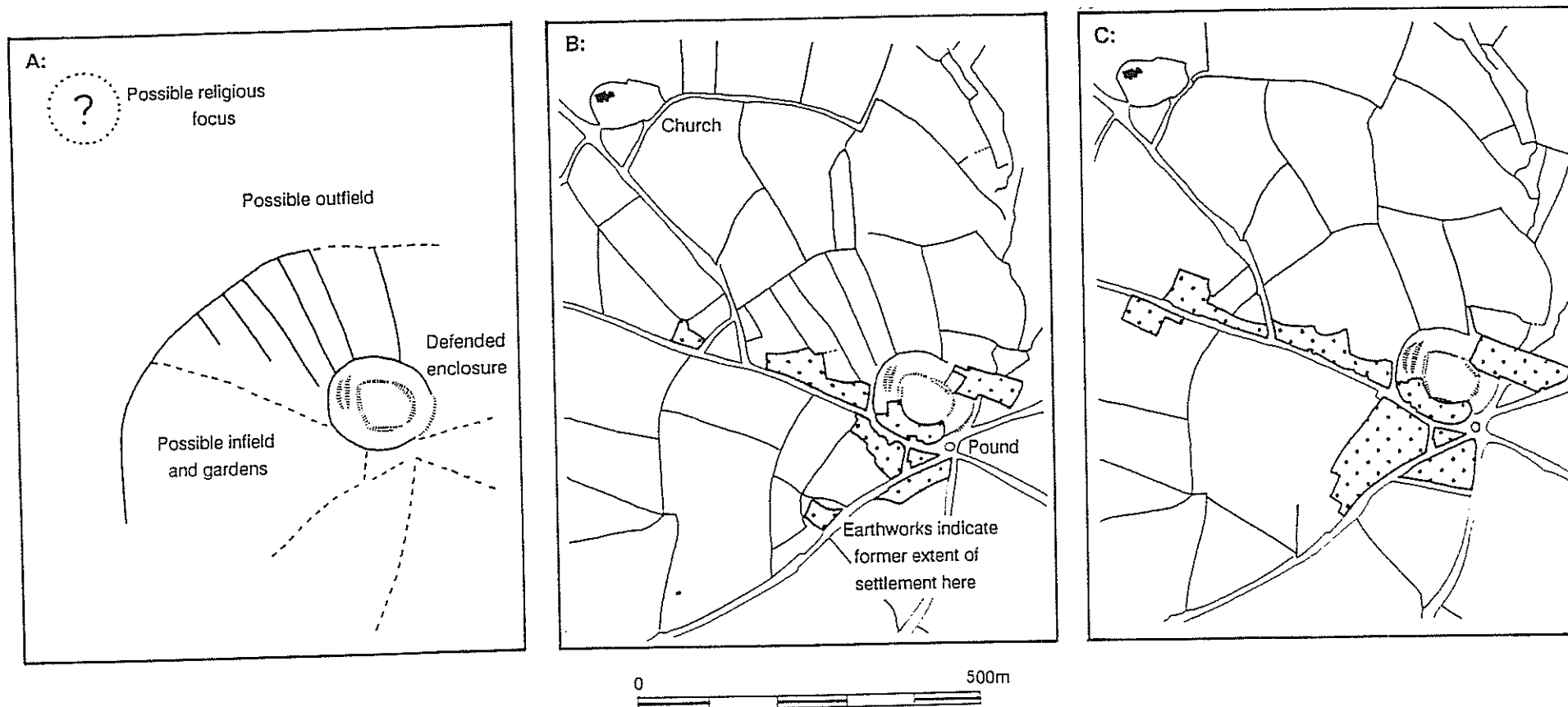
A: Castlemartin in the pre-Conquest period. Gardens and infield radiate from a central enclosure. Some boundaries are preserved as later field boundaries, others may have followed roads and tracks. St. Michael's Church may lie over an earlier religious site.

B: Castlemartin in the mid 19th century. Settlement is concentrated around the former enclosure and has shifted or shrunk since the medieval period as the presence of earthwork sites shows. Where there is no building north and north-west of the enclosure the earlier pattern can clearly be discerned; the major terminal boundary can be traced further west and south.

C: Castlemartin in 1970.

enclosure. It is likely that this boundary separated early in-field from outfield. Jones has noted that similar patterns can be found around settlements which were important centres of the early church (1972: 348) and this argument will be advanced for Jeffreyston, where the church stands at the centre of the village and where there is archaeological evidence for early Christian activity. There is no archaeological or documentary evidence for an early Christian site at the centre of Castlemartin. Indeed, as has been noted, the church lies some distance away from the village. The dedication of the church to St. Michael may indicate a tenth century foundation. The veneration of St Michael the Archangel was popular in Wales at this time. (Later dedications are known, however they reflect the position of St Michael as patron of high places and are therefore not found in valley locations.) In his evolutionary model for Llanynys, Jones pro-posed that a naturally high location was selected for an embanked enclosure, which became a place of burial and, eventually, the raised circular yard of a later church. If this sequence is tenable then Castlemartin seems at some point to have diverted from it and to have remained a secular enclosure with a separate focus for ecclesistical practices elsewhere.

St. Florence and Castlemartin share parts of their history and yet have quite different morphologies. Both were the demesne settlements of the lords of Pembroke, both had high populations of gabulares in the thirteenth and fourteenth centuries (Rees, 1924: 144) and both may have been the tir bwrdd of the Welsh princes. Yet it has been argued that St. Florence is an example a the grid pattern village and Castlemartin one where traces of a radial settlement have survived. It is not easy to reconcile the two. It is possible to speculate that the difference is be due to function and economic factors. The pattern at Castlemartin ap-pears to reflect an infield/outfield system suggesting an arable regime with flocks and herds kept largely for manure. At St. Florence the agrarian pattern may have been quite different, perhaps with an emphasis on pasture and animals being kept for meat, wool etc. Hence in the pre-Conquest period St. Florence may not have been a tightly-knit nucleation with all the houses gathered around the church. Instead it may have been a looser concentration, although one with a higher density of settlements than was to have been found elsewhere in the immediate vicinity. The Indian and African models, discussed above, saw nucleation in a grid pattern as replacing earlier "formless" patterns after Conquest and the subsequent imposition of colonial rule. If St. Florence was "formless" in the middle and late eleventh century, when Castlemartin was already a nucleation with a radial form, then their response to the advent of new Norman lords could have been quite different.

The origins of early medieval villages.
It is only possible to speculate on the reasons for the development of villages in this period. The reasons for the transition from an economy based upon the multiple estate to one based upon the village have been considered by H.S.A. Fox (1981: 99 - 101 and 1992.) He argues for a two-step model: as the multi-ple estate breaks up (for whatever reason) pasture and arable land are integrated with open-field agriculture as the result. This has to be done as individual vills lose either arable or

pastoral resources and aim to replace specialised production with diversification. The consequent division of the land into strips and the scattering of holdings leads to the development of a village at a suitable location.

Whilst there are circumstances in which this model is applicable; this author believes that there is another model which can help to explain village origins. Village economies are generally more productive than those based on the household. The domestic mode of production, as defined by Sahlins (1972: 41) is inefficient and suited only to economies where production is geared to satisfy wants and not to those that aim for maximum output. In certain circumstances leaders emerge who wish to change this system in order to increase production. One way in which this can be done is to make people work harder and it has long been realised that the way in which the workforce is organised is as important as its size in determining its capacity to produce more. This view is certainly found in the early works of Karl Marx written in the mid-nineteenth century, for example in his Grundrisse (nd.) If people are brought together into villages the workforce becomes easier to control and production can be increased. One circumstance in which this might happen is the emergence of a strong leader or a leadership elite. A Welsh prince or the head of a Celtic monastery are all suitable candidates here (as indeed at a later period will be a Norman lord.) The head of a religious establishment at Penally is known to have witnessed charters in the late seventh century: Guencat (or Gwengad) princeps Aluni Captis (Davies, 1979: 100.) His position, near the head of the witness lists, suggests a person and/or an establishment of some importance. The presence of a large community of dependent (ie unproductive) clergy and monks in the vicinity of Penally may have been the sort of stimulus required for an increase in agricultural production in the locality and hence village foundation.

There are no definite circumstances known to this author which would have made necessary an increase in agricultural production throughout the whole region. Further east this is not the case. The emergence of the kingdom of Glywysing, stretching from Gower to the River Wye, the coming to power of Meurig ap Tewdrig and the earliest imposition of royal taxes are all eighth/ninth century events (Davies, 1982: 101 - 103 and 130.) This author has based his argument for village origins in south east Wales on this serious of contemporary developments (Kissock, 1990b: 157 - 158.) In South Pembrokeshire the changes may have been more localised. The foundation of a religious establishment of some importance at Penally seems to have exerted a localised pressure bringing about change in this area.

Ecclesiastical settlements in the early medieval period.
There also appears to have been other ecclesiastical centres in addition to Penally. There is documentary evidence for Rhoscrowther as one of the seven bishop houses of Dyfed and physical evidence and morphological evidence for possible early Christian activity at Jeffreyston. Amroth may also have been a focus of early medieval ecclesiastical activity. According to the evidence of the late ninth or early tenth century lawbooks Rhoscrowther - listed as Llan Degeman - appears to have been the paramount early

Christian centre and the seat of the bishop whose diocese was coextensive with the cantref or kingdom of Penfro (Charles-Edwards, 1971: 251.)

At Jeffreyston the evidence is more equivocal. The churchyard is raised and - allowing for a late nineteenth century extension on the western edge - largely circular in shape. Both features are generally agreed to be indicative of early church sites. At least two early Christian monuments have been found here; this number increases if one believes the now lost fragments found to be from two separate stones rather than from the same one. The principal monument is a tall, narrow, rectangular slab or pillar-stone, decorated with an incised ring cross which has slightly splayed intersecting arms together with a distorted wheel and a narrow stem. This has been dated to the period c. 600 to c. 800 (Nash-Williams, 1950: 18.)

The morphology of Jeffreyston is most interesting. Figure 5. It is possible to discern amidst the contemporary boundaries traces of a radial settlement plan. The church stands at the centre of the settlement and close to it may have lain a small community of laymen, clerics or both. Unfortunately (but not unexpectedly) any traces of this settlement are likely to have been totally obscured by a millennium of successive building and rebuilding on the site. Around this nucleus there once would have been gardens and short strips arranged in a radial pattern. Similar forms are known elsewhere in Wales, for example at Llanynys in Clwyd and Llanfilo in Powys, where they are often found in those settlements which are thought to have been of ancient importance, perhaps settlements which acted as a focus for the wider community (Jones, 1972: 346 - 347.) The gardens are likely to have been heavily manured and may have formed the infield portion of an infield/outfield system. At Llanynys Jones considers that land arranged in this way was tir corddlan, a type of land which he considers to be found at the more important ancient settlements which served as focal points for the community (1972: 341 - 342.) This author believes traces of an early radial pattern have been preserved in the modern morphology and that therefore it is possible that Jeffreyston was a settlement, probably of ecclesiastical importance in the pre-Conquest period.

The churchyard at Amroth was once largely circular in shape too. Although it is now reduced to an almost triangular area, the original larger area is visible on the early twentieth century OS map. The tithe map shows that some of the larger, circular enclosure was glebe land in 1844 and it is possible that the fifty acres of Sanctuary land granted to the Knight's of St. John c. 1150 lay hereabouts. The churchyard cross at Amroth bears a plaque stating it dates to c. 900; there is no evidence for this.

Other locations were the focus of some religious activity too. The likelihood that Penally was once the centre for an early ecclesiastical community has been reviewed above. Although neither the church yard shape nor the church's dedication to St. Nicholas appear to be of historic importance there are four inscribed stones here, all of which are of relatively late date. The shaft of a free standing pillar-cross displays a remarkable blend of Irish and Northumbrian decorative motifs and is thought
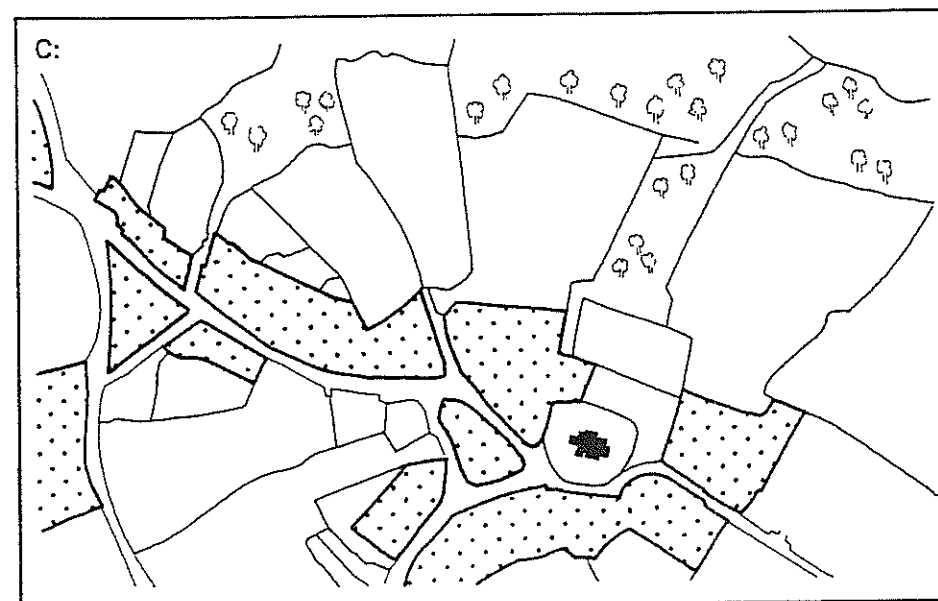
Figure 5.
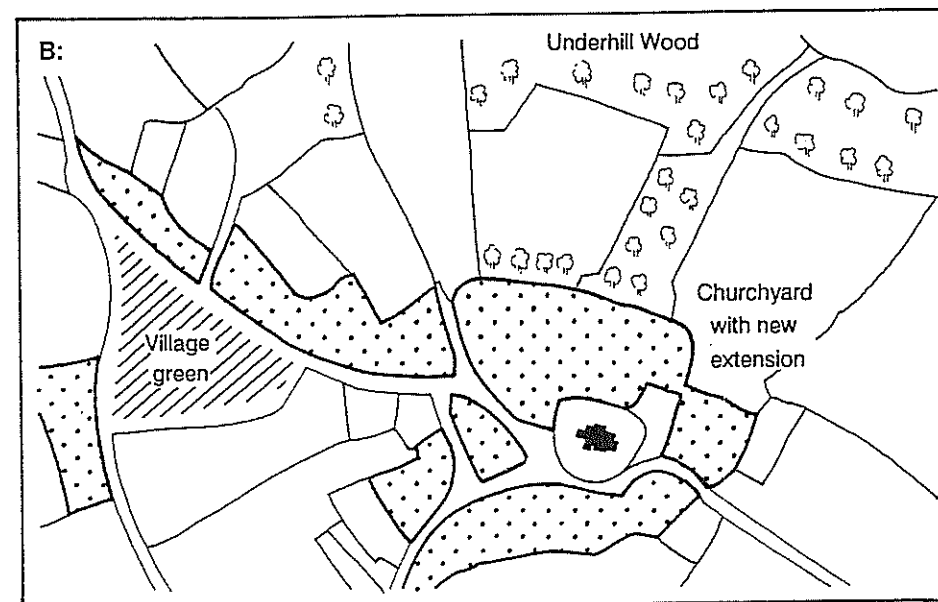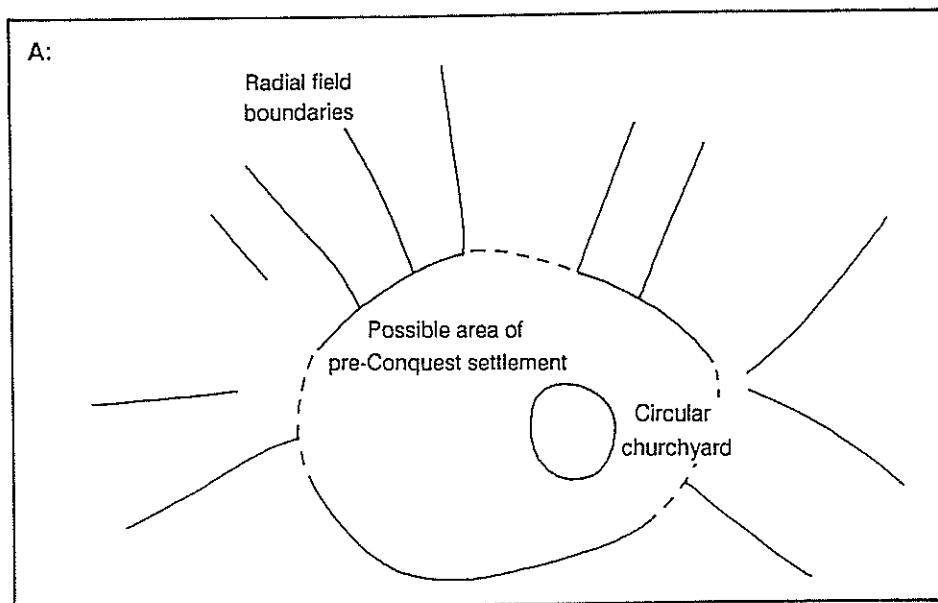
A: Tentative reconstruction of pre-Conquest Jeffreyston.

B: 19th and early 20th century Jeffreyston.

C: Modern Jeffreyston.

to date after c. 850. A beautiful free-standing monolithic slab-cross with a wheel head and decorated with vine leaves, beading and plait-work also shows mixed Celtic and Northumbrian influences and would appear to be of a tenth century date. A fragment of the shaft of a free-standing slab-cross resembles the first monument, but is a little later in date: early tenth century. The final fragment is now lost, but descriptions survive to show that it was part of a free-standing slab-cross which was decorated and bore a Latin inscription; this monument is also thought to be an early tenth century work (Nash-Williams, 1950:.) This concentration of monumental architecture serves to show that Penally was almost certainly an important ecclesiastical centre in the ninth and tenth centuries. It has been claimed that the church at St. Petrox, near Castlemartin, is a sixth century foundation (Baring-Gould and Fisher, 1907: 101 - 103.) There is no evidence for this whatsoever.

The morphologies of Rhoscrowther, Jeffreyston and Penally do not resemble those of St. Florence and little can be said with certainty about the nature of the pre-Conquest nucleations (if indeed there were any) at these three religious sites. In 1908 (when the second edition of the OS 25" county series map was made) Rhoscrowther was barely a nucleation. A large farm - Hilton - and a few cottages stood around the church and rectory. This pattern had not changed for two or three generations as comparison with the tithe map demonstrates. In recent decades the settlement pattern in this area has changed dramatically and further changes are in progress. When Texaco opened the oil refinery here in 1964 new houses were built at both the top and bottom of the hill to rehouse the farming families whose homes had been demolished to make way for the refinery. Following a minor industrial accident at the plant in January 1992 and local concern Texaco has agreed to purchase all the dwellings, rehouse the villagers in Pembroke and, then, to demolish the village. Jeffreyston and Penally are much larger than Rhoscrowther. The morphology of Jeffreyston and, in particular, the changes brought about by building on the village green will be discussed below. For the moment it is enough to say that the village shows no sign of a change of shape such as is argued for St. Florence. In 1887 on the first edition of the OS 25" map Penally is show as a "tightly knit" nucleation around the church and Penally House. The settlement is already expanding on the southern edge where the Crown Inn and the Congregational chapel make unlikely neighbours; further expansion took place in the mid-twentieth century and a ribbon development runs uphill to the north of the village. Like many coastal villages in south Wales large areas of land have been lost to wind-blown sand, most notably in the sixteenth century. It has been argued that Penally's open fields were lost in this way (Walker, 1991: 153.) This may have lead to changes in the settlement pattern which later maps and documents do not reveal.

Any examination of the morphology or archaeology of these sites with the aim of determining the location of the original monastery is doomed from the outset. A pre-Conquest monastery should not be confused with a post-Conquest one. Celtic monasteries were not always communities within a large complex of buildings, as for example a later Cistercian or Benedictine foundation

would have been. Some Celtic communities were bodies of people with a framework of shared beliefs and spiritual identity. Searching for the site of a monastery is likely therefore to be a fruitless activity (especially when the invisibility of all sites of this period is remembered.)

Early medieval field patterns.

The relationship between fields and villages at two locations - Jameston and Templeton - leads to the suggestion that these field systems pre-date the villages (Kissock, forthcoming.) Templeton is a post-Conquest planned village which will be discussed in considerable detail in the next section, for the moment however it is worth noting that the field boundaries on the western side of the village run up to the boundary bank along the edge of the village and then appear to "disappear" under it. This is most noticeable just north of Sentence castle where the village boundary runs north south and the field boundaries run at an angle of 30 degrees to this. A similar pattern can be found at Jameston (selected features of which are also discussed below.) If as will be argued Templeton was founded c. 1100, then it would appear that the field boundaries are an earlier and perhaps a pre-Conquest feature. Throughout a large part of the parish of Manorbier the field boundaries run in a north south direction down from the Ridgeway towards the coast. Jameston lies in the centre of the parish and the pattern of these long boundaries "breaks" in the vicinity of the village. Adjacent to the village the boundaries lie at a variance of 150 degrees to the prevailing north south trend. It is impossible to tell whether the village and some of its boundaries have been inserted into an earlier landscape or if the north-south boundaries have been laid out around a pre-existing village. Selected excavation at the junctions of the two sets of boundaries at each location could be a worthwhile exercise, revealing further details about both the relative and perhaps the absolute chronology of these features.

Summary.

Presenting a general overview of the landscape of South Pembrokeshire in the years immediately prior to the Norman Conquest is not an easy. Evidence - archaeological, historical and historico-geographical - certainly exists. However much of it is imperfect and it is unevenly scattered over six centuries. It has been proposed that the majority of the study area was divided into two commotes: Manorbier and Coetrath. Each commote was further divided into multiple estates. Some of these - perhaps Castlemartin and St. Florence - were bond vills, whose labour was forced to work to support the king and his dependents. The evidence for settlement is based in part on later tenurial and morphological patterns. There is no excavated evidence for settlement at either site. Other centres had a religious function - notably Rhoscrowther and, as perhaps did, Jeffreyston and Amroth. The region around Penally, almost certainly another major religious site, seems to have been one of considerable importance: a settlement site has been found, other settlements are mentioned in documentary sources and the quality of early Christian monuments here is unsurpassed in the study area.

Bringing all this material together into a coherent whole does not seem to be possible yet. It is certain however that some

of the settlements of South Pembrokeshire predate the Norman Conquest. It is in the eleventh century - and especially from the fourteenth - that the picture becomes more certain. In moving forward into this period it must be remembered that much of what will be seen will not be new, rather a development onwards from an as yet unclear past.

II: Conquerors and colonists: the settlement pattern from 1093 to c. 1300.

The establishment of the villages of south Wales is usually, if not always correctly, attributed to the Norman conquerors. After the Normans had seized what is now South Pembrokeshire there began the process of anglicisation which in a few decades changed the nature of the region irrevocably. If the ideas set out above are correct they would have taken over a landscape which was, in part, farmed by settled communities living in small nucleated settlements. The remainder of the rural landscape was drastically remodelled by the deliberate settlement of a large number of colonists in the villages and farmsteads of the newly created manors. To this landscape the Normans added de novo castles, boroughs and religious establishments based on Latin (rather than Celtic) principles.

The first Norman incursions into Dyfed were began in 1093 by Roger of Montgomery, earl of Shrewsbury, and William fitz Baldwin, sheriff of Devon. Although the first advances were easy, the Welsh soon regained the offensive and from 1094 onwards there was an uneasy balance as first the Normans and then the Welsh periodically gained and lost the upper hand. South Pembrokeshire was seized by Arnulf de Montgomery. Like many a marcher lord he held land in England too and, having established his claim in south west Wales, he departed to search for other opportunities. The task of consolidation the conquest was left to local magnates; prominent amongst whom were members of the de Barri, de Brian, fitz Gerald and fitz Martin families (Rowlands: 1980: 145.) Their first task was to defend what they had gained. This was done in several ways: castles were built, settlers brought in to exploit - and if necessary fight to retain - the newly-won lands and defensive strategies sought.

Post-Conquest planted settlement.
It is probable that a proportion of these early settlements were deliberately planted. Planted villages are a common phenomenon in many parts of the world. They exist in many countries which were recently settled by migrants from the Old World, for example in Australia, Germanic communities established regularly laid-out, linear villages in the Barossa Valley north of Adelaide (Young: 1987: 302 - 303.) This recent migration and subsequent village planning can be mirrored in historical contexts. In the twelfth and thirteenth century settlers left the Germanic lands in search of new opportunities in the Slav territories of eastern Europe. The villages planted in the areas along the Baltic coast and in the Ordensland of Prussia were virtually identical to those founded seven centuries later on the other side of the world: regularly laid out, linear settlements (Mayhew: 1973: 51.) It seems appropriate therefore to search for villages of a similar shape in Pembrokeshire. The second editions of the County

series of the OS 25": 1 mile maps, drawn mainly in the first decade of this century, show in an accurate and standardised form, the lay out of all villages. The shape of these can be analysed using the principles set out by Brian Roberts (1987: passim) in order to determine where there are regular villages. Once this has been the study of other material can cast further light on the circumstances and methods of village plantation and foundation.

A study of village morphology has shown that the focus of village plantation was not in South Pembrokeshire, but further north. It appears that Henry I deliberately encouraged the settlement of communities of Flemings along the English-Welsh border zone c. 1110. These communities were brought to the area by leaders, known as locators. They were settled in planted villages, for example Letterston, and in some places offered advantageous tenures, often the same as those enjoyed by burgesses in towns. The Flemings were planted in this area probably in order to strengthen a border left vulnerable by the flight of Arnulf de Montgomery and his followers. They had backed the "wrong" side in the Belleme rebellion of 1102 (Kissock: 1992: 39.) The earldom of Pembroke was forfeit to the English crown from 1102 until 1138 and during this period Henry I may have taken the opportunity to seize certain properties. The Benedictine Priory of St. Martin de Sees had been granted twenty carucates, a church and certain rights over lands adjacent to the tidal confluence of Pembroke River and Monkton Pill, close to the town itself. This grant had been made by the de Montgomery family and thus the monastic endowment was not considered inviolable by the displeased monarch. Place-names such as Kingswood, Kingsfold and Kingston are common in this area and are likely to indicate lands which were formerly part of the monastery and which transferred to royal control at this time. Like many a Benedictine house Monkton rented out its lands in the same way as a secular landlord would have done and a village would have developed close to the Priory. Although much building has now taken place in the area it is possible to determine the core of this village around Monkton Lane and Back Lane on the early OS 25":1 mile map. The narrow, thin plots of the medieval settlement differ clearly from those of their broader, shorter and more recent neighbours.

The influence on the Crown on the settlement pattern of South Pembrokeshire should not be overestimated and it is to Arnulf de Montgomery's tenure of the earldom that historians should look for the second stage in the genesis of the medieval settlement pattern. Hence the focus of study must move back a little to the last decade of the eleventh century. De Montgomery was the first Norman earl (or perhaps just lord) of Pembroke. He appears to have planted villages here and also in east Yorkshire, where he was lord of Holderness. Clear examples of regular layouts can be found at Angle, Cosheston and Templeton. Some suggestion of regularity can be found in the plans of Llawhaden, Robeston Wathen, Hodgeston, Rhoscrowther, Carew Newton, Redberth and Reynalton. The original plan at Angle and that at Cosheston are very similar. Plots, usually of equal width, front a single street and behind them lie long, narrow pieces of land which often stretch for a considerable distance. Their plans closely resemble that of Letterston, a more northerly planted village.

The plans of all three are very similar to that of villages such as Sneaton in Yorkshire. Although both Angle and Cosheston lie on slopes, close to the sea no account seems to have been taken of these factors in their original morphology; in fact their layout could be described as "terrain oblivious." The close resemblance of the plans of some of the South Pembrokeshire villages with some of the Holderness ones can be used to argue for the foundation during the period when Arnulf de Montgomery held both areas. He became earl of Pembroke in 1093, lord of Holderness in 1096 and held both titles until his banishment in 1102.

Determining which elements are planted at some of the other villages is difficult. The mixture of planned, unplanned and just plainly confusing elements justifies their position on what Roberts has (borrowing a term from soil science) termed the catena. This is the liminal zone where two or more of the types of village within his grid merge (Roberts: 1987: 24.) Roberts himself places Hodgeston in this category by stating that it may have had a planned row (1987: 199.) In fact all three rows show some possibility of having been planned, though Roberts is probably referring to the one that runs north south adjacent to the moated site. The two rows, which in the early twentieth century made up Redberth, also display the possibility of a planned origin. As do the rows at Reynalton, Llawhaden and Robeston Wathen. Both Carew Newton and Rhoscrowther have a peculiar shape: short, possibly regular rows are grouped together to give the settlements a "square" appearance.

Some examples of post-Conquest planted settlements: 1 - Templeton.

The most clear-cut example of a planted village is Templeton near Narberth. The current morphology of Templeton is relatively recent. Figure 6. However it is possible to use the 1901 OS map as the starting point for a reconstruction of the earlier plan. The first stage is to allow for the construction of the railway. The line of the railway and all plot boundaries which abut, but which do not run under it are excluded. This reveals one large plot at the northern end of the eastern row. At the southern end, where the church now stands, there was another plot. This gives a total of twenty plots. The reconstruction of Templeton reveals something of the design of the planned village. A modular unit of two thirds of an acre appears to have been used. Five of the twenty plots have an area of two thirds of an acre, four of one and one third acres and three of two acres. All these plots lie together in a row along the western edge of the village. The existence of plots which are twice and three times the modular size suggest that plots have at some time been amalgamated. There is some documentary evidence for this. In the late thirteenth century Sarah and Walter Cole acquired two adjacent burgages between the plots of Robert le Skynnare and Philip Heylot (National Library of Wales: Slebech Ms. 486.) This may have been one of a series of transactions which led to a reduction in the number of plots from an original thirty one. The ability to perform a transaction of this type suggests that Templeton might have been in decline in this period, a time which is generally thought to be one of rising population. The agricultural depression of 1314 to 1321 and the plagues of 1349 and the 1360s could only have made the situation worse and increased the

Figure 6.
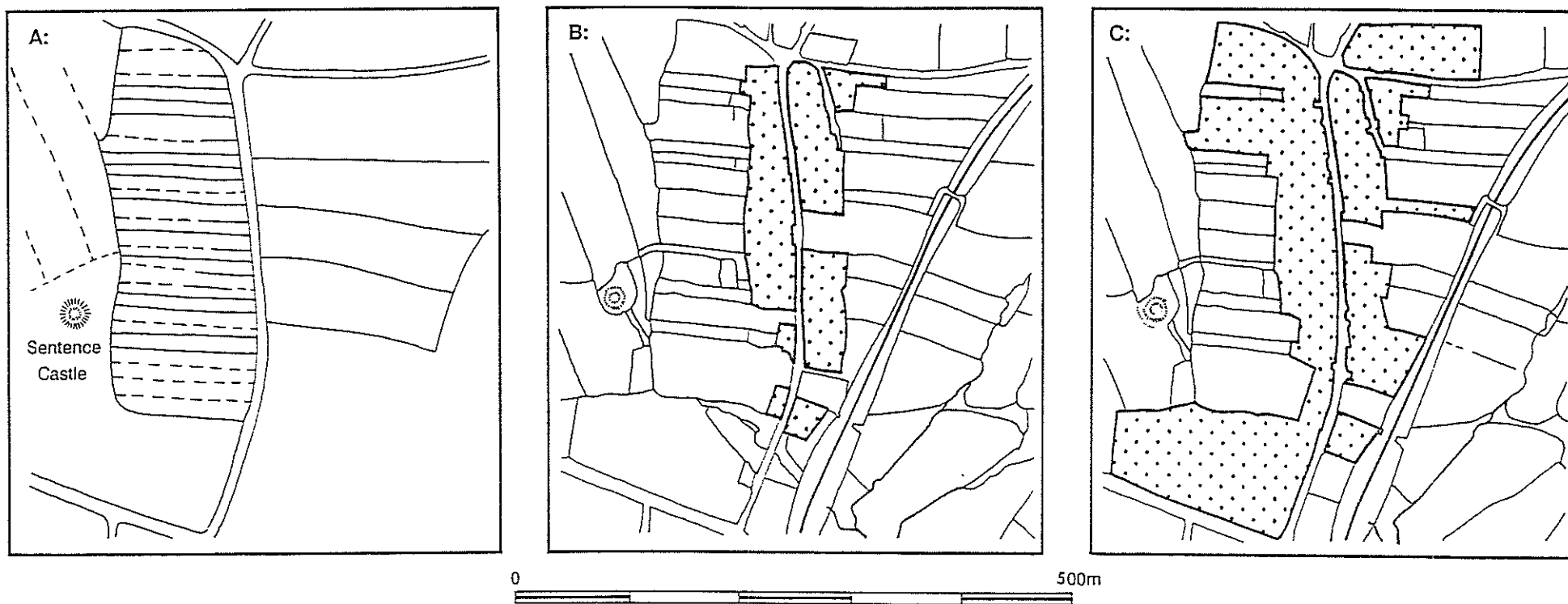
A: Templeton in the immediate post-Conquest period. 26 small and 4 large plots lie along the main road, Sentence Castle lies further west. A possible coaxial field system of an earlier date apparently disappears under the planted village.

B: Templeton in 1901. The basic plan is still clearly visible despite increased building (stippled areas) and plot amalgamation.

C: Templeton in 1993. The density of building has increased considerably and very few opportunities remain for the examination of earlier street frontages.

opportunities for plot acquisition and amalgamation. The name Templeton clearly suggests a link with the Knights Templar, yet nothing is known of this. In his history of the Order in Wales Rees dismiss Templeton as a "hamlet" (1947:32) and the library of the Order holds no material whatsoever on the settlement (Willis, 1993: pers. comm.)
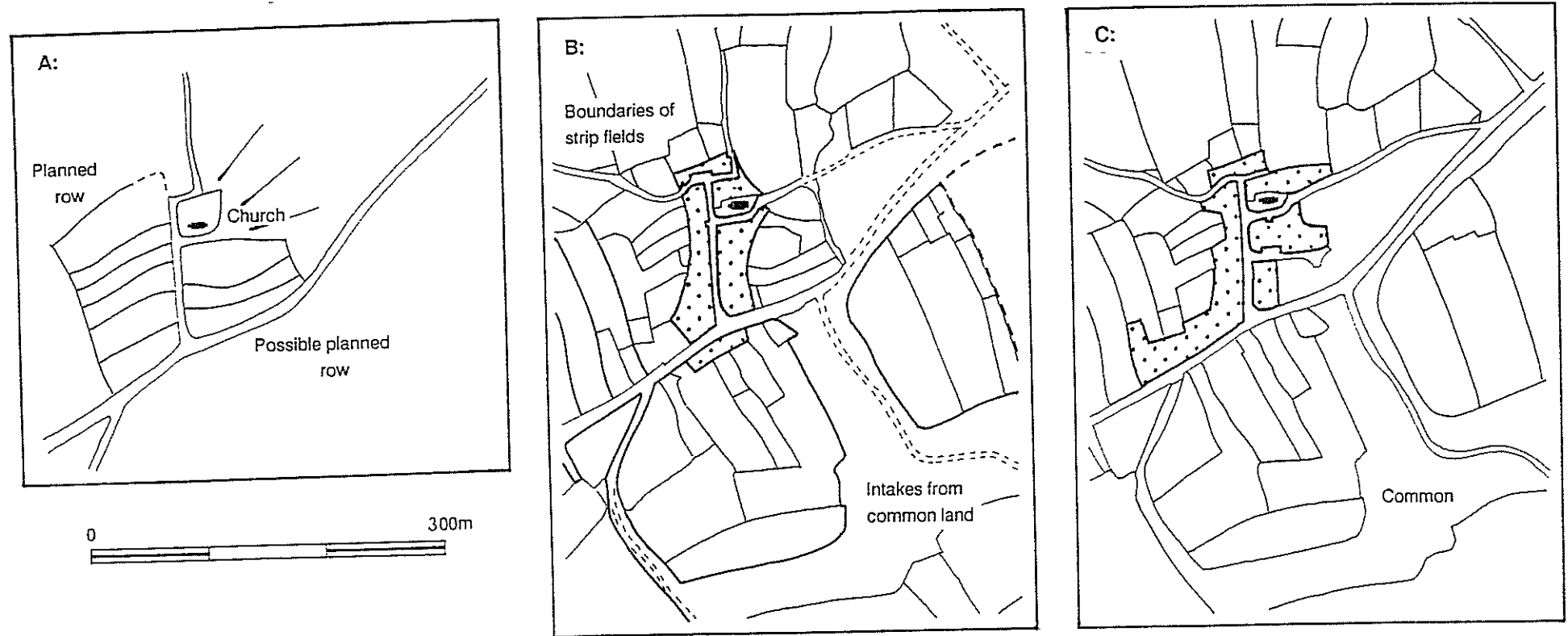
2 - Redberth.

Redberth was also founded by the Knights Templar and, although much smaller than Templeton, it too has a regular morphology. Figure 7. Redberth lies just off the main Carmarthen-Pembroke road, close to what is likely to have been the frontier of the lordship in the thirteenth and fourteenth centuries. Eight plots lie either side of a north south street with the church and, now, a Methodist chapel occupying the north eastern corner where the land slopes quickly away from the village. The village was once surrounded on three sides by extensive open fields; the distinctively curved strip boundaries are preserved in the contemporary field boundaries. On the opposite side of the main road from the village there was once a tract of common land. This has been enclosed, probably in several stages, with dwellings having been built here. This process could have taken place at any time between the sixteenth and nineteenth centuries. A small row of houses stood opposite the core of the village here in the early twentieth century, but it has since disappeared.

3 - Angle.

Angle is a planned village which appears to have shifted eastwards towards the principal manorial centre and the coast. The tenurial history of Angle is not straightforward, it is possible that at least two manors existed within the parish along with perhaps three ecclesiastical holdings (one of which was an alien priory.) Detailed morphological analysis shows that the village once lay further west and was probably restricted to the northern side of the street. Figure 8. On the southern side the curved shape of the boundaries suggests an area of open field. To the east of planned element and separated from it by a short distance lay the church, a castle and a rectory (also fortified.) Groups of high status buildings standing away from villages have been noted elsewhere in Pembrokeshire (at Letterston, for example) and in northern Britain (Cumwhitton, Cumberland.) The term "magnate core" is proposed to describe this phenomenon. As the focus of the village's activity has moved eastwards towards the natural harbour formed by the tidal mudflats on the western edge of Angle Bay so settlement has concentrated in this area. Originally this secondary settlement was limited to the southern side of the street. Opposite some of this newer development and immediately outside the planned area lies one site which requires further investigation, perhaps by means of a geophysical survey. This vacant plot contains clear traces of one house platform, with possible evidence for a second, separated by a small hollow way.

The present road leading down to Angle is relatively new. The war-time construction of an airfield forced the closure of the old road which lead towards The Block House and thus via North Studdock Farm to the village centre. However there has been no change to the point at which the main road enters the village

17

Figure 7.

A: Possible reconstruction of 12th century Redberth.

B: Redberth in 1907: village core, intakes from common land (perhaps of 17th-18th century date) and preserved boundaries of strip fields.

C: Contemporary Redberth.

Figure 8.
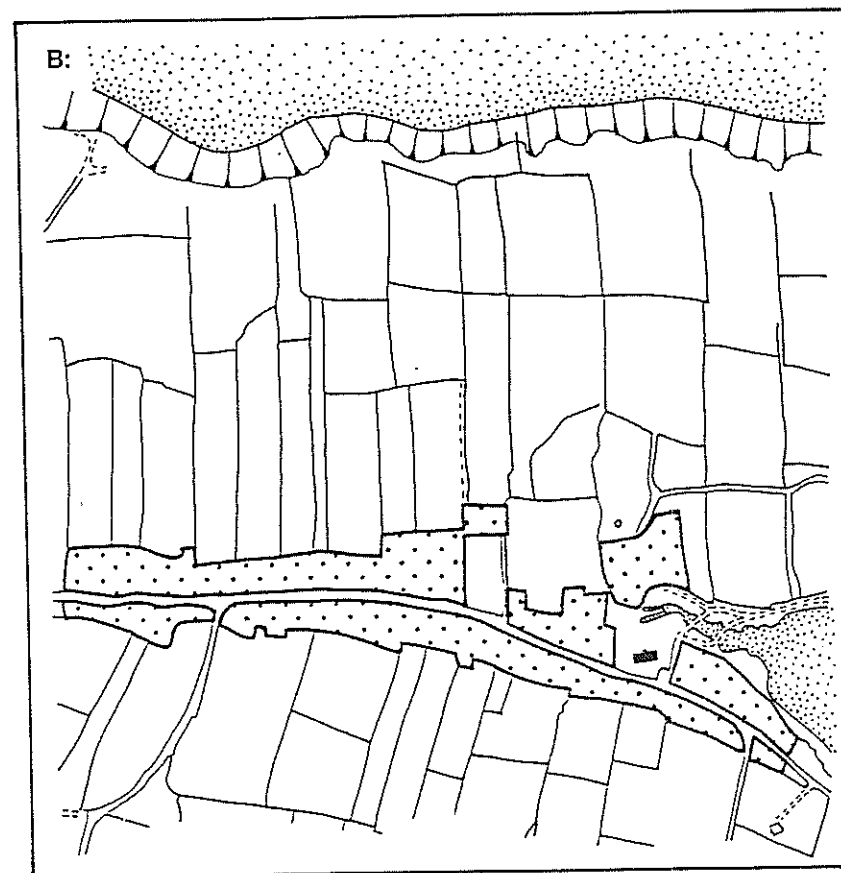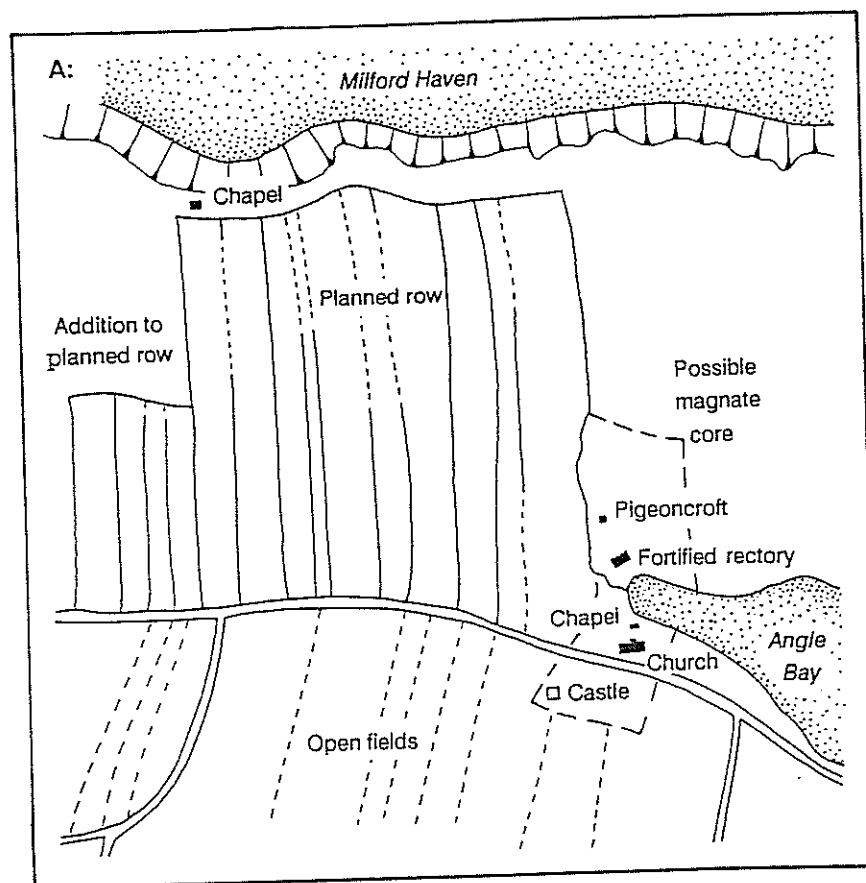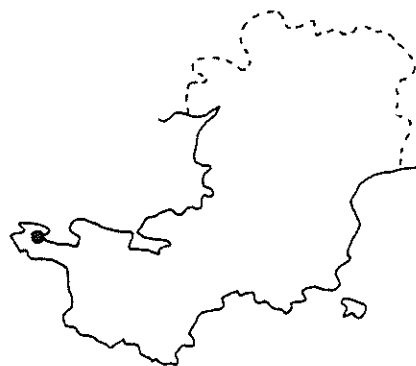
A: Possible reconstruction of 12th century Angle.

B: Contemporary Angle.

C: Possible shift of magnate core as a response to village growth.

Labels within A:
Milford Haven
Chapel
Planned row
Addition to planned row
Possible magnate core
Pigeoncroft
Fortified rectory
Chapel
Church
Angle Bay
Castle
Open fields

0 — 300m

Labels within C:
North Hill
Angle village
Early magnate core
Later magnate core
0 — 00m

or to the linear shape of the village itself.

Post-Conquest manorial villages.

The planted villages such as Templeton and Angle ought to be contrasted with a typical manorial village. Unfortunately there would appear to be no such thing! Some settlements have Celtic antecedents, others do not; some (notably those on the coalfield) changed out of all recognition as the population grew in the early modern period, others remained much as they had done before. No two villages occupied the same location and hence the resource of no two villages was identical. Nevertheless in order to give as full a possible a picture of the medieval settlement pattern it is necessary to select and describe other settlements. Warren and Loveston were, and are, two small villages and it is possible to reconstruct something of their medieval setting.

Warren lies deep in the Castlemartin Peninsula, about three miles inland. The quality of the land in the area is generally excellent. It is mainly grade 2 with some grade 3 on the northern edge. In the medieval period the manor of Warren was owned by the Bishop of St. Davids and the Black Book records that six virgates (180 customary acres) of land grew corn and ten acres were rented as pasture. Unfortunately maps record nothing of the early field patterns of the area, although the placename Butts is known (Charles, 1992: 741.) The village comprised three farms and a few cottages probably then, as now, grouped around St. Mary's Church (now renovated as the German garrison chapel for Castlemartin range.) The records make no mention of a mill, but the name Windmill Lane is given to the road running north from the village. Examination of the fields along this route have however revealed no trace of a mill mound. Loveston lies in the centre of the study area. It lies in a pocket of grade 3 land surrounded by grade 4. Three main farms and some smaller dwellings surround St. Leonard's church to form a linear settlement. There are no early documentary sou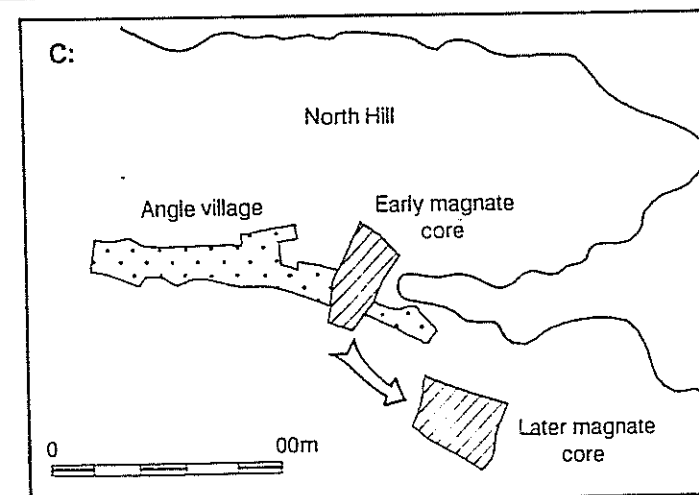rces for the economy of Loveston. The poor quality of the ground suggests that pastoral farming may have been a dominant factor. The placename Splots indicates wet pasture land (Charles, 1992: 508) and the placename element meadow is regularly found. Loveston had its mill too. Across a footpath from the church a water mill ground the community's corn.

Stability in change in village plans.

The possible role of Jeffreyston as an early centre of the Christian church has already been discussed and morphological change - in the form of the expansion of its churchyard - was alluded to. Another important change took place in the decades between the making of the tithe map and the second edition of the OS 25" map. A village green has been enclosed and built upon. This green lay a little west of the church, it was triangular in shape and roads ran along two of its sides. The road along the southern edge has disappeared and Croft Villa stands close to where it met the road along the north western edge. A disappeared green might also be a feature of Jameston. Here the centre of the village had, in the early twentieth century, a fragmented appearance, groups of two or three buildings stand close together, separated from other groups by small roads which turn at awkward angles. When all these are taken together a block, approximately rectangular in shape, emerges. It is possible that this area was

once a green on to which the four rows which make up the rest of the settlement once faced. Figure 9.

The last paragraphs have concentrated on village change; building on greens, expansion and settlement shift and the amalgamation of plots are all themes which have been described. If all settlements had changed to this degree then the morphological analysis outlined earlier would not have been a valid procedure. Rather than outlining the history of the conquest and settlement of the region in the medieval period it would have been an exercise in describing nineteenth and twentieth century development. Thankfully there is evidence to show that not all settlements have changed. Surveys of Templeton made in 1532 and 1609 (PRO: SC6/HenVIII/5262 and LR2/206 respectively) show relatively little change in the period between then and 1901. After the execution of Rees ap Griffith in 1531 his lands remained in Crown hands for over seventy years and during this period the two surveys were made. These can be used to argue for morphological stability from at least 1532 onwards.

The economy of the post-Conquest village.

In the fourteenth century historical sources which can be used to describe and analyse the settlement patterns become more plentiful. Three important documents are The Black Book of St. David's (a survey of the lands of the diocese, made in 1326) and the extents attached to the inquisitions post mortem of Aymer de Valance and Sir John Carew, made on 20 August 1324 and 28 August 1363 respectively. The first source provides plentiful economic information: tenants' obligations, crops grown and rents received are amongst the minutiae detailed. Economic data can also be gained from the two extents, this is in addition to the material they contain of a military nature. Archaeological and topographical material can be added to the economic data to gain a fuller picture of medieval agrarian life in this area.

The Bishop's estates at Llawhaden included two gardens with fruit, herbs and vegetables, a corn and fulling mill along with a fishery, 315 acres of arable land (lying in strips) producing buckwheat, beans, peas, barley and oats and 15 acres of meadow. The need to plough, harrow and make hay for the lord is specified amongst the tenants' services as is the requirement to pay taxes on beer brewed and flocks of sheep grazed on the lord bishop's pasture. The mill at Llawhaden stood on the valley floor, a leat (now dammed - but with its course still clearly visible) took water from the Cleddau to power it. In the early twentieth century this was the flour mill. The location of the fulling mill remains at present uncertain, but in 1815 the place-name Tucking Mill Ham was accorded to a field further along the valley floor close to the ford on the track between St. Kenox and Robeston Wathen at or about SN 076164 (National Library of Wales: 14299.6.) The fishpond may have formed a part of the mill complex (see the Luttrell Psalter for an example of this) alternatively the name Fishpond Meadow, found north of the village near Little Holgan, might indicate its site. At Lamphey there were three orchards and gardens, a dovecote, two water mills and a wind mill, a park with animals for the chase and underwood which could be gathered and sold and four viuaria (vivarium: fishpond.) Medieval Canon law demanded lengthy periods of fasting and absti-

Figure 9.

A: Pre-20th century Jameston. A limited amount of settlement (stippled) surrounds a village green (shaded). Boundaries diverging from the north-south axis of the field system are visible north and south of the village (bold).

B: Contemporary Jameston. Expansion of the built area has obscured the green. Field patterns to the south of the village have changed considerably - few of the former radial boundaries are visible here.

nence from meat, hence fish would have been an important food source for an episcopal household. Both watermills stood on the upper reaches of the Pembroke River, one quite close to the palace, the other further west. The fishponds are also likely to have been on or near the river, perhaps in the meadow close to the location of the modern sewage farm. The windmill seems to have lain much further south, on the outskirts of the recent expansion of the village. The bishop's demesne comprised just over 426 acres of arable, there was sufficient meadow land to graze 32 gross' au'ia (?cattle; averia: draft animal) and enough summer pasture for 500 sheep and winter pasture for 600. Much less is known about the estate at Warren; ten acres and six virgates (180 customary acres) of land grew corn and rents on pasture produced £8 13s. 3d. The picture presented by the Black Book is one of a mixed economy of arable and pasture lands, which were to an extent interdependent; for example the 100 "extra" sheep which could be grazed on the stubble of Lamphey's arable fields. Orchards and gardens were maintained, wood and waters exploited. Fish and fowl formed part of the diet, as did cattle and mutton; the former also providing traction, the latter wool which was processed in the manor, and presumably, then sold.

The inquisition post mortem of Aymer de Valance provides virtually contemporary data for the resources used on some of the lay manors in the study area (PRO: C 134/84 and 85.) The manor of St. Florence was worth £33 14s.; this was derived from rents charged on arable and pasture (which included meadow, marshland and rough grazing,) the farm of a watermill and rents on other properties. The accounts of the demesne manor of Castlemartin can be broken down to show the relative importance of various elements in the manorial income:

Income of the manor of Castlemartin, 1324:

Rent derived from a capital messuage	1s.
Two carucates of land at 40s. each	80s.
Fifteen acres of meadow at 1s. per acre	15s.
Three hundred acres of rough pasture at 2d. per acres	50s.
Farm of two mills, one water, one wind	180s.
Rent of a wier attached to the mill	6s. 8d.
Fixed and certain rents	85s. 4d.
Profits of the court	60s.

	£25 6s.

A breakdown of the accounts shows that the farm of the mills was by far the largest element in the manorial income. They accounted for 36% of the total. Arable and pasture land were worth almost

equal amounts: 16% and 15% respectively. However there was probably more pasture than arable: 315 statute acres compared with 240 customary acres (a carucate is equal to 120 customary acres.) The low value of the pasture was in part due to the nature of the Corse, which is described as being "always wet" (semper aquosa.) Other rents and the profits of the court made up almost another third of the manor's annual income, with smaller amounts coming from the rent of the manor house and a wier.

The rent charged for the capital messuage is by no means unusual; yet it was a structure of some quality. Neglect in the years between 1378 and 1386 lead to the drawing up of a valuation and description of the building,
"Manor of Castlemartin ... The doors and windows of the hall are broken and carried away, value 40s. The posts, beams, spars and walls of the hall are decaying for lack of roofing, damage £8. The doors, windows, glazing and iron bars in the chambered annexed to the hall at the upper and lower ends are broken and carried away, damage 20s. The beams, planks, posts and spars in the said chambered are injured for want of roofing, damage £9. The doors and windows in the pantry, buttery and kitchen are broken and carried away, value 40s. The walls, posts, beams, rafters and spars there are injured by rain for lack of roofing, damage £8 ... There was a warren there stocked with rabbits worth 60s. yearly net, it is now completely destroyed and valueless, damage £30." (PRO: C 145/23/3.)
The survey of the Forest of Coetrath (from the same source) provides a contrasting picture. Agricultural land does not provide most of the revenue. The exploitation of woods, coal and turf are listed as worth 13s., 16s. 4d. and 6s. 8d. respectively. The nature of the coal deposit is uncertain the document refers to both a mine (fossatum) and to sea coal (mineria carbonum maris.)

Military factors and the post-Conquest settlement pattern.
The inquisitions post mortem also provide information in the form of lists of knights' fees which can be used to speculate on the preparations taken for the defence of the Lordship should the need arise. As one would expect in any fourteenth century list of knights' fees fractions - usually halves, tens and twentieths - predominate. Yet the de Valance inquisition of 1324 begins by listing three groups of five lordships: Carew, Manorbier and Stackpole together with a pair of knights' fees at Cosheston. With the exception of Stackpole, the remaining groups of fees all lie adjacent and at the inland edge of the core of the Lordship. In the fourteenth century the lands around Carew formed a distinct identity: the barony of Carew. It can be proposed that a similar system of organisation was in operation at Manorbier (the manor of this name encompassing both the parishes of Manorbier and Penally) and Cosheston, with the named tenants responsible for providing between them twelve knights with their retainers and equipment for the defence of the lands behind them. Between and to the east of Carew and Manorbier lay the demesne manor of St. Florence and the Templar manor of Redberth, thus making a defensive chain which runs from Pembroke to Tenby. Figure 10.

Further north their lies another group of estates which may

Figure 10.

Legend:
- Demesne lands
- Baronies
- Lands of the Knights Hospitaller and Knights Templar

Slebech

Templeton

Amroth

Forest
of
Coetrath

Redberth

Barony
of
Carew

Cosheston

Pembroke

St.Florence

Tenby

Barony of
Manorbier

Castlemartin

0   10km
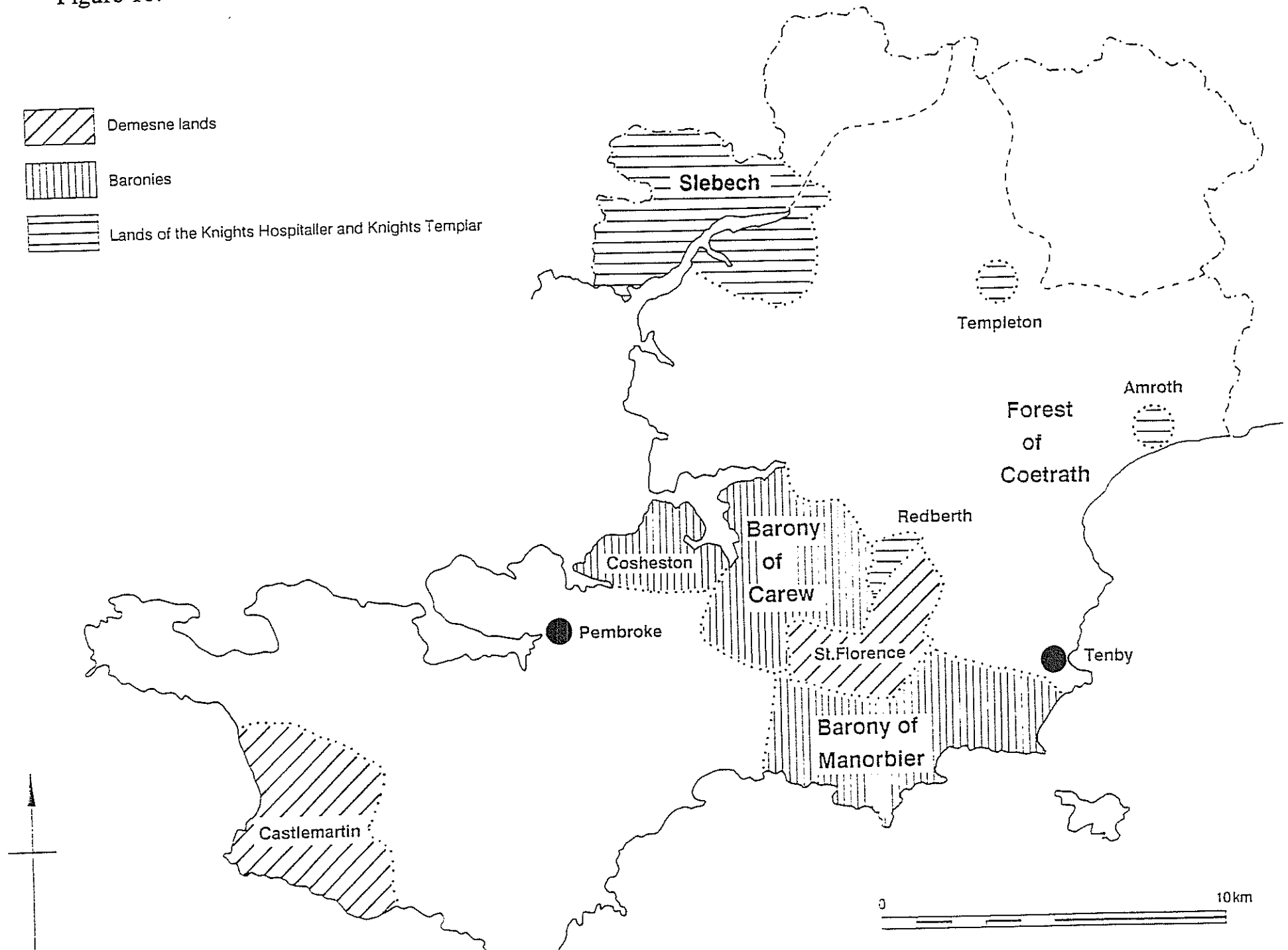
perform a similar function. Both Slebech, on the Cleddau, and Amroth, on Carmarthen Bay were held by the Knights Hospitaller. Equidistant between them that veritable medieval "frontier force" the Knights Templar held Templeton. Both dated grants are relatively earlier in the history of the earldom: Amroth perhaps as early as 1140 (Rees, 1947: 108.) The early history of the Slebech estate is confused, Rees reflects this confusion by giving a variety of dates for its foundation (compare Rees, 1947: 26 - 28 with 108.) More importantly he associates the foundation with Wizo princeps Flandrensis. A man whose duties this author has argued (1990b: 235 - 236) included the defence of the frontier. These duties were inherent in his position of locator, a role which involved deliberately founding villages in this frontier area.

The 1338 accounts for the Commandery of Slebech have survived amongst the muniments of the Order preserved in Malta (Larkin, 1857.) They list incomes and expenditures in the usual way. Most of the Order's lands, which covered an extensive area stretching across the tidal reach of the Cleddau to Minwear and Canaston, were rented to tenants so that monies might be raised to support the Order's crusading zeal. There were also two mills on the estate together with a third at Minwear. Amongst the officials receiving income from the knights were a fisherman and boy (pistoris cum garcione) suggesting that either the river or man-made pools were being exploited for fish. Nothing now remains of either the Commandery or the adjacent village. The Commandery is likely to have comprised a great hall, dormitories, guest rooms, servants' quarters, cellar, a buttery, a brewhouse, granaries and other farm buildings. The nearby village would have comprised the usual range of domestic and agrarian buildings. The estate passed from the Hospitallers at the Dissolution and by 1613 extensive freehold properties had developed within the manor, for example those at Arnoldshill and Colby (Rees, 1947: 88) This might signal the movement out from the village of the more prosperous yeoman class and the start of the village's decline - a prelude to the village's clearance at a later date.

The pattern of knights' fees and baronies in South Pembrokeshire is of relevance to much more than putative defensive arrangements. There might be a link to differences in the processes which led to the establishment of nucleations and the pattern could also reflect variations in the distribution of potential archaeological resources. To Rees the key difference in tenurial patterns was that which he perceived to exist between a sublordship and a knight's fee. Before the discussion of process and the its implications for archaeological research it is desirable to examine these concepts further. This is the result of Rees's failure to provide a schedule of source material to accompany the map and his never setting out clearly what he meant by some of the terms he used. Rees includes many sublordships on his map of South Wales and the Border in the Fourteenth century. Yet some of the centres claimed by Rees to be sublordships are listed in the Carew inquisition as knights' fees, for example Loveston and Jeffreyston. There are two possible differences between a knights's fee and a sublordship - one chronological and the other functional.

It can be argued that knights' fees were created only in the twelfth, thirteenth and early fourteenth centuries, and that they were then replaced by a different form of tenure. This would account for the relative preponderance of knights' fees in the western part of the lordship of Pembroke and the concentration of sublordships in the eastern part. The chronological argument ignores the fact that sublordships are also to be found in the southern Vale of Glamorgan which was settled and anglicised at a very early date. The conquest of what was to become the Shire-fee of Glamorgan was completed before 1104; that is within a decade of the seizure of southern Pembrokeshire. It is therefore worth considering that these centres are not necessarily later than knights' and are, instead, centres with a different system of organisation.

It was stated earlier that the difference between sublord-ship and knight's fee had implications for both the study of village origins and, perhaps also, for the nature of the archaeo-logical record. As the sublordships appear to be tenurially distinct from the better-understood knights' fees. Then it is to be expected that the reasons behind their foundation were differ-ent; furthermore their subsequent history might also be differ-ent. The sublordships might have been the central places for manors or groups of manors. In south Wales the manor was essenti-ally a unit of economic exploitation founded to cater for the needs of an alien lord and his retainers. The economic nature of the manor has long been its main characteristic; almost a century ago Maitland argued that although the manor was first and fore-most a unit for tax collection, and that its linked judicial functions and tenurial patterns were of secondary importance (1897: 119 - 121.) More recently Aston has taken a similar view and described the manor as, in the main, a "functioning economic unit" (1958: 61.) Closely associated with the "typical" manor is thought to be the nucleated village (Postan: 1966: 576.) In contrast the raison d'etre of the knights' fee was military. Land, to be used as the tenant wished, was exchanged in return for a promise of future military service. There is then at the simplest level an economic:military, knight's fee:sublordship difference.

The differences between the two also finds expression in the nature of contemporary settlement. Within the Lordship of Pem-broke Rees presents twenty eight knights fees and eighteen sub-lordships. Begelly (both a knight's fee and a sublordship) and Castlemartin (both a knight's fee and demesne land) have been discounted from this analysis. Of the twenty eight knights' fees eight are now nucleations, seventeen farms and three are untrace-able on the 2.5" OS maps. This may not, of course, always have been the pattern. Of the sublordships ten are nucleations, six are farms and two are untraceable. Hence whilst less than a third of the knights' fees are now nucleations, over half of the sub-lordships are. The economic nature of the sublordship and the proportion of them which are now nucleations is worthy of note. The sublordship - the centre a system of economic exploitation - depended on a settled population. Where former sublordships now appear to exist either without or with limited population could be a pointer to deserted or shrunken medieval villages. Further research has revealed this to be the case. Air photographs show

traces of former settlements in the vicinity of Coedcanlas, Wedlock and Landigwynnet.

Castles and the post-Conquest settlement pattern.

Two structures might have formed some type of focal point in the landscape: castles and churches. Settlement might have been attracted to or forced towards these centres and hence villages formed. The small earthen mottes and ringworks which were constructed immediately after the Conquest would to a Welsh man or woman in the late tenth or eleventh century have been the most alien introduction into the landscape. These small castles were easy to build and provided bases from which small forces of soldiers could have commanded the local population and been protected from them. Previous work by this author (1990b: 94 - 98) has tried to elucidate where ringworks were built, when and why. C.J. Spurgeon has argued that, in Glamorgan at least, the pattern is geologically determined with mottes being built on the glacial drift and ringworks elsewhere (1987: 28 - 34.) This author has found that this is not so in Pembrokeshire as a whole, and he has argued that strategic factors are more important. The mottes with their impressive height and restricted perimeters cluster along the Norman-Welsh border. Ringworks lie away from this frontier area and were perhaps the castles of local exploitation founded by minor lords. If this was the case then villages might be expected in the vicinity of ringworks and not mottes. This not however the case. There are equal amounts of mottes and ringworks within or very close to villages. Indeed elsewhere the reverse is true; de Bouard found that mottes were usually sited close to villages and it was ringworks that were in isolated locations in Normandy (1964: 30.) Clyn Pattel motte and bailey, Crinow, is a local example which conforms to the Normandy pattern. The motte, which takes the usual form of an inverted basin-shaped earthwork with a flat top, is surrounded in part by a ditch and in part by a stream bed. Adjoining the motte is the rectangular bailey which is surrounded by a ditch and a bank. The structure stands within the bounds of Pantyffynon Farm, one of three farms which together with a church and a few smaller dwellings make up the village of Crinow.

The pattern of castles in South Pembrokeshire is more complex than it is in Pembrokeshire as a whole. There are few earthwork castles here - most castles are stone structures (some perhaps masking earlier earthworks, others constructed from stone ab initio.) With the exception of the ringwork and bailey at Castlemartin all the earthwork castles lie in the eastern part of the study area. These castles present a variety of problems to the scholar. These can be divided into siting, recent history and location. First, siting: as has been discussed Sentence Camp lies peripheral to the village of Templeton and is outside the boundary bank delimiting the western edge of the village. Second, recent history: the motte and bailey castle at Begelly was destroyed in 1921 before adequate recording and research could take place. Finally, location: the Castell, Lampeter Velfrey, and Clyn Pattel lie beyond the usually excepted limits of Norman settlement. The former is an excellent example of a ringwork lying adjacent to the village (thus contradicting the Normandy pattern.) The castle stands a little to the north of this small linear village, the focus of which would appear to the church

with its partly circular raised churchyard.

Both the parishes of Lampeter Velfrey and Crinow stood in what was Efelffre, which is known to have been Welsh-held land until 1542. Hence Norman castles lie beyond the accepted limit of Norman penetration. It is possible that these castle represent an early abortive attempt to seize this area. The predominance of Welsh placenames and the possibility (albeit far from adequately proven; Charles, 1992: 485) of a focus of Celtic Christianity here add to the proposition that this was an area where the indigenous Celtic population retained a position of dominance for sometime after the Conquest of the rest of the region. The nature and location of two other settlements is interesting in the light of this scenario. Templeton some three miles to the south west is, as has been extensively discussed, a planned and planted settlement. Perhaps it was placed here to help secure the border once the advance had been reversed and the frontier stabilised. The second settlement is Blaengwaithnoah, about a mile and a half south of the village of Lampeter Velfrey. Now a farm, this was originally a Cistercian grange. The grange was a key feature of the Cistercian lifestyle: a farm - often in a marginal, secluded location - worked by monks and lay brothers. Blaengwaithnoah although not marginal in the economic sense, may during the thirteenth and fourteenth centuries have been marginal in a political sense - in the "no man's land" between the English and Welsh. It is therefore possible to argue that a final stage in the Conquest of southern Pembrokeshire was a thrust along the valley of the Marlais River from Narberth towards Whitland. A series of campaign castles were built only to be abandoned when the advance faltered and the retreat began. This would also explain why these castles unlike others in South Pembrokeshire remained as earthworks and were never consolidated with stone structures.

Any attempt to gain a coherent understanding of these castles is hampered by the limited number of sites and the problems of siting, location and history discussed above. If the type of structure built is geologically determined then an examination of the geology of that specific area in the field or, at least, on small scale maps (to date it has been possible to use only 1:10000 maps) ought to resolve this. Strategic factors also have to be examined. This author has argued that mottes with their height have a psychological advantage in certain circumstances and Spurgeon and Thomas have claimed that mottes may have been favoured over ringworks as the primary castles of campaign (1980: 67.) If it is strategic considerations which are more important only an impracticably large scale programme of excavations will resolve matters.

Churches and the post-Conquest settlement pattern.
Studies of the relationship between the church and village can help illustrate the origins and growth of the villages themselves. It has long been realised, for example, that isolated churches may mark the site of deserted villages. It has been proposed (Morris, 1989: 274) that some churches testify to the geography of lordship. He states,
"The possibility that many of them [the churches] then adjoined the homes of local power holders is an hypothesis

that goes further than any other to explain the positions of most medieval churches in the landscape."

In view of this opinion and the relationship already argued to exist between villages and lordly power the links between churches and villages will be explored next.

In South Pembrokeshire there does not appear to be any pattern between the siting of a church and the location of the manor house, hall or other major dwelling. Sometimes they stand close together, sometimes they do not. In Angle it has been argued that the church forms part of the magnate core, yet in Castlemartin the church stands some distance from the village and castle. In Hodgeston the church stands almost opposite the moated site, presumably the principal residence of the village, whilst at Manorbier the church stands on the opposite side of the valley from the castle. Various other configurations have been explored but again with no significant results. There appears to be no certain pattern which links location to dedication, location to wealth or wealth to dedication. All three factors appear to be independent rather than interdependent and hence it is as individual themes they are summarised below.

The principal documentary source for South Pembrokeshire churches in the first centuries of Norman rule is the Taxatio Ecclesiastica of Pope Nicholas IV taken in 1291. Unlike the earlier Valuation of Norwich the section dealing with the diocese of St. David's has not been lost. However as all benefices worth less than £4 per year are excluded many of the smaller Welsh churches are likely to have been omitted. The collectors' rolls have survived and been published (Lunt, 1968) and although they mention certain places, St. Florence for example, they do not add substantially to our knowledge. All the richest churches (ie those with an annual income in excess of £15) are to be found in the Castlemartin Peninsula with the exception of the episcopal church at Llawhaden. Indeed most of the valued churches lie here; sixteen out of the twenty three lie below a line drawn from Saundersfoot to Lawrenny. A slightly higher concentration of wealth is found in the Manorbier - Penally - St. Florence area, which it has already been argued was the focus of an early medieval ecclesiastical activity.

The study of the nature of church dedications is interesting yet problematical. Much work on the distribution of dedications to particular saints and their spheres of influence has been carried out by E.G. Bowen (1954 and 1972.) There are problems with this type of analysis. They are principally those of the rededication of churches and chronology. There are also the problems for the archaeologist of delving into a field full of religious sentiment and psychological subtlety. The unique dedication of Jeffreyston church to Ss. Jeffrey and Oswald illustrates the problem: which St. Oswald does the dedication commemorate? The well-known Northumbrian saint of that name, the Saxon St Oswald of Worcester or the St Oswald whose cult is popular in northern Italy? Is there any link with St. Ishmael, an earlier form of whose name was Osmail? Was the church dedicated to St. Jeffrey because it was the name of the supposed founder of the village? Was there some special, local veneration of St. Geoffrey of the Holy Sepulchre and hence the origin of the name? All these

question are unanswered and probably unanswerable - yet they underlie the mapping and analysis of church dedications.

The pattern of Anglo-Norman, as opposed to Celtic, dedications in South Pembrokeshire is worthy of note. There is a solid core of Anglo-Norman dedications in the south eastern part of the area. This stretches from Manorbier across to Tenby and as far north as Narberth and Slebech. Only on the periphery of this area are Celtic dedications found; at Llawhaden, Llandewi Velfrey, Lawrenny and in the group of parishes around Amroth, Kilgetty and Ludchurch. On the Castlemartin Peninsula the pattern is different: there are few Anglo-Norman dedications, five "old" Celtic dedications, one compound dedication (to both an Anglo-Norman and a Celtic saint) and three dedications to St. Michael the Archangel, whose cult was extremely popular in tenth century Wales. It could be argued therefore that in the post-Conquest period the Castlemartin Peninsula remained an area where the Celtic influence was still strong.

There is an interesting correspondence between the distribution of placenames with a tref- element and Celtic dedications. If a parish church is dedicated to a Celtic saint then there is often a tref- in the parish too. It is possible to speculate on the reasons for this. The Anglo-Norman settlement of Pembrokeshire was not the settlement of a vacuum; there would have been, probably at a low density, an indigenous population. The multiple estate model postulated that this population lived in a number of small settlements scattered over a wide area. Some of these settlements may have - for whatever reason - survived the nucleating processes of the immediate post-Conquest period. Perhaps they were the settlements of the freemen, who could not be coerced into the nucleations but who were prepared to continue to pay rents for smaller parcels of land away from the nucleations into which the conquerors forced the bondmen. Many of these settlements exist in remoter corners of the parishes; for example Trebrowen is in the extreme southeasternmost part of Rhoscrowther parish, and Trevallen is on a headland isolated from Bosherston by a steep valley. Further research might add to this pattern. A wide ranging, in depth study of field names might reveal elements such as sted or stead thought to indicate the location of former dwellings; although it must be noted that Charles gives only one example of a name of this type (1992: 814.) Whilst a study of field shape might show that in these small areas cultivation was focussed on the farm rather than on the village community.

Summary.
The period between the Norman Conquest and the fourteenth century saw the foundation of villages throughout the study area. Some were deliberately laid out and settled by colonists, from England or elsewhere; villages such as Templeton and Redberth are examples of this type of settlement. Some of these settlements were founded on the orders of Arnulf de Montgomery, earl of Pembroke until 1102, perhaps in order to defend his newly won lands. Other settlements grew up as the centres of manors, with settled populations exploiting the natural resources of the area. Other settlements, notably St Florence, were the "descendents" of pre-Conquest nucleations founded in order to meeting the growing demands of a voracious monastic system. Virtually all the settle-

ments considered in this section were villages, although not all have survived as such. By the fourteenth and fifteenth centuries this pattern was changing.

III: The poor and hungry: settlement patterns in the fourteenth century.

The advent of the fourteenth century does not only see an increase in both the quantity and range of documentary sources available for the study of the settlement pattern. It also saw a change in the nature of settlement foundation. Villages were rarely - if at all - founded in this period. By the fourteenth century the balance between population, resources, technology and standards of living had become critical. More and more land - much of it of low quality - was being brought into cultivation, population was growing at an unprecedented rate whilst the levels of demand per capita and technology remained constant. Crisis could not be far away. It is possible that the agrarian catastrophes of the years 1314 to 1321 or the "Black Death", first occurring in 1349, checked the foundation of new settlement. The actual dates and causes for agrarian collapse seem to vary regionally (Campbell, ed., 1991: passim) and elsewhere in south Wales it has been argued that no new settlements were founded after c. 1315 (Kissock, 1991b: 142 - 145.)

Marginal settlement in the fourteenth century.

Settlements founded in the last decades of the thirteenth or first years of the fourteenth century can often be identified by one of several criteria, including names and position. The place-name elements suggesting inhospitable or poor locations are often found: for example Cold Inn, Cold Blow (where a new house is aptly name Fresh Winds) and Hungerford. Position can take two forms: climatic or administrative. Cold Blow - which even in the early twentieth century had only grown to a farm and two small terraces of houses - lies to the north of Templeton, just outside its open fields. This would suggest an attempt to expand settlement onto what might have been less intensively used land, perhaps in the late thirteenth century.

All settlements with the name element cold or a similar have been plotted against a background of a soil map with an unexpected result. A few of the settlements conformed to this author's expectations and were found on poor quality soils; for example Cold Comfort Farm, close to Castlemartin, which lies on the cambic stagnogley. In contrast to this a large proportion of the settlements lay on the generally fertile typical brown earth soils which are common in South Pembrokeshire. This suggests that soil quality is not in itself a sufficient factor in determining the quality of an area for cultivation. Other factors, notably climatic ones - and especially wind - have to be taken into account.

A modified approach plots the locations of these settlements against the Agricultural Land Classification maps. These maps grade land into five categories on the basis of physical quality alone. Factors such as micro-climate and relief are considered alongside soil type. The standard of fixed equipment, management and other impermanent factors is not taken into account. Hence

these maps have a historical validity. Grade 1 land (which is not found in South Pembrokeshire) is of the highest quality and possess no serious impediment to agricultural use; grade 5 is of the poorest quality and largely comprises upland grazing. Of the seven examples of cold-type names recorded on contemporary maps four are on grade 4 land and three on grade 3 lands. This demonstrates a clearer linkage between these settlements and poor land. Settlements of this type are transient in nature; when the pressure that led to settlement on the margin is removed or reduced settlements tend to be deserted and Charles records twenty three names of this nature which he cannot now locate (1992: 826.)

Assarting and settlement in the fourteenth century.

Any examination of secondary settlement at the margin cannot neglect the process of assarting. A group of names around Tedion Mountain in the north west of the study area indicate that land was cleared of woodland and scrub so that it could be used for arable cultivation. Oak Hill and Thorne Farm can be considered as typical of the names given to assarted land. More detailed studies of field shapes, field names and the natural resources of the area could lead to a more thorough understanding of the chronology and economic basis of the nature of secondary settlement in this area. A study of the place-names shows the localised nature of assarting. Using a basic resource - the current edition of the OS 1:25000 maps - to give a sample of place-names it is possible to determine their entomology and to classify them into two groups: woodland-derived or other. When the proportions of place-names derived from woodland features are compared to other forms the proportion of woodland names is highest in those parishes which lie on the edge of the Cleddau. The proportion - up to 60% in places - is markedly higher than it is in nearby inland parishes, as the table shows:

	Woodland-derived	Other origin
Minwear	60%	40%
Coedcanlas	60%	40%
Lawrenny	54%	46%
Martletwy	46%	54%
Jeffreyston	16%	84%
Loveston	14%	86%
Yerbeston	13%	87%

The assarted land would usually have been worked from a series of independent farms. Villages were rarely founded in such circumstances. Some of the small nucleations found in this area today have late origins, related to their development on the edge of the coalfield. The first recorded use of the names Landshipping and Cresselly come in the late sixteenth century, whilst Cresswell is first recorded in 1793 (Charles, 1992: 506.) Other settlements are recorded at earlier dates, with Loveston and Yerbeston being first mentioned in the Carew inquisition post mortem of 1363. Even in the mid-nineteenth century some of these settlements were quite small. The tithe map shows that Yerbeston and Minwear were small groups of dwellings close to their parish churches; Cresselly is a little larger (although settlement is restricted to two short rows) with Jeffreyston being a little

larger again.

Deserted medieval settlements.

At Linney, probably the best example of a deserted medieval village in South Pembrokeshire, the pattern is quite different from that that might be expected. The village does not appear, on the basis of documentary records, to have been deserted until the fifteenth century and neither does it lie in, what by any stretch of the imagination can be described as, a marginal location. On a much overgrown north-facing slope close to the south western corner of Castlemartin headland there are perhaps twenty house platforms. As is usual they seem to have been made by cutting into the slope and throwing the debris forwards, with the long axis of the platforms being parallel to the contours. Traces of stone foundations are discernible on some of the platforms. Linney may have undergone a lengthy decline. In 1583 reference is made to three tenements there (Carmarthen RO: Lort 8/390) whilst in 1480/81 13 tenants owed labour services there, itself a fall - albeit of one - from the previous year's 14 (PRO: SC6/1208/11.)

There exists the possibility of using documentary evidence to study the causes and effects of settlement desertion. A study of this nature has already been carried out by this author on the lowlands of Glamorgan and Gwent (1990a: passim.) The data for south west Wales is far better than it is for south east Wales. There would be no need to calculate hypothetical village sizes from taxation lists as the 1563 Bishop of St. David's census (British Library: Harleian Ms. 595, f. 87) gives the number of households in a parish by parish listing. The Glamorgan and Gwent study showed that certain types of villages were much more seriously affected by the occasional warfare and epidemic diseases common in the medieval period and also identified other agents of desertion, for example the acquisition of land by Cistercian houses and the loss of arable land to wind-blown sand. Unfortunately this study may have been methodologically flawed. The data comes from relatively late sources; the main period for desertion is likely to have been before the mid-sixteenth century and hence the figures calculated may be no more than an index of depopulation. Furthermore it may not be a useful exercise to repeat the study in South Pembrokeshire because the number and range of sites is too small to give any statistically significant result. This is a regrettable and unalterable situation.

IV: Farmers and miners: settlement in the post-medieval period.

The period between the end of the Middle Ages and the onset of the agricultural depression in the late nineteenth century was one of dramatic change. The landscape and agricultural economy were radically altered as population grew and industry developed on an unprecedented scale. This section begins with a description of that population growth. Four sources have been used to chart population patterns in South Pembrokeshire between 1563 and 1901: the bishops census of 1563 (the use of which for one particular study has been discussed above,) the hearth tax returns of 1670 and the censuses of 1801 and 1901.

Population change 1563 - 1901.

In 1563 the Privy Council requested that a survey be made

the number of households in every parish. Although the figures for certain parishes, and at times whole dioceses, are now missing the enumerations for South Pembrokeshire have survived largely intact. In this respect the figures are more valuable than those in the 1539 muster rolls or those which can be extrapolated from the 1543 - 1545 lay subsidy returns. More importantly the figures given refer to households and hence it is not necessary to work backwards from the numbers of able bodied men or taxpayers to attempt to estimate the numbers of households. During the period 1662 - 1674 a tax was levied on the number of hearths in the household in every parish. The hearth tax returns record both the names of the payers and the names of those who were exempt on the grounds of extreme poverty. The surviving Pembrokeshire returns are of a relatively late date (1670) and are therefore more reliable than earlier documents in the same series (Unwin, 1985: 13 - 14.) This does not mean that the hearth tax returns are perfect records of the number of households in each parish. Patten has observed that there are variations in whether or not all the exemptions were listed. It appears that in certain circumstances those who were certified as exempt were usually listed, whilst those who were regarded as paupers were not (1971: 18.) Thus the totals may slightly underestimate the actual number of households resident in the parish. Nevertheless these are the only figures which exist for the population of south west Wales between 1563 and 1801 and this author agrees with Patten when he concludes that - whatever their problems - the hearth taxes are the only useful sources for the evaluation of the level of local populations in the later seventeenth century.

The Napoleonic Wars brought about a need for accurate data on a scale which had never before been found necessary. Amongst the figures collected were those on the number of families living in each parish. These are here taken as being comparable with the number of households recorded in 1563 and 1670. The comparison of these figures with those for 1801 and 1901 allow a discussion of the general patterns of population growth and change in South Pembrokeshire for nearly three and half centuries. It must be remembered that underlying the general patterns are some peculiar local trends. For example Robeston Wathen was the only parish where population fell between 1563 and 1670, yet it is one of the faster growers in the period 1801 to 1901. In Angle population rose by 30% between 1563 and 1670 (54 households to 70,) it stagnated between then and 1801 (when there were 72 families) and grew rapidly again in the following century (102 families - an increase of 42%.)

In the period from 1563 to 1670 population grew almost everywhere in South Pembrokeshire. Growth appears to have been concentrated in the central area with above median increases in population occurring in a band of parishes running from Slebech in the north to the coast at Manorbier. Lampeter and Llandewi Velfrey, Amroth, Rhoscrowther, Pwllcrochan and St Twynells all grew at above the median rate too. Other communities increased more steadily in size. The period from 1670 to 1801 saw a considerable change in the pattern. The band of "growth" was no longer a north south one but an east west one. The parishes with above median growth stretch from Coedcanlas on the Daugleddy estuary in

the west to Amroth in the east, with Carew marking the southern end of this region of population increase and Llawhaden the north. The above the median growth of St. Petrox and the increase in population at Slebech were probably the result of the growth in the number of estate workers and household staffs employed by the major landowners here. The nineteenth century also saw more widespread examples of falling population This is particularly noticeable in the south and west, where Pwllcrochan, Rhoscrowther, Castlemartin, Warren, Stackpole, Hodgeston and Penally all lost population. The third and final period to be considered here - 1801 to 1901 - saw quite and different pattern with growth on the periphery being balanced with loss in the core. Carew, Redberth, Gumfreston, Jeffreyston, Yerbeston, Loveston and Reynalton all lost population whilst immediately to the south St. Florence, Manorbier and Jameston all grew at above 40% as did Martletwy, Minwear, Newton, Mounton and Robeston Wathen immediately to the north.

Almost all of the population data is available on a parish by parish basis. This makes studies of the growth of individual settlements almost impossible. Only through close study of the census returns can further observation to be made about the evolution of the settlement pattern in South Pembrokeshire. They record the emergence of certain settlements as entities worthy of a separate entry. In 1841 the populations of Manorbier Newton and Jameston were enumerated separately, rather than incorporated into those of Manorbier itself, and by 1851 Lydstep (also in the parish of Manorbier) was also regarded as a separate entity. In the census of 1901 no fewer than 22 "new" settlements were first recorded. All of them lie in central and eastern part of South Pembrokeshire, in the vicinity of Carew, East Williamston and Begelly. Manorbier is a large village dominated by an impressive stone castle. Four other settlements lie within the present community boundary: Manorbier Newton, Jameston (discussed in detail earlier) Lydstep and Shrinkle. The last is a relatively new settlement comprising almost entirely of housing linked to the nearby military establishment. Jameston and Manorbier Newton are thought to have had medieval origins. Hence their recognition as separate entities in 1841 may just be "catching up with reality." It might also mark a recent phase of growth within these settlements, and it has already been suggested that Jameston's central green was built upon, at some time after the foundation of the village.

It was proposed that many of the villages in South Pembrokeshire were created throughout the exercise of lordly power: some were deliberately planted and others began as manorial centres. It can also be argued that lordly domination was a factor in the growth of villages in the post medieval period. Mills (1965: 272 - 276) has developed a model of "open" and "closed" parishes which, whilst the terminology is nineteenth century, he believes originates in the sixteenth century. The closed parish is dominated by one major landlord who, desiring to minimise his payments of poor rates, limits the movement of population into the parish. The result is small populations and low rates of growth. In the open parish power is vested in a large number of individuals each of whom is of equal status. As there is no overall control there is no concerted action to keep poor rates low and thus population

grows quickly. Although specific aspects of this work have been challenged (for example by Banks, 1988: 64 - 66) the difference between the two types of parish is generally accepted and examples of both can be found in South Pembrokeshire.

A general guide to the number of landholders in three quarters of the South Pembrokeshire parishes is provided by The Imperial Gazetteer. This refers to landownership within a parish as being "divided among a few" or with one owner (here equated with closed) and "much subdivided" (open.) Earlier research by this author (Kissock, 1990b: 70) has shown that ten appears to be the Gazetteer's threshold for "few" and "many." Twenty parishes in South Pembrokeshire were closed. In six all the land was owned by one individual and in fourteen there were dominant landowners, for examples the Mirehouse family who owned 87% of the land Angle in 1841. There were seven open parishes and for some parishes there is no easily available data. In the period between the bishop's census and the hearth tax returns (1563 to 1670) there is no clear cut pattern between open and closed villages; high levels of population growth can be observed in both sets. In the years between 1670 and 1801 the expected pattern is seen: many of the closed parish experience stagnation and population falls or grows slowly. The addition of just two households in Angle (mentioned above) is a typical example of this pattern. During the same time period none of the open parishes experienced a decline in population and many saw an increase at a rate above the median for the county. In the century from 1801 to 1901 there is a tendency for growth to be slow or non-existent in closed parishes, although in a few the rate of growth is above 40%. A more sophisticated analysis matches population trends with the development of industry. In the years between 1563 and 1670 and between 1670 and 1801 many of the supposedly closed parishes which experienced high population growth were on the coalfield. Notable examples are Amroth and East Williamston, together with Lawrenny, which was a centre for coal exports. It would therefore appear that the major landowners were deliberately encouraging immigration in order to provide a labour source for the coal industry. A detailed series of local studies of the influence of individual landowners and particular settlements can be found in the "pen portraits" provided by B.E. Howells in his introductory study to the early modern volume of the Pembrokeshire County History (1987: 1 - 31.)

Population growth has implications for the study of village development and village morphology. A growth in population can lead to change in shape as greens and other open spaces are built upon and the village exapands along the roads and footpaths which lead to it. Expansion of the settlement is only one possible response, an alternative is increasing the density of population within the bounds of the settlement. Hence a higher population does not necessarilly mean settlement expansion. Measuring density is a relatively simple process. Roberts (1987: 32) has described how it might be done by randomly superimposing a grid on a plan of a village and counting the number of squares containing all or part of a building. This figure has then to be related to am appropriate measure of area: either the area of a circle which encompasses the settlement or the square of the diameter of that circle. In order to gauge whether density is increasing, decreas-

ing or remaining constant a number of maps made at frequent intervals will be required. Thus this technique is only likely to be possible in the relatively recent period. This is unfortunate as the light that could be shed on psychological factors, such as perceptions of space, nearness and overcrowding, would be most interesting and modern perceptions of these factors are unlikely to have been those of the past.

A practical attempt at measuring density has revealed other problems. An analysis of maps of Templeton dating to 1901, 1970 and 1993 shows a considerable increase in the density of settlement. When Roberts's "grid technique" is used and the resulting figure divided by the area of the circle the following values are obtained: 0.112, 0.187 and 0.358. Taken to its logical conclusion a value of 1.0 will be reached when all the land within the circle which encompasses Templeton is built upon. A value of 0.358 suggests therefore that just over a third of the land is now covered by settlement. Observation shows that is is quite inaccurate. Whilst this value might be true of the circle it must be remembered that Templeton is a long, linear settlement; its north-south length is in the region of 750 m., compared with an east-west width of, at most, 200m. If the values are recalculated so that they are expressed as decimal fractions of a rectangle the following results are obtained: 0.338, 0.566 and 0.984. These figures are more realistic, but are not without problems themselves. The principal problem would appear to be definition of the rectangle (or other suitable shape) used to calculate the area. If recent development has expanded well beyond the historic village core, as has happened at Lamphey for example, then the rectangle would include large areas which were once part of the medieval manor's open field. Hence the figures for early densities would be considerably reduced and convey an artificial impression of a low density of occupation. Futhermore, crude numerical values cannot portray that certain areas within the built up core might be more sensitive in terms of archaeological potential than are others.

Settlement and the coalfield.

The Pembrokeshire coalfield is a continuation of the Glamorgan coal measures. The seams run in a narrow belt from Saundersfoot Bay across to St. Brides Bay, thus crossing South Pembrokeshire. In places the coal measures are disturbed, thus forming a complex and irregular structure of distorted strata. The principal faults are the Erroxhill fault, which runs near Amroth and Sardis Mountain and to the south of Kingsmoor, and the Harbour fault running from Saundersfoot to Broadmoor. The coal is a high grade anthracite which, according to Owen, was an excellent "dryer of mault." (Price, 1982: 17 - 18 and 37.) The small-scale mining of coal in Coytrath in 1324 has already been mentioned and by 1603 collieries had opened at Saundersfoot, Begelly and Jeffreyston. A period of rapid expansion came in the second half of the eighteenth century with mines being sunk at Wooden (1756), Moreton (1757), on the Hean Castle estate (1764), Kilgetty (1775), Thomas Chapel (1784) and Stonecross (1786.) The coal was dispatched by sea from Saundersfoot, Tenby, Wiseman's Bridge, Lawrenny, Cresswell and Landshipping. Although coal was generally taken from the mines in horse or ox carts, a canal was built linking the collieries at Kilgetty to the sea. It was however an

unsuccessful venture (Price, 1982: 20.) Good quality iron ore was often found in the collieries and was mined in the vicinity of Wiseman's Bridge, from where it appears to have been shipped to the Carmarthen area for smelting prior to the opening of Kilgetty ironworks in 1849 (Price, 1982: 24 and 137 - 142.)

Settlement in the coalfield area of central South Pembroke- shire has a complex history. At least three clear phases can be discerned. Two of them - the establishment of villages at the time of the Norman Conquest and fourteenth century expansion on the margins of settlement - have already been looked at. The third stage was the establishment of mining centres in the late eighteenth and nineteenth centuries. Many of the pits were small, under-capitalised and short-lived. Often they were leased by the miners from the land owners. All these conditions favoured the establishment of small "pit villages" rather the massive mining towns more commonly associated with coalfield areas. At Begelly, probably the largest colliery in the study area, the work force numbered only 64 in 1776 - 1777 and this included nineteen women and some boys (Howell, 1987: 321.) Therefore the population of the village may have been in the region of forty households. The villages of Cresselly, Thomas Chapel, Pentlepoir, Wooden, Wise- man's Bridge, Stepaside and Summerhill were all first recorded between the late sixteenth and eighteenth centuries (Charles, 1992.) It can also be assumed that this period saw the further growth of long-established centres such as Jeffreyston and Rey- nalton.

The first mines were opened at Thomas Chapel in 1784 and coal production continued until, at least, 1854 (Price, 1982: 101 - 102.) Traces of these mine workings exist to the north west of the village and they are recorded as an "old shaft" and an "old engine house" on the 1907 edition of the 25" OS map. Little is known about the history of the village prior to this. The place- name was first used in 1584 (Charles, 1992: 473) and it clearly takes the form of a reference to a chapel of ease associated with the church of St. Mary at Begelly. However there is no known evidence for an ecclesiastical structure here. OS and tithe maps show the village as a small, compact nucleation around a square green. Thomas Chapel Farm, on the southern side of the green, may have formed the focus of early settlement with the village grow- ing later. New House Farm, on the opposite side of the green, might be either the second or the final stage in the completion of the settlement.

There were strong links between the coal industry and agri- culture. Charles Hassall writing for the Board of Agriculture in 1794 stated that,
"[The collieries] have a material influence in checking the progress of agriculture in the part of the county through which they pass." (1794: 59.)
His main concern was that cartloads of coal were ruining roads and hence the transport of agricultural commodities was impaired. The parish profiles compiled by local clergymen and added to the 1801 agricultural census reveal further information about the links between the two. The vicar of Lawrenny wrote
"There is not corn sown in this parish in proportion to its extent and the number of its inhabitants ... It is a

general observation in this county that in the neighbourhood of collieries tillage is much neglected, and the farmers are very slovenly in dressing their lands." (Williams, 1950: 151)
The vicars of St. Issells and Begelly made similar observations.

Settlement and the textile industry.

One other industry was important in rural South Pembrokeshire in the early modern period: the production of textiles. Wool production within Pembrokeshire doubled in the last decades of the sixteenth century. Yet the production of woollen cloth declined dramatically in the same period. The heavy, dowdy and poorly finished Pembrokeshire woollens were generally of poor quality. By the early seventeenth century raw wool was usually sold to merchants from Somerset and Devonshire or mid-Wales for cloth manufacture. Some woollen cloth was however made for local consumption. Details of the few woollen mills of the more recent period are available (Jenkins, 1969: passim.) Dyffryn Mill in Lampeter Velfrey and the mill in Llawhaden both have mid-nineteenth century origins and were known to have been in production as recently as 1923, although by 1989 the disused buildings of the former had been converted into holiday flats. Two other mills lay in the vicinity of Dyffryn Mill, making Llanmill an important centre for the woollen industry. A fulling mill stood close to Penlan Farm in 1770 (if not before) and the leat which provided water for its operation is still visible in part today. A further mill, known as The Factory, was in operation near Venterin Farm in the nineteenth century. The tithe map shows Llanmill as nothing more than a small settlement with a few buildings at the bottom of the valley of the Gwyddno, by 1907 the settlement had increased in size mainly through the construction of the houses which make up Bryn Vale Terrace.

At St. Florence there is evidence in the fieldnames for the production of linen. Freshly harvested flax is soaked in water in order to enable the outer stem to be removed and the fibres extracted for cleaning, spining and weaving. This process is known as retting (Higham, 1989: 38 - 40.) The placename element lil- (from linen) is often given to fields where this process took place. In the vicinity fields sometimes contain the name tenter (indicating where recently fulled cloth was dried, stretched and returned to shape.) The names kiln and bracken are also found and refer to the burning of furze, gorse and wood in order to produce potash for soap. Lilly Moor lies under a mile north of the centre of St. Florence village, close to the road to Redberth. The name Lilli-Moor is now given to a farm and two adjacent houses, but the tithe map shows that in the nineteenth century this name was given to two fields a little further west. Adjacent to Lilly Moor lie small streams (copious water supplies are an essential part of the process,) a field known as Furzy Park and two kilns. The presence of the kilns might be linked to the nearby and now disused New Inn Quarry and therefore be spurious. The field name Tenter How exists on the southern edge of the village. Features shown on air photographs of the area [Meridian 13060] are almost certainly modern field drains and are not related to the proposed flax processing facility here. The dating of this system is not known. The principal evidence is taken from the tithe map, indicating development prior to 1840

and no mention is made of a fulling mill in Jack's list which
runs up to 1547 (1981: 86 - 127.) The placename Le Deyehouse,
known in the parish in 1386 but since lost, has nothing to do
with cloth processing. The name is derived from the Middle Engl-
ish deye - meaning dairy (Charles, 1992: 719) and not from the
Latin for dye works: tingaria.

Agriculture and the settlement pattern.
The early modern period also saw the enclosure of the open
fields which had surrounded many of the long-established vil-
lages. The open fields in the Castlemartin Peninsula had been
enclosed by the Civil War and those of Narberth Hundred by the
end of the reign of Elizabeth I (Howells, 1987: 17 and 24 - 25.)
By the 1790s most of the Pembrokeshire landscape had been en-
closed by common consent. Legislation was rarely brought in to
secure an enclosure especially on arable lands. One of the few
Pembrokeshire enclosure acts which details the lands to which it
refers shows clearly that it is waste land on the periphery of
several parishes - and not arable lands at the core - which were
the subject of the issue (HLRO: Original act, 55 George III,
163.) Certain lands also changed their nature, for example lands
in Manorbier and Penally were converted from arable use to sheep
pasture (Howells, 1987: 27.) The most noted enclosure in South
Pembrokeshire must be that of the drainage of Castlemartin Corse
which took place between 1788 and 1800. In the medieval period
the land here had been described as semper aquosa and, as a
consequence, of little value. In 1788 John Campbell of Stackpole,
having paid compensation to the other tenants, obtained an act of
Parliament for the cutting of a major land drain and the con-
struction of a tunnel through the sand dunes to discharge water
into the sea. The lands were then leased to John Mirehouse of
Brownslade who had completed the scheme by 1800.

The patterns of enclosure are preserved in the shape of the
fields of South Pembrokeshire. The landscapes Castlemartin Corse
and the eastern part of Manorbier and Penally are characterised
by small enclosures with a regular geometrical shape, atypical of
the field shapes elsewhere in the region. Less than 10% of the
field here have this distinctive shape. These small closes are
ideally suited to cattle farming and the vicar of Manorbier added
to his returns for the agricultural census the comment that,
"This parish produces but little corn in proportion to
its size, it being very extensive. The major part is chiefly
occupied by graziers, and dairymen." (Williams, 1950: 151.)
In the area stretching south of Castlemartin running eastwards to
Stackpole and encompassing Warren and St Twynells the fields are
also regular in shape, but are much larger. This pattern is
probably the result of the establishment of agricultural improve-
ment and the establishment of large farms associated with the
Stackpole Court estate, whose owners - the Campbell family - were
the largest landowners in the county in the nineteenth century.
This landscape is no longer preserved. The establishment of a
tank training range in 1938 has led to the removal of many of the
boundaries in order to create manoevering spaces; nevertheless
the pattern can easily be reconstructed from the tithe map.

A distinctive block of field shapes also exists in the area
immediately south of Thomas Chapel and Reynalton; this pattern

can also be found around Begelly, Broadmoor, Jeffreyston, Temple Bar, Pentlepoir and East Williamston. These long, narrow fields are almost certainly blocks of strip fields enclosed to make individual holdings. The correspondence of this type of field with the eastern part of the coalfield is almost certainly no coincidence. As has already been mentioned above, agriculture and coal went hand in hand (often it seems to the detriment of the former.) It is probable that the rapid industrialisation of the area help to preserve some of the old field boundaries. Opportunities for agricultural improvement were never seized and traces of old, long-established practises remained. This pattern is not found in the western part of the coalfield, where small, irregularly shaped closes are to be found. This dichotomy probably reflects the pattern of medieval agriculture in this area. Jeffreyston, Begelly and Reynalton are all villages founded in the twelfth or thirteenth centuries, if not before; settlements around Martletwy probably originated as individual farmsteads in the fourteenth century.

In his report to the Board of Agriculture Charles Hassall, landagent and farmer, described Stackpole Court estate as,
"One of the finest and best connected estates that had ever fallen within my observation in any part of the kingdom, being all valuable land (1794: .)"
The estate comprised virtually 16,000 acres in the parishes of Stackpole, St. Petrox, St. Twynells, Bosherston, Warren and Castlemartin with smaller portions in Angle, Rhoscrowther, Pwllcrochan and Pembroke. The focus of this vast estate was Stackpole Court, St. Petrox, which was demolished in 1962. Much of the house as it was then recorded was of a Regency style with alterations taking place in from 1821 onwards. Distinctive features of the mansion were a striking chimney arrangement and a conservatory with a collection of sculpture (Lloyd, 1989: 71.) Adjacent to the house stood the home farm and a courtyard with the usual accompanying buildings. From both east and west the house was approached by lengthy vistas adding to the splendour and grandeur. In order to create an appropriate view from the front of the house Stackpole village was moved. It had once stood on a plateau on the opposite side of the river directly in front of the house itself. Its new location was much further north, shielded by a covert of trees. Much of the housing here was provided for estate workers and was built in similar style. The terrace lying at the northern edge of the village in the early twentieth century and photographed c. 1910 belongs to this phase of the village's history (Davies, 1988: plate 50.)

The Campells of Stackpole - elevated to the peerage as the Lords Cawdor - were not the only family who ruthlessly cleared villages to suit their artistic sensitivities. In the early nineteenth century when John Symmons of Llanstinan acquired the property of Slebech and began to build the present mansion there he too removed an "inconvenient" village. Indeed this process was repeated time and time again throughout Britain. Large houses grew, populations of servants and estate workers were recruited and villages removed to "suitable" locations.

Stackpole was the largest, but not the only, estate in South Pembrokeshire. Cartographic and other evidence exists for estates

with extensive parkland elsewhere; at Slebech and Picton in the north, Upton on the Cleddau, and at Lamphey, Brownslade and Orielton in the Castlemartin Peninsula. At Lamphey The Black Book of St David's records that there was a park of 144 acres with a herd of 60 deer in 1326. The early twentieth century 25" map shows a park around Lamphey Court approached by a carriageway which runs past a gatehouse off the Pembroke - Manorbier road. Although no longer used the traces of this driveway can be clearly seen crossing the fields running in the direction of the episcopal castle. It is possible that some settlement was cleared to enhance the view of the castle from Lamphey Court. In the field alongside the lane which runs to the castle today are faint traces of possible house sites. It is possible that settlement was forced out of this area and towards the church, at the centre of the contemporary village, when the park was established. Not all parkland involved the forced destruction of settlement - no former nucleation has been noted in the vicinity of Orielton, for example. This might be due to the peculiar historical circumstances pertaining in the parish of Monkton. When the Benedictine Priory lost its estates at the time of the Dissolution many dispersed settlements were founded, between the three farms which make up Orielton (East and West Orielton and Home Farms) there was a triangular area of land, which is shown on the tithe map as having been emparked.

V: Travellers and cartographers: settlement in the eighteenth, nineteenth centuries and twentieth centuries.

Amongst the last sources to be considered are a series of maps of South Pembrokeshire. By comparing the maps drawn over a lengthy period it is possible to note which settlements were worthy of note and when. It is possible to speculate on why certain settlements were included or excluded. The size and density of population at given location (ie the presence of a nucleation) is unfortunately not always attested. Saxton's map of 1578 illustrates this problem; he restricts himself almost always to the inclusion of settlements which contained either the parish church or which carried the name of the parish. Hence Amroth (which did not develop as a nucleation until after 1907) is included, whilst a host of other settlements in the vicinity - Sardis and Wiseman's Bridge, for example - is not. Kip's map of Pembrokeshire (1607) was based upon George Owen's survey and published in Camden's Britannia. This map is very similar to Saxton's: four more places are included (Stackpole Elidor, Hundleton, Freshwater East and Rhoscrowther) and four excluded (Lawrenny, East Williamston, Loveston and - most surprisingly - Llawhaden.)

Kithchen's map, published in 1764, is more informative. Whilst his criteria for the inclusion of a settlement are not known it appears that he was using some measure of perceived importance. Hence certain minor settlements which appeared on earlier maps are deleted and others are included for the first time: notably Carew Newton (which may have had a medieval origin; Howells, 1971: 16) The first comprehensive maps made at a large scale were those of the Ordnance Survey. The 1":1 mile of the southern part of the study area (sheet 38, Pembroke) was first published in 1818, based on surveys made between 1800 and 1809.

Various alterations were made and the facsimile reproduced by David & Charles is that of the re-engraving of 1839. Sheet 40 (Haverfordwest) was first published in 1819, having been surveyed between 1809 and 1814. This map was revised and re-engraved in 1843 and it is this version, based on surveys made between 1839 and 1842, that has been published as a facsimile. In summary, the two sheets of the OS 1":1 mile map show the South Pembrokeshire settlement pattern as it appeared in the late 1830s. As far as this study is concerned the map is comprehensive - sixty nine of the seventy nine major settlements are depicted

Certain sets of maps were made for specific purposes; for instance the large scale OS maps were intended to provide topographical information for military commanders should the Napoleonic French invade. One set of maps was intended to guide travellers, these maps show the growth of the road system in South Pembrokeshire in the early modern and later periods. The "strip maps" which comprise Ogilby's Britannia (dated c. 1650) show the route which ran across the northern part of South Pembrokeshire from Carmarthen to St. David's. Narberth, Templeton and Robeston Wathen are the only settlements included. A untitled map in Haverfordwest library shows the pattern of roads in 1811. The mail road runs from Carmarthen to the Irish Sea ports and passes through Robeston Wathen, Princes Gate and Tavernspite. From Narberth a turnpike road ran south to Templeton where it divided into two. One "arm" ran to Pembroke, with the anonymous map maker showing Cresswell and Carew as the only settlements along it. The other "arm" ran through Begelly to Tenby. A third turnpike linked Pembroke and Tenby via Lamphey, Jameston and Penally. A later map shows the development of the road network, with the turnpike running from Narberth via Cold Blow as well as Princes Gate to Tavernspite. Here it met the road which ran from Pembroke through Carew and thence northeastwards through Redberth, East Williamston, Begelly and Amroth. A separate road ran from Amroth to St. Clears.

Location on a major routeway was an important factor in determining the growth of certain settlements in the nineteenth century. Fenton recorded that Narberth was growing in size and importance because a daily mail coach ran through it (1811: 168.) The mail coach to Milford changed horses at Tavernspite. Numerous roads meet immediately to the east of the village emphasising its role as a nodal point in the transport system. In 1907 two smithies, an inn and the toll gate all stood here; more recently settlement has developed on the north side of the main through route, and then on its south side. The name of this settlement preserves the element tavern or coaching inn, whilst the element spite or sbeit records that it was opened in contentious, possibly malicious, circumstances, perhaps in opposition to another tavern (Charles, 1992: 500.) Fenton, however, conjectures that the name is Tavern y spitty and is derived from an "inn raised from the ruins of a hospitium" linked to a monastery which provided accommodation for pilgrims travelling to St. David's (1811: 262.) There is no evidence that the settlement provided facilities of this nature at this early a date. The later growth of railways does not appear to have effected the settlement pattern in a similar way: transport was faster and stopping places less necessary. Furthermore, in rural areas,

stations seem to have been built on the periphery of or even away from villages. Penally and Lamphey demonstrate the former tendency, Manorbier the latter. The siting of stations on the periphery of villages is almost certainly explained by the presence of suitable large areas of land for tracks and associated facilities here.

The maps of Saxton, Kip and Kitchen present, despite the minor variations noted above, fairly consitent indications of what were the major settlements of their times. This can be contrasted with the very "patchy" descriptions of villages given by their contemporaries. At different times between the late sixteenth and mid-nineteenth centuries Edward Lhwyd, George Owen and Samuel Lewis rarely mention villages. Lhwyd, collecting material for a revision of Camden's Britannia, wrote to many local correspondents for detailed information. The South Pembrokeshire parishes of St. Petrox, St. Twynells and Bosherston are included in Lhwyd's Parochialia. Limited information is given on the number and status of dwellings, the size of population and local antiquities, agriculture and pedology. Owen's descriptions are even more limited. Although he covers the whole county he gives only basic information on local agriculture, markets and customs. Descriptions are included of both Pembroke and Tenby, but there is nothing of note on any other settlement from within the study area. Lewis's Topographical Dictionary contains plentiful information on local economies, some basic statistics and descriptions of church architecture and other monuments. The description of Stacpole, for example, contains plentiful information on Stackpole Court mansion, even down to the contents of the library, yet nothing is mentioned of the village or any other contemporary settlement. Likewise the entry of Castlemartin contains a most complimentary description of the residences of the Mirehouse and Leach families, some notes on local history and ornithology, but again no mention of any settlement.

The are two important sources which illustrate the growth of settlements in the twentieth century: the second edition of the county series of the 25" OS maps and Kelly's Directory of South Wales (published in 1906.) There are several problems encountered with an analysis of the data included in the Directory. Although it is the most comprenhensive one for the region certain information is not recorded. The names of farmers, craftsmen and - much less frequently - those of the agents or owners of extractive and manufacturing industries (such as quarries and brickworks) are given, but there is no reference to farm labourers, quarrymen or miners. This gives the impression that settlements such as Loveston, Jeffreyston and Begelly were almost entirely peopled by farming families. A detailed study of the occupational data included in census returns would show a quite different picture: these were mining communities and farming was a minority occupation. Furthermore the data is presented on a parish-specific basis. References are rarely made to settlements, but rather to the civil parishes as they existed in 1906. Finally there is the problem of interpretation; for example, a clear distinction is always drawn between a grocer and a shopkeeper, yet the basis of this is not known.

The information given in the directories can be used to

compile a hierarchy of settlements and so it is possible to identify which settlements were, and were not, of importance in the early twentieth century. Three criteria have been used to identify important centres providing some degree of local service. These are the presence of a church or a non-conformist chapel within the settlement (as opposed to within the parish,) an elementray school and a sub-postoffice. Fourteen of the seventy nine settlements (18%) possess all three elements and may therefore be considered as important rural centres in the first decade of this century; Angle, Hundleton and St. Florence are all examples of this type. In nine settlements (11%) two of the three functions can be found and in 17 settlements (22%) just one attribute. In 14 of these 17 the single attribute is the church; This suggests that the importance of most of these settlements might be the result of historical chance. The parish church was (for whatever reason) built there in the twelfth or thirteenth century and has survived, as might be expected, for several centuries. Almost half (49%) of the centres now considered to be important possessed no church/chapel, school or sub-postoffice in 1906.

The small scale maps also show that 29 of the 79 nucleations (37%) which exist today were single farms in the years before the Great War. Over a third of the contemporary nucleations have therefore developed in the last eighty years. These settlements are scattered throughout the study area, with a slight tendency to be located between Narberth and Saundersfoot. As might be expected the Directory shows that few of the settlements possessed any of the three functions listed above: 23 had no attribute at all, The Rhos and Landshipping had just sub-postoffices and Rhoscrowther just a church. Kilgetty had both a school and sub-postoffice and both Amroth and Llandewi Velfrey had all three attributes. This observation is of note - neither, it appears was populous - but both were recognised as local service centres at that time.

VI: Conclusion.

This report has considered how the historical settlements of South Pembrokeshire have been defined and has examined at length the origins and growth of these settlements. Throughout it has been aimed to strike a balance between description of the nucleated settlements and an examination of the processes which led to their existence, or in some cases, disappearance.

No one period has emerged as the crucial one in which all the villages were established. Some would appear to have their origins in the early medieval centuries, others did not exist before the present century. Two periods of heightened development can be identified within this gradual evolutionary trend: the years after the Norman Conquest in the late eleventh century and the eighteenth century during which the coalfield was commercially exploited. One period of retrenchment has also been identified. This was the fourteenth and fifteenth centuries when settlement reached the margin at which crops could be successfully cultivated and then began to retreat from it.

Paradoxically, the processes which lie behind settlement

nucleation are varied and yet constant. Clerics, conquistadores and coal owners hardly make up a unified group; however all three exercised power over ordinary people and thus over the settlement pattern and landscape. The ownership of land and the need to make it productive led to the need to control the labour force, and villages emerged as centres where people could be brought together and their abilities exploited. This theme unifies this study. Whether at St. Florence and Jeffreyston in the pre-Conquest period, Monkton and Templeton in the twelfth century, or Thomas Chapel and Reynalton in the eighteenth century villages were centres of labour under the power of elites who saw people and land as resources to be controlled and made productive.

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