A GEOGRAPHICAL STUDY OF LANGUAGE BORDERS IN WALES AND BRITTANY

A thesis submitted by

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To my Grandmother in Llanfechain
and Aunty Pattie in Llansilin

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(Please note that these are located in Volume II, immediately following illustrations)

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APPENDIX II: Production of Population Surface maps by means of a Moving Circle computer programme.(Includes copy of programme,sample of printout and maps of effect of choice of radius size.)

APPENDIX III: Copies of Questionnaire I, to collect information on "Speaking frequencies" and "Speaking situations", administered in both study areas, and of Questionnaire II (the "Diary experiment"), administered in the Welsh area only.

APPENDIX IV: Copies of Questionnaire III (administered in both areas) and data forming the basis of figures VII.1 to VII.9

A geographical study of language borders in Wales and Brittany

SUMMARY

Making particular use of cartographic methods, the study analyses the process of language-shift in two localities, one near Oswestry in the Welsh Borderland and the other near Châtelaudren in Côtes-du-Nord, Brittany. Both areas are situated on the line of linguistic divides, as traditionally recognised. The assumption is made that the geographer's methods may realistically be applied in the analysis of the abstract characteristics of language, so long as a distance-scale and a time-scale commensurate with the scale of the process are selected. This necessitates the discarding of census data on Welsh speaking, and no official statistics on the speaking of Breton are available. Instead, a hundred per cent sample of "households with one or more members able to speak Welsh or Breton" is obtained, providing detailed information on the potential for the speaking of these languages in different parts of the study areas. The distribution of speakers is related to the influence of a series of variables, including topography, accessibility, settlement and communications patterns, employment and demographic characteristics.

Against the potential are set two measures of the actual use of the two languages. Two pieces of information on actual use are obtained by questionnaire sample: first, the frequency of Welsh or Breton use by individuals; secondly, the variety of speaking situations (for example, home, workplace) where these languages are spoken. Cartographic comparison reveals areas showing anomalies between potential and actual use, and raises the question whether critical threshold numbers and proportions of speakers are necessary to promote or prevent language shifts. Particular attention is given to aspects of migration as an influence on thresholds and patterns

of language use. A further stage of the survey examines opinion on the state of survival of Welsh and Breton in the two areas and the influence which opinion may have on the continued use of either language as the shift progresses.

The two areas produce many contrasting results. Differences in attitudes to language use in the two areas are attributed partly to historical influences and partly to the differing status of the two languages, both within the study areas and in the national context. The Breton area appears to be at a more advanced stage of shift than the Welsh one. In both cases, knowledge of the state of decay of the two languages is found to be only slight, and is inaccurate except in the most general terms. Extraneous factors such as communications or employment patterns seem to exert a greater influence on language change than do local opinions on language survival. The linguistic divide is seen to be a complex zone within which speaking groups maintain or forfeit their language according to the degree of group communication which they can maintain.

It is concluded that even at the most local of scales, language areas exhibit spatial features such as cores and fringes of intensity of language use, and that geographical and cartographic methods may make a significant contribution to the analysis of linguistic processes if an appropriate scale is employed for the collection and analysis of information.

CHAPTER I

GEOGRAPHY AND THE STUDY OF LANGUAGE

1.1 The nature of language:

In the last decades of the nineteenth century and the first decades of the present one, a subject called "linguistic geography" established itself as one element of the geographer's developing skills. Its subsequent evolution has been both diverse and sporadic, and it has remained one of the less-studied aspects of twentieth-century geography. This relative obscurity is not surprising. The material which appears to lend itself most readily to geographical study is perhaps that which can be conceived of in terms of distributions and, traditionally, that which can be represented adequately on maps. Either of these two approaches to language presents difficulties. It is a transient, airborne phenomenon, continually subject to change, and its progress from mouth to ear can be aided by telecommunications, transcending the problems posed by such obstacles as mountains or rivers.

Reactions to this characteristic are varied; some workers dismantle languages and study their component words, expressions, syntax or pronunciation, usually with reference to their distributions if the study considers itself a geographical one. Others prefer to disregard these structural details, instead considering languages as entities and often using the national unit or the whole language area as a basis for study. If there is any desire further to eliminate problems, only the centre or core of the language

area is studied, in order to remove the complications existing at the fringes. For beyond doubt, greater problems are posed at the edge of the language area. There is a greater likelihood of words, expressions or constructions being adopted from neighbouring languages, frequently in hybrid form, and the more subtle the influence, the greater are the complications and uncertainties it introduces.

1.2 The motive for the study of language borders:

Despite such problems, the present study sets out to pay particular attention to language borders. The edges of areas (for example land and water, agricultural margins) have provided geographers with many of their most rewarding sources of information, highlighting processes which may be less visible in the centre. In the same way, there seems every reason to suppose that the fringes of language areas can provide information which may be less evident in the centre of the language area. For this to be the case, however, the language borders must be "open", that is, not coincident with political frontiers which may artificially maintain them. The two examples chosen for study are the open borders between English and Welsh, French and Breton. The subject will be approached mainly from a scrutiny of particular localities, transecting these two language - borders. In this case it is not a study of languages of equal status, such as might be applied to the border - zone between the French - and German - speaking areas of Europe for example, but a study of the borders between monoglot

areas (English only, French only) and partly bilingual[1] ones, where Welsh and Breton, along with English and French, play parts of varying importance in the daily pattern of speech. The English language has, over the centuries, gradually encroached upon the territory of Welsh, and has appropriated some of the latter's functions (for example, as a medium of communication in the field of science) even in areas where the territorial invasion is not yet obvious. French is in a similarly powerful position with regard to Breton. The process is somewhat inelegantly termed, in the literature of linguistics, as "language shift".

Language shifts contribute in no small part to the creation of movements of national identity, such as Plaid Cymru or the Front de la Libération de Bretagne, and also to societies devoted, wholly or partly, to language promotion or preservation, such as the Welsh Language Society or Emglev an Tiegezhiou, the Catholic Association of Breton-speaking families. A growing body of literature, including studies by Fishman (1972a) and Stephens (1976), traces the evolution of such language-related movements and societies. While it should be remembered that language friction is only one of many vehicles for the development of nationalist movements, it is so commonly encountered, in Europe and elsewhere, that it seems necessary to understand, in as much detail as possible, the processes contributing to the changing fortunes of languages. The present study will consider the linguistic rather than the political or other aspects of language shift.

1: The precise meaning of this term is discussed below (section 1.4).

1.3 Definitions of linguistic geography:

The word "linguistic" has already been used several times in a context more vague than linguisticians would happily accept. As mentioned in 1.1, the meeting-point between linguistics and geography is of uncertain character and in recent years attempts have been made to explain and classify the subject matter of linguistic geography. A study of the Auvergne by Bonnaud (1973) distinguished between "linguistic geography" and "geographical linguistics", and Breton (1975), made the same rather nebulous distinction, in an article which sets out to explain some of the motives for studying cultural geography in general and linguistic geography in particular. His conclusion (op.cit., p.521) is that:

> "The linguistician's work ends where that of the geographer begins. The latter takes the language which has been analysed by the former and places it in the context of space and society..."

The relationship is seen, presumably, in the same light as that between geography and other specialist disciplines such as botany, mathematics or geology. That the relationship is as straightforward as the quotation would imply, seems very doubtful. Breton feels that the geographer is only qualified to study language as a "phenomène global", or entity (op.cit., p.524), and that any investigation below this global level should be consigned to linguisticians. This implies that the student of linguistics is necessarily able to undertake any geographical analysis necessary at the sub-global level of language, but this is not usually the case. Many of the best-known applications of geography to

linguistics have been precisely at this sub-global level, for example Gilliéron and Edmont (1910).

In a paper which provides a useful outline of the subject a matter of linguistic geography, Trudgill (1975, pp. 240-1) concludes that geography, both in its analytical and cartographic techniques, has much to offer linguisticians in the further pursuit of their subject. His division of the geography of language is basically: (i) "dialectology" or "linguistic geography", concerned with the spatial distributions of words, pronunciations or constructions, (ii) "linguistic area studies", identifying common features of languages, usually on the broad scale of whole countries or continents and (iii) "geographical linguistics", using geographical sampling methods, concepts such as Hägerstrand's innovation diffusion, and cartographic techniques developed by geographers, in order to aid analysis. Trudgill's nomenclature is contentious, but the present study (henceforth avoiding any of the above terms as far as possible) seems to correspond with the third category. Particular use will be made of cartographic analysis in the present instance. The application of other geographical methods of analysis has been used to good effect in other studies mentioned by Trudgill. Afendras (1970a), for example, was among the first to realise the applicability of concepts such as innovation diffusion to the process of analysing language shifts, though there are a few earlier applications, including that of Jernudd (1968), who attempts to predict the sequence of diffusion of Arabic in an area of the Sudan. As the number of geographical language studies accumulates, it will become possible to derive

language shift models, if this is still seen as an appropriate aim. Certainly, the process of forecasting language changes will become less hazardous than at present. Given the stage of development of work, the present study will neither construct models nor attempt forecasts of the shift from Welsh to English or Breton to French, but may be able to test the feasibility and desirability of doing this.

1.4 Preliminary consideration of the relative roles of the languages under study:

One further aspect of the problems the geographer faces in the study of language borders is the difficulties posed by the term "bilingual". It may happen, as it has, for example, in areas of South America where an originally Spanish culture is being superimposed upon a native Indian one, that two languages exist in an area totally or almost totally independently of each other, with monolingual groups conducting their daily affairs in exactly the same piece of territory, but in different languages ("between-group multilingualism"). In contrast it may occur, as it has in the case of French and Flemish in Brussels, that a substantial proportion of people in an area are able to converse in two languages, both of which therefore appear to have a similar distribution ("within-group multilingualism").[2] In the case of the present study, there are few people who speak Welsh and English, or Breton and French, indiscriminately, and a very small proportion indeed who are monolingual in Breton or Welsh, at least in the border areas here under study.

2: The terms are those of J.A. Fishman (1972 b)

It is frequently found that people able to speak more than one language tend to reserve each for particular occasions, such as going shopping or attending religious services or cultural gatherings such as an eisteddfod or feston noz. These varying occasions (henceforth referred to as "speaking situations") will form an important part of the investigation.

It is difficult to reconcile this discriminate use of language with traditional definitions of "bilingual" such as "speaking two languages customarily and with equal ease" (Pei and Gaynor, 1958, p.29). The two ideas are not entirely incompatible, however, since it may be that speakers exercise their ability to switch languages quite instinctively, without taking a conscious decision. It seems likely, whatever the level of consciousness, that the choice of language used is influenced by the subject of conversation, the company the speaker is in and by the speaker's location at the time.

Finally, if the strict definition of "bilingual" is disregarded, and even people who speak one or other of the languages with the greatest reluctance or difficulty are included, a further problem arises: that of deciding whether a speaker's limited vocabulary in any language is comprehensive enough to constitute effective speaking of that language. The problem remains for later chapters.

1.5 The crucial factor of distance-scale in language geography:

It seems to follow that the greater the amount of detail sought on language borders, the more complications and even apparent contradictions it is necessary to accept. It

is only too easy to apply principles which hold good in studies at a national scale to local studies and to consider them invalid because they do not conform to realities at a micro-scale. Bonnaud, in his study of the Auvergne (op.cit., p.338), makes just such a point:

> "In order to explain (linguistic) phenomena at varying scales, it is necessary to seek a number of possible influences: the geographical influences on local sub-dialects are not the same as those on dialect-groups as a whole".

The task here undertaken demands a "micro-approach". In this context, the term means not only that relatively small areas will be examined in detail, but also that the time-scale used will be short when compared with the length of time during which Welsh and Breton have been experiencing pressure from their more powerful neighbours.

A brief consideration of possible types of scale now becomes necessary, using examples of some of the types of time - and distance - scales employed in the past, and beginning with distance - scales. In this second connection, figure I.1 should be consulted. It serves a dual purpose, briefly locating the two main areas chosen for close study in relation to the English, French, Welsh and Breton areas as a whole, as well as indicating the size of units which have been used for past studies of language borders. The process by which the choice of the present areas was made is described in chapter II.

The main impression of the two study areas obtained from figure I.1 is probably of their insignificant proportions. From these two small areas, it can scarcely be

hoped or expected that general conclusions on the Welsh and Breton borders can be drawn, nor can they legitimately be compared. The desire to restrict the extent of the areas stems from the aim of obtaining as detailed an impression as possible of the chosen localities, including, if possible, a hundred per cent sample of households. This, in turn, was prompted by the hypothesis that patterns of language speaking are essentially extremely localised, being created by a few individuals within any locality, and that without examining all households, at least initially, these patterns would escape attention. If this is indeed so, it may be suggested that it might have been more helpful to consider either Wales or Brittany, rather than both, and that this reduction would have enabled larger hundred per cent sample areas to be taken in whichever one were chosen, thus offering a greater chance of avoiding atypical or eccentric features. Previous experience by language geographers has indicated strongly, however, that working on micro-areas in only one linguistic context makes the task of objective judgment a difficult one. Addition of further micro-study areas from different situations allows a greater chance of seeing the processes at work. Bonnaud's summing-up (op.cit, p.338) is again succinct:

> "often a solution to unanswered questions in France can be suggested by situations observable further afield, where problems may be seen in a different light, and at another stage of development".

Perhaps, in view of these difficulties encountered at the micro-scale, it is scarcely surprising that the great

majority of textbooks on cultural or social geography tend to discuss language in the most general of terms, at a national, continental or even global scale, and descriptively rather than analytically.[3] Not surprisingly, studies on the national scale but devoted to one particular language area can provide more detail and a greater degree of analysis. One of the best-known studies of this type is that by Bowen (1959). Within the national territory of Wales, he distinguishes a physical "heartland", on the basis of the seaward-facing valleys of the west and a number of other criteria including climatic and vegetational ones. Distinct from this physical division, though evidently influenced by it, is a cultural one, based on considerations of population density and the percentage of people able to speak Welsh, and incorporating a "core" and "fringe". The Welsh language border is, of course, generally coincident with the language fringe.

Bowen's article is by no means the only example that could be given. Before and after it, numerous other studies, for example those by D.T. Williams (1935 and 1936), J.G. Thomas (1956) and Bowen and Carter (1975) have contributed to the literature at the national scale. Such is their number, in fact, that at this scale Welsh must be one of the most thoroughly-treated languages in the whole of geographical literature. Part of the explanation for

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3: two of the many texts treating language at this scale, and selected for their typicality rather than their quality, are Kariel and Kariel (1972) and Broek and Webb (1973).

this is the decennial source of data (with the exception of 1941) from the Census of England and Wales, which has asked a question on Welsh-speaking since 1891, though the parish unit has only been used as a basis of published statistics since 1921. For Brittany, such a data source and hence such a literature, is totally lacking. Successive French governments have steadfastly refused to obtain precise statistics on Breton speaking, from the census or by any other means. Inconsistently (and perhaps significantly), the Direction Régionale of INSEE at Strasbourg has been collecting data on the German and dialect-speaking minorities of Alsace since 1931 (see bibliography). The would-be student of Breton language distribution must rely upon estimates at the national scale, for example those by Hemon (1928), Gourvil (1952) and Bozec (1974), reported by Gwegen (1975, pp. 55-7). The lack of precise information on the state of survival of Breton in the various parts of "Bretagne bretonnante" makes it scarcely surprising that most of the literature on Breton is somewhat speculative and often slightly evangelistic in tone.[4] More particularly, the dearth of geographical analysis is explained.

After the national unit, it is a matter of some debate what the next smallest convenient unit of study would be. More often than not, the size and composition of such a unit is determined entirely by the methods of data collection

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4: see, for example, Peniarth (1963) and Etienne-Abanna (1964)

used by government or other bodies, and the geographer is obliged to attempt to manipulate data collected on the basis of planning-regions, counties, départements, rural districts, parishes, or other administrative areas which he would not always have chosen as the ideal basis for such enumerations. As already mentioned, parish census data are available for Wales since 1921, and while enumeration-district data have also been available, the expense and delay necessary in order to obtain them have meant that the majority of studies have employed theparish as a convenient compromise.[5] In most cases, this unit has been detailed enough, since the whole length of the border, or else sections covering many miles, have been under consideration. In the absence of any officially-collected statistics in Brittany, it might be expected that individuals or organisations wishing to study the Breton language at the commune scale would collect statistics for their own purposes. If this is done, a remarkably small proportion of the data find their way into published material. Gwegen (op.cit., p.58) quotes figures for a school in Finistère and a commune in Côtes-du-Nord, for 1973 and 1971 respectively, but these fragments of information only emphasise the more usual lack of up-to-date statistics.

Even before the use of census data on Welsh speaking, it seems that parishes and communes were favoured as a framework for studies of both the Welsh and Breton borders. This is not surprising, since the parish vicars,

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5: among these are W.H. Rees (1947), R.M. Thomas (1967) and G.J. Lewis (1970).

ministers and priests were often used as local sources of information, though their reports were of varying reliability. For Welsh parishes between about 1750 and 1780, Anglican church Episcopal Visitation Returns are almost complete, and Nonconformist diaries are also available. Both give an indication of the proportion of church services conducted wholly or partly in Welsh. Diaries of casual visitors to Wales and to Brittany, such as that of Borrow (1862) make somewhat vague reference to the amounts of Welsh or Breton encountered in particular localities, but the more systematic survey carried out by Ogée (1843-53) is considerably more reliable as a source of background information on Breton-speaking in individual communes.

By the last quarter of the nineteenth century, and even before the taking of precise percentages by the Census, a more organised and systematic review of parishes was taking place, as, for example, that of A.J. Ellis (1882). In the case of the Breton border, Sébillot (1886) and Loth (1907), among others, carried out similar attempts at consolidation of commune data, attempting to introduce an element of objectivity into the previously rather impressionistic descriptions of the borders.

For several decades after the first use of the parish as a base for the collection of figures on Welsh-speaking, the parish unit appears to have been accepted as a satisfactory means of collecting data. At the same time

as the release of the first parish statistics on Welsh speaking, Dauzat (1922, p.10) was advocating the commune (the nearest French equivalent to the parish) as the most effective unit for the linguisic geographer to study. This may be regarded as a reasonable approach in rural France in the 1920s, when daily life tended to revolve around the church, shop, mairie and café of the individual commune, producing a great degree of social cohesion and linguistic homogeneity. In other cases, as remarked by D. T. Williams (1936, p.146) the parish scale was already less satisfactory. He points out (1935, p.240) that while Census parish statistics are useful for identifying general features of the distribution of Welsh, certain parishes (Swansea, for example) provide too large a territorial or population unit for any accurate analysis or cartographic representation, and local fieldwork is necessary. In the effort to establish not only the location of a line to be termed, loosely, the "linguistic divide", but also the actual character and clarity of this line, it becomes clear that something much more detailed than parish data will be required.

Signs of the difficulty experienced by the geographer attempting to make use of census-data in a study-area of relatively local nature may clearly be seen in the thesis written by R.M. Thomas (1967) on "The linguistic geography of Carmarthenshire, Glamorgan and Pembrokeshire".

He sums up the problem (op.cit., p.98) in the following terms:

> "... Parish data thus represent for the cartographer and sociologist alike the penultimate in statistical desirability, being surpassed only by individual linguistic information".

Thomas finds himself having to supplement parish figures by considerable fieldwork, especially as his study area covers parts of three different counties. In view of the small proportions of the two study areas as shown on figure I.1, there are strong indications that census data will decline proportionally in their usefulness as the scale of the chosen unit increases. Further , it will be noted that the area chosen on the English - Welsh border is located at the one point where a tongue of native Welsh-speaking extends across the national border line into Shropshire, and the Census does not ask the question on Welsh - speaking within this small area of England. No precise data on distribution of Welsh speaking at present in this area have been located, and very detailed fieldwork is required. However, considering the coarse grid of data for the areas just over the border inside Wales, equally detailed work seems necessary in that case also.

It is easy to agree with Thomas's quotation that parish data are not the perfect raw material for the cartographer and sociologist, but not so easy to concede that they are "the penultimate in statistical desirability". This last concept surely demands that units be of standard shape and size, or else it assumes that if units are not standard, they are completely random in nature. A glance at any map of parish boundaries shows that neither of these is the case. Parishes frequently bear some relationship to the topography or the agriculture of the area they enclose and, if ecclesiastical parishes, to ease of access to the church;

in other words, they have frequently been devised so as to avoid randomness[6]. If irregular units have to be used, it would be best to make them as small as possible, and figures for Welsh-speaking at enumeration-district level could play a useful part in setting the Welsh study-area in its context, with reference to nearby areas of Clwyd and Powys.

But better still would be the regular grid of kilometre squares upon which some information has been made available from the 1971 Census. This would bring several advantages (and some problems)[7] but enquiries from the Office of Population Censuses and surveys have revealed that it is not possible to obtain tabulation of Welsh-speakers at grid - square level, though such figures could be estimated from the enumeration- district figures for Wales. Use will be made of kilometre, and smaller, squares, for certain aspects of the present study (chapters IV - VII).

At a smaller scale still than this grid, there still remain two units at which language study is feasible, and could be desirable, especially where the aim is to detect linguistically subtle, but sometimes spatially sudden, changes across a border. These are the household unit and the individual.

6: This observation is corroborated, for example, by Stamp and Beaver (1963, p.239), who state that a large proportion of parishes "owe their peculiar form... to the necessity of sharing fairly between neighbouring parishes good land and poor, upland pasture and lowland pasture".

7: A general discussion of the grid square unit is to be found in Robertson, I.M.L. (1970)

Both, it is hoped, will find a place as essential elements in the present study, since a part of its purpose is to describe the speaking-links, between individuals and between households, across the line of the borders. The earlier quotation from R. M. Thomas stresses the value of information for individual speakers, and in respect of scale this is indeed the ultimate in value to the linguistic geographer.

It could be argued that at the scale of the individual house, linguistic information loses its spatial nature, and becomes sociology or linguistics. The geographer's interest lies, however, in discovering the speaking relationships which individual households, or local groups of households, set up with neighbouring units of similar scale, across an area of country. Thus detail at this scale becomes essential. It brings with it problems, not the least of which is the danger of becoming inundated with detail and failing to perceive the major elements of the pattern, but prevents the unwarranted generalisation of complex patterns of language - use. If language - speaking is the practice of the individual, who has the choice of continuing to use a traditional minority language in a language-shift situation, then it is to the individual that the language geographer is obliged to turn in the choice of his study scale.

1.6 <u>The choice of time-scales for study</u>:

Too often, time and distance seem to have been seen as alternatives, rather than complements, in language - study. For example, Gino Bottiglioni (1954) remarks that Gilliéron, in compiling his "Atlas Linguistique", thought he could discard the historical - comparative approach to linguistic geography,

in favour of comparisons of different land-areas at the same moment in time. In addition (op.cit, p.379), Bottiglioni states that the language student should begin "with the word in the immediacy of its poetic creation", rather than by looking at historical patterns. The same reasoning would, however, lead to a similar disregard of the geographical approach to language. The approach is by no means atypical of a whole school of thought in language study, which would maintain that language is the creation of the moment, and of one particular place, ill-suited to generalisations.

Nonetheless, many of the detailed studies of Welsh and Breton during the present century have used the dimensions of space, or time, or both, as an analytical instrument. Figure I.1, greatly simplified as it is, makes it clear that Welsh and Breton have manifestly not been of static distribution over the past thousand years, and explains why a discussion of changes over time is necessary. The benefit of this length of time-scale is that it allows the whole of the period of Welsh and Breton decline to be surveyed, but it has the disadvantage that detail of specific locations is relatively sparse for the period between the departure of the Romans from Britain and the influx of Saxons into Britain which is said by some sources to have been one of the main factors in the emigration of British inhabitants to Brittany, carrying with them their

language which has survived to become Breton.[8] P.D. Wood (1958) and J.I. Thomas (1963) both begin their studies as early as the Iron Age, but obviously neither can begin a detailed study of language as early as this. W.H. Rees (1947), after a brief sojourn in the Roman to Saxon period, concentrates his attention on giving a very much more detailed account of the progressive westward movement of the English-Welsh language divide after the tenth century. The same kind of period is taken by François Falc'hun (1949) for his study of the linguistic geography of the Breton language, an authoritative phonological survey of the distribution of regional variations within Breton, though G. Béchard (1967) one of Falc'hun's students, is able to begin his thesis in Roman times or earlier, this work being concerned with language and more with placenames, in an area near the Breton language-border. Béchard does, however, attempt to trace some former positions of the language - divide from placenames.

Examination of such a long time-scale perhaps befits studies such as those quoted, all of which cover either a whole cultural or linguistic border or else an extensive section of such a border.

8: Even this is not undisputed; the opinion expressed is stated by Chadwick (1963), for example, while Falc'hun (1962) considers Breton to owe its origin much more to the Celtic language of ancient Gaul (500 - 50 B.C). A background to the long - standing argument may be found in W. Edwards (1892), indicating the protracted nature of the debate.

But frequently, specific knowledge of early periods covered by Wood, Thomas and Béchard is lacking for more localised studies. Thus R. M. Thomas begins his survey in 1750, which he takes as that moment just before that first stirrings of the Industrial Revolution in South Wales were to destroy permanently the existing language-patterns, and his aim, expressed in the summary which precedes his thesis (op.cit, p.13), is:

> "... to create a series of period pictures, these being followed by an analysis of changes and an attempt to relate these to prevailing social and economic conditions...".

Thomas stresses the need to take a long time-span in language study, rather than basing conclusions on the examination of any particular area taken at any particular moment in time. His methods could, with reason, be applied to the study here under way, the examination of a long time span helping to eliminate, in part, the dangers resulting from the small size of study- areas. Against this longer scale, however, could be placed one more practical for purely local study: the span of time remembered by the oldest inhabitants interviewed, that is from about 1890 onwards, this corresponding, by good fortune, with the first detailed and apparently objective surveys of the borders (Ellis, Sébillot, op.cit) and with the first available Welsh Census information for the areas surrounding that chosen in Shropshire. The choice of this time-span helps ensure that the language-geographer is dealing with present and observable trends, rather than ones he is assuming to exist from the historical pattern. This is an important comment to make in this case, where the areas are experiencing, from the point of view

of language, changes which they have never before felt to the same extent and which are likely, in a relatively short time, permanently to change the patterns of language-speaking within them.

While, therefore, an examination of much wider surrounding areas and much longer periods of time will find their place here, it is the purely local and the immediate to which the researcher hopes to make reference, using wider and longer scales merely to place the local and present ones in context.

1.7 First appraisal of the characteristics of the two language borders:

One assumption implicit in the discussion of space and time so far is that it is possible to delimit accurately the boundaries of a language-area, and to draw lines indicating the successive positions of language-frontiers[9], as has been attempted on figure I.1.

9: From this point onwards, specific meanings will be attributed to the following terms:
boundary: a precise limit, indicated by a line.
frontier: a wider zone on either side of a boundary, and whose way of life is clearly affected by the presence of the boundary.
(these two definitions are based on Prescott (1965), p.30).
border : a general term, used when it is not clear which of the two terms defined above is the more appropriate

N.B. the term linguistic divide remains for definition in chapter II, since it has many different connotations.

In one way it can be agreed that this last term is meaningless; a map showing location of numbers of Welsh-speakers in Britain, with a large number of expatriate speakers in London, or of Breton-speakers in France, with concentrations in Rennes and Paris, would point to the idea that colonies of speakers of a language may be, and often are, found outside the area normally associated with the speaking of that language. Frequently, too, these exiles are more closely-grouped than they would be in their area of origin; they tend to be very aware of their position as a minority group, make a conscious effort to maintain their language and customs, and contain in their number speakers who are of the second generation, and who may never have seen the area normally associated with the speaking of their minority language[10]. Taking this argument to its extreme, it could further be argued that speakers of the vast majority of languages can be found in all the countries of the world, making most major languages, theoretically, world-wide in distribution. Isolated language - speakers and communities ofthis kind present an interesting topic for study, but will not be discussed in the present work, which confines its attentions to the border areas of the original sources of the languages.

10: All of these features have been observed clearly, for example, in the Gaelic - speaking population of Glasgow, which numbers 23,735 out of 88,415 in Scotland, according to the 1971 Census.

If the borders of the Welsh and Breton languages are to be examined in the context of the national units of these two countries themselves, they cannot, with any possibility of success, be made to associate clearly with the eastern administrative borders of Wales and Brittany. This is especially so in the case of the latter, and figure I. 1 indicates that the present frontier zone of Breton and the eastern edge of the Planning Region of "Bretagne" are separated by a distance of some 150 kilometres in places. The division of national and language borders is less clear in the Welsh case (I.1) and in places the linguistic divide runs nearly along the national border, though never completely coincident with it for more than a short distance. It is generally true that until the Acts of Union of 1536 and 1542, the Welsh border was usually coincident with its national frontier, whereas the Breton national and linguistic frontiers had begun to separate some five centuries earlier[11].

It may be considered even more misleading to attempt to relate the language borders to any particular physical line, though often such comparisons of the physical and cultural may be useful in a very general sense. Sir Halford Mackinder (1902, p.57) attempted to relate the English-Welsh border to the 1,000 foot contour of the border hills, and while disagreeing with such an over-simplification and pointing out that the Marcher Lordships of the thirteeth and later centuries acting as buffers between England and Wales,

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11: see, for example Hemon (1947), p. 46.

transcended this border, P. D. Wood (op.cit, chapter VII) has to agree that they were divided into "Englishries" and "Welshries" according to altitude. But generally it does not appear that topographical or other physical considerations will be of predominant importance in defining the language-borders, or even for accounting for localised pockets of particular strength or weakness of Welsh or Breton-speaking. Musset, (1937 p.1) notes that " c'est par pure convention qu'on sépare Haute et Basse Bretagne par la frontière entre les langues française et bretonne", and adds the following clear statement (op.cit, p.162) about this same line and its relationship to relief:

> "... elle court, par l'effet des caprices de l'histoire, au travers d'un pays singulièrement uniforme; rien ne change quand on la franchit, hors le langage...".

If this is indeed the case, the task of close examination of the Breton language border is likely to be greatly simplified by the lack of influence of such features as relief; but it is difficult to believe that the transition is as straightforward as Musset implies.

In the meantime the problem still remains of setting the criteria by which the language-border should be defined. Since the criterion of number of speakers of the language by parishes has already been shown to be of little practical use in this case, others will have to be devised. The first of these which comes to mind in the areas in question is that of the location of "native speakers" - that is, those who

learned the language as children, in the same place where they at present live. Since very few people are likely to be living, at the time when the enquiry takes place, in exactly the same house in which they were born, this method, in its turn, raises problems of how "the same place" is to be defined. It is questionable whether it is permissible to set arbitrary limits of two or ten miles, yet some sort of range would have to be set, in order to collect a large enough sample of people who are living in "the same place". It may be, however, that in border areas even distances of half a mile can be critical.

One way of overcoming this is to take a completely different criterion, which makes no difference between "native" speakers and those who have learned Welsh in school or at evening classes. (Classes in Breton tend to be more rare.) This method rests on the assumption that towards the edge of the language area it is especially likely that pockets of greater and lesser strength of speaking will appear, and that Welsh and Breton migrants to areas just over the border may well continue to speak Welsh or Breton in these areas, seeking out other speakers of the same language, and if a suitable number is found, either consciously or unconsciously setting up a local language-speaking group. The exact size of "a suitable number", the size of locality in which the group can be regarded as existing, the distances between the homes of the various speakers and the frequency of speaking all remain for definition later.

If these assumptions are correct, it is fair to draw the impression that the language border, seen under the close inspection of a small-scale examination of particular localities, cannot possibly be linear and must, rather, be a frontier, a zone of some width. In its very essence, a language is a network of interactions between all the people in a community, an areal rather than a linear feature, a contact-zone rather than a "divide". The borders can be expected to be a series of points, representing households where Welsh or Breton is spoken,whose percentage of the total decreases and whose scatter widens as the linguistic frontier is crossed. But here again the question of scale is raised; on the scale of many previous examinations of the borders of Welsh and Breton, a line representing the linguistic divide is quite a reasonable means of representation. Even on the national scale, though, not all workers have seen the necessity of representation by lines. For example, Gilliéron in the "Atlas de France", uses the framework of 1:50,000 map sheets and simply notes absence or presence of words or expressions achieving thereby a less precise, yet perhaps more realistic, result.

In addition to objections to the drawing of lines as an indication of the edge of language-areas, there may be quoted those which state, basically, that a line of constant thickness gives no indication of the varying clarity of a linguistic divide along its length. In the introduction to his thesis, in the course of a discussion on "The Political Boundary in Geography", P.D. Wood (op.cit, p.10) mentions the

varying clarity of the Welsh national border (in the period of his description also to a great extent the language border) during various periods of history, including the pre-Roman unpopulated forest zone,the clearly-defined Roman strip, the eighth and ninth-century agreed and defined boundary, including the line of Offa's Dyke, and the no-man's-land of the later West Mercian frontier. It is contended that not only can this characteristic of language-frontiers be noted over time, but also over distance at any one moment in time, and that in both study-areas, varying degrees of abruptness of the disappearance of Welsh and Breton may be noted. Alternatively a more abrupt west-east disappearance of Breton than of Welsh may be seen, or vice-versa. This leads to hypotheses that the extent to which the two language-communities each side of the border live in isolation from each other, and perhaps also the rapidity of the encroachment of the language which is winning the battle for territory, will affect the clarity and the narrowness of the border-zone. The first of these may be implied in the first chapter of R.M. Thomas (op.cit.), where he ascribes the narrowness of the historical linguistic divide (the "Landsker") of Pembrokeshire to the social separation of the English and Welsh communities on either side.

1.8: Points of view on language borders:

While it is useful to know how scholars have approached the idea of language borders, it may be contended

with reason that the most important opinions are those of people whose lives are spent on language borders, and, most of all, those people who have particular power to affect these borders, in their capacity as planners, for example. It is difficult to deny that administrative systems are important. The position of the English-Welsh border governs the availability of Welsh-lessons in schools, regardless of the actual distribution of Welsh-speakers. This argument could be used just as well to justify the abolition of formal Welsh teaching in some very anglicised areas of Wales (for example the parishes of Tybroughton and Halghton , ten miles north-east of the study-area, with 10 out of 135 and 5 out of 250 Welsh-speaking respectively in 1971)[12], as it could to support the commencement of Welsh-lessons in some of the schools of north-west Shropshire. The inconsistencies in the availability of census data have already been discussed, and the same apparent lack of observation can be noted in the distribution of bilingual notices and circulars by companies serving the border area. This approach to language borders is of considerably greater importance in the case of Wales than of Brittany, for the simple fact that administrators and commercial concerns almost completely disregard the existence of Breton, and central policy seems to be based on the idea of ignoring the language as far as possible.[13]

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12. Census of England and Wales, 1971; Report on the Welsh Language in Wales.

13. See, for example M. Stephens (1976), pp 389 - 91.

Further, it has already been seen that the region "Bretagne", as conceived of by French regional planners, has nothing to do with the area where Breton is spoken, and no evidence has been found that the planning regions have been used as a basis for cultural planning, but rather simply for administrative convenience and economic strategy. In the Welsh area, consideration will be given to the effect of the national border, both upon local people's opinions and upon those of planners. The opinion of local residents is a factor which, at this stage of the study, is attended by a particularly large number of imponderables. In cases where political and linguistic borders are not necessarily one and the same (that is, in "open borders"), it may well be that there is some unwritten social agreement, within the locality, upon where the language border is located, and if so, this may influence the frequency of Welsh and Breton speaking.

1.9: <u>The problem and the approach</u>:

From the foregoing discussions it may be concluded that the problem is that of establishing the relationship between language and place. This has raised associated questions on the exact nature of language and on the scale of approach. Not all students of linguistics would even approve of the idea of attempting to relate language and geographical environments. Haugen (1972, p.325), for example, is of the opinion that:

> "Language ecology may be defined as the study of interactions between any given language and its environment. The definition of environment might lead one's thoughts first of all to the referential world to which language provides an index. However, this is the environment not of the language but of its lexicon or grammar. The true environment of a language is the society that it uses as one of its codes".

Despite such reservations, the present study is based upon the belief that it is possible to relate language to place as well as to society, and to measure, against scales of place and time, "the word in the immediacy of its poetic creation". Chapter IV, based as it is upon the distributions of households with one or more members able to speak Welsh or Breton, will give the first indication of the absence or presence of spatial pattern in the "potential" for the speaking of these two languages. Later chapters (V and VI) will attempt to analyse, by cartographic and other means, the frequency and versatility of the two languages, providing "actual" situations with which to compare the potential. If this approach is successful, subsequent chapters will analyse the opinions and attitudes which create, maintain or destroy the patterns discovered.

CHAPTER II

BACKGROUND TO THE STUDY AREAS

2.1 Early descriptive studies of linguistic divides in Wales and Brittany :

Before any detailed study of the two language borders can take place, it is necessary both to explain the choice of study areas and to describe some of the features which are likely to affect language speaking within them.

Although the precise meaning of the term "linguistic divide" has already given rise to some doubt (section 1.7), it was earlier studies of such divides which strongly influenced the location of the study areas. The term seems to imply a linear feature, or a boundary, and that early writers were in general quite content to think of language borders as lines. Thus, in 1882, A.J. Ellis's discussion of"the present boundary of English and Welsh", identifies its location (op.cit. p.119) as follows:-

> "Denbighshire — The line deflects slightly to the south east, passing through Wrexham, to the east of Ruabon (Rhiwabon) and west of Chirk.
> Shropshire — The line possibly continues through Oswestry and Llan-y-mynech.
> Montgomeryshire — The line enters this county east of Llansantffraid, and west of Llandysilio...".

Ellis's line, sketched according to his description in figure II,1, is based upon reports by local clergymen. He recognises the risk of inaccuracy in using only one information source per parish, but is still content to present his results in the form of a linear feature, and to describe the line's exact course.

The same stage of observation is represented in the case of Brittany in the work of Sébillot (1886). Although Ellis's study quotes the exact questions he put to his respondents, it is still not clear exactly what his line represents, whether it is the extent of the area where Welsh is known, or generally used. Sébillot is more precise; after referring to an early seventeenth century map, with the border of Breton passing through Binic, "leaving Lanvollon in Basse Bretagne, passing through Châtelaudren, then some distance to the west of Quintin" (op.cit, p.2), he makes it clear that west of the boundary he is setting out to trace French may be spoken, but Breton is the more usual language, and quotes several of the communes eventually chosen for examination in the present study as examples of this situation (op.cit, p.9). From his comment that in several localities situated exactly on his boundary line "the two languages are used almost equally", it seems clear that his line represents as nearly as possible the edges of the areas where French and Breton are in everyday use, rather than the maximum possible eastward extent of the Breton language area, and this accounts for the line's location slightly further west than might have been expected. Despite his obvious awareness of the complexity of the subject, he is still content to think of the border as a linear one, and he presents a map, reproduced in figure II. 2, tracing its course across the northern part of Côtes-du-Nord.

2.2 The advent of census data, and its effect on language studies:

The next phase, for Wales but not for Brittany, is that from 1921 onwards, with the availability of census information on a parish basis. The first authoritative articles discovered, written on the basis of parish data, are those by D.T. Williams (1935 and 1936). Considering the advance this may be thought to represent in data collection, Williams's lack of enthusiasm for the parish unit as a means of studying the language border (1935, p.240) is slightly ironic. His realisation of the complexity of language speaking frequencies clearly transcends the mass of parish statistics with which he is confronted, and he states that although a linear linguistic divide is shown on his maps, it should be regarded as a zone varying in width on each map, according to local conditions. Once again, however, his definition of a linguistic divide is obscure. Parish figures from the census clearly offer little help in the closer examination of this feature, and since Williams's time they have rarely proved helpful in the study of detailed distributions and micro-processes affecting the Welsh language, though they are sometimes helpful as background material.

2.3 Some examples of detailed studies of the language borders of Welsh :

This said, many of the articles appearing since the 1930s have continued to use the parish, because of the great amount of difficulty in obtaining information at a larger scale. This is particularly the case for studies of a historical

nature, such as those of W.T.R. Pryce (1972, 1975a, and 1975b) and B.S. John (1972), for example. These two references are quoted because of their contrasting nature. Pryce uses a study area in north east Wales, and refers particularly to the period between 1749 and 1846, when rapid changes, associated with industrialisation, urbanisation and migration, were taking place. Although the area finally chosen for study in the present case is only a few miles south of Pryce's, conditions are perhaps more similar to those described by John, writing of the Pembrokeshire Landsker. This area has been much less affected by the disruptions of industrialisation , and its social structure is strongly traditional, as in the case of the study area chosen here, though both are likely to have undergone subtle changes associated with migration and changing population densities, for example. John traces the development of the Landsker from Anglo-Norman times, and infers that, of one hundred and forty-five parishes in Pembrokeshire, seventy-four were English speaking, sixty-four Welsh and only six bilingual, "beinge as it were the marches betweene both those nations". The words he quotes (op.cit., p.10) are those of George Owen (1603), who also states that:

> "You shall finde in on parish a pathe waye parteinge the Welshe and Englishe, and the one side speake all Englishe, the other all Welshe, and differinge in tyllinge and in measuringe of theire lande, and diverse other matters....".

The self-containment of rural life, possible in the case of simple agricultural economies, has been reduced by the processes already mentioned in connection with Pryce's study area. In the

case of this last- mentioned area, even as early as the eighteenth century,

> "...nowhere was the divide between Welsh and English as sharply defined as has been suggested by previous writers: on the contrary, the territory shown as bilingual... was a manifestation of a buffer zone or a transitional area between what E.G. Bowen has termed 'Inner and 'Outer Wales'." (Pryce, 1972, p.359)

Pryce goes on to describe a series of intense pockets of one or the other language, flourishing within the transitional area —— in some cases several within the area of a single parish. He tends to dismiss them (*op.cit.*p.355) in favour of the greater importance of the idea of a buffer zone as an entity but it is the process of formation and maintenance of these pockets which may hold the clue to the processes at work on language borders, and to the existence or non - existence of the linguistic divide. In historical studies it is, of course, a task of extreme difficulty to obtain detailed enough information to carry the investigation to this sub-parish scale.

2.4 The study areas located in relation to linguistic divides; the range of possible influences on language:

Only a sample of the studies of linguistic divides in Wales and Brittany has been included here; yet it is probably enough to demonstrate the inaccuracy which tends to occur when attempts are made to generalise upon language borders, and also enough to allow the two study areas to be located with a reasonable degree of accuracy. This is done on figuresII.3 and II.4, which also illustrate the relatively restricted

range of conditions encountered, particularly in the Breton case, and reinforce the idea that a certain amount of caution must be exercised in making generalisations about language borders from incomplete evidence.[1]

At this point the question of distance-scales reappears. In the majority of the studies so far mentioned, the approach taken is to relate a broad range of factors, physical and human, to language distribution. Topography, land use, communications, settlement patterns, socio-economic systems, historical influences, migratory and demographic factors are among those which most often make their appearance. Within two such confined study areas, however, can the effect of any of these be demonstrated? The question cannot yet be fully answered, but a brief appraisal of some of the factors mentioned will help provide a background to the study.

2:5 Topography :

The effects of the first of these, topography, upon language are produced mainly through varying accessibility, suitability for cultivation and habitation, and the channelling of communications. The term encompasses the ideas both of altitude and of slope.

It would seem, at first sight, unacceptable to assume that altitude, per se, had any effect in preserving a language; a much more likely connection may be thought to exist,

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1: A more detailed source of background information may be found in the topographic maps enclosed at the end of this study. Grid references for the French area refer to the grid superimposed on the French 1: 50,000 sheet for the purposes of this study, rather than to the referencing system printed on the map.

however, between the isolation of a language from the influence of some more pervasive neighbour and the distances and slope steepnesses associated with altitude. Many distinguished writers in the past show support for the idea of the altitude factor, among them E. Estyn Evans (1928, p.266) who states, of the Shropshire - Montgomeryshire borderland:

> "The English language has similarly spread... uphill from the market towns..."

In the opening chapter of his thesis (1947), W.H. Rees makes special mention of two factors which appear to accompany an increase in the strength of Welsh speaking: distance west of the border and altitude.[2] Later work pursues the idea, including that of G.J. Lewis (1969, pp.210-14), who mentions the likelihood that altitude and accessibility (the two concepts apparently having some distinctive characteristics, attributing to altitude a role greater than that of simple restriction of access) are both important influences on Welsh speaking. There are even examples of the association working in reverse; J. Fewtrell (1877,p.383) states of Llanymynech parish:

> "Being situated upon the Welsh border, and part of it extending into Wales, we should naturally expect to find the Welsh portion to consist of hills...".

Bowen's "Pays de Galles", however, specifically denies the relationship at the national scale, quoting (p.5) the lack of the penetration of English along the Tanat and Vyrnwy valleys

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2: Rees, W.H. (1947), op.cit., for example, pp. 114, 164 189, 245.

(included, in part, in the study area) and the complete anglicisation of the upland Radnor Forest as evidence.

Another specific aspect of topography, slope, as distinct from altitude, has been less generally treated as an influence on language, perhaps because at the national or regional scale it is a factor upon which it is difficult to generalise. In this case the small extent of the study areas is an advantage. A sharp transition is visible in the solid geology of the Welsh area, from Ordovician and Silurian shales and mudstones in the west, much folded and faulted, to gently-dipping New Red Sandstones composing the eastern plain. Between these is a narrow band consisting mainly of Carboniferous limestone, terminating southwards in Llanymynech Hill (G.R.263220). The topography of the area (figure II.3) reflects this variety. It varies from generally north east -south west trending hills, rising to more than 500 metres in the west, with a relative relief of 150 to 250 metres, and slopes of 1 in 5 and more, to an eastern plain whose gentle undulations are attributable mainly to glacial and fluvioglacial deposits. The plain is only some 100 metres lower than much of the western hill area, but its relative relief is much less. Between the two extremes the limestone band forms a striking landscape feature, with steep breaks of slope of 100 or even 150 metres facing both westwards into Wales and eastwards into Shropshire.

The visual contrast within the Breton area's physical landscape are much more subtle. A general surface may be observed

sloping gently from 270 metres in the Bois Meur (044024) to about 100 metres in the north, near Bringolo (062134). The general trend of the solid geology is north west-south east, parallel to the coast, but this generalisation masks the complexity of the situation. Following this trend, and penetrating the general surface of granites and schists, is a complex series of porphyritic dykes, while another, similar, complex crosses the area from north to south. These cause the surface to be slightly accidented locally, but there is no marked break of slope comparable with those in the Welsh area, with the following exception: superimposed upon the general pattern and composed, according the the map of drift geology, of recent alluvium, is a dendritic pattern which is discovered to be a series of incised streams whose gorges are typically some 30 metres in depth (figure II.4). The Ruisseau Dourmeur south east of Bringolo (068129) is an example of a stream in such a gorge, and the Leff flows, to the north of Châtelaudren, through a gorge whose depth approaches 60 metres. Road and rail cross these gorges by bridge, and are not seriously impeded by their presence, but they may have an importance as landmarks. At the edge of a language area, and in a situation where respondents' views are sought on the location of the language border, this role may affect responses. The same may be true of landscape features in the Welsh area, in particular, perhaps, the limestone escarpments.

2.6 Settlement and communications patterns:

The broader role of physical landscape features is seen when they are related to man-made patterns such as those of communications, settlement and land use.

Rural settlement patterns in the two areas have much in common, despite the differences in physical background described. Writing of Llanfihangel, a parish four miles west of the Welsh study area, A.D. Rees (1951, p.11) states that:

> "Nine tenths of the inhabitants live in scattered farms and cottages, a few of which stand along the road-sides while the majority are well back among the fields and are connected with the roads and with each other by a network of rough tracks and footpaths".

This is a concise description of rural settlement as it appears in many of those parishes of the Welsh Borderland which have a predominantly farming, especially smallholding, economy, and which have been affected to only a small extent by such changes as the building of trunk roads. The rest of the parish population, Rees continues, lives either in the main village of the parish, Llanfihangel ("Y Llan") or in two other small hamlets which had (in 1939-40, when his study was undertaken) a shop, a school, and a chapel, and some half-dozen dwellings each. Such patterns exist, almost unmodified save for some school and shop closures, in the Welsh study area, and examples are shown in figure II.5, maps i and ii. The second of these shows that particularly adverse topographic conditions affect the pattern, which is really more associated with landscape of intermediate height and undulating or dissected nature, such as that found in Llanfihangel and over much of the

western part of the study area except the extreme western fringe. R.Musset (1937, pp.60 et.seq) is among the authors who describe Breton settlement patterns, mentioning patterns of complete dispersal such as that described by Rees for Llanfihangel, as well as agglomeration into hamlets ("villages") and larger nucleated settlements ("bourgs"), surrounding a church, rather in the manner of the ecclesiastical "Llan" settlements of pre-Norman Wales. Estimating the proportion of people living in the bourg of a sample commune (Bulat-Pestivien, some twenty kilometres west south west of the study area, but with very similar rural settlement characteristics), Musset (op.cit, p.77) quotes the proportion as one tenth, as for Llanfihangel. The maps in figures II.5, iii - vi show patterns typical of the dispersed, village and bourg settlements described, as well as a nucleated "Llan" settlement in the Welsh area.

Perhaps the way in which rural settlement patterns are most likely to affect language-speaking is through the varying degrees of family contact associated with each. This makes the assumption that the frequency with which people of the same language-speaking background meet and converse with each other, and the lack of frequency with which they meet people of other language backgrounds, is likely to be related directly with the strength, frequency and versatility of their use of their particular minority language, whether Welsh or Breton. The settlement patterns in figure II.5 demonstrate that there exists, also, a variety of communications networks.

The characteristics of networks associated with dispersal have already been described in the quotation on Llanfihangel, and the examples shown make it clear that dispersed settlement can give rise to a dense network of lanes and tracks which, even if not all of high quality, promote a degree of contact greater than might be expected in view of the population distribution. The network is, at the same time, not composed of roads of sufficient importance or quality to encourage the rapid ingress of influences from outside the locality.

The communications pattern associated with the agglomerated settlements, particularly the chief ones of parishes or communes, places them in an anomalous position with regard to language. This has been noted by some studies, for example that of the Irish Gaeltacht (1970), which concludes that in the case of north west Donegal, villages have a "negative linguistic influence".[3] By this it seeks to convey that the dispersed, outlying settlements, containing some 85 per cent of the parish population in many cases, may retain the minority language, for reasons already outlined, but that if the central village becomes anglicised, then the minority language in the whole of its hinterland is doomed to disappear:

> "Unless an Irish speaking community is large enough to encompass a village system, its linguistic future must be viewed with apprehension". (op.cit.,p.10)

3: An Foras Forbartha: A Development Study for the Gaeltacht (1970), p.63.

This degree of control is attributed, if only by inference, to the settlement's role in the settlement hierarchy and to its radial communications pattern, which allows anglicising influences, once established at a node, to penetrate the intricate network of hinterland roads and tracks. The hypothesis must be viewed with doubt, not least because it is possible to propose the entirely opposite idea that, in concentrating numbers of people in one place, and increasing the chance of daily encounters, the village and its communications system promote the speaking of languages, minority ones included. G.J. Lewis, however, lends his support to the former idea[4], and it may be thought applicable also to the Breton case.

Finally, a return to figures II.3 and II.4 shows the towns of Oswestry and Châtelaudren to provide the greatest concentrations of people, with the greatest chance of daily encounters, but also to be located at the centre of larger radial communications patterns. In these respects, they offer perhaps the greatest chance of weighing up the relative importance of the two alternative hypotheses expressed above. The urban status of Châtelaudren may be thought somewhat doubtful, but it has the remains of a weekly street-market, and also a rather greater variety of shops (some thirty in number) than are normally associated with even a large village.

4: G. J. Lewis, op.cit., p. 209. Quoted here the hypothesis is at least fourth-hand; Lewis quotes J. Hughes, who, in turn, inherited it from Cullum (see bibliography).

2.7 Agriculture and landscape; other employment types:

The dispersed settlement pattern described is claimed to be connected, in most cases, with a pastoral economy[5] and evidence from the two study areas does not contradict this. The landscape, in general terms, is one of small fields, with wooded hedgerows and a high proportion of permanent pasture, perhaps 80 per cent in both areas. Figure II.6, showing the occupation-structure of the communes in and immediately surrounding the Breton study area, demonstrates the dominance of agricultural employment, for the most part on family-owned holdings, exerted as recently as 1968. In the minds of many writers, for example Hemon (1947,p.54), the settled routine of traditional family life which this pattern promoted, particularly before the compulsory education laws of the 1880s increased the influence of French, is closely associated with the maintenance of Breton speaking.

Apart from the two "agricultural" columns, adding up to more than seventy per cent in almost all cases, the only other notable occupation is the general category "manual workers". This refers to non-agricultural labourers and craftsmen and, more particularly now, to factory and building workers in centres such as Châtelaudren and Guingamp. Ogée (1843, p.176) mentions a slight history of mining in the commune of Châtelaudren, the objects of interest being lead, silver and arsenic, but this activity ceased in the study area and nearby communes during the late decades of the

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5: For example, by J.G. Thomas (1946), p.142 Sylvester (1969) p.196 and Pinchemel (1964), p. 299.

nineteenth century. Much of the commune's present non-agricultural employment is provided by agricultural storage and retailing facilities, particularly an agricultural co-operative. The processing of agricultural produce (for example in the form of a small fruit-conserves factory) is of importance as are agricultural services (for example, banks, shops, solicitors' offices) and a printer's workshop. The agricultural proportion is now experiencing a decline, associated with land-holding consolidation and with a gradual decrease in the dispersal of the settlement pattern. For the more completely agricultural parts of the Welsh study area, even thirty years ago, an employment structure similar to the Breton ones was in existence though the proportion in agriculture has never been quite so high in the period since 1800. This is mainly because of some mining and quarrying activity, as well as the development of manufacturing and processing industries in Oswestry, associated with the railway era. Coal mining in the eighteenth and early nineteenth century was in both open-cast and closed mines, employing small numbers of workers in a few localities (e.g. Nant y Caws, 282266), and in the later nineteenth and twentieth centuries was restricted almost completely to larger, closed mines, such as that at Weston Rhyn (295360) and Ifton (322373). With the closure of these, mining has ceased to play an important part, but quarrying remains, including that at Porthywaen (265245), Llanddu (259229), Nantmawr (250250) and Criggion (287145), for limestone and granite, though the local quarries only employ a few hundred people in all. The building of the Welsh railway network was an important factor in the growth of these activities, as it was in the growth of Oswestry. The main through routes of the Welsh network were complete by 1864, after which the town

experienced a population growth (see section 2.8) and developed a variety of industries, from engineering to food processing. Though the variety has since suffered a decline, the town still contrasts sharply with the rest of the Welsh study area, in the emphasis on industrial and service functions in its employment structure.

2.8 Stages of population change in the study areas:

Carter and Thomas (1957,pp.230 et.seq.) mention some of the difficulties associated with estimating population numbers and densities in Wales before the 1801 population census. This applies equally to the study area, as it does also to the Breton study area before the first French census in 1801. Most writers assume a gradual rise in population between the Dark Ages and 1800, recognising that there were undoubtedly local fluctuations during this long interval. This seems particularly probable in areas which have traditionally experienced confict between people of different cultural backgrounds, as have both study areas. Deaths and enforced emigrations resulting from local hostilities result in a population density which can fluctuate over as short a period as a few years. The re- colonisation of devastated areas seems likely to have set up a series of regular waves of local migration, which would account in part for local population variations. They are also important for the fact that they may have played a part in disrupting and setting up language communities.

The general characteristics of population change since 1801 are shown in figures II.7 to II.9. An early upward trend is

visible in most cases, usually until about 1831 in the Welsh case and until 1851 in the Breton one. Since these dates, three main types of changes are visible: a decline, sometimes to the pre-1851 figure (e.g., Llangedwyn, Llanrhaiadr, Saint-Jean-Kerdaniel); a sustained, gradual rise or else a maintenance of population (e.g. Weston Rhyn, Selattyn , but no example among the communes in the Breton study area); or a more pronounced rise, as in the case of Oswestry Urban and Chirk, with, again, no example in the Breton study area. In many cases, these types can be associated with the types of landscapes distinguished in 2.5. The rise followed by a fall frequently represents parishes or communes where increasing agricultural population necessitated the reclamation and improvement of mountain and heathland which was not eminently suitable for intensive agriculture. Sylvester (1969, p.197), J.G. Thomas (1957, pp.144-56) and Pinchemel (1964, pp. 297-98) all describe this process, and evidence from the Welsh study area relates to the (admittedly atypical) parish of Selattyn, for which the 1831 Census adds a note to the effect that:

> " The increase of population in the parish of Selattyn (183 persons) is attributed to the cultivation of mountain land". 6

Pinchemel describes the same phase of evolution in France, pointing out the use of names fashionable in the late eighteenth century as evidence of land cleared at this period. "Mississippi" (G.R.081095) is an example. Ogée (1853, p.317)

6: 1831 Census Enumeration Abstract Vol I, p.520, note (C)

says, of Plouagat, that "there were previously many heathlands, but reclamation took place between 1778 and 1780".

The destination for out-migrating people from the more marginal agricultural land, as well as for the surplus labour accruing from reorganisation of land-holdings and agricultural methods, has been the areas to the east in the cases of both study areas. This eastward migration has continued ever since the start of the census period, and indeed it may well have been in existence before 1801, but during the early decades there was sufficient population in the areas west of those chosen for study constantly to replenish their population, whereas this is becoming much less the case during the present century. The eastern destinations vary, however, as the remaining two types of graph on II.7 and II.9 demonstrate . The type represented by Weston Rhyn, Llanymynech and Llanyblodwel relates strongly to areas possessing mining or quarrying activities (those Shropshire parishes relying solely on agriculture having a very similar pattern to that for the ones further west), and it seems strongly likely that they absorbed at least some of the migrants. More recently the proximity of all of the examples mentioned to main roads may have helped them sustain their population numbers. This is certainly the case for Chirk, included in the same category as the town of Oswestry because of the similarity of its graph, but owing its growth to early coalmining, followed by a fortunate succession of industries locating along the A5. Active participation in new industries was certainly the motive for nineteenth and early twentieth century migrations to Oswestry, but more recently it has been for the purposes of working in shops and service industries

or else for the purposes of retirement, that most ofthe town's new arrivals have come. The differing fortunes of Oswestry Urban and Rural districts are clearly shown on figure II.7; their population remained the same, in size and growth pattern, until 1841, since when it has declined in the rural area and multiplied threefold in the urban one. The disparity has been particularly noticeable since the end of the Second World War, and it seems realistic to think of the town's creating a "population vacuum" in its immediately - surrounding rural district. If this is discovered to be the case, it offers the opportunity for the study of Welsh in the contrasting areas of urban core and fringe.

Figure II.10 is another way of expressing the information just presented, by dates of the population peaks of the various communes and parishes, and figure II.11 compares densities of population at the peak with those at present. The first maps, of population peak dates, show that in the Breton case the earliest peaks were in the communes further away from the route nationale. Only in the town of Guingamp and its nearby communes has the peak been since 1900. The peak does not necessarily imply the date of the greatest economic efficiency of the commune, and may indicate severe over-population. Nonetheless, it may also mark the time when rural population densities allowed frequent interaction between families, and a high frequency of use of Breton (depending, of course, on the location of the commune, and on the origins of the farming families concerned). The Welsh map

shows a clear contrast from north east to south west, with the town and larger villages near the main roads exhibiting a recent peak, and the hill country to the west an early (frequently pre-1850) one. From II.11 it can be seen that decreases in rural pppulation density by more than 50 per cent between the peak and the present day are common, and that there is a positive correlation between an early peak and a large population decrease — the early onset of population decline being precipitated, it seems, by intolerable conditions caused by over- population on poor-quality land. Population densities in themselves are thought to be of significance in language-shift, but so, too, are the mechanisms regulating them, especially that of migration.

2.9 Migrant characteristics:

For most purposes, at least in the Welsh case, a clear and comprehensive assessment of population migration and its effect on language speaking is already in existence. This is in the work of G.J. Lewis (op.cit, particularly chapter VIII). Among Lewis's conclusions are that, from his sample of Welsh and non-Welsh speakers based on the electoral register between 1956 and 1966, the Welsh speakers were proportionately more migratory than the English and that their migrations were distinguished by the following characteristics: on the inter-regional scale (the longest distance moves examined), the Welsh speakers were predominantly out-migrants, while at this scale the immigrants contained a higher proportion of English speakers. At the intermediate (intra-regional and inter-area) scales, the out-migrants were mostly Welsh speaking and the

in-migrants were linguistically unsorted, while at the most local (intra-area) scale, the Welsh speakers were only slightly more migratory than the non-Welsh. In summary, the Welsh were more migratory than the English, but the difference declined as the migration distance shortened (Lewis, op.cit., p.239). The areas taken for this part of the study did not include the present study area, but nonetheless the information may provide a basis for later comparisons. When the sample was analysed on the basis of socio-economic groupings, it was found (op.cit. pp.241-2) that:

> "irrespective of language, it was the young (16-30 and 31-60) age groups, the better educated (grammar school or further) and the higher status occupation groups (professional, intermediate and skilled) that were the most migratory".

Preliminary impressions of both study areas under consideration here are that although the characteristics of the most migratory people in Lewis's sample are those traditionally associated with migrants[7], within the restricted localities under examination factors such as age-selectivity may operate in a quite opposite manner from that expected, the rural exodus being composed as much of older people moving locally upon retirement as of younger migrants. This must await confirmation.

2.10 Age-sex structures and languages:

One of the most powerful influences of migrations is

7: As, for example, by Lawton, R. in House, J.W. (ed.) (1973), p.120

upon age-sex structures, both in the areas of departure and of reception. In this respect, they may also have an indirect effect on language distribution since age structures are related to language-speaking in the study areas in at least two respects.

The French census provides an age-sex population breakdown by communes, and while this is somewhat erratic because of the small numbers of people per commune, it is useful in relating language to the occupations of the various age groups. Figure II.12 shows a series of population pyramids, for the communes of Bringolo (1954 and 1968) and for Châtelaudren, and also for the three rural districts (the smallest units available) relevant to the Welsh area. They show typical features, such as reduced representation for the age groups affected by the two world wars, and also, in almost every case, indications of the "top-heavy" pyramid associated with an ageing population. II.13 provides information possible only from the French census: the breakdown of the agricultural sector of employment by ages, for Bringolo and Lanrodec. It is immediately apparent that at about the age of 35 a sharp change in the character of agricultural employment takes place. In the older age groups, agriculture, both among men and women, accounts for a far larger proportion of total employment than in the younger ones. The pyramids for the total population show that this is not simply a result of a smaller pool of population to supply workers, but is a real feature. Figure II.6 has already pointed to the greatly dominant role

of agriculture in the total employment structure of these two communes. It is possible to conclude that the younger people, either by preference or because of a process of land consolidation over which they have little control, are turning to other forms of employment, leaving their older relatives to pursue the traditional occupations of agriculture. Turning to the interpretation of Roparz Hemon, already quoted in section 2.7, that the survival of the Breton language has been associated with the agricultural way of life, the import of the agricultural breakdown by ages can now be seen. If Hemon's inference is correct, the Breton language in the study area will suffer a severe attack on its continued existence within a matter of decades.

One more piece of information remains to compound the problem. In both study areas the idea was frequently encountered, during the reconnaissance period, that it was the older age groups in the community which were mainly responsible for the speaking of Breton or Welsh. This idea may spring from the occupation structure of the older generations, allowing them to continue to use the languages, as already described, or it may be entirely independent of this connection with occupations. If Welsh and Breton are age-specific, however, the implications are as figure II.14 indicates; depending on the rate of decrease in the use of Breton and Welsh from one generation to the next, and on the degree of ageing and the death rate, the disappearance can again be seen to be hastened.

In combination with the employment-related problem described above, this makes the condition of Breton and Welsh yet more serious - - provided, of course, that the suppositions made here are discovered to be justified.

The role of the sex-structure of the two areas is not clear, and so little has been written about this aspect of language-speaking, that discussion will be withheld until a later stage of the study. It may be, for example, that the unusual age-sex structure of Châtelaudren has some significance for language-use. It is possible, also, that the specific roles of men and women in the two areas (for example, going to the auction mart, going shopping) can be related to language.

2.11 A hypothesis based on population structure and change:

From the discussion on population, the following features seem important: a fluctuating population total has been underlain by a decrease in the population of the more wholly agricultural parishes, particularly those with smaller farms or poorer land, since the early or mid-nineteenth century. The increasing economic difficulty and personal hardship of small farming acted as the "push" factor, while the "pull" was provided by mineral extractive industries by the main roads leading eastwards and by the nucleated village and urban environments. The migrations created were, and are, mostly on a local scale, the flow from the most marginal land to farms of slightly higher quality, and from there to the best land or to the towns, producing a

gradual and scarcely perceptible movement. Writing of the inhabitants of his parish in 1872, the Rector of Llanfechain (188205) observes:

> " But the strangest thing is, that a very small proportion of the present residents of the parish can be said to be natives. There are only five of the farmers who were born in it, and only one of these occupies the farm that his parents held. Great changes of occupiers have taken place within the last twenty years, in some instances as many as four on the same farm, and the immigration has been for the most part from the Welsh-speaking uplands". 8

The parish he describes is intermediate between highland and lowland, and this may help to explain a population turnover which was so rapid. Though this case may be unusually marked, the words provide confirmation, by an eye-witness, of the process when it was perhaps at its height.

The significance of such movements for language distribution is not difficult to assess in its most basic terms: the potential for Welsh or Breton speaking will be slowly decreased as the population leaves the most marginal areas. This may be for the simple reason that as traditional settlement patterns are disrupted and population-density decreases, chances for families to meet each other and converse in either of the languages will be reduced. In addition, families in such areas may have to turn to areas elsewhere to provide goods and services which they were previously

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8: Montgomeryshire Collections, Vol.V (1872), p.213

able to obtain within the locality, and this may involve the use of English or French. In the intermediate areas, though there may be some fluctuation, Welsh and Breton may be maintained for longer than they would otherwise have survived, because of the influx of migrating families. Once again, the Rector of Llanfechain:

> " The amount of Welsh spoken has, at times fluctuated..... According to reports, the English language seemed to preponderate at the beginning of this [19th] century. It has subsequently retrograded, and Welsh is undoubtedly in the ascendent, and has lately been increasing; which is easily to be accounted for by the ready and almost constant admission of farmers from the Uplands and Welsh-speaking districts..." 9

In turn, waves of migrants from these intermediate areas to the completely anglicised or gallicised ones may export Welsh and Breton to areas where they would not normally occur. R.M. Thomas's study of an area of south-west Wales explains this same process (op.cit. p.99) in terms of a"monoglot reservoir" (approximating to the "core" of Bowen's Pays de Galles), providing speakers to the bilingual fringe or intermediate zone, which, in its turn, disperses speakers with newly-acquired French or English to the monoglot speaking areas of these languages. The sequence of depopulation may therefore give rise to further possible, and very significant effect of migration; as small farms in the marginal areas become vacant, there may be a counter-movement, composed for example of country cottage buyers, or of people (often of English or French urban origin) seeking a simpler or

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9: ibid.

alternative lifestyle, into these areas. Non-Celtic influences are thus directed to the very centre of the Welsh and Breton language areas, whence they diffuse in all directions, including eastwards towards the language borders. In the light of this, it is easy to see why W.H. Rees remarked (op.cit. p.239) that it might no longer be realistic to think of the further retreat of the Welsh language border, but of the stagnation of the whole Welsh language area in situ. The contrasting relief of Brittany, which lacks the distinct physical contrasts of the Welsh border, means that the process is not so noticeable, but Béchard (1962, p.27) describes the gradual establishment of the French language, over a period of nine hundred years, to the west of the original limits of Celtic occupation, diffusing from numerous local pockets and causing, again, stagnation of Breton over a wide area, rather than the retreat of a language border.

2.12 Placing information against the background:

The foregoing discussion gives some indication that the physical landscape and also the cultural one — particularly in its aspects of settlement, communications, occupations, age and sex structures, and most importantly, population geography — may both be considered as important influences on language distribution and shift. The acquistion of information to specify their exact roles, however, presents considerable problems. The following discussion is an outline of some of the difficulties encountered in obtaining usable data on language speaking.

CHAPTER III

OBTAINING THE DATA: THE LANGUAGE CENSUS AND ALTERNATIVES.

3.1 The Census as a potential data source:

In the search for precise information on language speaking, the census presents itself as perhaps the most promising source. In the French case, any such idea must immediately be abandoned, in the light of the complete lack of government statistics on ability to speak Breton. This, it should be mentioned, contrasts with the census policy on language-speaking in Alsace, for which statistics have been collected since 1931 on the ability to speak French, German or Alsatian dialect. [1] For Wales, the first information on Welsh - speaking dates from the Census of 1891, though a breakdown on a parish basis is available only from 1921 onwards, with a gap in the decennial sequence in 1941. A further breakdown of parish figures by enumeration districts is also obtainable. Presentation of information from the 1971 Census on the basis of a kilometre and hundred metre mesh of grid - squares did not extend to the information on Welsh-speaking, although there remains the remotest possibility that this mesh may be used for presentation in 1981.[2] Even if so, the value will be strictly limited because of the likelihood that grid-square figures will be on a ten percent sample basis, and that squares will be amalgamated in cases where confidentiality is thought to be endangered.[2]

1: The resultant information, published on the basis of cantons, is a series of special reports, published in 1956, 1962 and 1976 by I.N.S.E.E., Direction Régionale de Strasbourg.

2: Personal communications with office of Population Census and Surveys, 1971 - 76

3.2 Difficulties associated with language censuses:

Lieberson (1967), in one of several papers he has produced on language questions in censuses, outlines the difficulties involved even in the phrasing of questions, before any attempt is made to interpret results. Among the problems which he discusses is that of deciding whether respondents should be asked to state their " mother tongue", or language first learned, (a type of question which gives the impression that languages being adversely affected by language-shift are more widely-spoken than is the case in reality). Alternatively, they could be asked to state the language in which they would normally converse (favouring whatever language is dominant in the everyday life of an area), or to list all of the languages they are able to speak. Finally, they could usefully be requested to declare each of these items (op.cit.,p.139). Most important of all is the problem of distinguishing betwwen the questions: "Could you, at any time, speak language x ?", in cases where respondents may have lost a language through lack of use; "Can you speak language x?", referring to a potential or theoretical ability; and "Do you speak language x?", to indicate whether the language is used in practice (ibid). For any comparison to be made over time, it is clearly desirable that the question remain precisely the same from one census to the next, once a satisfactory phraseology has been achieved.

In the absence of Breton data, the question on Welsh speaking, together with its general results, will be

used as a test case. The last two of the questions quoted above will provide one of the main themes for the present study: the comparison between areas where the potential for Welsh and Breton speaking is high (as indicated by the second of the three questions) and those where the speaking frequency is high in practice (as derived from the third of the three). In the meantime, some general features can be considered.

Figure II.3 gives an indication of the first problem associated with the question on Welsh speaking. It shows that although preliminary investigation gave reason to choose a study area extending over the national border into England, this brings with it aproblem, since the question on Welsh speaking is only asked within the confines of the Welsh national territory, as opposed to the Welsh language area shown by the locations of "linguistic divides". J.G. Thomas (1956,pp.71-2) mentions this difficulty, and also raises the problem of the ambiguity of the question as it stood in 1951, referring as it did to people "able to speak Welsh only" (which could be taken to mean "able to speak Welsh, but not able to read or write it", instead of its intended meaning of "able to speak Welsh exclusively"). There is, in addition, a more profound problem of what the "ability" to speak Welsh constitutes, the definition being left, in the last resort, to the respondent or enumerator. Jones and Griffiths (1963;p.192) echo these criticisms for the 1961 census, and mention that the whole subject of respondents' ability to read and write Welsh "would be much too complex an issue to deal with" in the Census.

Nonetheless, questions on these additional aspects were introduced for the first time in 1971.

Other general criticisms which could be stated at this point are first, that the census of England and Wales is among those which fail to make a rigorous enough distinction between the ability to speak, and the habit of speaking, Welsh, a theme which the present study will pursue in some detail. Secondly, the parish is notoriously variable in shape and size, as a means of tabulating and mapping results. In addition, the 1921 census, in particular, is untrustworthy as a reflection of speaking ability, since it was taken in June, when numbers of seasonal visitors may have distorted both the total numbers of Welsh speakers discovered and the relative strength of the language from area to area. Motives for falsely claiming or disclaiming an ability to speak Welsh may have changed over the sixty years for which parish data are available. Further problems will make themselves clear as the interpretation of census figures for Wales progresses.

3.3 Analysis of patterns from Welsh language censuses, 1921-71:

Parish statistics are those readily available from the census, and they have formed th basis of several detailed studies of those parts of the Welsh borderland for which they may be obtained. Perhaps the two most comprehensive surveys are those of W. H. Rees (1947) and G.J. Lewis (1970) the latter re-working Rees's parish data in the light of more recent and increasingly sophisticated techniques, and

with the addition of data for 1951 and 1961. Four aspects of the parish information from successive censuses will be considered: the percentage Welsh speaking, the Welsh monoglot reservoir, the proportions reading and writing Welsh, and finally the pattern of overall change (expressed in two ways).

3.4. The situation in 1921:

For the purposes of the present part of the examination, it is to be noted that a more extensive area than the immediate study area has been chosen (fig.III. 1) and figure III.2, the parish map of Welsh speaking for this larger area in 1921, demonstrates that the transition is unmistakable, from a situation in the west where almost everyone is able to speak Welsh to one in the east where few or almost no people are able to do so. It is once more worth stressing, however, that this does not prove that a similar transition in the use of Welsh as the everyday medium of conversation existed in 1921; this may have been more or less sharp than III.2 indicates.

The areas of lowest Welsh-speaking percentages (below 10 per cent) are grouped clearly to the east of Wrexham, and include the parishes of Llay, Gresford, Erlas, Marchwiel and Erbistock, and the whole of the Maelor area of Flintshire. A second belt of parishes with less than 10 per cent Welsh speaking follows the Severn valley, from Carreghofa, Llandrinio and Bausley in the north to Mochdre, near Newtown, in the south west. The disparity of the areas listed points to the necessity of seeking a variety of causes for the low percentage. A.H. Dodd (1940,p.502) points out the coincidence in the eighteenth century, of the line of division between the more

and less strongly Welsh speaking parishes in the Wrexham area with the line of Offa's Dyke. He seems to imply that there is nothing particularly significant in this, but that when the coal resources of the Wrexham area were discovered and first exploited in the early nineteenth century, flows of predominantly Welsh and English speaking immigrant workers, from west and east respectively, met along the line of country where the Dyke happens to exist. Thus the area of weak Welsh speaking cannot be associated simply with any particular type of economy; it contains both partly industrialised parishes (for example, Gresford, Llay and Marchwiel) and predominantly agricultural ones (Holt, Erbistock).

Maelor Saesneg, projecting into the Cheshire plain, is an area of low Welsh speaking percentage which is of particular interest, since it is perhaps the area for which census-data on Welsh-speaking are available which approximates most closely to topographic, communications and settlement conditions on the Shropshire plain, which borders the study area on its eastern side, and part of which (around Maesbrook) falls within the area. Only Overton parish contained six per cent or more Welsh speaking population in 1921, and in some of the Maelor parishes (for example Bettisfield, Bronington) the figure was less than one per cent. This area has an early history of English influence. It became a hundred of Mercia and then, after passing into Norman hands, became part of the newly-constituted county of Flint under the Statute of Rhuddlan (1284).[3]

3: Sylvester., D., op.cit., pp.465 - 66, 490- 91

There followed a period of increasing Welsh influence; the area was Welsh speaking in 1761, but from the reign of Edward the Confessor onwards the influence of Welsh language and culture had never been so strong as in even the area of Shropshire to the south (Palmer, A.N., 1899, passim). Historical factors may thus be held to account, at least in part, for the advanced stage of anglicisation of the area in 1921.

In the case of the other area of low Welsh-speaking percentages in this same year, the valley of the Severn which is greater in extent than the other two areas of low Welsh - speaking discussed, Sylvester remarks (op.cit., p.454) on the "hybridisation" of English and Welsh elements (for example, the mingling of Celtic settlement characteristics with English placenames in many areas), while W.H. Rees (op.cit.,pp.194-5) reiterates the valley's role as the main entry-point for English into Radnorshire. Rees also comments upon the varying width of the intermediate band of parishes, between the all-Welsh and all-English ones, and notes that this band is considerably wider in the Severn valley than in the Wrexham area, and that the valley exhibits greater variety and a less obvious pattern of Welsh speaking proportions. This pattern may stem in part from the varying ease of accessibility in the valley, and from the fact that there has been no sudden and powerful influence, such as the discovery of coal and onset of industrialisation over a wide area, to create a series of centres from which change could diffuse simultaneously.

The results from the 1971 census serve to highlight further an opinion which already existed in 1921 on the significance of the degree of anglicisation of the Severn valley parishes: that they represent:

> "the spearhead of a long established Anglicizing drive through the Severn-Dyfi routeway into mid-Wales".[4]

In the present context, however, it is the local rather than the national significance of this third main area of low Welsh speaking percentage which is being considered. Together with the two areas already mentioned, it indicates that the study area was almost completely defenceless, on its eastern fringes, to the inroads of English though, interpolating the proportions for nearby Welsh parishes, some of the westernmost parishes of Shropshire may be thought to have contained 20 per cent, perhaps even more, Welsh speaking population.

Bowen and Carter point out, in addition, the fact that only a matter of miles away from anglicised areas there can exist strongly Welsh parishes — at least in numerical terms — with over 80 per cent of their population able to speak Welsh. They imply (op.cit.,p.437) that there is some connection between the continuous retreat of the area of predominantly Welsh speech during the present century and the narrowness, or even lack, of the buffer zone which might be expected between the English and Welsh language areas. If the point is valid, it is worth noting in passing. The grouping

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4: Bowen, E.G. and Carter, H. (1974), p.434.

of strongly Welsh parishes (for example Pennant, Hirnant, Llanrhaeadr and Llanfihangel) is another feature worthy of mention, particularly for its contrast with the pattern of varying Welshness of parishes in areas where proportions of Welsh speakers are smaller (as in the case of Bettws, Newtown and Llanllwchaiarn). The map for 1921 reveals clearly a contrast in the effectiveness of the parish as a basis for data; in areas of consistently high or low Welsh speaking with many adjacent parishes exhibiting the same features, the parish may be considered a revealing unit, whereas in districts where alterations in Welsh speaking proportions take place over short distances (as for example in the Severn valley) it may be considered that the complexity of the situation exceeds the capabilities of the parish unit.

3:5 <u>The situation in 1971; change over fifty years</u>:

The pattern for the same area by 1971 (figure III.3) shows that in the respect of suddenness of transition, there has been some change, though not a remarkable one at first sight. While some of the westernmost parishes (for example, Llangadfan and Garthbeibio) have changed little or not at all, retaining their Welsh speaking proportion at over 90 per cent, the general line of sudden transition noted on the 1921 map has retreated westwards by some ten kilometres (or by the width of one or two parishes). A core of strongly Welsh parishes remains, while around its fringe, in parishes as diverse as Brymbo, Llansilin and Llangurig, from 20 to 40 per cent fewer

bilingual people are noted. In the areas described as having low Welsh-speaking percentages in 1921, it is possible to see that numerically the situation has deteriorated no further, and Welsh has actually recovered slightly in some cases (for example, Forden). The local variability of the Severn valley is still visible, as well as the developing importance of Bowen and Carter's "spearhead" through Mid Wales. For the area chosen for close study (outlined on figure III.3) the significance of the 1921 - 71 change in Welsh speaking proportions is that a large proportion of the area has completely changed its character. Welsh has changed, in every case except Llansilin, from being a majority to a minority language. Figure III.4 expresses this more clearly, and places it in the context of the whole of the northern part of Wales, and of the whole time period for which parish figures are available.

On III4b the zone of change is clearly visible. It can be associated with no one type of topography, historical influence or economic type, and encourages the belief that, in the case of language shift, a fringe of sudden linguistic collapse is characteristic of the border of the Welsh language area. A part of Bowen and Carter's map showing changes in the strength of Welsh between 1961 and 1971 (figure III.4a) has been included to show that this area of sudden numerical decline may be traced through much of North Wales, surrounding a core area as yet unaffected by the sudden decline. Much of the interest in this zone of sudden linguistic transition it occasioned by the hope that it may be possible to predict its progress towards the heart of the Welsh language area, thus identifying areas threatened by imminent linguistic collapse,

and the zone is at present the subject of examination by several authors, for example C.H. Williams (1977a and forthcoming). The present study offers an opportunity to examine in closer detail the processes at work in the zone of sudden transition, rather than specifically to attempt the task of forecasting on a local scale.

3.6 Census data on monoglot Welsh-speaking; a model of language - shift:

Observations on census data so far have neglected the "monoglot reservoir". Some doubt must be cast on the reliability of census data in the respect of that part of the population unable to speak English; it is possible that some people who can speak English but make a point of doing so as rarely as possible have described themselves as "not speaking English", and the procedure of rounding figures to the nearest 5 or 0, adopted in 1971, may increase the proportion in some cases, as well as hindering interpretation. Upon the release of the figures from the 1971 census, a local newspaper reported with bewilderment and some disbelief that:

> "According to the lastest census figures released last week there are fifteen people living in the Chirk area who cannot speak English. Five of these are male and five are female" 5

Despite such problems, it is possible to draw some conclusions from the percentages of people able to speak Welsh but not English in the extended study area (figures III.5 a and b). In summary, contrasts visible in the area in 1921 had practically disappeared by 1971. At the earlier date,

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5. Border Counties Advertizer, 23rd January, 1974, p.1.

four parishes (Llanfihangel, Llangadfan, Garthbeibio and Llanerfyl) were still at the stage where less than half their population was able to speak English, and at the western edge of the extended study area, with the exception of the industrialised north, were other parishes with ten per cent or more of their population unable to speak English. At the eastern edge, a percentage of 2.5 or more monoglot Welsh speakers was exceptionally high. Thus defined, the language represented a very distinct feature, and the four parishes mentioned could certainly have been classified as part of the Welsh heartland. The 1971 census data (III.5b) shows that this contrast has now practically disappeared. Only in Garthbeibio would the monoglot English speaker now be likely to experience any difficulty in making himself understood. While the monoglot component of the population is still a few per cent higher in the west than in the east of the study area, it is the uniformly low percentage of Welsh monoglots which is striking, rather than the variability of the figure. The zone of greatest change of monoglot Welshness is situated between five and ten kilometres to the west of that of the greatest change of the total Welsh-speaking percentage for the fifty year period.

This idea of the variability of the speed of change of the various components of the Welsh speaking populations of parishes (a variability not devoid, nonetheless, of pattern) leads to the attempt to discover more about the sequence of

stages of language shift. For this purpose, Appendix I was drawn, showing by means of graphs the percentages of people able to speak Welsh and the percentage of monoglot Welsh speakers in each parish for the period 1921 to 1971.

It proves possible, on the basis of the graphs, to draw the model shown in figure III.6. It can be seen that five stages of language shift have been distinguished, as the key to III.6 explains. In the earliest stage (1) it is exceptional to find someone who is not able to speak Welsh, and the majority of those able to speak the language do, in fact, make a practice of speaking it, since ability to speak the language is so widespread. It is at this stage that monoglot Welsh speakers are most easily able to exist, being able to participate in most aspects of community life because of the rarity of use of English.

The next stage (2) of the shift sees a fluctuation in the percentage of Welsh speakers, which remains, however, above eighty per cent of parish populations. The reason for the degree of fluctuation is difficult to determine, but it is associated with waves of anglicisation caused by migration or varying age - or occupation- structure, or by some other, unknown, influence. The fact that the Welsh speaking proportion remains at an overall high level at all seems mainly due to the influence of selective out-migration; this stage, corresponding with the breakdown of traditional agricultural and social systems, releases workers, usually the younger members of the

community, who are more predisposed to accept both the idea of leaving their home parish and of speaking English, and the Welsh speaking proportion is thus maintained at an artificially high level even though the overall parish population falls. Simultaneous with this stage, however, is usually a sharp decrease in the monoglot reservoir, perhaps reflecting the increasing impracticality of being able to speak only Welsh in a situation of strengthening English influence.

In contrast with the fluctuating character of stage 2, the next phase, divided into 3a and 3b, is one of decisive and usually irrevocable change. The percentage of people able to speak Welsh falls rapidly and unremittingly from 80 to 20 per cent, and the monoglot reservoir is extremely small, sporadic or extinct. This is a crucial phase. It seems to coincide with a sudden loss of cohesion in the Welsh-speaking community, a shedding, in a matter of decades, of general ability to speak the language. The graphs in Appendix I show that this does not take place at the same time in every parish underlining the hypothesis that it is the product of forces internal to the parish, rather than the result of external pressures acting simultaneously upon the Welsh language over the whole study area. The fact that the parish unit has been the means of demonstrating this feature may lead to the conclusion that it is the most revealing areal unit in the study of language in this area and the quotation from the

Gaeltacht study (section 2:6) to the effect that the speaking community should be held to encompass a "village system" (the equivalent of a parish in much of the extended study area) would indicate that the writers support this idea. It may, nonetheless, be the case that this phase of sudden loss of Welsh-speaking ability operates in communities at the sub-parish level. The reason for the division of this phase into two sub-sections is that at the mid-point of the rapid decline is the point at which the speaking of Welsh becomes a minority ability. At this point, provision of special facilities for Welsh speakers at the parish level becomes considerably more difficult, especially if the Welsh speaking contingent becomes out-numbered on district and community councils.

The last two phases reflect the first two. Stage 4 is one of fluctuating ability to speak Welsh, with twenty per cent or less of the population Welsh -speaking, and the monoglot reservoir less than five per cent, or extinct. The main phase of decline is over and demographic, occupational and migrational influences are once again mainly responsible for the fluctuations in the overall downward trend of the graph. Finally (stage 5) the ability to speak Welsh either disappears completely or is occasionally re-kindled by in-migration of Welsh-speaking families who are likely to discard the language in a matter of years, unless they maintain their contact with their area of origin.

This is not, of course, a model of the whole process of language shift; the stages at which the whole parish population was able to speak Welsh alone, and at which a majority were monoglot Welsh speakers have been omitted, since no example of either of these exists within the extended study area. Such situations are rare in large parts of modern Wales. The time scale for the phases included has also been left undefined. Very few of the parishes in Appendix I show more than two of these phases, and the speed of transition from one to another seems rather variable, though twenty or thirty years per phase would not be considered unusual.

3.7 The model applied to the extended Welsh study area:

It should now be possible to apply the model to the extended study area, with the purpose of seeing whether any pattern is visible, on the basis of the stage of shift at which a parish has mainly been during the last fifty years.

Figure III.7 is the result of such an attempt. Its symbols refer to the stages discerned in the key to III.6. A pattern is clearly visible; its sequence of zones, running parallel in a north-south direction, follows exactly that on figure III.6. The pattern resembles closely that on figure III.4b, the zone of greatest change on the latter corresponding with the crucial transition stages (3a and 3b). This is not surprising, nor is the relative stability of the zones to either side of it (though it is known from the monoglot Welsh element that the stability, at least in the westernmost area, is illusory).

It is worth reiterating, however, that no one type of topographic, demographic, communications or settlement environment can be related to each individual zone of language shift. The zones are to some extent independent of these, and are dependent in part simply upon the language area of Welsh. At its junction with English there is indeed what has been referred to as a "fall - line", created by mechanisms of language shift.

3.8 Census data on reading and writing Welsh:

To the discussion of language core and fringe as perceived from the stage of language shift the census can perhaps add another indicator of the location of these features: the questions on the reading and writing of Welsh could be regarded as a rudimentary measure of familiarity with Welsh and of "intensity" of its use. As a data source this is, however, of limited use, since the formal teaching of Welsh in schools all over the Principality raises the number of people under forty who are able to read and write Welsh - - sometimes without being able to speak it. Since census results are available only from 1971 for this item, any study of change over time is also precluded. Nonetheless, the proportions of the population able to speak Welsh who were also able to read and write the language were calculated, speculatively, and the results are presented in figures III. 8 and III. 9.

Comparison of the two maps indicates that reading is a more common ability than writing. This is scarcely surprising, and the disparity between the two abilities would have been even greater had the whole population of each parish been considered, since many people are unable to speak Welsh but can read the language. The census restricts the questions to those who have already stated that they are Welsh-speakers. For the present discussions, the most important feature of the two maps is that the proportion is not the same over the whole study area. A return to figure III.3 shows that facility in the reading and writing of Welsh may be associated with the proportion of the parish population able to speak it. The reading and writing proportion can therefore be used as an indicator of the language border. On reflection this, again, is not surprising, since those parishes where Welsh is most likely to be used in daily life are also those where it would be most necessary or worth-while to learn to read and write it.

If figure III.3 has points of comparison with III.8 and III.9, it also has contrasts. Although in almost the whole of the Wrexham coalfield and Maelor area in 1971 the percentage of Welsh speakers was ten or less, the percentage of Welsh speakers able to read and also to write the language was nearly everywhere eighty per cent or more. This can only be accounted for by the fact that most of the people who can speak Welsh at present have learnt the language in the

classroom or other formal situation, developing speaking, reading and writing skills simultaneously. If this is so, these areas should correspond with those already classed as being in the fourth phase of language shift (Welsh undulating between 0 and 20 per cent), and figure III.4b shows this to be the case. Consequently, it is possible to propose the idea that between the westernmost and easternmost edges of the study area, where reading and writing proportions are high, lies a zone of sudden decrease (phase 3) which is characterised by considerably lower proportions of Welsh speakers also able to read and write the language - - in other words, that a weakly-developed reading and writing ability is a further characteristic of the fringe of the area where the Welsh language might be said to exist "naturally" (independently of the support of school Welsh). There may be some justification for such a conclusion, but the evidence is not convincing. Figure III. 3, consulted once more, shows a large part of the eastern edge of the area, in the Severn valley, to have been classified with the coalfield and Maelor as in phase 4 of the shift, and in the Severn valley reading and writing proportions are considerably lower, mainly between 40 and 70 per cent. No satisfactory reason can be given for the difference, except that it may depend on a less strongly developed tradition of written Welsh in the valley, or else an education system, in the original counties of Denbigh and Flint, which taught the reading and writing of Welsh more efficiently. This last

is improbable; the variation can be seen to be from school to school rather than from county to county.

On the significance of written, as opposed to spoken, Welsh, the article by Bowen and Carter (1971), a product of considerable experience and familiarity, considers the opposition of spoken and written Welsh for Wales as a whole. Its main conclusions (op.cit.,pp. 9 - 11) are that: "the Welsh population is illiterate" because only 73.2 per cent of those who speak Welsh write it; secondly, that the ability to write Welsh is age - specific, especially as the young children do not learn to write the language until some time after gaining familiarity with the spoken word and the oldest people never achieved literacy in Welsh, since it was rejected in favour of English as the literary language during their schooldays; finally that "the differences between speaking and writing proportions is a stage in language decline ", the intermediate zone of 40 to 70 per cent being noted as the one where percentage writing ability is least.

Not all the conclusions correspond exactly with those drawn from the present, less extensive, study area, and the conclusion on the illiteracy of the Welsh population seems somewhat harsh in comparison with the situation observed in Brittany, where only the schools of the extreme west and a few private schools teach spoken Breton, to say nothing of the languages's literary aspects. The article may be held, nevertheless, to represent the quite detailed stage which census information has allowed studies to reach at the national scale in the case of Wales.

3.9 Enumeration districts as a basis for data on Welsh speaking:

One further scale of study remains a possibility, given the nature of data from the census. Enumeration district figures are available for consultation for all censuses since 1921. Figure III.10 may help to explain why they are not more widely used. It should be compared with the corresponding part of figure III.3. For the most part, it can be seen that a slightly closer network of information (two or three units for every one previously shown) results. In the Maelor, the increase in information is negligible, however, since the enumeration district and parish are, for the most part, one and the same. On the other hand, in built-up areas such as Cefn (inset on figure III.10), or Chirk, a much increased network of information results. It is clear that, in accordance with the information-collection system operated by the Census of England and Wales, the increase in information occurs on a population, rather than a spatial, basis. Densely-populated areas such as those quoted gain considerably in depth of information, whereas thinly-populated ones or areas with small parishes gain little or nothing. In the case of the present study, it is precisely these thinly-populated rural parishes which provide the continuity of conditions necessary for a study of language change. Furthermore, the method adopted to divide parishes into enumeration districts, while convenient to the purpose of data collection with a view to aggregation (that is, for the counting of population), has little geographical relevance. For example the parish of Llanfechain (56) is divided into two enumeration districts. It is situated astride a road following the line of the valley and it may be expected that conditions favouring

the retention of Welsh are different in the valley from those in the hills on either side. The enumeration district boundary follows the valley bottom, alongside the road, and while this arrangement means that enumerators can gain access with the greatest convenience to the area for which they are responsible, conditions in one enumeration district are practically a "mirror image" of those in the other, and two rather similar percentages for Welsh speaking result (44 and 32 per cent). This kind of situation is common, and explains the relatively small increase of information, as well as the apparently uneven coverage, on figure III.10.

Reference has already been made (section 3:1) to an alternative data collection network, proposed by the Office of Population Censuses and Surveys: the kilometre squares of the National Grid and a further breakdown into hundred metre squares. Subject to conditions of confidentiality, population data are available on this basis for 1971. This is not the case for data on Welsh speaking. [6] Such a grid would certainly represent an advance in detail on the units shown in III.10 and the systematic positioning of squares might have alleviated the problems discussed in the case of enumeration districts.

6: Census Office Information leaflet No. 1 (1970) and personal communication with Census Office, 1971-75.

When the speed of transition and the complicated nature of the patterns known to exist in the language geography of the Welsh borderland are considered, one kilometre is still, however, a large distance, particularly in the case of built-up areas, and even the hundred metre grid would mask important details. To add to the potential problems, there remains that of confidentiality. Once again, it is precisely in the undisturbed areas, frequently corresponding with rural parishes where population density is least, that interest is greatest, and that there is the greatest chance that confidentiality would demand the amalgamation of information for several, or many, adjacent squares. The lack of availability of grid square information on Welsh speaking for 1971 is perhaps not such a loss as it may seem.

3:10 Alternatives to the census:

Criticism of the census implies that for the purpose in hand a more effective alternative can be devised. "Effective" in the present situation, appears to amount to "more detailed", since it is being implied that mechanisms of language shift may be more detailed than the data from the census can provide for. In the search for detail, however, an immediate compromise must be made; the scale of the individual speaker, the ideal unit for a geographical approach to language, has regrettably to be abandoned as impractical, mainly because it would involve an unwarranted intrusion into personal privacy. On the other hand, at the point where inter-household communication starts to imply a spatial element, compromise becomes unwise. The

household has therefore been chosen as the basic unit for study.

The plan of investigation based upon this household unit is two-fold: to construct maps of both the numbers and proportions of households with one or more Welsh or Breton speakers in any locality, in order to gain an impression of the local potential for Welsh or Breton speaking, and to devise a way of showing, cartographically, where these languages are used in practice, and by whom, for what purposes and for what proportion of daily conversation, with the subsequent aim of making a specially close study of areas which may prove to have a discrepancy between "potential" and " actual" speaking. The method is conceptually very straightforward, the greatest problem being the manipulation and cartographic presentation of the hundred per cent sample of households for both the Welsh and the Breton study areas.

3.11 Administration of the language question in the field:

The research concept is matched in simplicity by the method of field investigation. For the present, only the "potential" aspects of Welsh and Breton speaking are being considered. In the two study areas, every fourth household is visited, and the question posed: "Is there anyone in your household able to speak Welsh (Breton)?" The same question is next asked with reference to the occupants of all nearby houses not visited, and for every

house not visited this same question is asked of two separate neighbours. If any element of doubt is expressed in either case and, obviously, if contradictory results are obtained, a third or fourth household is asked, or the household in question is visited.

Several questions on the suitability of this method could be posed. The first of these concerns the necessity of obtaining information on every household. This aim clearly restricts the size of the study areas, and it may be considered that a sample of households, taken over a larger area, would give more reliable or typical results. Sampling over a larger area has been discarded because the very feature of language which is of interest is the degree of localisation of its use, seen, for example, in the smallest size of speaking community in which Welsh or Breton can survive. For this to appear clearly, every exterior Welsh or Breton speaking contact a household makes should be sought, and precise detail for a rather restricted area is a better alternative than partial detail on the same number of households sampled over a greater area. Earlier observations (2.3) have already indicated the abrupt changes in language patterns which can occur over small distances.

The format of the question "is there anyone in your household able to speak Welsh (Breton)?" may be thought a further problem. In just the same way as the 1971 census

question, it leaves the vital definition of ability to speak either language to the persons asking or answering the question. In the present case, the problem is lessened to some extent by the fact that the questioner is in all cases the same. The working definition of what constitutes "speaking Welsh (Breton)" is the following: an element of participation in the spoken language in its everyday local form is required. Respondents simply able to understand one or other of the languages without being able to respond or instigate a further stage of the conversation are not considered to be Welsh or Breton speakers; neither are those who have simply learned "set pieces" (for example, greetings such as "good morning") which they use intermittently in an otherwise totally French or English vocabulary. Apart from these, even the simplest or least literate attempts to construct Welsh or Breton sentences are taken as constituting an ability to speak the language. Reading and writing ability are not considered.

The greatest single source of inconsistency in the method is perhaps that group of households not visited personally, but simply enquired about. The procedure for verification of answers has already been described, and such a process is undoubtedly necessary, since the accuracy of responses is found to be highly variable. In parts of Oswestry and the larger villages, as also in Châtelaudren, particularly in the case of newly-built housing, knowledge is non-existent or highly inaccurate, and it becomes necessary to visit nearly every household. In some of the older

residential areas, in the smaller villages and in the open country, respondents take a pride in knowing every individual for a considerable distance, and this is especially so in the old-established farming communities. In the case of one or two respondents, however, enthusiasm occurs at the expense of accuracy, and the minimum of one household in four is adhered to. One way of checking the efficacy of the method is to note the proportion of questionnaires, issued in a later stage of the survey, to homes which prove to have no Welsh or Breton speaking member. With the exception of households which have changed their address between the two stages of the survey, this proportion, as will be seen, is small (1.5 per cent in the Welsh and 2.4 per cent in the Breton case), and almost all the inaccuracies occur in the towns or on the new housing estates.

One further, and potentially serious, problem associated with the use of the household unit, was not appreciated until the field survey was well under way: that it was possible that households nearer the language border would be more likely to contain one or two potential Welsh or Breton speakers, while those further into the language area had a greater likelihood of every member being a potential speaker. Maps of "potential" speaking therefore tend to exaggerate the potential for Welsh or Breton speaking towards the border, and households with more potential speakers tend to contain speakers who are more fluent or more inclined to maintain their speaking ability. The degree of seriousness of this problem can only be assessed in

practice, at a later stage.

3.12 The decision to set aside the census as a language source for the present study:

The foregoing discussion has shown something of the usefulness of data from the Census of England and Wales as a source of background information for local language studies, and also some of the weaknesses of this source. The insurmountable problems posed at the sub-enumeration district scale by the admittedly well- intentioned confidentiality regulations at the Office of Population Censuses and Surveys mean that the census has unfortunately to be abandoned as a data source for the remainder of the present study. It is by no means certain that at this very local scale any recognisable spatial patterns will emerge, nor, if they do, that they will be capable of interpretation. A laborious interlude of data collection, ironically duplicating that undertaken in order to produce the census statistics, is necessary before either of these questions can be resolved.

CHAPTER IV

THE POTENTIAL FOR WELSH AND BRETON SPEAKING

4.1 The problem of cartographic representation:

The result of the fieldwork procedure described is a series of maps similar to those in figure IV.1 (provided as an example) and also an index of names and addresses of Welsh and Breton speakers. The maps are helpful in several respects. They bring a first appreciation of distributions at a local scale, particularly in the respect of isolation or clustering of Welsh or Breton speaking household units. In addition they show something of the role of communications in promoting the migratory flow of the various types of households across the study areas. For every feature discovered in the search for pattern, however, the dot maps can supply an exception or inconsistency, and in this form the data cannot be considered easily legible. The conversion of the point information into a general surface would help to smooth out the patterns to the extent that they might be interpreted for the study areas as a whole.

To this end, the method which suggests itself is the superimposition of a grid on the point pattern, with the subsequent application of a running mean to generalise the pattern a little further. The method finally adopted is to divide the maps with a mesh of hundred metre grid squares and to total, for each square, first the number of households and secondly the number of households with one or more Welsh or Breton speakers. Instead of applying a simple running mean to the two resulting sets of figures a

"moving circle" method, for which a computer programme is available, [1] is in some respects a more realistic way of performing the task. The programme employed is included, together with some additional information in Appendix II. The simple but monotonous task it performs is as follows: a shape approximating to a circle, of pre-determined radius, is centred upon alternate grid-squares and the catchment (a) of households and (b) of households with a Welsh or Breton speaker it totalled for the circle, and expressed as a figure for each square in turn. Two population surfaces result, one for total households and the other for households with a Welsh or Breton speaker.

While essentially the same running mean, the moving circle has one particular advantage: it makes it possible to experiment with a series of different radii, representing a variety of different catchments, with the minimum of difficulty. This is useful in two respects, the first of which is purely practical. While it is desired to generalise the dot pattern into a surface, it is also desirable that as little information as possible should be lost in the process. Legibility dictates that the pattern should be generalised into a reasonably continuous surface, but that small areas of unusually weak or strong Welsh or Breton potential or

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1. Thanks are due to Mrs. I.M.L. Robertson of the Department of Town and Regional Planning, University of Glasgow, for making this programme available and advising on its use.

unpopulated localities should remain for inspection, without being smoothed out of existence. The final map in Appendix II shows an example of the result at radius 2 (that is, 200 metres in all directions from the centre of any square), which is fragmented in appearance and difficult to interpret when compared with the map at radius 4 (400 metres), the one finally selected for use.

A second reason for the use of a smoothing technique of this type is that it could be held to represent something of the inter-relationship of households, and the potential which this might have for encouraging communication in Welsh or Breton. As a means of doing this, however, it possesses as many problems as advantages. It may be contended, on the one hand, that a circle of fixed radius placed successively over an urban area, a village and an open country district reflects quite accurately the varying number of daily encounters (or speaking contacts) a person in each of these areas might have in reality, the contention being based upon the idea that a greater density of population occasions more frequent meetings and conversations. Against this can be set several alternative ideas, including that which considers each person's pattern of daily speaking contacts to be unique and not capable of simulation by any technique, and also the idea that within the circle of the majority of people is an average number of daily contacts (friends, workmates, shopkeepers and others) which remains fairly constant regardless of the element of distance or

population density. In this last case, it would be more appropriate to substitute for the moving circle method some programme such as the "Range Map" described by Nordbeck and Rystedt (1972), in which the threshold population sought (for example, in the present case, perhaps 50 households) is made the constant, rather than the radius of the circle. This method would also ensure that no part of the resultant surface map would record a score of zero, but in doing so it would remove the sought-for element of locality. With all its simplifications and assumptions, the moving circle method was still considered the better alternative.

4.2 The population surface maps examined:

The total population surfaces (based on households) obtained for the two study areas by the application of the 400 metre moving circle may be a useful background for discussion, and they are presented in figures IV.2 and IV. 3. These two maps verify the fact that the study areas contain a variety of population densities; even with the increased radius size, areas of unpopulated country are visible, for the most part less than one square kilometre in extent, except for some of the hilltops in the west of the Welsh map and the forests of the Bois Meur and the Bois de Malaunay in the Breton area, where they are more extensive. The most common density encountered at this radius in both study areas is one of between one and nine households, and the general occurrence of this makes it justifiable to associate this density with the scattered

farms already stated (section 2.6) to be characteristic of much of the study areas. From this general surface a number of more densely populated areas of restricted extent stand out. These have, most commonly, a density of between 10 and 19 households, though the density can be over a hundred, and these more heavily populated areas correspond with villages in almost all cases. The influence of communications is evident in both maps; between Châtelaudren and Plouagat on IV.3 an east-west trending area of comparatively dense population appears to follow the course of part of the route nationale, while between Oswestry and Llanymynech on IV.2 the course of the A483, and also of other roads leading westwards into the hills, is picked out by areas of density of ten households or more at radius 4. The most obvious feature of all, on figure IV.2, must be the huge dominance of Oswestry, and the rather lesser dominance of the Breton map by the town of Châtelaudren may also be noted.

Many of these features are visible upon the next maps examined (figures IV.4 and IV.5), those which present the Welsh and Breton household surface, or, more accurately, the surface for households with one or more members able to speak Breton or Welsh. The first, and most important, remark to be made about either of them is that if they are taken in isolation they provide no evidence at all that language borders are located in the study areas. There is

no transition visible, and it may be thought that this is only to be expected, given that the surfaces are portraying the simple ability to speak Welsh or Breton, rather than the practice of doing so, and that migration along communications routes, from the poorer land and towards the towns and larger villages, has distorted any simple pattern of transition which may originally have existed. Once again, the general surface of between one and nine households is visible, broken, this time, by rather larger areas recording no population. To the areas unpopulated on the total household maps are now added some which are devoid of people able to speak Welsh or Breton, though any pattern which may exist in this last feature is not perceptible at this stage. The location of villages is again clear, as is the dominance of Oswestry, but the presence of Châtelaudren is not evident on the Breton household map, indicating perhaps some difference in the tendency to migrate from country to town in the two study areas. A more general consideration of the two maps suggests the hypothesis that regardless of the total population of the study areas, as represented by the total household surfaces, and regardless of the proportion of Welsh or Breton speakers which may exist in the population, it is the proximity of potential speakers one to another which will lead to the frequent speaking of Welsh or Breton, simply because speakers will tend to meet each other more frequently if they are located close together, or because they may gain some added element of confidence or group identity from the knowledge that other

potential speakers of the language live nearby. If this hypothesis is correct, the villages in the Breton study area (for example, Bringolo, St. Jean Kerdaniel, Plouagat, Lanrodec and Senven) should be regarded as having a greater potential for the speaking of Breton and will exhibit a greater Breton speaking frequency when speaking frequencies are examined at a later stage, and villages such as Gobowen, Llansantffraid and Llansilin in the Welsh area, as well as the town of Oswestry, should be the location of similarly frequent use of Welsh, because of speaker proximity.

Setting aside, for the moment, the discussion of the hypothesis, and returning to the Welsh and Breton surface maps and their apparent lack of transition, it is not enough to assume that the frequency of speaking rather than the ability to speak, Welsh or Breton is the way in which this transition will be expressed in reality, nor that migration and other processes have disrupted that pattern of transition. One important additional fact is that, as the total surface map showed, there is an increase in population density with movement eastward across the Welsh area, this increase more than compensating for the eastward decrease in likelihood of encountering Welsh speakers in the area, and thus obscuring the pattern of transition on the Welsh surface map. In the Breton area the total population density increase towards the east is replaced by the axis of higher density following the route nationale, as already discussed, and the explanation for lack of transition on the Breton surface map remains

somewhat uncertain.

To seek reassurance however, regarding the existence of language borders on this local scale, at least in terms of households with potential speakers, it is necessary only to consult figures IV.6 and IV.7, the result of superimposing the Welsh and Breton surface maps upon those of the total population surface and expressing the result as a percentage of households. This result is an intricate pattern of varying percentages, and it is worth pointing out that the two maps are themselves generalisations of the results obtained from the printout material, examples of which are included for inspection in Appendix II.

4.3 General features of the percentage speaking surface maps:

From the most cursory inspection of the two maps, reassuring signs of transition are visible, the sharpness of which, particularly in the Breton case, is worthy of comment. Areas of over ninety per cent Welsh or Breton speaking potential (at least in the household term already described) lie within a few kilometres of areas where no-one can speak either language. This, however, is little more than it was possible to deduce from the census data (sections 3.4, 3.5), and the maps invite considerably more detailed inspection.

The main impression of the two surface maps, apart from the overall transition, is perhaps the fragmentation of the pattern, and the variability of percentages within short distances. There are few homogeneous areas of more than three

or four square kilometres in extent, particularly in the centre and west of the Welsh study area and the central and eastern portions of the Breton one. This pattern indicates something of the complexity of the processes of language- shift which are under study. If the area of any parish or enumeration district for which census data are available is taken as an example and compared with the data available from the household surface, it is apparent how uninformative census information is about the processes under way in areas of language-shift. When it is considered further, that the household itself is a generalisation and that the household data have been "smoothed", the point is reinforced. At the same time, it may be argued that the variability in the pattern is wholly the result of the large-scale examination at which the study is made and that, given the choice of the household unit as the basis for study, it is scarcely surprising that such variability emerges. In support of this, it is broadly true that an inverse relationship can be seen between variability and population density. The evident anomalies at Petit Perrien (044033) in the Breton area and between Maesbrook and Llanymynech (285220) in the Welsh one, are further evidence of this fact, and of the necessity of not regarding such restricted localitites in complete isolation, but of seeking corroboration from other nearby localities.

On the other hand, it would be misleading to ignore the existence of this minutely fragmented pattern and to base evidence solely on the relatively few large and homogeneous sections of surface available for examination. It seems likely that the fragmented pattern is evidence of some process of language - shift which may repay analysis. It presents, perhaps, further evidence that, instead of seeking a retreating "linguistic divide", linguistic geographers may find it more valuable to examine micro-processes at work in a zone some kilometres in breadth, as the process of language-shift takes place. It may indeed be possible to imagine a linguistic divide crossing the Welsh area from north-east to south-west, but it is clearly necessary to proceed beyond this concept in order to gain any idea of the processes of language-shift in the Welsh study area.

When attention is turned to the Breton potential surface map, it is impossible not to receive the impression that some slightly different process must be under way, so much more abrupt is the transition. The extent of unbroken potential Breton territory of 90 per cent and over is larger than any area in the Welsh example, but it gives way more rapidly eastward to French. Despite the dominantly east-west trend of major communications lines, the degree of interdigitation in the Breton case is far less. The topographic socio-economic, historical and demographic contrasts in the

two study areas (2.5 to 2.11) may go someway to explaining the difference; on the other hand it may be the product either of chance or of some socio-linguistic feature not yet considered.

4.4 Relief, altitude and accessibility:

First analysis of the surface maps is concerned with a collection of variables which linguistic geographers have experienced difficulty in defining: "accessibility" prompts the question "accessibility to what?", and consideration of the highly concrete ideas posed by "relief", "altitude", "terrain" and other words may seem incongruous when associated with anything so abstract as language, particularly at the scale of the present study.

Writing of the association of the two ideas, W.H. Rees (op.cit., p.114) says of Flintshire, as a county, that the material available provides

> "a fairly convincing answer in the affirmative to the question as to whether the degree of anglicisation in general diminishes as distance increases from the English 'Border' counties, especially when favoured by relief, viz., a westerly general increase in altitude".

Of Denbighshire, similarly,

> "It would be reasonable to conclude that the geographical factor, elevated terrain [further defined by the 600 foot contour], involving generally a measure of inaccessibility, has exercised an important role in stemming the inflowing tide of anglicisation"(op.cit.,pp.163 - 64)

While "accessibility" is never really defined by Rees, he resolves the discussion into two "linguistic principles", a "relief principle" and a "situational principle", that

> "anglicising influences broadly diminish in intensity with increase of distance westward from the English " ' Borders' ". (op. cit.,p.189).

The inference which might be drawn from the quotations is that Rees only intends the two principles to hold at a county scale. Yet he applies his two principles to the parish of Llansilin, and elsewhere (op.cit., pp.256-57) quotes a personal communication from a Trefonen (260268) farmer, who informs him that:

> " ' there is a lot of Welsh-speaking people the one side (i.e the Western) of Oswestry. They join up to Glyn Ceiriog, Llansilin and Llangedwyn, from Selattyn, Llawnt, Croesau Bach, Sychtyn and Bryn' ".

The line thus described traverses the surface map at approximately the eastern-most limit of the main extent of areas of over 90 per cent Welsh households. But more important, in the present context, is Rees's inference from this (p.257):

> " The above citation, read in connection with a scrutiny of a physical map of the area, seems to suggest that here is yet another instance in operation, on a miniature scale, of the two linguistic principles, viz. (1) Decline of anglicisation with altitude and (2) Decrease in intensity of anglicisation in a Westerly direction".

The changed conditions (for example, improved communications) in the space of even the three decades since Rees conducted his survey, coupled with the profound changes in geographical techniques, may make his two principles seem simplistic at county level and impossibly optimistic at the parish or sub-parish level. Yet it was considered necessary to test them, if only to justify discarding them.

Accordingly, a series of transects was made of the study areas, ffom east to west, and a random sample was made of altitudes and percentage Welsh/Breton speaking.

4.5 The "situational principle" tested:

The drawing of transects to test the significance of distance west of the border was accomplished by the somewhat crude expedient of taking a number of sample points at kilometre intervals to east and west on figures IV.6 and IV.7 (as shown on the final diagram on figure IV.8), and expressing the result as a mean for each distance. It is to be assumed from Rees's reference to "the English 'Border' Counties" that the "border" to which he refers is the national one. Thus, with considerable reservations about its relevance at this local scale, the national border is first examined as an influence on percentage Welsh potential (fig. IV.8(a)).

While there is an unmistakable increase in average Welsh potential westwards, the curve of the graph, which is anything but regular, indicates that areas of strong

English influence occur at regular intervals considerably to the West of the border. Considering the pattern of pocketing already described on the surface map, this can be considered in no way surprising; it only emphasises the relatively small significance, in local linguistic terms, of the national border.

If, however, a slightly different interpretation is put on the word "border" and some linguistic border is taken instead, the "situational principle" may be seen to have a little more significance. Rees's own definition of the "linguistic divide" provides such a basis, and this new interpretation permits the enquiry to be extended to the Breton area, using the linguistic divide quoted by Béchard. The results, as shown in figures IV.8 (b) and (c), bring a little more credibility to the "situational principle"; their slope upwards to the west, while not completely regular, is much more so than that on the first graph. More interestingly, the sharper and more complete transition in the Breton area is emphasised. The first of Rees's principles cannot be dismissed as completely as was supposed.

4.6. The "relief principle" accessibility and speaking potential:

Rees tends to use such terms as "altitude", "elevated terrain" and "relief" interchangeably when discussing their effect upon language changes. While ideally, for the purposes of relating relief and accessibility, some measure of slope steepness would be most useful, altitude provides a convenient substitute for present purposes. Within

each study area, a random sample of points is taken, and their height recorded, in addition to the percentage potential Welsh or Breton speaking on figures IV.6 and IV.7. Sampling continuesuntil ten results are available for each altitude category except the highest one in the Breton area, whose sparse population and small extent permit only six results. Figures IV.9 (a) and (b) show how average speaking potentials, based on this sample, relate to altitude zones.

Because of the different contour-intervals of the two maps from which the samples were taken, the vertical intervals are not the same on the two graphs, but each shows that a direct relationship exists between altitude and Welsh or Breton potential in the two areas. In the Breton one, this statement needs little qualification; despite a not very dramatic change of altitude, the transition, as already noted, is sharp. In the Welsh case, despite a much greater relative relief in the study area, the transition in potential can be seen to be both less complete and less smooth than the Breton one. Pockets of anglicisation are to be found even at the higher altitudes, and at the highest points of all, 1,200ft and more above sea level, there is an interesting sign that the potential for Welsh - speaking is perhaps not so great as at intermediate altitudes.

As with the situational principle, there remains some suspicion that the varying potential for Welsh-speaking has still eluded explanation. It may even be

argued that if the situational principle is accepted, the relief principle, at least as expressed thus, cannot be, since it is to be expected that a valley in the west of the study areas will be more strongly Welsh or Breton in potential than a hilltop in the east. It may even be that, in employing the relief principle in this manner, the method is involving itself in a logical fallacy: west of the border is a greater potential for Welsh or Breton speaking; west of the border, too (at least in the Welsh case), is a greater proportion of hilly terrain; therefore the hilly areas are associated with the retention of Welsh, even though in reality there may be no causal connection between the two.

It is, of course, not enough to dismiss the "relief principle" thus. Some more sophisticated measure of accessibility is required. In devising such a measure, the most fundamental problem is probably the definition of "accessibility". To state how accessible any point is, it is necessary to know to what or from what item, and in cases of language-shift it is often very difficult to isolate one particular point from which any linguistic influence may be diffusing, since the process may be taking place along a wide front, as it is in the two study areas.

The problem appears to be resolved if the term "accessibility" is re-expressed as " ease of inter-communication across the land surface". An approximation of this is reached by scoring kilometre squares according to the types of communications they contain, and the slope steepness and relative relief within them (see keys of maps for details). Figures IV.10 and IV.11 are the result.

The map of the Welsh area, IV. 10, strongly reflects the topographic map, showing a sharp contrast between the area of difficult intercommunication in the north-west and the much greater accessibility in the south and east. A look back at the potential surface map of the area (IV.6), with its very similar sharp degree of transition, prompts the immediate reaction that here, indeed, is confirmation of the "relief principle", with the more elevated and hilly terrain shielding the Welsh language from the westward diffusion of English. More considered reaction suggests, however, that the same logical error as that considered earlier may be prompting a false conclusion, and that any connection between terrain and language requires further evidence. This suspicion is strengthened when the Breton surface intercommunication map (IV.11) is examined. It can be seen that inter-communication across the Breton area, as thus measured, is subject to less extreme conditions than in the Welsh one, but that there is a zone of more accessible country following the course of the route nationale east-west

across the centre of the area, with areas of lesser accessibility to the north and, more particularly, the south. The pattern of potential Breton transition (IV.7), on the other hand, runs at right-angles to the route nationale and its zone of easy intercommunication. The contrast may be caused by the fact that the difficulty of access in the Breton area is not enough to have any shielding effect on the language. Whatever the reason, the "relief principle" remains open to question.

Superimposed upon the two intercommunication maps is some information obtained from a rather more systematic comparison of accessibility and potential language strength. Two categories are distinguished: those in which there is a lesser language potential than might be expected if inaccessibility really has any effect in preserving those languages, and those in which the potential exceeds the expected proportions as derived from accessibility. Quite subjectively, squares of accessibility scores of 4 or lower and a potential speaking figure of 50 per cent or lower are taken as criteria for the first category, and the second is based on squares having an accessibility score of 7 or more and a potential speaking score of over 50 per cent. In view of the subjectivity of the selection of these scores and also the fact that the surfaces being compared have been compiled by

different methods, it is the location and existence, rather than the exact shape, of the resulting "areas of anomaly" which should be noted.

4.7 "Deficit" areas in terms of accessibility and speaking potential:

Investigation of the reasons for the atypicality of such localities in the Welsh area gives a first indication of the processes which may be at work in language-shift in this part of the Welsh borderland. Atypical localities are classed as having a "deficit" or "surplus"of Welsh or Breton in relation to their accessibility, though no absolute values are implied, but only a comparison with average accessibility and speaking potential for the two study areas.

Turning first to the areas of "deficit" of Welsh on IV.10 (that is, localities in which there is less Welsh than one might expect from their relative inaccessibility), it can be seen that the method reveals relatively few such areas. Furthest east is the area of Llanymynech Hill (265220), and the anomaly may be explained by the fact that although the Welsh potential on the hill is entirely unexceptional (at 0 to 20 per cent) for the area in which it is situated, it is an unusually inaccessible spot for this eastern side of the study area, yet not extensive enough to have retained sufficient potential Welsh-speakers to form a recognisable community.

Some three kilometres to the west and north west, between Winllan and Llanyblodwel (at 222222) and near Nantmawr (at 248245) respectively, are two localities of low accessibility, nearer the area of generally stronger Welsh potential but which are anglicised. On closer examination, their settlement pattern is one of small, scattered farms most closely resembling the pattern in figure II.5 (i), and investigation in the two localities indicates that they are inhabited by families claiming strong traditional associations with the locality. Many of the residents report that though they themselves are unable to speak Welsh, their immediate ancestors were able to speak the language, and that within their lifetime Welsh has been spoken in the locality. Recently, the tendency for farm sizes to grow has meant that some farmhouses, stripped of their land, have been sold or let to incoming families, and these have tended to be local and non Welsh-speaking in the two areas under consideration.

The remaining areas of Welsh "deficit", all situated further west, are of a slightly different origin. The one at Briw (175265) will be taken as an example. Figures II.5 (i) and (ii) most nearly exemplify its settlement pattern. Most of the farms, of less than twenty hectares (50 acres), offer a standard of living which is no longer acceptable to most local people. Steep slopes, coarse vegetation and thin soils, together with a lack of rural transport and other services, have meant that since the population

peak which occurred in 1841 approximately (see figure II.7), there has been a steady population drift from the area, either to better agricultural land or to a different way of life in the lowlands. During the past decade, many of the empty houses, some in ruins, have been renovated and reoccupied, mostly on a weekend basis or as summer residences. Not all of the new occupants are from Merseyside, Manchester or the Midlands; some are from Shrewsbury and other towns within thirty kilometres, Most of the newcomers, however, are non-welsh speaking. No longer do they simply play the passive role of occupying empty houses. They have inadvertently raised property prices by decreasing supply, and many of the remaining local people complain that they have been priced out of the market. The same problems typify the other "areas of anomaly" in the west of the Welsh study area, as well, probably, as many other localities which the accessibility study has not picked out. Nor, as the many studies of the problem testify, is the situation unique to this part of Wales.

Among the studies of the effects of second homes in Wales is that of Ashby, P. et al. (1975). They describe the sequence of emigration, dereliction, re-occupation, stressing its particular significance in the uplands and pointing out that second home owners are frequently wealthier and more mobile, and that their presence decreases the potential workforce of local people, thus undermining the more traditional elements of local economies. The density of second home owner-

ship is stated to be very variable, being low in much of the Severn Valley and high in South Clwyd (op.cit.,p.327). In the light of the evidence they present, their conclusion may be considered somewhat unwarranted , taking the line that

> " there is no reason to suppose that Welsh traditions cannot continue or that the Welsh language should fall into disuse because of the growth of second home ownership for as long as the Welsh people wish their language and tradition to continue" (op.cit., p. 333).

At this stage of the study, the exact ways in which this changing aspect of rural settlement may affect the socio - linguistic mechanisms of local Welsh speaking remain somewhat ill-defined. The problem is recognised at the national scale, as witnessed by the Welsh Language Society report (1972) and by planners in the local authority areas most affected, for example, Jacobs (1972) in the case of Denbighshire. One its most serious aspects may be the alienation, in terms of absolute distance, of one potential Welsh - speaker from another (as implied by the Welsh population surface map), or it may be the simple dilution of the proportion of potential Welsh speakers in the whole population (as implied by the percentage potential surface). Alternatively, the most severe aspects may be that already proposed as a hypothesis in section 2.7: that by diverting patterns of activity from those associated with the traditional, mainly agricultural, economy, incoming vistors, whether they are Welsh - speaking or not, are disrupting established potential speaking patterns.

If this last is the case, it is difficult to predict the survival of Welsh as an everyday conversational medium anywhere in Wales, but the hypothesis is regarded , at this stage, as something of an exaggeration, though patterns of use in practice (Chapters V and VI) may finally confirm or refute it.

A search for similar areas of Breton "deficit" on figure IV.11 discovers no example. Methodological problems and population dynamics may both be held to account for this. The method for isolation of "areas of anomaly" was devised with particular reference to the extremes of condition encountered in the Welsh area, and it may be that it is not capable of demonstrating "anomalous areas" in the more subtle topographic conditions of the Breton study area. This seems unlikely, since the method was successful in showing examples of "Breton surplus" in the area (see 4.10).

The explanation based on population dynamics necessitates a return to figure II. 11, the density of parish or commune populations at the date of the population peak. It can be seen that peak rural population densities in the part of the study area with most Breton-speaking potential are greater than those which have ever been characteristic of the western areas of the Welsh area. As section 2.8 suggests, peak populations probably greatly exceeded the carrying capacity of the land in terms of efficient agricultural production. Figure II.9, showing the often sharp decline in population in the Breton rural communes, represents, onee again, the increase in farm

holding sizes and the reduction of agricultural population to a size commensurate with modern farming methods. The strong element of contrast in the effect this has on the Breton speaking potential surface seems to stem from the fact that population density in France as a whole is considerably less than that in Britain, so that there is much less likelihood of abandoned farmsteads being occupied by week-end or summer residents, monoglot French or otherwise. While second home ownership in Brittany has been less closely studied than in Wales, the work of G.LeGuen (1964) out of date and rather brief as it may be, provides some useful observations on its effects. He distinguishes between coastal increases of numbers of second homes, many of them purpose-built as seaside holiday retreats, and inland development of second homes. While the traditional economies and societies affected by the first type are those of fishing communities as much as farming ones, in the case of the second type it is farming areas with few alternative resources which have been affected (op.cit.,p.148). At the time of Le Guen's study however, it is mainly Haute Bretagne, outside the areas where Breton-speaking is naturally likely to occur, which is affected (op.cit.,p.150). Once again, the strong variation, even from one commune to the next, is stressed, and in connection with the inland areas, a telling comment is made,(op.cit., p.151) to the following effect:

> " we are discussing areas where the rental value of land is at the lowest encountered anywhere in Brittany".

Such areas may in some respects be counted the equivalent of the agriculturally undesirable uplands of the Welsh area, though in Brittany they would normally take the form of much less elevated heath and moorland. The Breton study area has relatively little such heathland, and, in 1972, judging from the household survey undertaken and from visual evidence, remained almost unaffected by second home ownership as an influence on demographic change, although, as has been seen, not by other aspects of population change such as rural depopulation. As pointed out by Clout (1977,p.47), French census information on second-home ownership, already a detailed information source by comparison with the data available for most other European countries, may be supplemented by information from cadastral registers, which show addresses of property owners in each commune. Abstraction of these data is a laborious task which was not undertaken for the Breton study-area but which would provide a valuable future data source on second homes and language change in this and other parts of Brittany.

4.8 "Surplus" areas in terms of accessibility and speaking potential; the Welsh area:

For the areas where the potential for Welsh and Breton speaking is greater then accessibility might suggest, several explanations may once again be invoked. If the Welsh area is examined (IV.10) it may be seen that in its eastern half there are a few small such "surplus" areas, situated between, rather than upon, settlements and lines of communication. In the western half of the map, the "surplus" areas are more extensive and, by complete contrast, coincide with villages and roads. Explanation of the varying pattern may again be based partly on the methods used to define accessibility, and partly on the hypothesis based on population movement in the Welsh area.

First of all it may be expected that if there is evidence of the outward movement of Welsh speakers from the physically less-favoured uplands, so there should also be clear indications of the arrival of Welsh speakers on the eastern plain. As already stated, the evidence for this is less than convincing. The Welsh-speaking household surface map confirms the presence of in-comers, but a comparison with the total household surface (IV.2) shows that the numbers of incoming Welsh-speakers are lost in the high density of households

in the east. Only in the more remote locations, away from roads and settlements, do small areas of anomaly appear, where, probably by chance, groups of Welsh-speaking families have moved into lowland farms, as in the Llanymynech area (287220), and have been sufficient, in the low population density, to appear on IV.10.

The question remains: can the "surplus" areas along the roads and in the villages of the west similarly be explained by methodology? A return to the potential surface map, IV.6, shows that in terms of percentages of Welsh-speaking households it would be very difficult to distinguish villages and roads from any other items on the map. Their appearance on the "anomaly" map thus seems to result almost wholly from some factor of greater accessibility associated with roadside and village locations. If explanation could be based wholly upon either the relief or situational principles or upon the concept of accessibility, however, it might be expected that main roads and villages would have a much decreased population of Welsh-speaking. The fact that this is not the case seems attributable to the migrations from poorer to better land, from hill to valley and from isolated farm to village. That is to say, there already seems to be evidence that instead of having a purely negative role as the instruments of encroachment of anglicising influences, the roadside and village communities, with their greater accumulations of potential Welsh speakers in close proximity to each

other, locally increase the possibility of continued Welsh-speaking.

Focusing this generalisation onto precise examples, the villages of Llansilin, Llangedwyn, Llanfechain and Bwlchycibau and their nearby valley roads may all be quoted as examples. The function of these villages as "collecting-points" for potential Welsh - speakers is confirmed by the Welsh household surface map. This feature is interesting because it may be thought to contradict the conclusions of the Donegal study, that villages have a "negative linguistic-influence" (section 2.6) There is not necessarily such a contradiction, for two reasons: firstly, in the case of Donegal, although rural depopulation continues to play a role, there is a far lesser degree of second-home growth than in the Welsh study area, and the concern is much more with anglicising influences penetrating from town to village and thence into their rural hinterlands; secondly, in the case of the Welsh area the concentration of Welsh speakers in villages and valleys may be a transient feature, associated partly with a rationalisation of local agriculture in combination with an ageing population of retiring farming families, and partly with an influx of English-speaking immigrants onto the agriculturally poorer uplands. In other words, it seems unhelpful to make generalisations about the

optimum settlement pattern for the survival of languages. Other factors, such as the balance of migratory flow, may cause such patterns to vary according to time and place.

4.9 Potential Welsh speaking; a model based on principles of accessibility:

As a way of reinforcing this point and also of testing how far the conclusions so far reached accord with reality, a hypothetical model (IV.12A) was drawn. Indications of scale are notably absent on this model; it may be thought optimistically simple even at the national scale, and much more so at the scale of the study areas. It is, in effect, a "balancing" of Rees's two principles one against the other; with increasing altitude, steepness and resultant inaccessibility, the likelihood of Welsh retention increases while, on the other hand, with increasing proximity to the source of diffusion of anglicisation, the likelihood increases that the topographic shielding effect will be lost. Thus it is that on hill area of the same height and steepness, language-shift may be at a different stage, having advanced to a greater height in the east than in the west. The advance of English along the valley corridors is also indicated. To complicate the picture, however, there is also some representation first of the totally uninhabitable uplands, secondly of those whose marginal conditions have caused the emigration of inhabitants since the population peak date, and finally of the reoccupations of the same areas by a new set of inhabitants from the east, indicating

that a Welsh - English language shift may be taking place from several directions simultaneously. The outflow of potential Welsh-speakers onto the plain, once again using the valley routeways, is shown, and acts as a reminder of the very important point that the processes of diffusion under discussion are two-way; for every westward flow of English, an eastward flow of Welsh may be found, with all which that signifies for the formation of new potential Welsh language- speaking groups in the east of the study area.

A section of the potential surface from figure IV.6, representing the reality, is provided in IV.12B. It demonstrates the overall transition, both of language and of topography, and it may be thought to reinforce, in the most general terms, the connection between language and accessibility. Many of the features on the model (for example, Welsh hilltop remnants, English flow up valleys and on-to hilltops and Welsh outflow onto the plain) make an appearance.

The complexity of the reality is, nonetheless, the feature which is perhaps most obvious. Topographic features which are practically identical to each other in shape, height and location have quite different Welsh-operating potentials. While by no means refuting the hypothetical model as a part of the explanation of Welsh potential, the reality stresses what has already been conjectured - that the potential surface is the result of a complex balance of factors, physical, demographic,

historical, economic, even accidental, and the balance is likely to vary from one locality to another.

4.10 Areas of "surplus" on the Breton map:

This point is reinforced by a consideration of the areas of "surplus" on the Breton map, IV.11. It will be recalled that in terms of the accessibility index derived earlier, there was no example of " deficit" areas of Breton and this was attributed largely to the history of population -change in the area since 1841 and to the small pressure from external influences such as second-home buyers. In the case of areas of "surplus", it may be seen that extensive areas of potential Breton - speaking exist despite the relatively easy access to the study area from the east and the easy communications within the area.

The briefest way to comment upon the areas of "surplus" of Breton is perhaps quite simply to note that they correspond with almost all the areas of over 50 per cent Breton speaking potential(figure IV.7). That is to say that in terms of the conditions already encountered in the study of accessibility in the Welsh area, the relief and communications in the Breton area would prepare the observer for a complete absence of Breton almost everywhere except, perhaps , for the extreme south of the study area, and this is manifestly not the case. It is difficult to imagine any "relief principle", such as that devised by Rees with respect to Wales, being proposed with respect to this part of Brittany, though the existence of a "situational principle" measured in terms of distance westward into the Armorican peninsula,

or distance from the nearest large town, may be thought more credible as part of the explanation. This does not invalidate the role attributed to physical landscape features by figure IV.12A, but simply shows the danger of attempting to explain the potential for language speaking in terms of a few selected factors for one particular area or for one chosen language. In the Breton case, as discussion has already indicated, if a few explanatory factors were selected from the many possible ones, historical-demographic ones would probably first come to mind. More than any simple explanation, however, the words of Musset concerning the Breton language border, quoted in the first chapter (section 1.7), may be repeated:

> "by strange historical chance, it runs across singularly uniform countryside; nothing changes when the border is crossed, except the language".

The location of the language border within Brittany as a whole may, he says, be attributed to historical factors, but Musset's unwillingness to specify any further influence on its location, regarded at the time as an over-simplification, becomes entirely understandable in the local context of the Breton study area. There is the increasing suspicion that if the pattern is not the direct product of the physical landscape, it may be produced by a series of socio or psycho-linguistic influences as yet undiagnosed.

4.11 Speaking potential in an urban context; alternative hypotheses :

Before concluding this appraisal of the potential for Welsh and Breton speaking, some special consideration

should be given to potential speaking in an urban enviro - ment. This necessitates a return to the Welsh area an an examination of patterns in Oswestry. The example chosen is far from being representative of the potential use of Welsh in every urban situation where groups of speakers exist, because the social groups existing among the Welsh-speaking residents are in many respects more like those in the villages in which they originated, and newcomers to the town frequently choose their area of residence precisely because they are already familiar with others already living in the area, as a result of having lived near them when previously resident in the west of the study area, or because they are members of the same family. Oswestry retains its weekly markets, along with a considerable variety of shops and services and an industrial component, factors which in combination may justify the description "urban". Châtelaudren, on the other hand, while originally thought suitable as an equivalent of Oswestry for the purpose of examining language in an urban situation (2.6), exhibits social and occupational patterns very little different from the villages elsewhere in the study area, and has thus been excluded from the present section of the study.

If figure IV.4 were alone taken as evidence, it might confidently be expected that Oswestry, with its predom - inantly large number of potential Welsh speakers and situated at probably the most "accessible" point in the study area, would appear as an area of "surplus" on the anomaly map.

That it does not is attributable, as in the case of the villages of the east (section 4.8), to the fact that the numbers of Welsh speakers are lost in the total population of the town (fig.IV.2). On the potential sufface map (fig.IV.6), the town may be classed simply as one more reception area, no different from other eastern portions of the study area in the process of population movement and its effect on Welsh-speaking distributions. One interesting feature, which may however be a product of chance, is that within some two or three kilometres radius to the west of the town on IV.6 is the most extensive area of "no Welsh potential" to be found in the whole study area, indicating perhaps that if the urban area has the effect of concentrating speakers, in a cumulative sense at least, it produces a corresponding "vacuum", in terms of numbers of Welsh-speakers, in its immediate hinterland.

Within the urban area the theme of accessibility was pursued in a different sense and on a different scale. The "smoothing" of data for IV.6 was thought very likely to conceal variations within the urban area, and so, for analysis, the original dot-map of the town was divided into squares of side 65 metres, and the number of households with a Welsh speaker was first totalled (figure IV.13) and then expressed as a percentage of all households (IV.14). Assuming that within the urban area few points could be described as "remote" or "isolated", it was the accessibility of one potential speaker to another which was thought important, rather than surface communication, and the two

measures described embody, in effect, two alternative hypotheses already expressed in 4.2, about the potential for Welsh speaking and its relationship with the reality of use of the language.

The first hypothesis is that sheer numbers of speakers encountered within a given distance, regardless of their "dilution" in the total population, are the major influence on the use of Welsh in reality. It will be noted that "distance" in the urban case, is regarded as linear, rather than a radial feature, reflecting street alignments and that no running mean has been used to generalise the pattern of 65 metre squares.

One area, above all, stands out on IV.13, based upon one individual street, Park Avenue. The street has the reputation, amongst the townsfolk, of being the "most Welsh" area. It consists almost wholly of terraced houses built between 1850 and the First World War. This house-type is favoured by retired people from surrounding rural areas who seek small, convenient houses close to the town's shops, and which perhaps offer an established, friendly and intimate atmosphere. Figure IV. 15 is a generalisation of residential types within the town, and it shows that this type of house is common in the areas surrounding the central business district and along some of the roads leading out of the town. A second area of high density of potential Welsh speakers on figure IV. 13 is seen to correspond with an area of similar housing to the north of the town centre, while a third high density area may be connected with a group of somewhat larger villas of similar age, just to

the south of the centre.

The second hypothesis, that it is the proportion of Welsh speakers, representing the degree of dominance of potential Welsh in the population, which is more significant, is expressed by figure IV. 14. It can be seen that even in the area already mentioned, it is uncommon for more than half of the households to have a Welsh speaker, and that the pattern is less well defined than on the aggregate map. Using IV.14 as a basis, generalised areas of over 20 per cent households with a Welsh speaker have been superimposed upon figure IV.15 for clarity.

Once again, the zone surrounding the shopping area of the town emerges as having the largest areas of potential speakers. This zone is composed almost completely of nineteenth century housing, terraces and larger villas. The correspondence between this residential type and potential Welsh communities is fairly clear. There is a lack of Welsh in the residences in the town's central shopping area, partly because there are so few people resident there. In addition, perhaps, the population of this central area is younger and more mobile, having imigrated from further afield for employment reasons, and is using small houses or flats in the town centre as temporary accommodation.

The percentage map adds some further areas where the potential for Welsh-speaking is strong, assuming that it is the proportion rather than the absolute number of speakers which is important. The additional areas, towards the edge of the town, are situated mainly in new housing

estates, and it is no exaggeration to state that they are associated with private, rather than local authority, housing. The association is clear on figure IV.15. Several factors may account for this. The first is that data collection was somehow less efficient on the local authority than the private estates. A second reason may be that the Welsh speaking section of the population may prefer, or be better able to afford, private housing. Thirdly, the feature may be age-related, with the older, more established, family units also having a greater tendency to be Welsh-speaking, and the younger, more mobile, less established families settling on the local authority estates.

The final map of the urban area, IV. 16, represents a compromise between the earlier two maps, IV.13 and IV.14, rather than a hypothesis in itself. It may be that both interpretations of potential have some significance. On IV.16, the same features emerge, with an axis of strong Welsh potential stretching south-westwards out of the town as an additional item.

4.12 <u>From speaking potential to speaking in practice:</u>

From all the evidence so far produced, it appears that the examination of household data on "potential" for language use, while an advance on enumeration - district statistics, is still an incomplete method of analysis. There is clearly a case for obtaining data on the individual's use of language in practice: on the extent, in distance and

time, of daily intercommunication; on speaking frequency (as pereeived by Welsh and Breton speakers and by others); on the choice of speaking-situations in daily life; and, finally, on the mechanisms allowing the maintenance of language at the border or setting under way the process of language - shift in the two study areas.

CHAPTER V

SPEAKING FREQUENCIES.

5.1 Methods of obtaining data on speaking frequencies:

The need for data on the use of Welsh and Breton by individual speakers has become clear, but the means of obtaining such information immediately present a problem. Language speaking is a complex process calling for the manipulation of abstract ideas, yet most speakers perform this task quite automatically and for the most part subconsciously. An accurate self-assessment of their use of language (for example, the frequency of use) may thus be very difficult. Further, in the case of bilingual speakers, their assessment of the relative frequency of their use of either language may not be reliable. As an added complication, the differing status of Welsh and Breton is likely to produce results which are not directly comparable. Short of observing, personally, and recording the speaking habits of individuals over an extended period of time (which would greatly reduce the possible sample size and intrude upon privacy to an impossible extent, as well as producing an entirely biased result as a consequence of the intrusive presence of the observer) it would be extremely difficult to remove the element of inconsistency which results from individuals' differing self-assessments and from the different "national conditioning" of the two sample groups.

These basic problems accepted, a questionnaire survey of Welsh and Breton speakers was chosen with some misgivings, as

most appropriate for the present purpose. Much has been written about the problems of questionnaires. The following are probably representative: McNemar (1946) attacks the validity of telephone and questionnaire surveys in general; Suchman and McCandless (1940) present strong evidence that the characteristics and responses of people who answer questionnaires without prompting and those who have to be reminded are quite different; the same authors (op.cit.,p.760) stress the problems arising from differing educational level and different cultural background of respondents; Clausen and Ford (1947) are concerned by the differing accuracy and attention to detail which different respondents may produce. Upon these early criticisms a large literature has been built[1] and the doubts expressed have been such that many sociologists, in particular, are now loth to use questionnaires at all.

The problems are perhaps particularly severe in opinion and attitude surveys, where respondents may be particularly inclined to state opinions which they feel they ought to hold, or which they think the questioner would like to hear. Such difficulties are a little less severe in the present survey, though by no means non-existent. While opinion, as opposed to perceived fact, is intended to play a relatively small part in responses, it is difficult to prevent respondents who have

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1: an example of the severity of present - day criticisms may be found in Phillips (1973), particularly in Chapter 5 and bibliography.

a particular interest in preserving or suppressing Welsh or Breton from deliberately or inadvertently falsifying responses. It can only be hoped that such intentions motivate a relatively small proportion of respondents. A part of this same problem is that perhaps such strongly - motivated people would be among the group of respondents who, in a postal survey, sent back completed questionnaire - forms with the least prompting, and it would therefore be necessary to ensure, by several follow-up letters if necessary, that as large a proportion as possible of the recipient sample of speakers filled in the form. The use of a postal questionnaire would bring several benefits: more and less accessible localities would be reached with equal ease, interviewer bias would be reduced as far as possible and recipients would be permitted adequate time to supply the requested information and return the form in a pre-paid envelope.

Despite such arguments in favour of a two-way postal survey, a pilot survey reveals several problems: forms are occasionally returned from families other than the original addressees; there are varying interpretations of some of the questions, especially on the French form; most seriously, it is clear that the response from the Breton area is going to be poor, and the problems are compounded by financial constraints and international postal difficulties. Local sources in Brittany stress that the residents in some parts of the area are unused to postal forms and that response rates may therefore suffer. This problem is also felt to exist, though to a lesser degree, in the Welsh area. A lack of response is felt to be particularly severe in the Breton case, since the area is much the smaller

of the two, and areas of non- response may further reduce the usefulness of already- depleted data. For all these reasons, a somewhat different method has been chosen for each of the areas. In both cases, the forms are delivered personally to a fifty per cent sample of all households with a Welsh or Breton speaker located on the survey of potential speaking. In the Breton area they are filled in by, or under the supervision of, the researcher, and in the Welsh one they are left for later postal return, unless the householder requires help. The difference in administration of the forms may introduce some lack of comparability of results, but it is stressed that the prime aim is comparability within, rather than between, the two study areas.

5.2 Layout of the questionnaire forms:

Since the exact wording of questions undoubtedly influences the rate, quality and usefulness of responses, this should be the subject of extreme care. Before the selection of words, however, that of languages must be considered, particularly the question of the possible need for bilingual forms, including Breton and Welsh as well as French and English. The necessity of not antagonising potential respondents by the absence - or presence - of Welsh or Breton has to be balanced against the confusion and subsequent loss of responses produced by the presence of an additional language on each form. In addition, the small fraction of people unable to speak English (figure III. 5b) and probably also French should not be forgotten. On the other hand, the likelihood of the very small percentage of monoglot

Welsh or Breton speakers being unable to obtain help from a bilingual speaker in filling in the form is thought rather remote. Additionally, figures III.8 and III.9 show that in the study area between thirty and forty per cent of those people able to speak Welsh cannot read or write it, and the evidence appears to be that the proportion of speakers able to read and write Breton is very much smaller than that for Welsh.[2] On the basis of these reasons, Welsh and Breton translations have been omitted from the questionnaires, though in retrospect this is regarded as a somewhat misguided step, albeit one which is unlikely seriously to have affected the results obtained.

Examples of the forms ("Questionnaire I") are available in Appendix III. The first section on both forms has the purposes of locating the response - point exactly for each household and of giving an indication of the mobility of the households concerned, both in terms of their length of occupation and of the distance they have moved if they have changed addresses in the ten years prior to the survey, administered in 1973. The direction of moves, too, for example west to east, isolated farm to village, side-road to main-road, may be of importance.

2: Jorj Gwegen (1975, p.207), for example, quotes an average, for Wales as a whole, of 83% of Welsh speakers able to read and 73% to write Welsh in 1971 and estimates that perhaps ten times fewer Breton speakers could read or write Breton at the same date.

Both forms are directed to "the head of the household or any other member who is able to answer on behalf of the household". This person, it is hoped, is able to give adequate detail on the Welsh or Breton speaking frequency of other members. The forms contain, in addition, tables on which details of age-groups, occupations and speaking- situations of household members are to be recorded. In part 2 of the Breton form and section 7 of the Welsh one are, however, some questions requiring an individual answer based on a purely personal point of view are included.

The Welsh form has also a final section in which Welsh-speakers are invited to take part in a further stage of the enquiry, again on an individual basis. Initially, the idea is that volunteers should complete a "diary", recording for a set period, perhaps a week, every occasion on which they use the medium of Welsh. This would enable some more precise meaning to be set on such descriptions as "sometimes speaks Welsh" and also give a more accurate idea of the relative importance of the various speaking situations selected for study.

In view of the similarity of data required, it may be surprising that the two versions of Questionnaire I are so different in format. The difference arises partly from the difference in the collection-method, and partly from the lessons learned from the Welsh form, returned, for the most part, before the delivery of the Breton one. Certain questions, having been found to be ineffective, are omitted (for example, the question on Welsh "Functions", the subject of frequent

misunderstanding. Others have been transferred to a later stage of the study, or are thought to be inapplicable. On the Breton form has been added a "speaking frequency" which Welsh respondents sometimes indicate that they would have used: "speaks very little Breton; understands a lot". The significance of this inclusion is that a preliminary examination of the Welsh results indicates that the speakers seem to divide into two sub-groups: active speakers, who seek out and initiate Welsh speaking situations, and more passive ones who may attend chapel services or similar occasions using Welsh but who, under most circumstances, would not choose to speak the language, except perhaps to reply to questions or pass the time of day, or who may not be able to make any reply at all. On the assumption that these people, too, represent an aspect of minority language distribution, provision has been made for them on the Breton form, and also on both versions of Questionnaire III, a later stage of the study.

The speaking frequencies measured by the two forms are, in essence, perceptions, by respondents, of their use of the languages in question. An attempt has been made to express Welsh or Breton speaking frequency in words, and in general the descriptions chosen appear to have been appropriate, with one exception: the choice of "Sometimes speaks Welsh (Breton)" attempts to place this description in a gradation, between "Can speak Welsh (Breton) but rarely or never does so" and "speaks more Welsh (Breton) than English", but its vague syntax

means that respondents occasionally interpret it more broadly than was intended, and use it in addition to one of the other descriptions.

One method of making answers on the Welsh and Breton speaking habits of respondents more informative is to ask another question, on when and where speakers are in the habit of speaking their minority language. A number of common situations (e.g. house, school, work) have accordingly been selected as places where either language may be spoken, and an extra category ("elsewhere") added, with the request that respondents specify the situation if this category is used. The residential location of speakers, when linked with the frequency of speaking in each of the situations, may give an indication of whether language speaking at the border has any connection with the formal or informal, public or private situation, and whether the border is marked by any sudden decrease in the versatility of the language when the total number of situations is mapped.

In addition to these main aims, the form has several more general ones. The sections on the time and place of minority language learning are intended to cast light upon the mechanisms of language change, as seen in the sample of Welsh and Breton speaking respondents. Section 7 seeks the opinion of local people on whether Welsh and Breton are increasing or declining, and their reasons for their answers. The last question in the section is an open-ended one, allowing, it is hoped, a view of the feelings and ideas which most strongly motivate the Welsh speakers. Though a similar question is

asked on the Breton form, no formal space is allocated for answers, which may, therefore, be less frequent and less typical.

5.3 Administration and return of the survey forms:

The numbers of households with a member able to speak Welsh or Breton discovered during the first stage of the survey totalled 1,223 and 411 respectively. From these households a sample of recipients for questionnaires was chosen. It was a random sample, but stratified according to parishes and communes, to ensure a more even distribution.

Table V.1 and a figure V.1 show some details of distribution. It will be noted that even with a doorstep visit, 27 per cent of responses were lost from the Breton sample, and on the 125 completed questionnaires, a considerable number of people offered no opinion on some of the questions in part 2 of the form, and some refused to give answers on the occupation question, number 10 in part 3. In the Welsh study area, probably because of the good rapport which had been established with the respondents, the response rate was high (64 per cent) even without the follow-up letter, which, in its turn, elucidated a further 14 per cent of responses. It was considered that a potential source of bias in the responses had been removed, in both areas.

Table V.1 : details of "questionnaire I" forms delivered and returned

	(a) total number of households with a Welsh or Breton speaker	(b) number of forms distributed	(c) number returned unprompted or at interview	(d) (c) as a percentage of (b)	(e) number returned after letter	(f) (c) plus (e) as a percentage of (b)	(g) (c) plus (e) as a percentage of (a) — i.e., the total sample
Welsh area	1,223	445	285	64%	63	78%	28%
Breton area	411	171	125	73%	-	73%	30%

The distribution of origins of completed questionnaires (figure V.I) was also reasonably even. This was important, as gaps in information representing areas where potential Welsh or Breton speakers lived but from which no response had been obtained would have distorted the maps of speaking frequency to be produced from the responses. The gap to the north-west of Oswestry is accounted for by the lack of potential speakers there, as already noted, and other gaps on both maps coincide with unpopulated areas. A high proportion of responses (43%) in the Welsh area were from the urban area of Oswestry.

The more general information from the questionnaire, since it relates to some of the hypotheses on migration discussed in section 2.11, should perhaps be discussed first. The pattern on the "potential" language map (chapter IV) may then be interpreted with greater certainty. In addition, the information forms a basis for discussion of "actual" speaking scores derived from the main sections of the form. This general information consists of six items: the ages of speakers of Welsh and Breton; the correlation of the frequency of their use of Welsh or Breton with their ages; their residential mobility; their short-term and lifetime migratory patterns; the stage of their life at which they learned Welsh or Breton; and the surroundings in which they learned these languages (home or elsewhere). The last two items only really have meaning if they are correlated, once again, with speaking frequencies.

5.4 Age structures and speaking frequency:

Some general observations were made in section 2.10 regarding age-structures in the study areas and their possible relationship with potential for speaking Welsh and Breton. It is of interest to discover whether the greater potential amongst the older age-groups in both areas is reflected by a differing frequency and variety of use of Welsh or Breton. A breakdown of frequency use by age group is available in figures V. 2 and V. 3. It is the top half of each diagram which should be consulted first. For each of the five age - groups used, it represents all those within each group who are able to speak Welsh or Breton. This figure is taken as 100 per cent, and the proportion of the 100 per cent using Welsh or Breton with each frequency is shown in the upper half of the diagrams. It should be borne in mind that "100 per cent", in the case of the older age-groups, represents many more people than in the younger ones.

The bar graphs on the lower half of each diagram are intended to represent the relative proportion of people of the same age group, within the households under study, who are unable to speak Welsh or Breton. Thus if, in the 30 - 60 age group, the lower bar graph were exactly the same length as the line representing 100 per cent on the upper half of the diagram, it would mean that within that particular age group exactly the same number of people were able to speak Welsh or Breton as were unable to do so. It must be stressed that the proportion

is not that for the population of each study area at large but for the "households with a Welsh or Breton speaker" which were used on the basis of the discussion of potential speaking. This is of significance since the index provided by the diagram is one of the "dilution" of Welsh or Breton within families which may be considered as the very centre of continued Welsh and Breton use within the study areas. If the family structure is an important defence for Welsh and Breton speaking, the point at which speakers of these languages become outnumbered by non-speakers, and also the point at which individual family members, particularly in the older age groups, become language "isolates" within the household, must be regarded as a critical stage in the progress of language shift.

It can be seen that within the sample of families with Welsh or Breton speaking connections, a greater proportion in the two older age-groups is able to speak these languages than is unable to do so. The position is very markedly reversed within the younger age-groups. This, in itself, is an indication that the study is being undertaken at a crucial moment, when abrupt changes in speaking habit seem to be occurring, even in families with established patterns of Welsh and Breton speaking, and that even the existence of family tradition does not appear, in the face of external pressures, to permit the continued existence of these languages at their previous strength. In the Breton case, the change appears to be especially pronounced; while there is almost no difference in the proportion of people able

and unable to speak the Welsh and Breton languages in the "60 and over" age-group, (about five times as many speakers as non - speakers?, in the "in school" group, there are over three times as many non-speakers as speakers of Breton, while there are not quite twice as many in the Welsh case. When it is remembered that these proportions are occurring in families with a tradition of Welsh and Breton speaking, and that these families themselves are only a part of the total local population, neither case is very encouraging, though the rapidity of Breton decline occasions particular concern.

Another aspect of the correlation of age and speaking ability gives cause for concern: the examination of more detailed descriptions of speaking frequencies to distinguish people who simply know the language from those who make a practice of speaking it is possible from the verbal descriptions given by respondents. On an earlier occasion (5.2), the distinction was made between "active" and "passive" speakers, the distinction being broadly that between people likely to initiate conversations in Welsh or Breton, and those only likely to reply if addressed in either of these languages, and then probably to revert to the use of English or French when the task of maintaining the conversation in the minority language became too difficult. Clearly, by these criteria, monoglot Welsh or Bretonnants are in the "active" category, and so, probably, are those who speak more Welsh than English, or more Breton than French. Speakers of more English (French) than Welsh (Breton) are, by the same token, very probably "passive"

speakers, while those who state that they "sometimes speak Welsh (Breton)" present something more of a problem. It seems very likely that at least a proportion of them are also "passive" speakers who do not wish to admit their lack of frequent use of the language, at least, in the case of Welsh, though a few of the Breton respondents give the impression of being unconcerned, or even slightly ashamed, about their ability to use the language.

The inevitable conclusion to be drawn from this examination of age-groups and speaking frequencies appears, therefore, to be as follows: equally as sharp as the decline in the overall potential for Welsh and Breton speaking is a decline in the frequency of use of these languages, and it seems that this, too, can be related to age. It is strongly probable that this decline in the frequency of language use would be much less marked in the areas where Welsh and Breton retain a high proportion of potential speakers, and that within - household variations in frequency are one more characteristic of localities which are undergoing the sudden transition from Welsh to English, Breton to French which was indicated on figure III.6.

One apparent anomaly on figures V.2 and V.3 remains, meanwhile, for comment. This is the increase in speaking frequency in the youngest group ("not yet in school"). In both cases, the samples in this age-group are rather small - nineteen only, in the Breton case - but an atypical sample is not thought to be the reason for the increase. Comments written on

returned questionnaire forms lead to the belief that parents tend to teach infants songs and rhymes in Welsh and Breton at an early age. The lack of limits put on the youngest age at which a child may be deemed to "speak a language" may have led to the inclusion of infants possessing only a few words of Welsh or Breton and little or no English or French, thus raising the frequency and, probably, decreasing the significance of the results obtained. The results are nonetheless evidence that, despite the clear indication of a shift to English and French, the household is still fulfilling to some extent its role as a location for the teaching of Welsh and Breton to some, at least, of the next generation of speakers.

As partial confirmation of the Welsh findings for the younger age-groups, the series of graphs in figure V.4 is presented, though these again show potential, rather than actual, Welsh speaking, and for a much larger area than the study area. The graphs show proportions of people able to speak Welsh who are, in addition, unable to speak English. The same characteristic emerges from nearly all of the graphs: that while monoglot Welsh speaking is a rather uncommon feature characteristic of usually less than five per cent of people in the study area, and only slightly higher even in West Wales, the pre-school age group is exceptional in having a high proportion of monoglot speakers - between 30 and 40 per cent for the counties of Montgomeryshire and Denbighshire and for Wales as a whole in 1971.

This high proportion of monoglot infants must be seen

in perspective; as seen elsewhere on V.4, this age-group has, in most cases, the lowest proportion of people able to speak Welsh. Parents tend either to teach their young children Welsh or English, and rely on the scheols to add the language which they have not taught. Thus, on figure V.3, very few children in the youngest age group are in possession of Welsh simply as an "adornment" to their speaking abilities; either they possess it as a working instrument or they do not possess it at all. Only some six per cent of all pre-school children sampled were stated to possess Welsh as "passive" speakers, as defined by sections 5.2 and 5.4.

No evidence from the census is available to confirm these ideas in the Breton case, but only a sample of speaking frequency carried out among the 400 inhabitants in the commune of Trédarzec, near Tréguier, in 1971 and reported by Jorj Gwegen (op.cit.,p.58). The findings are expressed in figure V.5. The commune is further west into the Armorican peninsula than the area of the present study, and it is also near an urban area and near to the coastal holiday area, both of which facts make it likely to have suffered a sudden collapse in its Breton-speaking. This collapse, as the diagram shows has indeed been sudden and remarkable. No one in the oldest age group does not know Breton, and no one in the youngest group does not know French. Thirty per cent of the commune's old

people are, apparently, unable to converse with forty per cent of the youngest people. Another aspect of this same fact is that though there may be an increase in Breton speaking frequency in the youngest children, there is no recurrence of monoglot Breton speaking in the pre-school group, as there is in both study areas of the present survey. The two diagrams, V.2 and V.3, illustrate the much sharper transition in speaking frequency in the Breton than the Welsh area, but when it is remembered that the Breton study area has a large monoglot French proportion which has not been taken into account on diagram V.2, and that it is situated on the very border of the language area, it is perhaps surprising, in the light of the commune of Trédarzec, that the complete extinction of Breton has not come about even more quickly than has been the case, and that children who habitually speak Breton can still be found.

In the middle age groups, on figures V.2 and V.3, attention now turns to the increasing proportion of Welsh or Breton speakers who say they "sometimes speak" Welsh or Breton or "can speak Welsh or Breton, but rarely or never do so". If the idea of "active" and "passive" speakers is pursued, it can be seen that even if the "sometimes speak Welsh (Breton)" category is counted as "active", there is a marked deficit, in the middle age groups, of people willing to start and maintain conversations in Welsh and Breton, and if this "sometimes" is counted as "passive" this problem becomes even more pronounced. In the Breton case there is a total lack of speakers, in the middle age-groups, willing to initiate conversations in the

language, and a very decisive point in language shift has thus been reached.

Before turning from the points raised by the two speaking - frequency patterns, it may be appropriate to consider the role of school lessons in strengthening the speaking potential and speaking frequency at that point in the age-groups where the speaking of Welsh and Breton seems in most danger of breaking down completely: the school years and those immediately following. To examine this, only those families with one or more children in school were taken, and the bar-graphs in figure V.6 were drawn to represent the speaking - frequencies of the members of these families. In the Welsh area, two separate diagrams were drawn, one for the area within Wales, where children received between one and three hours Welsh tuition per week in school, and one for the area in Shropshire, where no school Welsh is taught for the most part (see figure VI. 5 (vi)).

Speaking frequencies in general are higher for the members of families within Wales, and the breakdown at the age of school attendance is not so severe. It can be seen that in the "in school" and the "under 30" age groups, a much larger proportion of children with a potential for Welsh speaking is found, and that there are rather more young people who appear to use Welsh more often. While they are still in a minority, it can be seen that at least the teaching of Welsh in school, inadequate though the time allocation may often be, helps retain the potential for the maintenance of Welsh in

daily life, though once again, the process of language - shift appears to be at a crucial stage, By compabison, the state of Welsh in Shropshire (V.6b) and Breton (V.6c) is far weaker, and the educational process appears to be instrumental in hastening the loss of Welsh and Breton speaking in school - age children in the families sampled.

5.5 Three aspects of migration as a factor affecting language-speaking: (i) residential mobility:

The next piece of evidence from the first part of Questionnaire I is that on "residential mobility". To facilitate discussion, a hypothesis may be stated, based on the population - dynamics discussed in section 2.11 and chapter IV: that the degree of "establishment" of local communities is likely to affect the vigour (in terms of speaking - frequency) of Welsh or Breton, and that the more subject to population change the community is, the lesser the speaking frequency of these languages is likely to be, irrespective of the potential which may be represented.

To obtain maps of residential mobility, a relatively straight-forward procedure was adopted: once again, a grid was placed over the map on which dots represented length of residence of households at their present address, and the scores for dots were averaged. No running mean was applied, as the grid size was coarse and the areas with no score would have artificially reduced the average. The results are figures V. 7a to 7c, on which only the areas with the greatest residential mobility have been shown. From the question requesting respondents from families with a person able to

speak Welsh and Breton to state how long they had lived at their present address (question 2), the data for the dot-maps were obtained. Four classes of length of residence were selected as follows:

Length of residence	Score
Less than a year	1
one to five years	2
six to ten years	3
over ten years	4

The selection of class intervals and assignment of scores is a somewhat arbitrary procedure, since it is difficult to deduce what length of residence is necessary before a new arrival begins to converse with his neighbours at all, and before he acquires enough confidence, or knowledge about his neighbours, to start using Welsh or Breton as a medium of conversation. This seems likely to vary both with the personality pf the speaker and the type of neighbourhood (urban or rural, established or newly-built, for example). On the basis of the scores, squares with an average, for respondent families, of less than five years' residence, were considered to be those in which speech patterns and habits might still be incompletely developed. This is perhaps longer than even the most reserved speakers would require in order to settle into a new speaking routine following their change of address, but the five-year time period, represented by a score of 2 or less, is a convenient way of revealing contrasts in mobility, as the resulting maps show. They have several additional problems: the shaded areas are those where families are relatively mobile, but some of the

unshaded areas are attributable either to the fact that they are unpopulated, or to the fact that no data were available from the survey; in addition even though the time-span of five years was used, the number of Welsh or Breton speaking families which had changed addresses during this time was so small (some dozens in each case) that the data may be more than usually susceptible to chance variations.

These problems accepted, it is possible to see on V.7a, that three distinct zones appear, the clearest of which is a north-south trending line in the east, following the line of the main road linking Oswestry and the larger, expanding village settlements. Potential Welsh - speakers are moving into the area, many into newly-constructed houses on estates, where Welsh - speaking groups may be particularly difficult to initiate because of the simultaneous arrival of all the potential speakers and the correspondingly greater degree of disruption. Further, the small proportion of the overall population composed by potential Welsh-speakers in this same zone may decrease the chance of these new arrivals' meeting each other. In the west of the map, a much less noticeable zone of greater mobility is indicated. If it is not a chance phenomenon, it seems to be the result of the arrival of families returning, usually upon retirement, to their area of origin, where houses are available for purchase because of a drift of farming families from the poorer hill - lands of the west. Between the two zones is a third one, where residential mobility is low (i.e. scores are over 2.0). While

this area may well be supplying Welsh- speaking migrants to the other two, is does not seem, from the sample, to be receiving speakers in any number. Either its immigrants are not Welsh-speaking or it is an area of notably stable residence - patterns when compared with the other two. If this is the case, given the frequently high proportions of potential Welsh - speakers which figure IV.6 showed to occur over much of this area, it should, if residential mobility has indeed any major part to play in the preservation of speaking patterns, be a zone of frequent and active Welsh speaking, just as the eastern fringe should be a zone of inactivity.

In Oswestry (V. 7b) amidst a generally fragmented pattern, three larger areas of higher mobility stand out. One of them is the town centre, with a higher proportion of temporary and itinerant residents, and the other two are new housing estates, at the fringes of the urban area. Again, if the mobility of speakers has any clear role in the disruption of speaking activity, these areas may exhibit a lesser frequency of Welsh use than their potential would indicate.

The third map (V. 7c), of the Breton area, repeats the theme of a higher degree of mobility of potential speakers in the area adjoining the main road. The east-west line of greater mobility should again, if high residential mobility acts in the disruptive way suggested, be an area of lower speaking activity than its potential would indicate, while the areas to north and south, containing high proportions of potential speakers in places (figure IV. 7), should more completely fulfil their speaking - potential. These possibilities

will be re-examined in section 5.13.

5.6 Migration, aspect ii; Movement of Welsh and Breton speakers to and within the study areas:

If the degree of mobility of households for the period 1963 - 73 in the study areas is of significance for the speaking of language, so too, may be migrant origins and direction of movement within the areas. Unfortunately, the information from the questionnaires only concerns the Welsh and Breton speaking sections of populations but the information from figures V.8 and V.9 shows that in both cases, two distinct types of migration are involved: some long distance moves of more than 35 kilometres and a much greater number of short-distance moves of under 35 kilometres. The division is not so artifical as it seems; most of the migrations are quite clearly "long" or " short distance", and there is a notable dearth, in both cases, of "middle distance" moves of about 35 kilometres. This seems to point to two different motives for the attraction of speakers. Responses show that in both areas, the long distance moves were usually made for employment purposes, and that the heads of such households were frequently teachers, doctors or bank-managers. While employment undoubtedly provided the motive for a proportion of the short distance migrations, too, there was a high proportion of speakers moving for other reasons, for example, marriage or retirement, or because of changing family size. With the exception of the Severn valley, the lack of middle distance origins may be thought to be accounted for in the Welsh area by the fact that at that distance to the West of the area is a sparsely - inhabited area of the uplands

of Wales, but the feature is repeated in the case of Brittany, where such a fact cannot be held to account. The much smaller sample for Brittany is caused mainly by the lack of a populous centre comparable to Oswestry, but the presence of the town has an effect on the pattern emerging, the main aspect of which seems to be that the great majority of long - distance migrations are to Oswestry rather than the surrounding rural areas and the migrants are from a wide area of England and Wales (V.8 (ii)). While many of the short distance migrants (V.8 (i)) also go to the town, a greater proportion of them than of the long - distance migrants settle elsewhere in the study area. In particular, a line of settlement following the main road and comparable with the area of highest mobility on V.7 a can be seen. The significance of the destinations of migrants from various origins is that if itis true, as some respondents reported, that their area of origin within Wales affects the comprehensibility of the Welsh spoken by migrants than the grouping of predominantly local people along the road axis may considerably increase the chances of active Welsh - speaking groups being generated and, correspondingly, the mixture of migrant origins within the town may decrease the likelihood of Welsh there.

If the movements within the town are examined (V.8 (iii)), it is evident, even though the sample is small, that the flow is from older to newer housing on the outlying estates (compare figure IV.15), but that within the town the Park Avenue area and surrounding districts appear to attract Welsh speaking migrants from elsewhere in the town. Both this north - western sector

of the town and some of the newer estates therefore appear to be maintaining or gaining strength as potential speaking communities.

On the map for Brittany (V.9), all the longest - distance migrations except one were to Châtelaudren, but its lesser attraction may be reflected in the fact that origins of migrants are almost wholly restricted to the northern half of Brittany. It is not known how far this reflects the barrier of the hills of Argoat, nor how typical this pattern is of migrations into Côtes-du-Nord in general. Once more, as well as Châtelaudren which appears on this evidence to be maintaining a potential for Breton speaking, the line of the main road, visible on V.7c, emerges as a reception - area for Breton speakers.

The present discussion only touches upon the complex inter-relationships between migration and Welsh and Breton speaking potential, and its evidence is only fragmentary. As already discussed in 2.9, a detailed analysis of migration and language exists in the work of G.J. Lewis (1969), and the Welsh information, at least, may be set against that. Meanwhile, for both areas, a final point can be made on the direction of migration To some extent in the Breton area and to a great extent in the Welsh one, migrations of Welsh and Breton speakers from West to East exceed those in the reverse direction. It is suspected that if a corresponding sample of English speakers were taken this eastward flow would be found to be at least partially balanced by a westward flow of English influence, and that some aspects of the model proposed in IV.7A would be confirmed.

5.7 Migration, aspect (iii); Language generation:

A final aspect of migration to be discussed is the lifetime migratory pattern of Welsh and Breton - speaking respondents, as derived from the question: "please state the name of the area where you first learned Welsh (Breton)". The concept of the place where a language was learned has, perhaps, some validity as a criterion for the delimitation of language-areas, since the areas of "generation" of the language are more important for this purpose, than the areas which it has subsequently penetrated as a result of migration. The question thus sets out to delimit such "generation areas" of Welsh and Breton during the lifetime of the oldest residents of the study areas.

The Breton map (figure V.10) may be taken as an example of the operation of this idea. Approximately half of the speakers in the sample are still resident in the area where they first learned Breton, and most of the remainder learned the language in the immediately-surrounding areas. Of these last, most acquired Breton in the area just to the west of the study-area, only some 8 per cent of the total sample having done so at a radius of more than 15 kilometres west of the western boundary of the area. In comparison, even within the study area, only 4 per cent of the sample learned Breton east of the "linguistic divide" which was depicted on figure II.4, and only three people claim to have learned Breton in Châtelaudren. Some 5 per cent of the sample indicate that they learned to speak Breton in Plouagat, just to the West of the divide, while rather large porportions learned Breton at Bringolo, St.Jean

and Lanrodec (5, 6 and 10 per cent respectively). The figure for Plouagat contrasts with the impression received by the casual visitor to the village, which gives very little sign, at present, of being in the Breton - speaking area. The conclusion seems to be that within the lifetime of many of the residents of the study area, Plouagat has acted as an area of Breton generation, but no longer appears to do so.

One explanation for the existence of people learning the language to the east of the linguistic divide is that they acquired their Breton at a date when the language area extended further eastwards than it did at the time of drawing of the linguistic divide. This, in fact, is not the case, since, as the evidence from Sébillot and Ogée would indicate (section 2.1), Châtelaudren cannot have been a flourishing centre of Breton - speaking during the lifetime of any of the present residents of the study area. The members in the sample probably represent residual speakers of Breton, representing families with a greater than average degree of retention of Breton, out of a particular sense of tradition, or for some other reason. In conclusion on figure V.10, it seems that the location of linguistic divides may accurately be based on areas of "language generation" if this case is typical. The gradual eastward drift of Breton speakers across the whole study area is also indicated, and this drift is not merely along the narrow strip of territory following the route nationale.

The Welsh area adds a little to the detail an language generation, particularly as it is possible, on account of its larger area and population, to examine it in two parts: that

just to the east and that to the west of the national border. The eastern part (V.II) confirms the characteristic of an abrupt border to the language area as defined by the generation of speakers. Once again, in the rural areas, the edge of the generation-area may be related closely to the location of the linguistic divide, particularly as described by Rees (1947). For the urban area of Oswestry, however, there is a very notable anomaly, with the largest single number of speakers in the sample generated there. One explanation may be that these speakers are second - generation members of families, the children of Welsh speakers who have migrated into the town. If this is the case, they may be compared with second - generation speakers generated elsewhere (five in Liverpool, three in Birkenhead and three in London, for example). Only two similar speakers generated in distant towns were found in the Breton area, onefrom Rennes and one from St.Brieuc. A clue to the process generating such a large number of speakers in Oswestry is the fact that many of the respondents who were in this category referred specifically to the importance of the chapel in their learning of the language, as also to the availability, close at hand, of large numbers of other people to whom they could speak Welsh, thus making it worthwhile to retain it. The speakers from distant cities made similar remarks. This leads to the inference that the process generating speakers is somewhat different, in the case of Oswestry, from that in the countryside just to the west, which has, for its part, been very clearly a part of the Welsh culture area during the lifetime of respondents, generating

the Welsh language in just the same way as many neighbouring areas to the west of the border.

The inclusion of the western part of the Welsh area (figure V.12) in the discussion allows some further deductions to be made on the direction of drift of speakers during their lifetime. All the evidence from figure V.7 (residential mobility) and figures V.8 and V.9 (ten-year migration patterns) points to the existence of axes of short-term migration across the study areas, following the main roads. It was pointed out, in connection with the Breton area, that there was no similarly clear axis of generation of Breton, following the route nationale and the difference between short-term and lifetime migration patterns is perhaps surprising. The sample for this less densely-populated and more rural western portion of the Welsh area is smaller than for the eastern part, but it confirms a feature also visible in the east: that despite the orientation of the major routeway, the drift of Welsh speakers is directly from the west to the east, from the hill land to the plain. That there is no comparable westward flow - at least, of Welsh speakers - is indicated by the far smaller number of Welsh speakers generated, on V.12, by the Shropshire portion of the study area which formed the subject of V.11, and the hypothesis first expressed in section 2.11, on the role of changing population density and marginal land, appears to be confirmed.

5.8 Differential language generation by age-groups, and its effect upon language border retreat:

Before setting aside the subject of language generation, this seems an appropriate point at which to test an idea which has gradually been emerging, which is attractive in its simplicity and which might be employed to explain the gradual retreat of the minority language border in cases of language - shift such as the two at present being examined. The idea is based on the differences in language potential and frequency shown in diagrams V.2 to V.5, and it is expressed visually on figure V.13. If the younger members of a minority language group are the first to adopt new languages, and language diffuses into the area from the east, the language - border may be expected to retreat westwards with the loss of succeeding generations of speakers. This, much simplified, is the process which figure V.13 is intended to show.

To test this, the sample for language generation in the Welsh area was divided into three separate age groups, and figures V.14 to V.16 drawn, using proportional squares to represent the percentage of each sample learning Welsh in each location. Administrative boundaries were ignored as far as possible in favour of individual household locations. If the Hypothesis were correct, it was assumed that the largest squares or greatest number of squares would tend to group further west on the "30 - 60" map than on the "over 60" one,

and further west on the "under 30" map than on the "30-60". In this assumption, at least one major problem was ignored: the fact that the oldest group had, over its lifetime, moved further from its area of origin, and that this would confuse the pattern. It can be seen from the maps that this was in fact the case. The pattern for the "over 60s" is diffuse, and that for the "30 - 60s", the most mobile age-group, even more so while in the case of the "under 30s", who have had less time in which to migrate, a less complex situation appears to exist. Between the maps for the two older age-groups (V.14, 15) especially, little clear distinction is visible, though for the "30 - 60s", there is a sign that fewer speakers originated immediately west of the border , and rather more from the north Montgomeryshire (Meifod, Llanfair) areas. For the Shropshire area, no clear difference is visible. If on the other hand the map for the "under 30s" (V.16) is compared with that for the "over 60s", there are signs of a greater proportion of the former having learned Welsh within the area of Wales itself, and clear indication that the Shropshire area is declining in importance as a generator of Welsh in this youngest generation. The relative importance of the political area of Wales is not surprising when it is remembered that this age group has been affected by that aspect of the 1947 Education Act which prompted the importance of schools as disseminators of the Welsh language. Schools with a particularly good record in teaching Welsh to children who may not otherwise have learned it at home appear to be represented

on V.16 by the series of large symbols immediately west of border, and largely within the study area, whereas the momentum of language acquisition, which existed within the Shropshire area, appears to be weakening.

A summary of V.14 to 16 is difficult. They seem to have indicated, strongly, the spatial differences in language generation which results from imposed language learning but they do not appear conclusive on the idea that with succeeding generations the border of the language generation area is moving westward. That hypothesis, alluring though it may be, must remain unproven.

5.9 Sequence and medium of language learning related to speaking frequency:

The two final items for discussion lie more properly in the domain of the socio-linguistician, but may help to explain further the process of language shift and the diagrams of speaking frequency, V2 and 3. They relate to the surroundings and the stage of life in which the respondents learned Breton or Welsh. Table V.2 relates the sequence of language learning to speaking frequency descriptions:

TABLE V2 - Stage of language learning by speaking frequency :

	% learning:				% learning:		
Speaking frequency ↓	Welsh before English	At same time	Welsh after English	Speaking frequency ↓	Breton before French	At same time	Breton after French
Speaks only Welsh	100	-	-	Speaks only Breton	100	-	-
Speaks more Welsh than English	87	13	-	Speaks more Breton than French	97	3	-
Some-times speaks Welsh	74	9	17	Some-times speaks Breton	89	10	1
Rarely speaks Welsh	56	18	24	Rarely speaks Breton	58	34	8

There is thus a strong likelihood that a connection exists between the sequence in which Welsh or Breton was learned and the frequency with which the speaker uses it. The connection, in both study areas, is not surprising; most linguisticians are agreed that the first few years of life are the most important single influence in imprinting language

skills, even though children retain an efficient language-learning ability well into their schooldays. According to Christopherson (1973, p.46), the immersion in language which the infant experiences in the home is so complete that by the age of four or five he has acquired enough experience of language-structure to be able to assemble other languages extremely rapidly, using many of the same principles as for the first language. Applied here, this implies that the flood of English or French which the Welsh- or Breton-speaking child encounters in school may displace the home language in a very short time. Clearly, the reverse may also apply, with a previously non-Welsh or Breton-speaking child acquiring fluency in either of these languages in school, but table V.2 shows this is not normally the case, and that if the minority language is taught at the same time as, or after, English or French, the chances that the speaker will go on to use it in later life are much reduced.

When speaking-frequencies are related to place of learning of Welsh or Breton (table V.3), the importance of the home background tends to be confirmed, for there is a strong correlation between frequency and place of learning in the sample examined. Not all of those who learned Welsh or Breton at home speak it frequently, but almost all those

TABLE V3 - Medium of language learning by speaking frequency:

% learning Welsh:				% learning Breton:			
Speaking frequency ↓	At home	In school or at evening class	Elsewhere	Speaking frequency ↓	At home	In school or at evening class	Elsewhere
Speaks only Welsh	100	-	-	Speaks only Breton	100	-	-
Speaks more Welsh than English	87	13	-	Speaks more Breton than French	97	3	-
Sometimes speaks Welsh	74	9	17	Sometimes speaks Breton	89	10	1
Rarely speaks Welsh	56	18	24	Rarely speaks Breton	58	34	8

who speak Welsh or Breton frequently learned it at home. Of those who did not learn Welsh or Breton at home, almost all tend to be infrequent speakers.

Some modification must, however, be made to the statement on Welsh as a "home generated" language. In both

tables, the contrast between the state of survival of Welsh and Breton is implicit, with Welsh showing a more varied pattern of language generation situations, and also a greater likelihood of survival if taught as a second language. This is partly because of the chapels as a way of reinforcing Welsh culture, but perhaps more clearly because of the teaching of Welsh in the schools of Clwyd and Powys, and, to a slight extent, because of the availability of evening classes. With the exception of one school giving brief tuition in Breton to volunteers, these three features are almost entirely absent in the Breton area, though an evening class has been started since the time at which the sample was taken.

The contrast does not end there, though; it is time to return once more to the point made in connection with figure V.6, and make it again here. School Welsh lessons can only be held responsible for generating some seven per cent of that Welsh speaking which has previously been designated "active", and even among the "passive" speakers, situations outside the home only account for 34 per cent of the learning of Welsh, and the schools and evening classes only 14 per cent. As V.6 indicated, schools as an effective means of disseminating active Welsh in the study area must, at present, be viewed with some reserve. To think of teaching situations outside the home as giving the Welsh study area a profound advantage over its Breton counterpart, or to consider Welsh-speaking as, <u>ipso facto</u>,

in much less danger than Breton of sudden disappearance, may be a serious misconception.

5.10. Construction of maps of speaking frequency:

The evidence drawn from questionnaire I has illustrated some of the characteristics of language shift, but it has not, so far, served its stated purpose: the construction of frequency maps for the two study areas, with which to compare the potential maps.

Construction of maps of speaking frequencies on the basis of section 3 of the questionnaire is not as simple a matter as it at first appears to be. The various frequencies of speaking are first mapped in dot form, using a different symbol for each frequency, and with one dot representing one individual speaker. For the purposes of this part of the exercise, the non Welsh (Breton) speaking members of households are disregarded, and the frequency of Welsh speaking only in relation to those able to speak the language, rather than the whole population of the respondent households, is examined. The resultant dot maps are difficult to read, for two main reasons: it is difficult for the eye to overlook (or else to notice, on other occasions) individual dots which stand out as exceptions, and large areas of the surface of the study areas are left without a figure for Welsh or Breton speaking frequency, with which to compare the "potential" speaking map. One way to alleviate this problem is to superimpose a 500 metre grid on the dot map and then to adopt a procedure based, loosely,

upon that used by J.C. Weaver (1954), in his study of crop-combinations in the Middle West, in order to compare a variety of data of different types. Scores are allocated to the four Welsh and Breton speaking categories as follows:

Score	
1	"Can speak Welsh (Breton) but rarely or never does so".
2	"Sometimes speaks Welsh (Breton)".
3	"Speaks more Welsh (Breton) than English (French)".
4	"Speaks only Welsh (Breton)".

The scores for speakers having been allocated to grid squares, it is possible to employ a formula of the following type, to reach a score for the square as a whole:

$$\frac{(n \times 1) + (n \times 2) + (n \times 3) + (n \times 4)}{N}$$

where n is the number of respondents with each frequency score in the square in question and N is the total number of people able to speak Welsh or Breton in the square.

At this stage, a dilemma, already encountered, presents itself yet again: if the present attempt is to measure the relative intensity of Welsh and Breton speech across the study areas, is it the proportion of speaking activity relative to the total potential of any grid square, which is sought, or is it the total amount of speaking activity in each square which is important? In the latter case, the division

by N in the above formula would be omitted. The first alternative is that which is more compatible with the percentage results obtained for "potential" speaking; it is the method most frequently adopted, in a more straightforward form, for analysis of Census data (as it was in Chapter III), and in some respects it does give a realistic picture of the state of survival of the languages in any square. The second has the advantage that it measures the proximity of speakers, of all frequency types, to each other; it would be useful for examining all the Welsh or Breton activity within a given range of any particular point, and would thus provide evidence for the potential for setting up some activity such as a Welsh Society or a Breton evening class at that point. Clearly, by the first method, if a particular square had ten Welsh speakers, four of whom had a score of 1, three a score of 2, two a score of 3 and one a score of 4, the total score by the first method would be 2, indicating, by this average, a local population with a reasonably active speaking frequency. The score by the second method would be 20, but it would be highly unlikely that the square, at least in isolation, would warrant the foundation of any formal activity to cater for its Welsh or Breton population. On the other hand, if the numbers of Welsh speakers were increased from ten to one hundred, and the scores proportionally increased, the score by method one would still be 2, but by method two would be 200. The idea is not a complex one, but the point is believed to be of fundamental importance. Neither means of approach can be

disregarded; they are complementary, and therefore two maps will be presented for each area. It should be pointed out, at this juncture, that neither method, nor indeed any similar technique, is known to be employed by language planners in Wales (and certainly not in Brittany) as a criterion for the location of language facilities such as libraries.

5.11 The speaking frequency maps; a first appraisal:

Figures V.17 to V.19 are the results of the application of the two methods, with V.18, the map of Oswestry, as a more detailed addition to the Welsh data, produced on a different scale but by the same method. In order to produce a surface more akin to that on the "potential" speaking maps (IV.6, IV.7) and to serve the interests of greater legibility, a running mean has been introduced, and the score for each square is, in the cases of both methods employed, the average for that square and the eight surrounding it. One unfortunate side-effect of this is that the resultant scores are no longer capable of interpretation in terms of the four descriptions used in Section 5.10, and, on the "average" maps, at least, the scores are lower than they might be expected to be. The important gain, in return for this sacrifice, is that a picture is obtained of speaking frequencies in one locality relative to all neighbouring ones.

The importance of the distinction made between numbers and proportions of active Welsh and Breton speakers is seen when the maps are examined. Between the two versions

of V.17 the disparity is most striking, and this will be discussed first. On both versions, a feature of "pocketing", already discussed at some length, reappears. This may be regarded as scarcely surprising, since the frequency of any individual's Welsh speaking clearly depends on the level of activity of other Welsh speakers in his neighbourhood. On the western fringes of the maps, pockets of Welsh speaking activity are in greatest proximity to each other, and achieve the highest activity-scores. To this, however, there are several exceptions: large pockets of activity appear in the north eastern section of the maps, and just to the south of these is an area of extremely active Welsh speaking, achieving the highest score on the "average" map, and by far the highest score on the "total" map, while further south of this again there is a perceptible southward-extending line of activity. In the southern half of both maps there is a credible west-east decline of Welsh speaking activity, but because of the pattern in the northern area it is not justifiable to make the statement that Welsh speaking frequency declines eastwards on the maps as a whole. The area of very active Welsh speaking corresponds with Oswestry, and it is this area which exemplifies the importance of using both means of measurement of Welsh activity levels. It dominates V.17b, presenting itself as perhaps the true centre of Welsh activity for the whole study area, deserving of consideration for the site of libraries and other services for the specific use of the Welsh speaking population. At present, this possible

function is fulfilled to only a very limited extent, the town's location in England acting as both a psychological and an administrative restraint to public service planners. The high score is seen not to be simply a function of the large numbers of Welsh speakers, active or otherwise, in the town, since it also scores highest on the "average" map.

The high activity areas of the north east, again a feature of both maps, are Weston Rhyn, Gobowen and Hengoed. The last-named is a mainly farming settlement, the site of in-migration of Welsh speaking families, as described on the "potential" speaking map. Weston Rhyn has a history of mining and of settlement of people from the Ceiriog valley, as well as a tradition of Welsh Methodism, while Gobowen shares some of these characteristics with its growing role as a residential area for workers in Oswestry and at a large nearby hospital, and has, in addition a considerable proportion of retired people. Its social and economic links with the town are reflected in the fact that on V.17b it is the only area outside the town to record a total Welsh speaking activity score of more than 5.

It was in section 4.2 that the linguistic problem of local numbers versus local proportions of speakers was first raised, in connection with the detailed pattern of "speaking potential" within the urban area of Oswestry. The problem is now seen again in the pattern of "actual" speaking frequencies in the town (V.18b and c). The map of averages shows that extreme variation occurs in average frequency, and

that the centre of the town and the peripheral areas record a less frequent use of the Welsh language by resident speakers. In the case of the latter areas the pattern is caused only partly by the use of the running mean technique, and there is evidence that the lesser housing densities on the periphery may play a part in inhibiting local contacts of all kinds, including Welsh speaking ones, while the low housing density in the centre, where residential use gives way to retailing, seems to produce the same effect. The companion map, V.18b, shows that among the areas with greater Welsh frequency skirting the town centre, the north-west is distinctive for the sheer number of frequent Welsh-speakers living there. Even on the basis of a preliminary appraisal it is possible to confirm what was not certain at an earlier stage of the study (section 3.12) - that even at as large a scale as the one used for the town, and even with such a relatively small urban area, both language potential and language-frequency variations may clearly be discerned. To confirm the variation in speaking-frequency patterns within the town, and to relate frequencies with types of residential environments, a sample transect was examined, as shown in figure V.20. It follows the line drawn on the map of housing-types (figure IV.15).

The two graphs based on average and aggregate frequency scores show the peaks of activity surrounding the town's central shopping area, and also point to the dominance of the Park Avenue area in aggregate speaking terms.

The notes beneath relate these areas to the zone of terraced housing, high in density and dating from the nineteenth and early twentieth centuries (though it should be pointed out that the coincidence is not complete, and that elsewhere in the town are apparently entirely similar areas with lesser frequencies of Welsh-speaking). Between these areas and the next zone outward, where changes in building age, style and density occur, a clear example of the connection between house-types and the frequency of use of Welsh is seen between Park Avenue and Hampton Road.

While the evidence presented by the transect can by no means be called conclusive, it strengthens the belief that residential environments may encourage or inhibit minority language use, and that cumulative, more than average, numbers of speakers play a part in increasing the frequency of use. It is not entirely clear whether the increased frequency in the inner area of the town is because of anything inherently suitable (for example, proximity, or likelihood of speakers' meeting each other more frequently), or whether it reflects the socio-economic characteristics (for example, the rate of immigration, population turnover, financial means or area of origin) of Welsh-speaking incomers to the town.

Finally, in this comparison of the average and cumulative speaking-frequency, the Breton maps are examined (figures V.19a and b). If version a, the average frequency map, is examined first, features already familiar from V.17a are seen to recur. Overall, there is a transition from west to east, representing that from greater to lesser Breton speaking frequency. The largest score encountered, however, is only 1.4, indicating (even when the "smoothing" of the data is remembered) that the vast majority of respondents have placed themselves in the "rarely or never speak Breton" or in the "sometimes speak Breton" category. Reflecting, for a moment, upon the dramatic transition visible across the potential Breton map, IV.7, such a relatively small variation in average frequency as that on V.19a is unexpected, revealing once more, perhaps, that at the time of this particular "geographical snapshot" a crucial stage of language shift has been entered, with the potential remaining but the frequent practice of speaking the language disappearing. Again, on V.19a, the feature of "pocketing" reappears, this being especially marked between Plouagat and Chatelaudren, on the route nationale. To some extent, clearly, the gallicising influence of the major road is counteracted by the gathering of sufficient bretonnants in one place to form a viable speaking group, this being perhaps augmented by a limited amount of immigration of retired elderly people from more strongly Breton-speaking areas.

The aggregate map of frequency scores (V.19b) adds

three main details to this picture. Firstly, the route nationale is seen to divide, to the north and south of it, areas where there are greater numbers of bretonnants, and forms an exception to the general pattern in showing higher scores to the east, these resulting from the presence of the speaking communities already mentioned in Plouagat and Châtelaudren. Secondly, Châtelaudren emerges, rather falsely, as an area of great speaking activity, when it was seen, from earlier maps, to have little Breton speaking potential. Thirdly, the area in the south-west reveals its comparative importance as a bretonnant district, particularly in terms of numbers of speakers. The two versions of the Breton map tend to strengthen the idea of the anomaly between the ideas of numbers of active speakers in any area and their average frequency of speaking, and to lend further support to an idea that these two controlling features are of different importance in different situations: in an urban environment such as Oswestry, numbers of speakers within a given distance seem to be important, whereas in the more rural areas in the west of both the Welsh and the Breton areas, average frequencies per square seem to be a better guide.

This first examination of the speaking frequency maps has tended to obscure the clear pattern of transition visible on the "potential" maps, though not completely. While it is still possible to believe, from the speaking frequency maps, that through the areas of study do, indeed, run language borders, it may be seen how many questions are

begged by a simple perusal of numbers of people able to speak languages, rather than the practice of their use, and also how generalised, in this last respect, is the concept of a "linguistic divide". Even after consulting the two alternative versions of frequency maps for each study area, it would be likely that the language border, if conceived as a linear divide, would be placed in two quite different positions, and this especially so for the Breton area.

The intention of this part of the study is not, however, to abandon the idea of ability to speak Welsh or Breton in favour of their use in practice but to compare the two concepts. Once again, the idea of "areas of anomaly" may prove helpful.

5.12 Areas with a high but unfulfilled potential for Welsh or Breton speaking:

The comparison of the "potential" and "actual" speaking maps is complicated by the lack of truly objective measures of either of these items. For the purpose of the exercise, a comparative scale has been set up as shown in the key of the resulting maps V.21 to V.23, whose purpose is to attempt to discover locations of areas where, although there are high proportions of potential Welsh or Breton speakers, there is a low speaking activity rate, and areas which, despite low proportions of speakers, show high speaking activity. Grid-squares where apparent anomalies occur have been identified, as a basis for discussion, groups of anomalous squares, rather than individual cases, being considered adequate evidence. In retrospect, a classification based

upon ranked data might have been one step nearer to objectivity than the one used, but this could still be regarded as a spurious objectivity in view of there being no absolute measure on which quartiles or other divisions could be based.

According to the criteria used, areas with over 70 per cent of households containing one or more persons able to speak Welsh or Breton are considered to be of high "potential", but if their average frequency scores are 0.6 or below, they are considered to have low "actual" Welsh or Breton speaking. This particular combination of scores has been selected so that examples may be found in both study areas.

The resultant maps (V.21 and V.22a) appear rather fragmented, but distinct patterns nonetheless emerge. In the Welsh study area, with one small exception, the occurrences lie in a north-south band, running down the centre of the map. It may only be coincidental that this band runs parallel to the line of the language border and to traditional linguistic divides such as those of Rees or D.T. Williams. On the Breton map, again with exceptions, a band of high potential/ low actual speaking activity is perceptible, this time not in accordance with traditional linguistic divides but clearly following the edge of the area which, on the "potential" map and on the frequency maps, can be regarded as the core of Breton speaking. There is a marked coincidence, in the Welsh case, with valleys, and a correspondence, in the Breton one,

with the north-east break of slope crossing the study area. The location of both of these zones of lesser speaking activity than might be expected leads to the tentative suggestion that, in areas affected by language-shift, there may be discerned cores of more active language speaking and fringes where the language is used less frequently than the potential would suggest. If this is the case, it is difficult to say whether the cause is that speakers at the fringe tend to meet other speakers less frequently, or that they are less impelled by community spirit to speak the language - that is, whether the cause is external or internal to the speakers. If the frequency of the use of Welsh or Breton in the western extremes of either country is compared with its frequency and variety of use in the borderlands, it may not be difficult to agree that such a principle almost certainly applies at the national scale; to see the same process operating on a local scale at the language border would occasion rather more surprise. If, indeed, it is more realistic to suggest a pattern of language decline over wide areas in twentieth-century conditions, such a pattern of fringes of unrealised speaking potential surrounding pockets of more intense speaking activity may be a pattern repeated far and wide in Wales and Brittany, and another recognisable feature of language shift at a national scale.

Returning from this rather speculative comment to the local scale as represented by V.21, it can be seen that the precise reasons for anomalies in any particular locality

are varied and complex. Two areas could perhaps be considered briefly as examples: the Ogau valley, west of Rhydycroesau (numbered 1 on the map) and the districts surrounding Llanfechain, in the south-west of the map (2). The first-named has only some twenty isolated cottages and farmhouses. At the time of writing, it is undergoing a particularly rapid form of the sequence, by now well-known, of rural depopulation followed by occupation by English "week-enders". Being surrounded in the north, east and west by almost unpopulated hills, it has no adjacent Welsh-speaking areas of any strength from which to draw support. The survey has taken place at a moment when, although still numerically strong, the life of the Welsh-speaking community appears to have been disrupted by the changes. In Llanfechain they are also taking place, but are of a slightly different character, for though there is a small proportion of weekend residents, the new occupants of the hill-farms are permanent dwellers. They are young people, for the most part, predominantly of English origin, often of comfortable means, and form a cohesive social group, somewhat independent from the remainder of the local community. It may be that, being ever-present, this is even more disruptive to Welsh-speaking than the country cottage phenomenon (though in other respects it is more akin to the traditional farming economy of the area).

The movements of migrating population seem to provide part of the explanation for anomalous localities in the Welsh

area, and since these are attributed partly to physical conditions, as described in the model on IV.12A, it is possible to contend that the claimed "fringe" of high potential/low actual Welsh speaking in the study area is quite simply a product of the topography and related conditions existing there. Reference to the zone of high potential/low actual activity in the Breton area tends to make this very much less likely. On the potential Breton speaking surface maps and on the two speaking frequency maps it is possible to trace a "spearhead" of French influence, following the line of the route nationale across the line of the language border and into Breton-speaking territory. It isolates, to north and south of the road (and particularly strongly to the south), areas of continuing Breton influence. On figure V.22a, there are strong indications of a "buffer zone" between the two language areas, where Breton, although retaining a strong proportion of potential speakers, undergoes just the same type of decreased frequency of use as that visible in the Welsh study area. This time it is less possible to pass off the feature as topographically induced, and for this reason, one more hypothesis is tentatively proposed: that it is possible to discern, on the most local of scales, cores and fringes of language use in cases of language shift such as the two under examination. It remains to be seen whether further evidence may be produced to validate the hypothesis.

5.13 Areas with a low potential but unexpectedly active Welsh or Breton speaking:

If areas which have a high potential and low actual speaking frequency are of interest, so, too, are those with anomalies of the opposite kind -- with only between 1 and 30 per cent of households which have a Welsh or Breton speaker, but where the speaking frequency is unexpectedly high. A frequency of over 0.4 has been taken as indicating high speaking frequency, though interest really centres round areas with average scores of 1.0 or more. The maximum score achieved in the Breton area, for anomalous areas of this kind, is 1.4, but scores rise considerably higher in the Welsh areas. The study of areas with a low potential but high actual frequency is interesting, since the situation of low potential is occurring, and probably will occur, more and more commonly, in Welsh and Breton speaking areas, and if an examination were made of the details of functioning of areas which, despite this disadvantage, exhibited a high speaking frequency, it might be possible to define some of the policies which should be implemented in areas which require local authority support in the maintenance of minority languages.

Examination of the areas of "low potential/high actual" speaking on the Welsh map, V.23 reveals a slight tendency for such areas to be found along the eastern and western fringes of the map, whereas the distribution of "high potential/low actual" had tended to be in the central portion of the map. As the analysis map shows, this observation is

made with the eye of the optimist, but it is felt to have some justification in that two distinct types of anomaly appear to exist, in the uplands of the west and on the eastern lowlands.

On the highest hill land of the western fringe of the study area, anomalies of the first type - lesser Welsh frequency than expected - are notably absent from V.21. This may be explained by the fact that as farming families leave the poorest hill land, it either remains uninhabited or is completely reoccupied by English-speaking second home owners; thus areas are frequently of the "high potential/ high actual" speaking type, or of the "low potential/low actual" type, neither of which appears on the map of anomalies. On the map of "low potential/high actual" anomalies (V.23), however, there are examples from the western uplands. They are mainly associated with the higher ground of the interfluves, which has already been stated to have either very high or very low Welsh speaking potential, with few areas of intermediate score. Examples of such areas are those[3] east of Rhiwlas (1), and surrounding Moelfre (2) and Briw (3). In a matter of one or two decades these areas have found themselves undergoing a rapid transition, in which more and more of their original farmhouses have been vacated by Welsh speaking families and then taken over by English speaking "week-enders",

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3: numbers refer to locations marked on figure V.23. In connection with location (3), see also figure IV.12B.

sometimes after an intermediate stage of dereliction caused by only a few years' vacancy. The process described, although rapid in the areas mentioned, is not yet complete, and while this process is taking place, the Welsh language is in an anachronistic situation in these localities: while there are still high proportions of Welsh speakers remaining in nearby districts, speakers find themselves becoming exceptional cases in areas which they had previously regarded as being purely Welsh. Nonetheless, they continue, with the support of speakers from outside their immediate locality, to speak Welsh frequently, as a matter of habit. This feature, which could be termed "linguistic inertia", is presented as the main explanation for the anomalous areas in the western portion of figure V.23. The case of Moelfre (2) is an example; of sixteen houses within the settlement (G.R: 180285), only four have families who regularly use Welsh, the remainder of the village, with the exception of a few houses, only being occupied at weekends and during the summer, often by a succession of strangers, and probably rarely by Welsh speakers. The settlement emerges, on figure IV.6, as a locality with a low potential for Welsh speaking, but residents retain their Welsh speaking frequency, in practice, by conversing in Welsh when they go shopping in Llansilin or Oswestry, when they go to church or chapel or other meeting places, or simply by travelling to other nearby localities where greater Welsh speaking opportunities remain. This is an example of "linguistic inertia" in practice, but it can be

seen that the term may not be entirely appropriate, since the retention of Welsh calls, in fact, for increased activity in searching out other Welsh speakers, on the part of the residents of Moelfre. The retention of Welsh at Moelfre, as also at Briw and Rhiwlas, is permitted, if only temporarily, by the reservoir of Welsh speakers in villages and towns, from which they can draw support, as shown on the Welsh household surface map, IV.4. As was pointed out, however, in section 4.8, these reservoirs may only be a temporary feature, associated with migration prompted by changing socio-economic influences, and once again the concept of villages as "negative linguistic influences", as they are called in the Donegal study (section 2.6), becomes entirely realistic. This seems to be one essential difference between the areas of low potential/high actual speaking described here and the areas of high potential/low actual Welsh in the central portion of the map: the latter are almost all in the shopping and social hinterlands of villages which have suffered a decline in potential and actual Welsh, and can offer no reservoir of speakers to maintain pockets of high Welsh-speaking activity in outlying districts.

In the Breton area (V.22b), because of the generally lower speaking frequencies encountered, only one area comparable to the situation at Moelfre can be seen. This is at Le Petit Perrien, numbered (1) on the map. One of the six households is exceptional for the study area, being a holiday home, and of the remainder, three have no potential

Breton speakers. This is not enough to inhibit the practice of Breton-speaking by members of the other two households, partly because, once again, the most basic social and shopping needs of the area are served by Senven and Lanrodec, where reservoirs of Breton speakers exist. In any case, it may be argued, the anomaly is small and if Breton is indeed a language of the home, it should not matter especially that households with Breton-speakers become isolated in predominantly French speaking areas. The presumed existence of the fringe of under-fulfilled Breton potential on V.22a indicates that isolation is, nonetheless, an important reason for decline of activity, partly, perhaps, for reasons of "morale," and partly because use in the home seems to extend to use between households in a neighbourhood.

Returning to figure V.23, a whole area of very notable Welsh activity, exceeding the expected rate as based on the "potential" map, is to be seen in the eastern part of the map, including the settlements of Weston Rhyn (4), Chirk Bank (5), the Gobowen (6) and Hengoed (7) area, Oswestry (8), and the areas surrounding Pant (9) and Llanymynech (10) Treflach (12). An examination of population trends for the parishes containing these localities (figure II.7) shows that they have mainly been gaining population in recent decades, and much of this increase has already been shown to be caused by short distance migration from the hill country already described. The map shows that Weston Rhyn has a fairly extensive area which appears anomalous, though not to an

extreme degree, while Hengoed and Gobowen are more localised areas of greater discrepancy. The contrast seems to stem from recent historical differences; Weston Rhyn has a history of coal-mining, and has attracted workers to its mines (now defunct) from villages higher up the Ceiriog valley. In many cases these workers' first language was Welsh (some were monolingual), and the language has been passed on to a second and third generation. This has happened despite the lack of Welsh lessons in school, and the presence of a Welsh chapel in the village must account to some extent for the existence of the language outside the family circle. The importance of this fact is that the chapel turns Welsh from a "private" language, spoken in the seclusion of the home, into one which is spoken in public places, the street and shop as well as the chapel. This tends to account for the greater speaking frequency, despite the fact that only some 15% of households have a member able to speak Welsh.

The frequency of Welsh-speaking at Gobowen (6) and Hengoed (7), just to the south, while sharing some of the history of coal-mining, owes its strength much more, it is felt, to present-day migrations, especially since there are few local institutions to keep Welsh speaking alive in the second, and succeeding, generations. Farming families from the hills of the west have moved into Hengoed farms, and have retired to houses in Gobowen. It seems that the frequency of Welsh speaking can be attributed to the ease of access to

other Welsh speakers in Weston Rhyn, Oswestry and the migrants' areas of origin. For the survival of its continued frequent use of Welsh, the locality seems to depend strongly on the presence of communications connecting it with other Welsh speaking areas.

The two southernmost areas of anomaly, the Trefonen-Treflach area (11,12) and the Pant-Llanymynech district (9,10), both offer examples of the operation of the process of in-migration of potential Welsh speakers, creating the necessary conditions for the language to be spoken, despite the fact that the Welsh speakers form only a small minority (approximately 10%) of the household surface. In the case of the Pant-Llanymynech district, the area under discussion stretches at least 5 kilometres along the A483 trunk road. The presence of this road links the origins of the area's unexpectedly high Welsh speaking activity with that of Gobowen. Once again, it seems to be the case that communications, having promoted the inflow of Welsh speakers now play an important part in maintaining the contact between speakers which allows active and frequent speaking. Though Trefonen and Treflach are at a greater altitude and on a less obvious migration route, a very similar process seems to have taken place there.

Within the area of unexpectedly high Welsh-speaking activity, the town of Oswestry merits particular attention. Not only does it provide the clearest example of

the characteristics just described, but within the urban area itself are district areas where the frequency of Welsh use, with an average score of 2.0 or more in places, considerably surpasses the potential, as figure V.24 shows. The zones surrounding the town centre, the same ones as described in 5.11, show the highest frequency of Welsh speaking, though some of the newer outlying estates also have a high frequency. Even within the confined limits of the urban area, proximity of speakers seems to play a role.

Speaker proximity, aided by modern communications and denser settlement-patterns, may similarly be responsible for the clearest example of low potential/ high actual Breton-speaking shown on figure V.22b. Extending for one or two kilometers to the north and south of the route nationale and the settlements of Châtelaudren (2) and Plouagat (3), this is again an area of in-migration of bretonnauts, as figure V.9 showed, though not notably an area of present-day Breton generation. The anomaly is, unfortunately, based on rather a small sample, but it seems that the handful of respondents from Châtelaudren and the rather larger number from Plouagat rely heavily on the main road for access to each other and to their areas of origin, though no formal evidence is available for this except the household mobility map, V.7c.

From both study areas, evidence on this second type of "low potential/high actual" anomaly seems to be revealing an unexpected feature: modern communications do not necessarily

act as an inhibitor of Welsh or Breton language-speaking activity. Certainly they can do so, as in the cases of the Ogan Valley and Llanfechain, described in 5.12, but in districts into which they tend to channel migrating speakers they can also tend to set up potential and actual language speaking communities, by raising the numbers (even if not the proportions) of speakers to a critical threshold at which such speaking groups can come into existence. It is worth repeating that, as stressed by figure IV.12A and section 4.9, even in cases of language-shift, it is not simply a case of a one-way diffusion of the stronger language into the territory of the weaker, but of a counter-flow of the latter, to the extent that new language speaking communities may be set up by groups speaking the minority language, in areas with which it may have had no previous association. At this point, too, a further reference back to figure V.7, the household mobility map, and a comparison with the anomaly maps, V.22b and V.23, will show that the hypothesis proposed there, that greater household mobility has an adverse effect on the vitality of Welsh and Breton speaking-groups, has no basis in the study areas. While both Welsh and Breton may indeed be associated closely with a traditional, agricultural way of life, as proposed by Hemon (section 2.7), here is evidence that they are both capable of withstanding the disruption of mass migration of speakers, and that new language speaking communities, using the language more actively than in many of the more traditional areas, may be set up, provided that a

sufficient threshold of speakers (measured in absolute numbers rather than proportions of the total population) is attained. A certain reluctance to state the size of this critical threshold may be noted. It is unknown, but would clearly vary with the mobility of the population (as measured, perhaps, by some index such as car ownership), the enthusiasm and state of morale of the speaking group, to name only a few considerations.

5.14 Conclusions on the comparison of speaking potential and speaking frequency:

The attempt to collect data on the practice of Welsh and Breton speaking in the two study areas has raised as many questions as it has solved, demonstrating the complexity of many of the processes responsible for potential and actual language patterns, rather than explaining them. Nonetheless, the foregoing discussion has indicated that it is possible to map language frequency and also that patterns of language use emerge even at the large scale employed.

Among these patterns three zones at the language border appear most interesting, termed here, for convenience, zones of "language establishment", "disintegration" and "re-grouping". The "establishment" zone is that area where active speaking remains despite the reduction of speaking potential in some places (as in the examples of Moelfre, Petit Perrien). The "disintegration" zone is that where potential is not fulfilled and active language use appears to be breaking down.

The "regrouping" zone is that covering the reception areas of Welsh or Breton speaking migrants where speaking groups are being maintained or are even growing. All three are integral parts of the process of language-shift in the two study areas. The ability of the first zone to tolerate a certain degree of incursion of English or of French seems attributable partly to the fact that the systems serving the daily needs of the local people (especially the villages) have not yet been seriously disrupted and partly to the less tangible, but related, reason that morale and confidence amongst the local Breton or Welsh speaking community remain high. The second zone, that of "disintegration", represents the opposite state, where, suddenly, the morale of the local speaking group, and with it, to some extent, their sense of linguistic identity, collapses. A crucial stage appears to be reached, where the fabric of local Welsh or Breton speaking disintegrates. On several occasions, in the present study, an extremely similar pattern can be observed: for example, figures III.6 and III.7, where the proportion able to speak Welsh at the fringe of the language area undergoes a sudden collapse; or V.5, describing the sudden and decisive shift in the commune of Tredarzec; or, again, figure V.6, demonstrating the notable decrease in speaking frequency in the younger generations in the study areas. This last example, coupled with Tables V.2 and V.3, is indicative of the fact that Welsh or Breton school lessons, while they may be a useful way of reinforcing the languages in their zones of establishment, are

fairly ineffectual in checking the landslide which seems to occur at this stage of the process of language shift.

As to the third zone, that of language "regrouping", as displaced Welsh and Breton speakers form new speaking groups, it has been pointed out that such groups are frequently more active than might be expected, partly because, in the conditions of the study areas, sufficient speakers are gathered in a small locality and able to use the same communications which first aided their migration to maintain contact with each other and with their areas or origin. There is, however, a ceiling on the frequency of their language use, caused by their being a minority group in areas which are predominantly English or French speaking.

The next stage in the examination of the two language borders is to obtain corroboration or refutation of the existence of the features described, by adding to speaking frequency another measure of the vigour of language: the number and the variety of day-to-day situations in which Welsh and Breton are employed.

CHAPTER VI

SPEAKING SITUATIONS

6.1 "Speaking situations" as an index of language borders:

The provisional conclusion from the discussion so far has been that as well as being visible in changes in proportions able to speak Welsh and Breton at the borders of the two language areas, the process of language shift may also be viewed in terms of the frequency of their use, at least as perceived by the speakers themselves, so long as the modifying effects of communications and other factors are also taken into account. How far does another measure of the actual use of language, the variety and number of "situations" in which it is used, substantiate this conclusion?

The term "situation", hitherto used without definition, is by no means as self-explanatory as this casual use would imply. For some decades, sociolinguisticians, noting that in bilingual or multilingual conditions, or at least those of "within-group multilingualism" (section 1.4), speakers reserve particular languages for particular sets of circumstances or types of subject matter, have sought to define a range of these circumstances more objectively, in order to use them in studies of language maintenance or language shift. Fishman (1971 b, page 15) states the idea more precisely:

> " 'Proper' usage dictates that only one of the theoretically co-available languages or varieties will be chosen by particular classes of interlocutors on particular kinds of occasions to discuss particular kinds of topics."

He does not necessarily mean that the two languages have to be equally used, either by individuals or by the whole group, and by "classes" he presumably means people who share some common background (for example, upbringing in the same village or common aspects of education) as well as characteristics of social class.

The most interesting deduction which may be drawn from the quotation is, however, that strong forces are at work to preserve the traditional roles of languages used for any particular situation, and it may be a cause for conjecture how, therefore, language shift, if it implies a reduction in the number of situations used, can operate at all. How can it be a question of the existence of a "fringe" or "zone of disintegration" where the number of situations is reduced, and who, among the Welsh or Breton speaking residents of the study areas, would initiate such reductions? These questions imply that in addition to the discrete, relatively homogeneous speaking groups which are characteristic of socio-linguistic approaches, there may exist an added component of space or distance, gradually intensifying or reducing the use of language in particular situations, regardless of the "particular classes of interlocutors", and making geographical approaches especially

appropriate in the study of language shift and other linguistic processes.

Whether or not such suppositions are correct, it is certainly the case that socio-linguistic study has progressively been refining its ideas on "speaking situations". In the 1930s, Schmidt-Rohr (1932), Mak (1935) and others were developing the idea of the "domain" as a definable place in which language was used, though the estimated number of reliable domains for study varied. As related by Fishman (1971, pp. 18-19), three types of domain have been distinguished particularly frequently: the home, the school and the church.

Sociolinguisticians point out, however, that within each domain, a whole range of other influences may intervene to modify language choice. Age groups and social class are examples. Thus the home, as a speaking-domain, may be a multilingual situation, with the older members of the household habitually choosing one language for a particular situation, the younger ones another. The study of speaking frequencies has already shown this. It has not shown, nor does the present study give much attention to the fact, that within the household domain or situation, there may exist different family roles, or "dyads" (Fishman, op.cit., p.21) which mean that an elderly speaker in a household, for example, may use one language when speaking to a member of the family of the same age, but another when conversing with

a grandchild. In place of this concept, it will be noted that the questionnaire simply asks whether a person speaks Welsh (Breton) in a particular stated situation, that is to say, whether the person ever uses the language for the particular situation in question. It is perhaps, therefore, more effective as a means of discovering the particular speaking situations in which speakers feel inhibited from using Welsh or Breton, rather than the practical day-to-day use of these languages in any situation.

Since the 1960s, increasing attention has been paid to the element of place in the concept of speaking situations, with Ervin (1964), Gumperz (1964) and others developing the idea of the "locale" as an influence on language choice, and stressing that established language roles may be affected by a change of locale. For example, the language chosen by the grandparent to speak to the grandchild in the home may be different from that spoken if the two are out shopping. This element of study approaches that in use in the present case, but it should be noted that there is one problem associated with all the maps of language use in speaking situations produced here: they relate to the home location of the speaker, rather than to where he actually uses the language. His choice of language may thus vary according to whether he goes shopping, for example, in Oswestry or Welshpool, Saint-Brieuc or Guingamp, and there is no information on this.

With all of these constraints in mind, five of the many situations in which language can be used were selected, with the intention of covering as wide a range as possible of the private and public, informal and formal, organised and spontaneous uses of Welsh and Breton. In view of earlier comments on the home (5.10), this was an essential situation to include. Neighbourhood speaking, particularly in view of its apparently variable function according to whether it is situated in the hypothesised language "establishment", "disintegration" or "regrouping" zones, was included, and considered an interesting intermediate situation between the privacy of the household and the public situation of language use in the street and shops, which constituted the third situation included. The use of language in church or chapel was chosen for its clear relevance in the Welsh area, with its tradition of Nonconformism and availability of Welsh church services in the Church in Wales, and also because it was perhaps the nearest approximation, in the Breton area, to the possible use of Breton in a formal, institutional situation. The combination of school and workplace, in the fifth situation, was, in retrospect, an error of judgment, since it combines an institutional situation, the school, with one which may include such informal occupations as agriculture or shopkeeping. It was intended to indicate the relevance of Welsh and Breton in the pursuit of day-to-day activities

with associates outside the home. The sixth situation, "elsewhere", was intended to discover the variety of other situations in which speakers might use Welsh or Breton, and they were asked to specify such situations if they used the category.

6.2 Variety and relative use of speaking situations:

Before the use of speaking situations is mapped, figure VI.1 sets out the results of the enquiry according to age groups in the sample. The diagram should be compared with V.6, which sets out speaking frequencies in the same way, and in connection with which, it may be recalled, it was stated that a crucial change of frequency of use of Welsh and Breton seems to be taking place, visible in the age group breakdown.

To detect whether a similar change is affecting the use of speaking situations is a little more difficult, especially in the younger age groups, the samples for some of which are very small. To facilitate comparison, the total number of situations used has been divided by the number of people in each age sample, and the resultant figure, shown beneath the diagrams, is an average for the number of situations used by all members in each age group in families with school-age children. This procedure is necessary because the diagrams in VI.1 only show the relative use of speaking situations, not the total number

used by each age group. Once again, the Welsh area has been divided into two sections: that within Wales and the adjoining area of Shropshire.

The most evident conclusion is that, at least in families with children of school age, the shift from Breton is considerably more pronounced; from a comparably high speaking variety in the oldest age group, the decrease is rapid and the disappearance of a variety of speaking situations almost complete in the Breton case. The samples, extremely small though they are, suggest that for the youngest age groups, Breton is assuming, exclusively, the role of a private language, for use in the home, and this could be taken as an additional indicator of the "passive" role the language seems to be assuming in the younger age groups. The "public" situations, perhaps those favouring most the exchange of new ideas and expressions in Breton, are the first to disappear from use. This must be regarded as a considerable obstacle to the language's ability to regenerate itself and to enrich or retain its vocabulary, and is a significant phase of language-shift.

The same phenomenon of decreasing number of situations is visible in both Welsh samples, but an interesting increase, if only a slight one, in number of situations in the schoolchildren and infants in the sample from Wales is worthy of note. The increased variety of situations is not surprising in the very youngest group, given that some of

them are unable to speak English, but is slightly unexpected in the schoolchildren in the sample, who use a greater variety of situations than the next oldest group, at least in the Welsh half of the study area. In this may be a clue: the "at school or work" share of the situations increases downward through the age groups, and this must, in the second-youngest age group, be attributable to the "school" element. Both they and the "under 30" group will have experienced compulsory Welsh lessons in school, and it is conceivable that this has some effect in increasing the variety of situations in which the language is used elsewhere. This must, however, be seen in perspective, as figure V.6 showed that the younger age groups contain relatively few people who use Welsh any more than "rarely".

Thus the first evidence on the way in which the number and variety of speaking situations are affected by language-shift tends to give support to the evidence on frequency. As the shift progresses, both the variety and frequency of Welsh and Breton situations appear to decrease, though this statement can be made less confidently for the Welsh case than the Breton one.

The corroboration, though, is only indicated, so far, in terms of age groups, and the question remains: may it also be seen spatially, as represented in speaking situation maps?

6.3 Construction of speaking-situation maps:

The map-data obtained from the survey of speaking situations is, as for the frequency maps, a series of dot-distributions, one for each of the speaking situations on Questionnaire I, representing the home locations of respondents reported to use Welsh or Breton in each of the situations. Such data are of varying relevance, depending upon how accurately the particular situation may be pinpointed. In the case of Welsh or Breton use "in the home", the household location is clearly indicated, but it may be considered less helpful for language use "in the street and shops", which may take place at a considerable distance from the respondent's home.

One method of converting the dot-distributions into a more legible map would be to use a process similar to that for speaking-frequencies in chapter V, combining situation scores (weighted, if necessary, to reflect their varying importance) to produce maps of use of language situations similar in appearance to figures V.17 to V.19. There are clear indications, however, from the previous section, that very different patterns of language use in the various situations exist, and these differences may well be reflected in varying spatial patterns. For this reason it may be more useful to draw separate maps for each situation, even if the method of calculation of scores is rather crude. This method consists of superimposing a grid of kilometre

squares on the dot map and, taking each situation in turn, calculating the proportion of respondents in each square who report that they use Welsh or Breton for the situation in question. The mesh is large enough to ensure that few squares have no respondent living within them (unless they happen to be in areas devoid of Welsh or Breton speakers). Because a practically unbroken surface is visible, there is no need to impose a running mean, which, in any case, would generalise any possible pattern out of existence when applied to a kilometre grid. A disadvantage to set against this is that there is a greater likelihood that individual squares will, by sheer chance, produce atypical results, so once more, groups of squares, rather than individual results, form the basis of examination. As in earlier stages of the study, the town of Oswestry has been mapped at a larger scale, in the hope that patterns of speaking situations may appear even within the confines of such a relatively restricted urban area.

6.4 Household and neighbourhood Welsh and Breton:

The maps of responses for speaking "in the house" and "with neighbours" appear together, in figures VI.2 and VI.3, since they require the background information found in the maps of Welsh and Breton speaking households as absolute totals and as proportions of total household numbers. Simplified versions of these are included in the figures, and the necessity for their inclusion arises from

the need to test several ideas, namely: if the home background is important in the learning of Welsh and Breton, the pattern of language speaking in the home may bear very little relationship to institutions or communications patterns, but simply to the absolute numbers of Welsh and Breton speaking households in the locality. If the home background is even more important in the Breton than the Welsh case, the lack of pattern should be more marked on the Breton map. For "Welsh or Breton speaking with neighbours", three possible alternatives may be confirmed: that this is most likely to occur where absolute numbers of speakers are high; or where percentages of Welsh or Breton households are high; or perhaps where neither of these necessarily occurs, but where communications permit easy access to nearby groups of Welsh or Breton households.

A first inspection of the maps shows that, once again, no simple confirmation or refutation of these hypotheses is possible. If VI.2 is first examined, several already familiar patterns present themselves. Map (i), of "Welsh speaking at home", gives no indication of the presence of the language border, but presents, rather, two north-east - south-west trending zones of high activity, one in the west of the map and one in the east, a feature already noted in connection with V.23. As in the case of that figure, the explanations for the two zones are felt to be different. VI.2 ii and iii show that the western area of the map,

although it has high proportions of Welsh speakers in parts, has also a population of Welsh speakers which is low in absolute numbers. It is traditionally the territory which has the clearest associations with the Welsh heartland, where the language is most clearly generated, and where traditional values and language-speaking opportunities may be thought most likely to exist. Here Welsh is used as a matter of course for household communication. The eastern zone is seen to have higher absolute numbers, in a series of pockets, and a proportion of Welsh speaking households which is usually much smaller than in the west. Though language generation is already known to take place here, immigration of Welsh speakers has also been seen (chapter V) to account for much of the Welsh speaking potential. The line of the main road link emerges again, on V1.2 (i), emphasising the role of communications in making households accessible to each other. From this evidence, it is inferred that the supposition, expressed above, that the status of Welsh as a language of the home would make the pattern of household use independent of communications - patterns, is quite mistaken. Even for the continuation of Welsh as a household language, at least in areas where speakers are greatly outnumbered by habitually English-speaking families, or where the process of language shift is at an advanced stage, it seems necessary for a group cohesion to be maintained, and communications play an important role in allowing this to happen. By the same token, the zone of "language

disintegration", noticed on the speaking frequency maps, reappears as an area of lesser household use. This is partly attributable to the fact that while households in the western portion of the map are likely to contain more than one potential Welsh speaker, the likelihood grows, with increasing proximity to the Welsh language border, that only one individual will be able to speak Welsh (which would obviously inhibit household use) or that not all members will be able to speak it (in which event it is frequently the case that the potentially Welsh speaking members converse exclusively in English when at home: see Section 6.11). The intermarriage with non-Welsh speaking people is increasingly likely with distance east, and must be one of the main reasons for low household use in the "disintegration zone". That this cannot be alone responsible for the decreased use, however, is indicated by the increased household use of Welsh in the "regrouping zone", despite the fact that there, too, a large proportion of households with a Welsh-speaker have other members unable to speak the language. The lesser household use in the zone of disintegration appears to be another indicator of unfulfilled potential for Welsh speaking there.

Map (iv) of figure VI.2 relates the two potential speaker distributions to the second of the speaking situations - that of "Welsh speaking with neighbours", which clearly depends on the existence of other speakers in close proximity. The pattern, in this case, is by no means

as emphatic. There is little immediate indication of the presence of the language border, and even in the easternmost sector of the map "Welsh speaking with neighbours" is in evidence, at least as strongly as elsewhere in the study area. Earlier information has shown that although some generation of Welsh has taken place within the eastern parts of the area, immigration of speakers from the west has also been important. In areas of relatively good communications, even speakers living in isolation can gain access to larger speaking groups (e.g., speakers in the Maesbrook area have easy access to Pant and Llynclys, whose Welsh population is linked by the A483 to Oswestry and by the A 495 and B 4398 to the Cain and Tanat valleys), and once again, far from destroying patterns of Welsh use, the communications pattern helps create them. The fringe of "language disintegration" on the household map reappears on the map of "Welsh with neighbours", and in most respects the pattern seems to be a reflection of "Welsh speaking in the home", upon which it is probably dependent.

Attempts to confirm this by reference to the Breton maps, however, meet with mixed success. If the map of "Breton speaking in the home" (figure (i) on VI.3) is first considered, the main feature which seems to claim attention is the apparent randomness of distribution of squares of most active speaking. This is not especially surprising when the characteristics of Breton speaking previously described are recalled. The language was learnt

at home, and seems associated with the private and domestic aspects of conversation, rather than with more public or specialist situations. This is more the case with Breton than with Welsh, and the pattern of speaking situations, as the hypothesis anticipated, reflects the different degree of privacy of the two languages. Comparison with (ii) and (iii) reveals not the slightest correspondence of household speaking patterns with absolute speaking numbers or with speaking proportions. Neither is there any indication that the language border is thought to pass across the middle of the area. No zoning parallel to the line of the border, thought to exist on the Welsh map, is visible here. Several features of the lack of pattern are found puzzling; the alternative explanation to the existence of a distinctive "fringe zone" on the Welsh map was thought to be the variation in densities of speaker numbers and proportions and the presence of communications links offering contact with other families known to speak the language. Yet the N12 road, passing across the middle of the area, has, if anything, even smaller proportions of families who use Breton in the house than do other parts of the map. It may be that higher proportions of immigrant Bretonnants along this road feel no sense of community because of their recent arrival, or it may be that they tend to be younger families who are less in the habit of speaking the language. Whatever the explanation, the pattern is incompatible with the idea of a core and fringe of language-use

as discussed at the conclusion of chapter V.

The presence of a language border may not be clear on the household speaking map of Breton, but on the map representing "Breton speaking with neighbours" (iv) the situation is clearer: in the western part of the area, more particularly in the south west, this is a very common occasion for the use of the language, whereas it is commonly used by less than 20% of the individuals for this purpose in the east. The transition between the two conditions seems to occur within a matter of a few kilometres in most places, though there are occasional isolated exceptions. Between household and neighbourhood Breton speaking there is obviously some distinction, and the location of the transition, corresponding generally but not completely with the "linguistic divide" as distinguished by Bechard and others, will be studied more closely in chapter VII. The correspondence between the area of neighbourhood Breton-speaking and that where Breton-speaking households form a high proportion of the population is quite marked, but the importance of this association seems questionable, particularly since the contrast is so marked between this and the Welsh example, where absolute numbers of speakers within the locality, or within easy access, were found to be important, regardless of the proportion of speakers. The only way of explaining this contrast seems to lie in an appreciation of the different attitude and state of "morale" of the two languages. Among the Welsh speakers a certain aggressiveness

and an active and general desire to preserve the language mean that even where proportions are small, speakers may take steps to maintain their level of activity, whereas in the Breton study area "neighbourhood" has a different sense - that of the few houses within the immediate vicinity of the speaker's own home. Even the presence of an efficient communications system seems to produce no effect in enlarging neighbourhood speaking possibilities. This takes the present study into the realms of psycho-linguistics, and requires a precise investigation of the way in which the two communities view their languages and the border areas of these. Until this can be produced (chapter VII) all that can be stated is that preliminary investigation of the Breton area corroborates a completely different hypothesis - that Breton speaking with neighbours seems most closely associated with areas of high proportions of Breton households.

On a smaller scale, the town of Oswestry provides further opportunity to examine speaking situations (figure VI.4). The map of household speaking (i) confirms the feature noted for both areas, that speaking in this situation is very widespread, but also reflects on a reduced scale the association with areas of easy accessibility which was thought characteristic of the Welsh area. The town as a whole provides the highest absolute numbers of speakers, as well as having easy access to other centres with high numbers. Relative to the Welsh study area in general, it has high activity rates for household and

neighbourhood speaking. Within the urban area, as (ii) and (iii) demonstrate, the central area has low numbers and low proportions of Welsh speakers, but in this central areas, the central shopping area and the immediately - surrounding high-density housing areas, household speaking records its highest scores. The same feature is repeated on the map of "Welsh speaking with neighbours" (iv). In view of the high speaking frequencies recorded for the areas adjoining the central shopping area (figure V.18 and section 5.14), their high scores for household and neighbourhood Welsh speaking are not unexpected. Those for the central shopping area, in the case of neighbourhood speaking, are not what might have been expected, but the reason appears to be that the squares are large enough to include, in practically every case, a section of the high density housing adjoining the central shopping area, as well as the centre itself, and the results are therefore slightly misleading in the case of the shopping area.

Two factors seem to account for the consistently high scores for household and neighbourhood Welsh speaking in the inner housing areas of the town: firstly, the high numbers and densities of potential speakers encountered there; secondly, their extremely easy accessibility one to another. The remaining speaking situations may bear this out.

6.5 The "public" situation and Welsh-and Breton-speaking:

As an example of Welsh and Breton use in public, their occurrence in conversations held by respondent speakers in the streets and the shops will be taken as an example. It was assumed that the speakers would take this description to refer primarily to the streets and shops of the study areas, rather than far-distant shopping-centres to which they might travel occasionally. Nearby centres such as Wrexham, Welshpool, Saint Brieuc and Guingamp may, however, be included in responses.

Within the study areas, the problem of lack of comparability is reinforced in this case by the different scales of the shopping-centres included. Oswestry and Châtelaudren are in no way comparable in scale, but both are situated upon the main communications routes and both are some kilometres outside the zone of "language establishment" of Welsh and Breton, a fact which may inhibit some speakers. For the purpose of the study, food and general retailing businesses (selling items such as furniture, hardware, and clothes) have been selected, and concerns such as garages, public houses and cafés are not included on the maps.

The distinction between "speaking with neighbours" as a "private" activity and "speaking in the street and shops" as a "public" one may seem slightly dubious.

The distinction is intended to convey a difference in the formality or the intimacy of the situation. If this variable, whose precise definition is difficult, is discovered to be of any importance, the resultant patterns of speaking should appear different.

The map of Welsh speaking with neighbours for the Welsh area showed, it may be recalled, that this situation produced a pattern which indicated that Welsh was used sporadically but fairly generally in the whole area, and to at least the same extent in the east as the west. In the street and shops, as VI.5 (i) bears witness, the pattern of use is again general, but in the east the use of Welsh in this situation is more common. Far from inhibiting Welsh in the east, the presence of the denser network of retailing establishments seems to mean that a greater proportion of the respondents use the language in the street and shops. This eastern concentration of speakers may result from the vastly greater number of shops in the east of the study area (VI.5 (ii)), and it may be that some speakers from the western uplands, finding themselves in a somewhat alien environment when they go shopping in the town, tend to speak only in English. If this is so, it is slightly uncharacteristic of the Welsh population of the study area, and there are strong indications that the opposite motive frequently applies, and that travelling to the shops is used as an opportunity to renew Welsh-speaking

acquaintance. For those speakers resident in the town (VI.6 (a)) the scatter of speakers using this situation is general, with over 60 per cent of respondents claiming to use it, almost everywhere in the town. This is only a confirmation of an impression which is evident to any casual observer in the town, particularly on market-days.

A comparison of the Breton maps of speaking with neighbours and in the street and shops, VI.3 (iv) and VI.7 (i), is more revealing on the possible importance of distinguishing the "private" and "public" situation. In this situation a few locations in the extreme south and west provide reports of Breton being used, and the Châtelaudren area, where most of the shops are to be found, has a very low score. This is not a certain indication that speakers in the south-west do not speak Breton in the town's shops, but it is thought unlikely to be the case. More clearly, the two situations under examination provide much more of a contrast than their Welsh equivalents; the presence of groups of shops in the Breton area seems to act as a deterrent to use of the language, whereas neighbourhood groups in the area, within the limits already described, use it more freely. The suspected influence of differing "formalities" of situation (6.1) has indeed an effect on minority language use in the two areas, and though it is not

legitimate, on the basis of this evidence alone, to extend the contrast to the whole of the Breton and Welsh language areas, the quite different ways in which speakers of the two languages react to the "public" and "private" situations is thought to be the result, at least in part, of the differing self-confidence and state of morale of Welsh and Breton speakers in general.

6.6 Welsh and Breton in "institutional" situations:

The use of the two languages in "institutional" situations is a further development of this contrast or, possibly, a cause of it. The particular institutions under examination here are those already partly considered: educational religious establishments. Both areas have strong religious traditions; the Bretons are considered by the rest of France to be devout Catholics, just as the Welsh are known in Britain for their Nonconformist tradition. At most major road junctions and at other points in the Breton study area, "Calvaires", or roadside crosses, are common, and elsewhere more elaborate "chapelles" are to be found. These latter edifices are, for the most part, no longer used for services, and unless there was evidence for their regular use, they were omitted from the map VI.7 (iv) which plots the locations of churches in use. Except for the Missionary church at Coat an Doc'h (G.R.036089) these churches are all administered in the traditional French

Catholic manner, with curés in Châtelaudren and Plouagat, and village recteurs elsewhere. The smaller establishments are served by parish priests (for example, the chapelle at Senven, administered by the commune of Lanrodec). Economy measures are likely to force the closure of the chapelles, and also of the smaller churches, unless dwindling congregations can be swelled. However, even if this is the case, and serious as the closure of churches may be in its own right, it seems unlikely to have any marked effect upon the frequency of Breton speaking in the study area, for as VI.7 (iii) shows, the areas where Breton is used in this situation are those where the language has retained a more public role, as already noted on the "street and shops" map, that is, the south and west corner of the map. The church simply provides a further opportunity for the use of the language in the south western zone of "establishment" rather than maintaining it in the zone of "language disintegration". It must be remembered that though this situation is being quoted as an example of the formal use of Breton, the church service was, until recently, largely in Latin, and is now in French. Individual priests are permitted to vary the amount of Breton, and the curé of Plouagat, a native of Morbihan, where the language is more widespread, tends to use more than some other local priests. However, memorial stones in cemeteries are invariably in French, though casual conversations in the churchyard after the service can be in Breton.

As an example of a formal situation in the Welsh area, the church or chapel is more satisfactory, though also more complex. Welsh is used as the medium of services, though this, in itself, is not a satisfactory means of determining the extent of its survival in any area, since in some circumstances all items in the service may be in Welsh, in others all except the sermon, and in others the hymns alone may be in the language.[1] Instead of one denomination of importance, as in the Breton area, there are, in this case, churches representing at least six shades of belief, some of which are peculiar to Wales, and draw their identity, to a varying extent, from their use of the Welsh language. The proliferation of places of worship is evident on figure VI.5 (iv) which should be examined in connection with VI.6 (d), the map of Oswestry. It appears from these that the use of Welsh in the Established Church is much more affected by the national border than is Welsh in the chapels. This is accounted for by the different administrative structures of church and chapel. The Church in Wales is, in some respects, autonomous, and its dioceses tend to prefer to appoint Welsh-speaking vicars, if there is any local Welsh-speaking tradition. The boundary of the Diocese of St. Asaph corresponds, in the manner of most administrative units, with the national border, thus ascribing to the border an importance belied by the evidence so far

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1: This characteristic is closely examined by W.H. Rees (1947) passim.

presented, and further to be presented.

On the role of the Nonconformist chapels it is difficult to generalise satisfactorily. The attitudes of the various religious communions to the use of Welsh are sensitively summarised by R.T. Jones (1973). It is perhaps permissible to state that chapel administration is characterised by a lesser degree of hierarchism, and, perhaps, by a greater degree of flexibility and adaptability than that of the Established Church. At the risk of making unhelpful generalisations, it can be proposed that Nonconformism in the study area has a structure of organisation which enables it better to reflect the need for the use of Welsh in the area by providing chapels using the language; one of the principles of organisation of Methodist, Baptist and Congregationalist churches, for example, is that the local congregation, through local, regional and national representatives, possesses a close control over the detailed functioning of the denomination's local buildings. Where the congregation reaches sufficient size, further chapels may be opened, with no complications such as those provided by the parish structure. Similarly, where the congregation declines, it is possible, at least in principle, to close and sell the chapel, whereas, in the Church of England, the Church in Wales and the Roman Catholic Church in the Breton area, this is a procedure far more rarely contemplated. Buildings originally built as chapels are

to be found, in the Welsh study area, in use as houses, shops and storerooms. The Congregational church has a typical reputation for mobility. Operating through the Union of Welsh Independents, it developed in the rural areas and transferred itself successfully to the industrial areas in the nineteenth century, following the patterns of migration and the need for an institution serving growing numbers of Welsh speakers in the valleys and the lowland fringe. It is now suffering a decline in numbers, and although chapel closures have taken place, many of the buildings of this and other denominations are in the stage which precedes closure, with a handful of people, not all of them from the immediate vicinity, maintaining each one, out of a sense of loyalty, duty or nostalgia. This accounts, in part, for the already-mentioned proliferation on VI.5(iv). This feature, however, is further exaggerated by the need for identical chapels, in terms of location and shade of religious belief, to serve Welsh speaking and monoglot English congregations. By no means always, it seems, can this problem be solved by holding services in the same building at different times.

The complications of the development of Nonconformist chapels are reflected in the map of Welsh speaking in church and chapel (VI.5 (iii)). The main characteristic of this is the great variability of speaking frequency from one locality to the next, apparently

regardless of the east-west transition or the language and national borders. The western hills, but also the much more accessible eastern fringe, both record high activity rates, apparently for the same reasons which were used to explain this dichotomous situation in the case of "Welsh speaking with neighbours", but similarly high frequencies are also, in this case, to be found in the area previously termed the "zone of language disintegration" in the centre of the map, and VI.5 (iv) confirms that chapels using Welsh are to be found in this zone. This, coupled with the fact that respondents are prepared to travel considerable distances to chapels with which they have a family association, stresses the unique position in which chapels find themselves, perhaps temporarily, in this central zone; they provide an institutional, more formal, support for household and neighbourhood Welsh.

Within Oswestry, the pattern is generally one of intense use of the chapel situation by the Welsh-speaking respondents (VI.6 (c), particularly in the town's central areas, though with other occurrences of high use elsewhere. The area of very high proportions of chapel Welsh speaking in the north west of the town is notable,

and it corresponds with both the area of highest potential and highest average and aggregate frequency scores, offering a clue on the location of the pocket of more intense Welsh-speaking in this part of the town, and in particular in Park Avenue and the adjoining streets (section 4.11). The location of chapels in the town undoubtedly coincides with the streets most favoured by Welsh speaking immigrants to the town, and there is a strong tendency for most of the congregation to live close to the chapel which they attend, as figure VI.8 shows.

The questionnaire forms did not, unfortunately, provide the opportunity to ask individuals whether their choice of the particular part of the town in which they were living (in cases where families had migrated to the town from the surrounding rural areas) had been influenced by the location of chapels. It is likely that many of the respondents would have been unable to say, since the choice of residence would have been made not by them but by earlier generations. A more probable motive would be the knowledge that Welsh - speakers already lived in certain parts of the town, regardless of how these exisiing speakers had made their residential decision. The chapel buildings, like the surrounding houses, are some hundred

years old, and the clustering of at least some of the Welsh - speakers around them seems more likely than the siting of chapels in response to the presence of more strongly Welsh - speaking areas of the town.

The second of the "institutional" situations to be discussed is that described as "in school or at work". Like the "church and chapel" situation, it presents rather different problems in the two study areas. It should be repeated that the inclusion of school and work-place under one heading was a miscalculation, first because the school lesson might be described less as an "informal" or "casual" situation than as an "imposed" or "obligatory" one, where the speaking of Welsh or Breton may be considered to be enforced for the duration of particular classes. Except for a few respondents, for example in some sectors of the teaching and librarianship professions, this imposed use of Welsh and Breton does not occur in the "at work" part of the situation. A second, more obvious, problem is that the combination of school and workplace makes it difficult to tell whether either of them is particularly favourable or unfavourable to the use of Welsh and Breton, and valuable information is lost.

Despite this, some inferences can be made from figures VI.5 (v), (VI.6 (e) and VI.7 (v), showing patterns of use of the two languages in school or at work. In contrast with the other speaking situations in the Welsh area (VI.5 (v)), the intensity of the use of Welsh in this situation decreases markedly from west to east across the area, ending quite abruptly in the vicinity of the national border. This seems to reflect the stimulus given to Welsh by school lessons to the west of the border (VI.5 (vi)), and despite the doubts cast upon the effectiveness of school Welsh lessons in sections 5.4 and 6.2, the pattern is a reminder of the differing opportunity for language - speaking which the location of administrative boundaries provides.

In view of the lack of correspondence of the national border with those areas which seem to present the strongest potential for Welsh - speaking, it need hardly be stated that the function of school lessons in Welsh must be variable from one locality to the next, adapting itself to the Welsh-speaking ability of the population and to the other speaking - situations in which Welsh is normally used. The county of Powys (as did the old county of Montgomery) provides an adviser on Welsh-teaching in schools, in recognition of the complexity and variability of the teaching

of the language. The task is perhaps most difficult of all in the strongly Anglicised localities, where the teaching of Welsh is often undertaken by peripatetic teachers (as, for example, at Llandysilio, 269193). Teachers in such areas report the services of the Welsh League of Youth and other out - of - school organisations to be particularly helpful in consolidating the work of Welsh - teaching in schools.

The Llanymynech (266209) area provides an interesting case-study of the position of Welsh- teaching in such localities. The border runs down the village's main street, resulting in a duplication of primary schools, as well as of other facilities. One school, at Carreghofa, includes Welsh in its curriculum, while the other does not. Upon the county of residence depends the school which a child normally attends, and while pupils may cross the border to attend school by special request, it can be contended that, in this area where schools, more frequently than homes,are generators of Welsh - speaking potential, the language is generated on one side of the village street and scarcely at all on the other. Elsewhere the transition is less sudden. In the Llansilin (209282) district, for example, the vagaries of the local bus service mean that Shropshire children have the opportunity to obtain a few hours Welsh lessons per week.

Oswestry, as VI.6 (f) indicates, has a large number and variety of schools for its population, but in 1971 Welsh lessons were only available in one of them on a regular

basis. Exceptionally, as in the case of a pupil recently arrived from Wales and wishing to complete preparations already in hand for an external examination in Welsh, special tuition can be provided in some of the other schools in the town. Use of Welsh at work can be traced mainly to bank employees, sales - representatives and shopkeepers in the questionnaire sample, but even these form a small proportion of the total number of respondents, and as the map shows, the use of Welsh in this speaking situation is low. Most of the squares with high scores are those with low population totals, and therefore subject to chance variations from the average.

On both maps of the use of Welsh in school or at work, it is clear that in relation to the other speaking situations so far examined, Welsh is used less frequently and probably it is only the presence of the different policy on Welsh teaching to the east and west of the national border which produces any clear pattern. For the Breton map (VI.7 (v)) similarly, little definite pattern of Breton use in school or at work emerges, though in proportion to the total use of Breton the situation is relatively more often used than in the Welsh case. On first inspection the diffuse nature of the pattern causes some surprise, since it has been stated that in situations outside the household, some inhibiting factor seems to be present, greatly reducing the number of situations where Breton is used (6.4). This idea is not necessarily disproved by the "school and work" map; the work may either be farming

where respondents are usually in contact with members of their own family, or it may involve some element of travelling into the bretonnant area. The questionnaire responses indicate that both of these are the case. In addition, an exceptional influence in the Breton study area is the mission school at Coat-an-Doc'h (036089), which teaches Breton for a few hours per week. It is mainly a secondary school, with religious affiliations which mean that only a small proportion of local children attend it, and its catchment area is wide, accounting at least in part for the wide distribution of children reported to speak the language "in school". Only a few respondents are affected by this unusual circumstance.

6.7 Welsh and Breton use in other situations:

It has been seen that the speaking-situations so far described are only a sample of the many that could have been chosen. They were selected for their variety and for their distinctiveness. Partly as a means of obtaining further general detail, a situation described as "elsewhere" was included, and the respondents using the category were requested to specify the main examples of situations so described. If, at this stage, any particular hypothesis had been formulated, it would have been based, in all probability, upon the idea that the further into the "established" area of Welsh - speaking or Breton - speaking the respondent lived, the greater would be the variety of situations in which he used the minority language, and the

greater would be the likelihood of his using the "elsewhere" column. In the area of"language disintegration", and certainly in the somewhat artifical circumstances of the "regrouping" zone, it might have been expected that Welsh and Breton use would be restricted to a relatively small number of well - established speaking situations such as the home or the chapel, and that "elsewhere" would be used rarely.

The resultant patterns (VI.9 i -iii) show that no such supposition holds good. In the Welsh area (i) there may indeed be a generally rather greater use of Welsh in the western section of the study area than in the central portion, but without doubt it is the eastern part of the map, following roughly the course of the A5 and A483, which stands out for its frequency of use of Welsh in situations other than those already described. A variety of situations comprised the high frequencies in the west, ranging from the very informal, such as the public house, to the formal situation of the Eisteddfod, where there is almost a social obligation to speak Welsh. In the eastern fringe, the specified answers show the variety to be less great, though Oswestry again forms an exception to this generalisation VI.9 (iii). In the parts of the town where the highest absolute numbers of Welsh speakers have been seen to live, and where neighbourhood and chapel speaking are most common, the "elsewhere" category is also high. This is undoubtedly partly because many speakers return occasionally to their areas of origin and speak the language with family and

friends there, but this applies also to the other parts of the town where "elsewhere" is important. In addition, in the areas of high absolute number, there were references to Welsh societies, public houses and Welsh drama groups, which were rarely noted for the other parts of the town. Returning to the eastern fringe area as a whole, though the variety is small, a very large proportion of respondents (some 50 per cent overall) reported that they spoke the language frequently outside the study area, stressing further by this the importance of communications in promoting a viable speaking network. Between the eastern and western areas, with high scores for "elsewhere", for two rather different reasons, is the same zone of inactivity already noted in connection with the household, neighbourhood and street and shops maps of the Welsh study area, adding further to the evidence that in the "disintegration" zone, as well as being used less frequently, the language is used in a lesser variety of situations.

For the Châtelaudren area, the pattern may be slightly exaggerated by responses from individuals who are the only respondents in a few particular squares, and whose responses may be slightly atypical. Locally, their answers show that the use of Breton elsewhere than in the selected situations is fairly common -- more so than speaking in the street or at work, for example. As in the Welsh case, a variety of reasons may be discerned for the relative frequency of this speaking situation. It is discovered, in fact, to encompass a whole range of situations.

The specified situations for the area adjoining the route nationale, and also for the northern part of the map, refer almost without exception to conversations outside the study area, and almost exclusively to the west of it. Periodic returns by respondents to their areas of origin seem to account for this. While such motives similarly exist in the south west portion of the map, it is only in this last part that the specified situations include sporadic reference to a variety of other situations, the café being the main one, though one café in Plouagat also acts as an informal meeting place for Breton speakers. Inasmuch as two types of "speaking elsewhere" are discerned, the Breton area is similar to the Welsh , but this time there is little sign of the proposed zone of "language regrouping".

6.8 Variety of speaking situations; a summary:

Once again, the various situations have revealed contradictory features, and much detail which may be thought less than convincing. Figure VI.9 (iv-vi) may help make some concluding generalisations. It will be recalled that a question was posed, in section 6.1, concerning the possibility of the existence of language fringes, characterised by the use of fewer language situations. As the three figures show, patterns consisting of varying use of language situations certainly exist, though they are by no means as straightforward as the hypothesis anticipated. For the Welsh study area the conclusions must be very similar to those reached on speaking - frequencies: the decrease

in numbers of speaking situations between the west and centre of the map confirms the idea that it is helpful to think of a zone of disintegration, on the edge of the language area, where the language is not so versatile, that is, not used in as many types of situation. The marked increase with further eastward movement, again as in the case of speaking frequencies, strengthens the belief that where an efficient communications network exists, this fringe effect can be counteracted, and language re - grouping can take place. To this, in the light of the map for Brittany VI.9 (v), must be added the proviso that the effectiveness of communications in this role is limited by inherent charcteristics of the language in question, and probably, also, by availability of absolute numbers of speakers within a threshold distance. In the Breton area, the speakers of the minority language do not appear to form a cohesive enough group to make use of the potential of the route nationale as a means of securing a necessary threshold number of speakers; rather, they allow it to produce an erosional effect on their approach to language speaking. The transition is clear on VI.9 (v) but the lack of a visible language fringe may be caused by an insufficiently wide study area, meaning that a core area of language speaking was never encountered, and that the relatively high scores for the south west of the area are still only fringe scores. This may be symptomatic of the possibility that a sudden decline in the use of Breton is taking place simultaneously and with equal speed over a wide area, and that any

recognisable remaining area of "establishment" would not have been encountered until many miles further west. In the Welsh area, the study area was felt to be wide enough to discern a much more complete transition, and even allowing for the effect of relief in exaggerating the speed of transition, the rapidity of change at the edge of the language area is still felt to be surprising.

As to the question raised in 6.1, concerning the relative usefulness of social and spatial approaches to language - borders, discussion should perhaps start from the part of the quotation from Fishman referring to the fact that particular languages "will be chosen by particular classes of interlocutors on particular kinds of occasions to discuss particular kinds of topics". Given the broad interpretation of "particular classes of interlocutors" suggested in 6.1, and with the additional point from 5.13, that the zone of low speaking frequency in the Welsh area (taken as the "zone of language disintegration") represents the hinterlands of several village systems which seem to be in the stage of sudden and rapid Welsh decline, it might be possible to contend that this zone is quite simply a spatial representation of one particular class of Fishman's "interlocutors", who have chosen to discard Welsh for many of the "particular kinds of occasions" on which they originally used it. The "particular class", in this case would be a particular functional village community, several adjoining ones of which constitute the fringe of lower speaking activity.

There are several reasons why such an interpretation should be treated with some reservations. The village communities in the fringe area (coincident, in many respects, with parishes) contain a population of varying age, occupation, mobility, educational level and other variables. Sociolinguistic literature is full of examples of the ways in which such factors may influence language choice in multilingual societies, [2] yet here is a case where people of all backgrounds appear to choose, simultaneously, to discard a language for use in particular situations. Such decisions, taken by a group as they are, are nonetheless a series of individual choices to acquiesce in the shift from Welsh for particular purposes and, for such choices to be made, it is necessary that all the speakers "share many common experiences and points of view (or think they do, or pretend they do)" (Fishman 1968a, p.16). In this case, the underlying feature which all speakers appear to have in common, despite all their other differences, is their location of residence, creating, with or without their conscious acquiescence, a language fringe.

2: an examination of the contents list of almost any reader on sociolingusitics (for example that edited by Pride and Holmes, 1972, particularly the articles by Tanner (1967) and Cazden (1970), will testify to the truth of this statement.

This said, the failure of the Breton speaking situation maps clearly to confirm the phenomenon of zonation at the language border remains as a disquieting reminder that on something as variable as language it is dangerous to set up any universal rules. Location maps of the positions of the surmised zones of language-shift are included on VI.9, for comparison, and while the Welsh one can be seen to confirm their location, the Breton maps raise another point which has not, hitherto, been stressed: its gradation in use of speaking situations is from north-east to south-west across the area. So,too, was the gradation in speaking frequencies as derived from the figures comprising V.19, though a secondary area of greater frequency was visible in the north-west of the maps, around St. Jean (048122). This secondary area is now seen to be relatively unimportant, and the divide between areas of high and low variety of use of Breton for everyday situations can be seen to run from north-west to south-east across the map, as shown on figure V.9 (v). This division does not agree with the location of the linguistic divide as derived from earlier evidence. As will be seen, this lack of correspondence can be seen as a cartographic symptom of a "crisis of identity" which the Breton language is undergoing in the study area, and this will be examined in the next chapter.

Finally, map VI.9 (vi), the map of Oswestry, emphasises that within even small urban area it is possible

to discover considerable contrasts in language-use; with increasing proximity to the central area, particularly the western part of the centre, there is a well-defined increase in the number of situations in which Welsh is used. This is attributable not specifically to the centrality, but to at least two associated features: the terraced housing and chapels surrounding the central business area of the town, and favoured as an area of settlement by Welsh families; and the dense communications network of the centre, permitting easy access to other parts of the town and the district.

6.9 An alternative approach to speaking situations:

If the results for speaking frequencies and situations so far obtained have with them elements of contradiction and confusion, it may be argued that this is all that could be expected, given the complex nature of language-use patterns and the associated variability of use from one individual or locality to another. This was not entirely unexpected, and it will be recalled that the questionnaire and cartographic methods so far employed to obtain and process information were not adopted without some misgivings. In the same section where these were expressed (V.1), an alternative approach was mentioned but considered impractical under the circumstances: the close observation of the speaking - practices of individuals over a fixed period of time. It is a method commonly used by students of linguistics, especially in the form of "participant observation", and while it would clearly

result in much more detail concerning the network of language use which individuals set up, especially its relationship with transport systems or shopping patterns, the method would probably only prove feasible for use with a small sample of speakers.

However, as something of a compromise between this and the method so far used in the study of speaking frequencies and situations, it was decided that it might prove useful to persuade some speakers in the Welsh area to take part in a pilot study, involving their keeping a "diary" of their use of Welsh for a fixed period, to discover the exact proportions of time devoted to Welsh speaking in daily use, and to help interpret some of the patterns on the speaking frequency and situation maps. If the scheme were successful, it could be applied more rigorously in both study areas.

6.10 Administration of the second questionnaire:

Accordingly, those respondents, 138 in all, who had indicated, on Questionnaire I, that they would be willing to take part in a further stage of the survey, were issued with a "diary" like that in Appendix III. It was considered that a week was the maximum period during which most respondents might realistically be prevailed upon to keep an accurate record of their every use of Welsh, and that in cases of very frequent use even this might be too long. The number and type of situations were modified, and eleven were finally selected including all those on the earlier form and additions based upon the most common uses

of Welsh "elsewhere" on Questionnaire I. For all situations except Welsh within the household, respondents were to attempt to state whether the conversation held was "brief" or "long". This distinction, rather strange at first sight, was made because it was felt that many of the shorter conversations might be mere exchanges of greeting or other conversational set-pieces, and that the longer exchanges, over two or three minutes in duration, revealed a particular command of the language on the part of the respondent and an importance in the particular situations in which such lengthy exchanges took place. This proved to be the first of several severe methodological misjudgements associated with the diary. Respondents, as later information will show, were discovered to be very inaccurate in their judgement of how long conversations had lasted, and it even became apparent that the attempt to use the "conversation" as a unit was misguided. Respondents were not clear what they should do in cases where they had merely been spoken to, without replying in cases where they had been conversing with more than one person simultaneously!

These admissions alone, it may be considered, are enough to invalidate the findings of this part of the survey. Unfortunately, there are almost as many additional mistakes as it was possible to make, and some of them will be cited as examples of the problems which may be encountered in detailed questionnaire surveys of language use.

The respondents were requested to fill in the diary for seven consecutive days during the period comprising

the last week of July and the first week of August, 1974, so that responses are not entirely synchronous. This was the time of year when a substantial proportion of potential respondents were out of the district, on holiday, and in addition, at this time of year, rural events such as agricultural shows are at their most frequent, and probably raised the totals of Welsh speaking "elsewhere" to atypical proportions. Even more importantly (and quite unanticipated), the occurrence of the National Eisteddfod of Wales during the second week of the survey raised the speaking frequency and variety of situations of some potential respondents to a far higher level than in a normal week.

The main effect of this last problem seems to have been that many of the most frequent speakers found it impossible to keep an accurate record of their use of Welsh, and failed to send back the completed diary. This was the opposite problem to that which had been anticipated; it had been expected, as with Questionnaire I, that there might be a tendency for a larger proportion of the more enthusiastic supporters of Welsh speaking, who might also be the more frequent and varied users of the language, to return completed forms. The bias in favour of enthusiastic speakers would be compounded by the fact that, out of the sample who had originally volunteered to send back Questionnaire I, a further selection of volunteers was now being sought for Questionnaire II. Table VI.1, however, shows that this problem was not reflected in the speaking frequencies of the diary - volunteers to any great extent:

Table VI.1. Comparison of speaking frequencies of people who volunteered to take part in the "diary" experiment with those of non-participants in the experiment.

Frequencies.

%	speaks no Welsh	can speak Welsh, but rarely or never does so	sometimes speaks Welsh	speaks more Welsh than English	speaks only Welsh
diary volunteers (138)	5	16	41	37	1
diary non-volunteers (210)	10	17	38	32	3
returned diaries (Questionnaire 1 frequency description)	2	37	31	30	0
returned diaries (diary frequency description).	more English than Welsh		about half and half	more Welsh than English	
	46		26	28	

It was clear, though, that the respondents who spoke less Welsh had experienced fewer problems, both in remembering the occasions on which they had used the language and in filling in the form, so that the high proportion of people who use Welsh relatively rarely is unrepresentative of the frequency proportions in the original sample. If the original sample of volunteers is not subject to bias in this respect, then the sample of respondents who returned completed diaries manifestly is. Nor, regrettably, is this the only way in which the respondents sample is unrepresentative. A glance at the age-breakdown of respondents (figure VI.10a)shows that half of the diary-fillers were aged sixty or over (possibly a reflection of the greater amount of time available to retired people), and the occupation-structure was similarly unrepresentative, with 29% classing themselves as "retired" and 43% as "housewife".Of the remaining 28% in employment, comprising eighteen people, there were only four who were not "white-collar workers" such as clerks and teachers, and only two of those four, in this strongly agricultural community, who were farmers or farm-workers. The distribution of respondents' residences (fig.VI.10b) in accordance with these facts shows that a disproportionately large number of respondents lived in Oswestry, and the intended comparison of speaking patterns for the three zones of "establishment", "disintegration" and "regrouping" became impossible. Parts (c) and (d) of Figure VI.10 show that the great majority of those people completing the diary considered that their speaking situations had been typical of their normal pattern, and the majority thought that they had spoken

about the same amount of Welsh as usual. There is some doubt on this last point, however; nearly a quarter of the respondents said that they had spoken more Welsh than usual, and a few respondents stated that the need to remember the occasions on which they had used Welsh had actually prompted them to speak more than usual.

In short, the "diary" experiment, pilot scheme though it was, is an example of practically every set of bias which can enter a questionnaire survey of this type. Luckily the lack of typicality is clear enough not to have escaped notice, but it means that very little credence can be given to the results, and a little space only will be given to their discussion.

6.11. Additional information from the "diary" experiment:

Bearing in mind always the age and occupation bias in the results, an examination of figure VI.11 provides some additional light on the relative use of speaking situations.

VI.11(b) sets out the relative proportions of respondents reporting the use of Welsh within the household with each of the five frequency descriptions during the course of the week. Its pattern is not unexpected, but reinforces the belief that the household situation is that which most completely "polarises" the Welsh speaking community, by no means all of whom speak any Welsh at home. On the other hand, if Welsh is used within the household unit, it is quite likely that all conversations will be in the language, except on occasions when vistors, non-Welsh speaking ones in particular, are present. There is a

tendency either for all household conversation to be in Welsh, or none, and the intermediate speaking descriptions on VI.11(b) are relatively scarcely used. The privacy of the home allows respondents the constant use of Welsh, but some dozen respondents made the point that intermarriage with non-Welsh speakers had made the use of Welsh at home impossible, stating, in some cases, that their children did not know the language at all. One respondent reported a happy compromise: "the wife often speaks to me in English and I reply in Welsh. This occurs without either of us being really conscious of the fact that two different languages are being used". Much more often, reports on the week's speaking activities contained references to the use of English, rather than Welsh, on occasions when members of the family might fail to understand, and this applied far more to conversation in less intimate situations:

> "My Welsh is controlled by the company I am in. I consider it very rude to speak it in the company of non speaking friends".
>
> "In this area (Pant, G.R. 275223), one is inhibited from speaking the old tongue, as it is considered rude to use a language that others cannot understand".
>
> "I think it is a pity that a lot of Welsh people are inclined to talk English in public places".

Examples such as these illustrate the contrasting attitudes existing, and also the psychological constraints which begin to impose themselves in this particular case of language shift. The second quotation referring to an area of "language regrouping" as defined earlier, points to the conclusion that whereas such inhibitions are less likely

to be experienced in the zone of "language establishment", where a large proportion of the total population is able to speak Welsh, they play a role of considerable importance in areas of"disintegration" and"regrouping".

This casts some light on the implications of the main part of figure VI.11, showing the proportionate use of Welsh in the other situations. It is not possible to make a direct comparison between the household use of Welsh and that in the other situations , but it seems very likely that, in terms of hours of Welsh speaking, household use would far exceed the others. Even allowing for the lesser mobility of the older age-group which dominates the sample, the other situations can be seen, in many cases, to be of little importance. The role of Welsh in church and chapel seems surprisingly small until it is remembered that not all the respondents are attenders, and that in any case, this situation would only account in general for speaking on one day per week. This does not necessarily diminish the importance of chapels as an influence on Welsh speaking; as allocational influence and a focus for group identity, in addition to their religious functions, they have been seen to be influential. For the respondents in the sample, the other "household" situations are relatively heavily used, but the "neighbourhood" speaking situation can be seen to be of little importance. In contrast, the public situation of Welsh speaking in the street and shops, while it may have been over - stressed by the disproportion - ately large number of respondents living in the town itself,

emerges as a mainstay of language use. The distinction between "brief" and "long" conversations, crude as it was, seems to have succeeded in demonstrating that the different situations are conducive to different conversation-lengths, but the greater proportions of brief conversations in the street and shops than in the "household" situations can scarcely be claimed a surprising fact, and would probably be characteristic of any language in a similar range of situations.

The arrangement of conversations over time (that is, the seven days covered by the diary report) does a little to confirm some of the above suppositions. Figure VI.12 averages the number of each type of conversation - length per respondent per day, though this tends to hide the fact that the readiness of respondents to employ Welsh is very variable. The patterns for the two conversation types are rather different, but both show a peak for Wednesday, the local market day, when shopping is combined with conversations in the street and with visits to friends and relatives. For brief conversations the highest peak is for Sunday, but as VI.11 (a) showed, this cannot be accounted for wholly by conversations at church or chapel, but is augmented by the various visits and meetings, formal and informal, which seems to be precipitated by journeys to chapel. This shows, once again, the degree to which the chapel as an influence on Welsh speaking, is integrated into the social activities of local Welsh-speaking communities. It is not wholly surprising that the number of shorter (perhaps less essential) conversations should vary

more from day to day than do the longer ones, but it would be interesting to discover whether such variability from day to day is a sign that the language in question is not essential to its speakers as a means of communication of ideas, but merely an adornment or addition to normal language use, to be employed or discarded from day to day as the occasion demands. The diary-forms certainly provide some evidence that Welsh may be employed by one speaker in one particular speaking situation on one day (for example, in the town shops on Wednesdays) and not used in the same situation on another day (for example, while shopping on Saturdays). While it may be considered that there is something approaching the ludicrous about a study whose conclusion is that people in the study area speak less Welsh on Tuesdays and Saturdays that they do on Wednesdays and Sundays, such day-to-day variability may be one of the stages of transition of a language affected by language-shift. Before this could be stated conclusively, evidence would have to be produced that the respondents' total number of daily conversations (that is including English) was not similarly variable, and this, again, is unavailable. The same feature of variability may also exist on a longer time scale, according to a Weston Rhyn (283357) respondent who states that:

> "in this area more Welsh is spoken during the winter months when we attend church social functions and Welsh literary society meetings".

6.12 The need for local opinions:

In a few minor ways the "diary" experiment has added some detail to the geographical patterns of language use hitherto described, but its relative lack of success is

due mainly to the fact that its data are not only incomplete but cannot easily be turned to geographical account in the portrayal of spatial patterns of language use. The compromise, described in 6.9, between detailed information on individual speaking patterns and the acquisition of enough individual sets of data to be able to draw some conclusion on language use over the whole extent of the study areas, has clearly been unsuccessful. It is perhaps a case of an incautious geographer attempting an approach to language which students of sociolinguistics only undertake with extreme caution. In section 1.5, the discussion of scale in linguistic geography, the individual person was referred to as the ultimate in usefulness in the study of language, and while individual data can be used, and have been used in the present case, it may be that linguistic geography as a tool of language study has only a limited contribution to make at this level of detail.

On the other hand, increasing stress has been laid on the opinions and attitudes of speakers in the study of frequency and situation, and in 6.8 the particular necessity was mentioned of seeking enlightenment from the inhabitants of the Breton study area themselves on the apparent contradiction between the traditional language border and the area where Breton is actively spoken in practice. Thus, from one somewhat problematic means of measuring the use of language, the study must now pass on to another problem: are geographical patterns of opinion on the language border of

Welsh and Breton visible, and if so, what do they imply about the process of language shift and the state of survival of the two languages in the study areas?

CHAPTER VII

LANGUAGE BORDERS AS VIEWED BY STUDY-AREA RESPONDENTS

7.1 Subjective and objective views of language areas:

At an early stage in the present study the census was discarded as a source of data, in favour of more detailed information. A basic assumption of the census was, however, retained: that it is possible to gain an accurate impression of the state of minority language in an area by counting numbers and proportions of speakers. To this have been added the concepts of speaking frequencies and speaking situations, in an attempt to gain a more complete impression of minority language speaking in the two areas. Despite this, there remains a suspicion, increasing in strength, that the patterns of frequencies and situations already mapped are those existing in the minds of people in the study areas, in defiance of the so-called "objective" criteria originally envisaged. Since it may thus have been impossible to escape from perceived realities, it seems justifiable, even necessary, to examine in more detail the beliefs and attitudes in the minds of respondents, in order to discover something more of how they affect the location and operation of the language border and the process of language-shift.

7.2 Working hypotheses:

The impression gained from the first

questionnaire was that a few particular comments were appearing frequently, and that individuals of particular age groups, of particular acquaintance with the study areas and with one or both of the languages spoken in each, shared a common opinion. This gave rise to several basic assumptions: that a certain amount of group uniformity was, in fact, in existence; that it would reappear on a second questionnaire survey; and that the difference in group opinion would help to locate more accurately the position of the language borders. Age, local knowledge and the ability to speak Welsh and Breton were accordingly chosen as suitable criteria for the division of respondents into sub-groups which might differ from each other in response. Despite the sad lessons of Questionnaire II, the diary experiment, a questionnaire was again considered the most effective means of achieving a satisfactory number of responses. Should the questionnaire reveal a complete lack of pattern in the sub group responses, it would be clear that one or more of the assumptions had been falsely made, that the data processing had been incorrect, or that the characteristics of the language borders were so complex as to transcend the capabilities of the chosen indicators. Should the combined opinion of all groups (that is, the sample as a whole) fail to reveal any pattern, it would be a sign that the importance of language borders is an academic one, rather than being of any significance to the daily life of the two localities studied. Areas

giving rise to the greatest disagreement among the sample as a whole might, further, repay study of the reasons why they were so controversial, and offer some further clue to the variety of opinion constituting a language border.

7.3 The problems of formulating a questionnaire to assess opinions :

Some of the objections to questionnaire surveys have already been mentioned (5.1), and while the problems affect even that information which purports to be wholly factual, such as the frequency of use of language, they must be far more serious in cases where opinion is being sought. It is difficult, nearly impossible, to avoid loading words or phrases with unintended overtones, and to achieve the necessary compromise between phrasing the questions in such a manner that the chances of misinterpreting their meaning are reduced to a minimum while at the same time maintaining a style of language which is clear, simple and informal. In this case the problem had an added dimension: opinions were required on a series of points scattered over the two study areas, and many respondents were unfamiliar with the implications of distributions in space. The question arose: at what point should information be translated into cartographic form? Should the informant be presented with a map, and asked to draw on the location of the language border, or to assess the amount of Welsh or Breton spoken at each of

a series of points on the map? The method seemed likely to be totally impractical, demanding a great deal of sophistication on the part of the respondent and introducing considerable bias based on varying levels of cartographic literacy. Furthermore, the sight of a map was likely to encourage all kinds of prejudices in the minds of a certain proportion of respondents. For example, whereas figures IV.6 and IV.7 show a tendency to great local variability and pocketing in the Welsh and Breton speaking surfaces, the proximity of one place to another on a questionnaire map could lead a respondent to assume that such sharp variations could not possibly exist over such a short distance, causing him to modify his answers towards greater uniformity than his instincts might otherwise direct. A map might similarly prompt, in the minds of respondents, the idea that distance westwards, or the presence of a national border, or cultural landmark such as Offa's Dyke, influences the strength of Welsh or Breton. It thus seemed better to present the problem as a series of place-names, disembodied in the sense that they were simply presented as a list of names on the form. Thirty-one names for the Breton area and thirty-six for the Welsh one, were therefore included on the forms, but this did not wholly solve the problem. The Breton study area is some eighteen kilometres from north to south, the Welsh one twenty-five. A sufficient width of country (approximately twenty kilometres in each case) had to be included

in the enquiry area to allow for a possible range of answers on where the language border might lie. For the area covered by the enquiry, the number of points was rather small, and it was questionable whether they would provide enough information. A larger number was not possible, partly because of the difficulty of identifying points with place-names which would be generally known, and partly because a longer list would probably discourage respondents from participating in the survey. Even with the names chosen, particularly those for places in the open countryside or ill-defined localities, a "not certain" option was necessary. Finally, on the extent of the enquiry areas, it should be noted that the final questionnaire was only distributed over the same area as that covered by the first (that is, the restricted study area), and so it was likely that respondents' opinions for the peripheral parts of the enquiry area would be less accurate than for the central parts, which were better known.

7.4 Administration and layout of Questionnaire III:

A copy of the questionnaire for both areas is included in Appendix IV. Originally it had been intended that the forms should be delivered personally and returned by post. However, a pilot survey in the Welsh area proved to have such a small proportion of returned forms that a reconsideration of their method of distribution was necessary, and the questionnaires finally formed the

basis of personal interviews, with the researcher asking the questions. Some months later, some dozens of forms were posted to addresses in the study areas where coverage had proved to be inadequate, and this elucidated a few further responses, although adding an element of inconsistency to the survey. The choice finally to administer the questions orally may, in retrospect, have been beneficial, since it increased the proportion of completed forms and ascertained that all forms were completed with the same amount of care. It also prevented respondents from referring to maps or other information which might have distorted their initial opinion.

Questions 1 to 9 on both forms are intended to enable each respondent to be allocated to age, speaking and locality groups. While age groups are probably self-explanatory, the division by language and local origin should perhaps be explained. In both Wales and Brittany, language provides one of the most immediate means of group identity, on a national scale at least. On the assumption that the ability to speak Welsh or Breton might similarly operate on a local scale, division by sub-groups on the basis of language (questions 7 and 8) seemed a realistic procedure. It also seemed likely that those able to speak the language would best know its extent locally. If language does play an identifying role, it may also do so in the cases of people who are not themselves Welsh or Breton

speaking, but whose recent ancestors were, and the inclusion of such people in a separate sub group (question 9) was also considered worthwhile.

The question of "locality" (question 3) is a more dubious one. The distinction was based, in this case, on the assumption that people who claimed origins in or near the study area would be more likely to know of the characteristics of the language border locally than those with no previous local connections.

The problem with both of the above criteria is one of definition. The definition of "local", particularly, presented continual difficulties, even in an interview situation. The method of quoting a precise distance from Oswestry or Châtelaudren proved to be as unsuccessful as that of expressing locality as "within twenty miles" or "within thirty kilometres of your present address"; the concept of "locality" is elusive, though few people confessed themselves puzzled by the question. Finally, the decision was taken to leave the definitions for questions 3 and 9 completely to the respondent, only interfering if help should be required.

A number of the questions which follow are included not for any specific purpose at the time when the questionnaire was devised, but because it seemed likely that information received from some of the more calculated

questions might require the background information which these questions could provide. Questions 10, 11, 13 - 17 inclusive on the Welsh form and 10, 12 - 16 on the Breton one serve this purpose.

The main body of data for this part of the survey is derived from question 12 on the Welsh form and question 11 on the Breton one, which require that for each of the places selected for enquiry, respondents choose one of the three descriptions: "Welsh (Breton) plays a very important part"; "Welsh (Breton) is of only limited importance"; "Welsh (Breton) plays little or no part"; or that they indicate that they are "not certain". The reticence of many of the respondents on the pilot survey made it necessary, however, to request respondents not to use this last choice unless they were completely unsure or did not know where the enquiry-point was, otherwise a large element of the controversy which, by now, was emerging as a characteristic of opinion on language-borders and language shift would have been lost.

The difficulty of setting bounds on the area of enquiry has already been mentioned (7.3), but the choice of descriptions for the varying intensities of Welsh or Breton use, giving the respondent a sufficient range of description, is an added problem. Finally, once again, it was considered that the best policy was for the respondent to decide for himself what he meant by each of the three descriptions used ("very important", "of limited importance", "little or no part"). Any more precise

framing of the description would have necessitated a set of instructions so complicated as to deter many of the potential respondents from replying. On the other hand, allowing respondents to provide the description themselves would have rendered impossible the intended task of converting their answers into points scores, to be compared with the results obtained in earlier parts of the survey. To give respondents some idea of the range of intensities within which they should place each point, localities with a particularly strong Welsh or Breton speaking reputation were included in the list, although they were to play no further part in the survey (Glyn Ceiriog, Llanrhaeadr in the case of Wales, St. Agathon, Ploumagoar-Locmaria in that of Brittany), and at the other extreme, Overton-Bangor-Penley,[1] St. Martins in the Welsh area, Plouvara and Tréguidel in the Breton one, were added as examples of localities with practically non-existent Welsh and Breton. While it was expected that the different age, locality and speaking groups might choose the various descriptions with different frequency, it was hoped that there was nothing inherent in the wording of the descriptions which might cause any sub-group in particular to opt for any particular description more often than other sub-groups. The fact that respondents, as

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1: In the case of this composite response-point, a precise indication, in numeric terms at least, of the weakness of Welsh is available, from the1971 Census: 6.8 per cent, 3.3 per cent and 1.7 per cent, respectively, able to speak Welsh.

individuals, would not necessarily choose the same description for any point did not seem to be of any consequence; one respondent might never use "very important" as a description of any place on the list, while another might never choose "little or no part", but as long as that individual were consistent in his allocation of place to description, for one point relative to another, the method would not be invalidated, since it was the average points score for each place, based on the descriptions of the various sub-groups in the sample of respondents, which was to be calculated at the completion of this part of the survey, in order to compare any place with others in the study areas.

The sample of respondents for Questionnaire III was drawn in part from the sample of "households with a person able to speak Welsh or Breton" not used for Questionnaire I (section 5.3), and this provided 102 completed forms from the Welsh and 65 from the Breton study areas, drawn, once again, from all the parishes or communes. Because it was necessary to augment the number of respondents who considered themselves not be of "local" origin, and also because the point of view of people unable to speak Welsh or Breton and with no known family connection with either language was required, further respondents were picked at random until there were at least twenty respondents in each sub group. This brought the total number of respondents to 159 for Wales and 96 for Brittany.

7.5 The method of analysis:

As with earlier parts of the survey the information provided by the second questionnaire is not so much conceptually difficult as highly detailed. Once again, as simple an analytical technique as the material would permit seemed to be required. Accordingly, the percentage of answers in each of the description columns was calculated for each response point (including the "not certain" column), for each of the sub-groups (over 60, 30-60, under 30, local, non-local, and so on), and for the sample as a whole (that is, for all the responses received). It was decided that the main aspect of the analysis should be the examination, in map form, of the distribution of responses given by the largest group of respondents - the modal opinion - of both the sample as a whole and of the sub-groups within the sample. Other supplementary methods, such as the direct comparison of sub-group response percentages, would also be employed.

7.6 The total response examined:

Figures VII.1 and VII.2 summarise the results, for all respondents, for that part of the questionnaire which asked that they choose a description for the state of Welsh and Breton speaking for each location. Transferred to a map, the resultant histograms show that in each study area, respondents believe there is

indeed a transition in the use of Welsh and Breton, confirming the fact that the language border exists in the general opinion, as well as being an academic concept.

The first element of the two maps to be examined is the modal opinion of the samples, represented by the longest bar, and for this purpose generalised shadings have been added to figures VII.1 and VII.2, showing zones in which each type of modal opinion predominates. On the Breton map, it is notable that the modal opinion corresponds, in the west, to the description "Breton plays a very important part". Moving eastwards, the largest column changes to "Breton is of only limited importance", while in the easternmost part of the area the modal opinion is that "Breton plays little or no part". Even ignoring the semantic difficulties presented by such descriptions, it is not difficult to recognise a strong transition of opinion across the area of investigation. Within the stricter bounds of the study area, the south-western area, where it has already been seen that Breton is more frequently used and in a greater variety of situations, is recognised by the total sample as being that where "Breton plays a very important part". In the north-western part of the study area, which has been seen to have a high potential for speaking, and where Breton, although used fairly frequently, is spoken in a reduced number of situations, the whole sample agrees that "Breton is of only limited importance".

Eastwards, the decline of the importance of Breton, in opinion as in statistical terms, is rapid, from "very important" to "little or no part" within a matter of four kilometres at most, and much less in places. That general opinion will allow that such a rapid transition may take place may be of the greatest significance, if opinion is one of the forces creating and maintaining the language area, permitting or inhibiting the westward retreat of the Breton language border. Placed against this is the undoubted fact, from the evidence already presented, that Breton is being affected by a language shift, which means that such factors as speaking frequency and speaking situation variety are dynamic, not static, characteristics. In this mobile situation, does opinion regarding the importance of the language in any locality undergo an alteration, and if so, does it keep pace with the changing nature of the language border, and do all sections of opinion (age-groups, language-groups for example) change with equal rapidity?

Before any attempt is made to answer such questions, it is worth returning to VII.1, to point out that the modal categories of opinion form a series of zones, running approximately parallel to the traditional "linguistic divide". The central zone, where "Breton is of limited importance", is of particular interest. It cannot be said to be the area where public opinion recognises the supposed fringe of "language disintegration" shown on

figure VII.1, since the two areas do not coincide sufficiently. In fact, it is not even very clear that respondents are willing to recognise the existence of a fringe of gradual decrease in Breton use at all; the zone where "Breton is of limited importance" seems to be the area remaining between the zones where the other descriptions are thought to apply, rather than having any positive significance. Finally, on VII.1, it will be noted that the "linguistic divide", as traditionally recognised, runs mainly through an area which respondents now consider to be heavily dominated by French influences, perhaps an indication that, in addition to a decline of the whole Breton language area <u>in situ</u>, there is still a very slight element of retreat of the language border over time.

The mapping of modal opinion areas for the Welsh study area (VII.2) reveals a similar series of three zones, running parallel to the line of the linguistic divide. Once more, the central zone ("Welsh is of only limited importance") is of variable width, and is similar in dimensions to its equivalent in the Breton survey. The narrowest and most discontinuous section, in this case, corresponds with the part of this zone which lies in Shropshire. In the latter area, respondents seem to opt, instead, for a further westward - extending area of "Welsh is of little or no importance", though Oswestry appears as an outlier of the area where "Welsh is of limited importance".

As in the Breton area, the reality, according to the maps of speaking potential, frequency and situation, is far more complex than the pattern of general opinion; nor is such opinion particularly accurate, but it may, once again, be instrumental in promoting or inhibiting the use of Welsh in the study area. The map confirms that, in general opinion at least, there is a section of the study area within England which should be regarded as having strong cultural links with Wales, though in only a few square kilometres of the English part of the area is the general opinion that "Welsh plays a very important part". This discrepancy is enough, however, to show that the Welsh national border is not necessarily a decisive feature in forming opinion on the "Welshness" of any area.

A second aspect of the discussion of the general opinion in the two study areas necessitates a return to the original bar-graphs showing the distribution of answers. This aspect is the amount of agreement, amongst the respondents, on the description most applicable to any response-point, or, in visual terms, the length of the longest bar for each point in relation to all the others.

Applied to the Breton map, this approach immediately singles out the area to the east of the dotted line, corresponding nearly with the linguistic divide, and in which no respondents used the description "Breton plays a very important part" for any point, and where "Breton

plays little or no part" is heavily dominant, with over 80% of all answers in most cases. While Tréguidel (2) and Boqueho (29) do not exhibit this trend quite so markedly, this may be because they are towards the edge of the enquiry area and are therefore less well known to respondents. The area enclosed by the dotted line also corresponds, if a little less exactly, with the whole zone where the modal opinion was that "Breton plays little or no part", and it may therefore be expected that the area whose modal opinion was that "Breton plays a very important part" will have areas where this description is hugely dominant over the others. Figure V11.1 shows that this is not so. On every graph the bar representing "Breton is of only limited importance" approaches the one for "Breton plays a very important part" in size. One of two reasons for this is indicated: either the study area is not sufficiently wide to encompass an area where respondents can be unanimous in their opinion that Breton really has a very important part to play in daily life, or else, however large the study area were, one section of the respondent sample would always remain adamant that Breton has no very important part to play. The transition is therefore not quite so complete as the examination of "modal opinions" would at first indicate.

In the Welsh area, the same approach produces a slightly contrasting result. Instead of an area where there is unanimity that "Welsh plays little or no part", there is one where the whole sample is in agreement that "Welsh plays a very important part", situated in the west of the study area in the district surrounding Llansilin, Llangedwyn, Llanfyllin and Llanfechain (16, 19, 30—which the potential, frequency and situation maps have shown to be very varied and quite anglicised in places). Elsewhere in the west, for example at Glyn Ceiriog (4) an overwhelming majority of respondents (over 90 per cent) opts for the description "very important". Some 20 km further east, the proportion choosing the description "Welsh plays little or no part " is similarly very large. The transition in the Welsh area is much more complete, but even in the most anglicised area an as yet unidentified minority of respondents insists that "Welsh plays a very important part", in defiance of the facts which emerge from the potential and actual speaking maps. This is a very small minority, but the contrast between the Welsh and Breton samples is nonetheless clear. Two possible reasons suggest themselves. The first, purely semantic, one is that respondents in the two areas attach different meanings to the word "important". This, by itself, does not appear to explain the difference adequately; dictionary definitions of the word in English

and French indicate that it would have been interpreted in an entirely similar way by respondents in the two areas. A second reason for the different results may therefore be considered: that a fundamental difference in attitude to Welsh and to Breton exists in the two study areas. One Welsh respondent pointed out that he felt that Welsh was not really "important", since daily communication could, for the most part, be carried out perfectly successfully in English. He wished to substitute the word "desirable" for "important". His attitude is notable because it was one rarely encountered in the Welsh study area, even among respondents with no knowledge of, or sympathy for, Welsh. Conversation with respondents in the Breton area, on the other hand, showed that this was an attitude which commonly existed there. In other words, the difference in "national conditioning" of French and English, Welsh and Breton speaking people already mentioned in 5.1, has probably played a major part in forming the attitudes portrayed on VII. 1 and 2. Whether all sub-groups in the total response are equally affected and have identical attitudes to the language border remains for later consideration.

7.7 <u>The "accuracy" of respondents information; one perception versus another</u>:

In the account of the general opinion there has hitherto been little indication of the "correctness" or

"accuracy" of the opinions expressed. This is mainly because, despite the accumulated information on speaking potential, frequency and situation in the study thus far, what is available in the form of objective "reality", against which the correctness of the general opinion could be measured, is the product of necessarily ad hoc methods, processed by techniques which are sometimes crude, and which may perhaps be thought not to be "realities" at all, but merely one person's (admittedly considered) perception of the processes at work in the two study areas. It would be presumptuous to formulate any image of the real situation of language in the various parts of the areas, in order to make any comment on the accuracy or perception of detail which the samples of respondents demonstrated in their answers to Questionnaire III.

This is, nonetheless, the procedure which will now be briefly adopted in order to show how the general view of the rapidity of transition across the language borders differs from that based on the evidence presented in earlier chapters, and how detailed is the knowledge of the sample of respondents concerning the state of language shift at the enquiry-points used. Because the definition of "important" was left unspecified, and respondents may have interpreted it either as the number of people able to speak Welsh or Breton living in any locality, or as the likelihood of their hearing either language at any response-point, implying frequency, a score based both

on the "potential"maps (IV.6 and 7) and on the"speaking frequency " maps (V.17 - 19) was used. The two scores were averaged for each point, to provide a composite figure which might be compared with respondents' opinions, as presented in Appendix IV. The method of allocating scores is outlined in the keys to figures VII. 3 and VII.4, which present the results of the comparison.

Even from this description, it can be seen that the comparability of the two sets of results is dubious, more especially for individual points. It does seem permissible to compare the broad pattern of transition across the two areas, though comparison is not possible for a number of peripheral points because they are not included in the studies of potential and frequency.

The comparison reveals a similar feature on both maps (VII.3 and VII.4): in the east of both study areas, the sample appears to consider Welsh and Breton to be less "important" than seems to be implied by earlier parts of the present study, while in the west of both study areas, the general sample considers Welsh and Breton to be in a stronger position than earlier information would seem to imply. In other words, in purely descriptive terms, the transition appears to be stronger in local opinion than in the opinion of the researcher. While such a comparison may be totally spurious, there are several observations which it is tempting to make. In the Welsh area, particularly, there

is no indication that the general sample takes any account of the collapse of Welsh which has been observed to take place in the zone of disintegration (for example at Selattyn, point 10, or Llanyblodwel, point 22); nor does the sample perceive the comparative strength of Welsh in the zone of regrouping (at Pant, 24, Gobowen, 12, or even Oswestry, 35). Such features are the product of processes such as migration, unperceived by local inhabitants in general, but gradually changing the relative strength of Welsh in various parts of the study area. Two cases may be taken from the zone of "language establishment" of Welsh, to show that even in cases of severe but localised anglicisation, the sample is unaware of its intensity. At Craignant and Llechryddau, 9 (where the modal opinion is that Welsh is very important), of fourteen occupied houses, only two were occupied by Welsh speaking families in 1972. Section 5.13 describes the situation in Moelfre, where a very similar process has happened. It was quoted as an example of an area where Welsh speakers, though reduced in number, can maintain their frequent use of the language because of the strength of Welsh speaking is surrounding areas. The establishment of English at a few points marks the stage immediately preceding "language disintegration", the points of anglicisation proliferating, or English influence diffusing outwards from them, until the collapse occurs. It has already been stated (at the conclusion of 5.13) that the threshold number of Welsh speakers needed to form or maintain a speaking group is variable, and one

of the variables is probably the degree to which the community as a whole, and the Welsh speakers in particular, are aware of the speed of change and the locations at which it first takes place. If the accuracy of the general opinion in the Welsh area is typical, then this crucial installation of English in the "establishment zone", as well as the growth of Welsh speaking communities to threshold size in the "regrouping zone", goes largely unnoticed.

In the Breton study area, depicted on VII. 4, two areas reveal interesting local features of general opinion. The first of these concerns the area of Bringolo, La Grandville and St. Quay (7, 5, 8), in the east of the study area, where respondents feel, surprisingly, that Breton has a more important part to play than the speaking potential and frequency maps would imply. At this stage the feature may not be easily explained, but will be examined when the various sub-groups of opinion are mentioned (section 7.11). The second area is that represented by two response-points on the route nationale Kerguillerm and Coat-An-Doc'h (15) and Plouagat (16). The latter, a reception - point for Breton-speaking migrants, and situated exactly on the traditional "linguistic divide", has a relatively high speaking potential and frequency, yet has been abandoned, in the general opinion, as an area where Breton has an important part to play. Two kilometres further west, at Coat-An-Doc'h, the earlier maps show that

the potential and frequency of Breton speaking are considerably lower than at Plouagat, apparently because of the effect of the route nationale in permitting the incursion of non-Breton speakers into the area. The opinion of the general sample is, however, that Breton is in a much stronger position than at Plouagat. Once again, while explanation is not possible at this stage, the breakdown of the sample into sub-groups may reveal the reason for the discrepancies.

7.8 Method of sub-group analysis:

In order to proceed beyond the analysis of the total sample and examine sub-group opinions, it is necessary to contend with the elements of contradiction and inconsistency which are often characteristic of opinion surveys. Appendix IV, presenting the results from the main part of this stage of the study, shows that one of the problems is the sheer amount of detail obtained, and a suitable way to analyse and present the results was not discovered until several apparently appropriate methods had been tried and discarded as unsuitable. The most hopeful method was that of comparing each sub-group in turn with the general sample, and mapping discrepancies between the two results. It was not successful, for two reasons: it was impossible to say at what point a discrepancy from the general view became important, and there were so many discrepancies of 10% or more from the general that mapping became nearly impossible.

It was decided that the simplest alternative was to follow the method already adopted and, regardless of the subtleties of the data, to map the "modal categories of opinion" for each sub-group. This meant that the results were to be examined by means of comparing the map-distributions which they produced, rather than in terms of statistical comparisons. The sub-groups selected, as already stated in 7.4, were based on age, knowledge of Welsh or Breton, and knowledge of the study areas. They will be considered in turn.

7.9 The opinions of the age-groups:

In the discussion of language generation (5.8), age group differences in the area of language -learning were considered as a possible factor in language-border retreat. It may be recalled that little evidence in favour of the idea was obtained, largely because of the effect of migratory movements which distorted any possible pattern. Another possible effect of age-differences upon the practice of language - speaking will now be considered. If opinions on the location of the language area vary according to age, so may the willingness of respondents of different ages to speak Welsh or Breton in any particular locality.

Figures VII.5 and VII.6 show the modal categories of opinion on Welsh and Breton speaking in the two study areas according to three different age-groups in the samples. Despite the apprehensions expressed in 7.2, the maps show that it is indeed possible to conceive of

invisible cultural features as being differently perceived by sub-groups of local opinion. Interpretation of the reasons for such differences and of the effect of the differences on the practice of language use seems a more tentative procedure, however.

On VII. 5, for the Welsh study area, several features merit discussion. In section 5.8 it was proposed, with no substantial evidence to prove the point, that there might be a connection between age and language generation. Perhaps age is connected with the location of the language border in another respect: if language -speaking is affected by different opinions on where the edge of the language area is, or on what stage the language-shift has reached, the mapping of age-group opinions may cast some light on changes of location of the language-borders in the two areas during the lifetime of respondents. Figure VII. 5 shows that in the Welsh area the age-groups do reveal a varying appreciation of areas where Welsh is "very important", "of limited importance" or "of little or no importance". It might have been suggested that the younger the age-group was, the greater was the likelihood of its placing the Welsh language area, and the zone of English encroachment, further to the west. This is not entirely borne out.

It is the middle age-group which considers the area of Welsh use to have retreated furthest westward, though the patterns for the middle and the youngest age-groups are rather similar. The town of Oswestry is a source of some disagreement, with the middle group considering that Welsh plays some part in the life of the town and the youngest group estimating that the language is of little or no importance there. It is the oldest age-group, however, whose pattern is most different. The maps show that it is this group which considers that area where "Welsh is of limited importance" to extend considerably further east than do the other two groups. Of particular interest is the area of north Shropshire including the settlements of Chirk Bank (6), Weston Rhyn (11) and Hengoed (13). This part of the study area is distinctive in having a history of coalmining in addition to the traditional occupation of agriculture (section 2.7). All the mines are now closed, and it seems from the subscription lists of the Welsh chapel[2] that the strength of the local Welsh community was considerably greater at the time of coalmining, drawing in workers from the strongly Welsh Ceiriog valley. It appears to be for this reason that while the younger part of the sample is quite certain of the unimportance of Welsh, the older people are much less inclined to dismiss the part of the

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2: despite a steady increase in total population, the lists show a decrease from 83 adult members in 1951 to 51 members in 1978.

language in the area, though they do not find it possible to state positively that it has a role of great importance. The term "linguistic inertia" has already been used (5.13) in the explanation of anomalous features on the speaking frequency maps, and the present case would also seem to be one of inertia. It may be thought that the difference in opinion can be attributed simply to the fact that, though the decline of the Welsh language, hastened in this case by the demise of the industrial activity which originally gave the language its strength in this area, has taken place, the older people's impression is partly of the area as it used to be, while the younger groups have never known the language in widespread and active use. This is not the whole explanation however. Figure IV.6, the map of potential Welsh speaking, shows that in many parts of the locality, twenty, and in other places up to fifty, per cent of households have a Welsh speaker. The actual speaking frequency is high in comparison to nearby areas, and the range of speaking situations in this English area higher than for parts of Wales (VI.9 (iv)), though not strikingly so in informal situations such as shops, workplaces or with neighbours (VI.2, VI.5). Welsh still exists as a medium of communication in the area, therefore, though a proportion of the younger population in the study area is hardly aware of it. If nothing else, this contrast in age-group opinion serves to show the problems which may be encountered in using opinion surveys as a means of

defining culture areas (as represented, in this case, by language-use).

The Breton maps, VII.6, confirm that differences in age-group opinions may help to reveal changes in language distribution over time. In this case the pattern is clear: while all age groups share the opinion that Breton plays a "very important part" in the life of the south-western portion of the study area, there is much disagreement over the state of Breton in the north, and, particularly, about its survival in the central area following the line of the route nationale. None of the opinions is that the eastern extent of the language is completely coincident with the position of the linguistic divide marked on the maps, but that of the "over 60" age group is most nearly so, and that of the "under 30" group the least. Within the study area, four enquiry-points in particular are the subject of controversy: Bringolo (7), St. Jean Kerdaniel (9), Coat-An-Doc'h (15) and particularly, Plouagat (16). As in the case of the example quoted in the Welsh area, it seems fair to suggest that at least a part of the explanation for the discrepancy is that the older people's impression is of the area as it used to be (remembering, from figure V.10, and the point made in connection with it, that the large proportion of the sample stated that they had learned Breton at Plouagat, a fact found surprising in view of the infrequent Breton-speaking presently encountered in the settlement - section

5.7), while the impression of the younger people dates from the period at or just after which Breton speaking suffered a sudden collapse (or "disintegration", as it has been called) in the area. As in the case of Weston Rhyn, the results for speaking potential and frequency make it impossible to believe that such a complete decline of Breton has taken place during the lifetime of the oldest people. However, the age-group maps give an indication of the situation which was found to exist in the village. No respondent admitting to the ability to speak Breton was discovered in the under thirty age-group in Plouagat, and most of the village's bretonnants were aged fifty and over, and spoke the language mainly at home, with neighbours and in one particular café, noted for being a Breton meeting-place. Once again, it seems a case of the minority language's gradual change of fortune within the lifetime of the older people, and of a different understanding of the language's role both among people of various age-groups and among the language-groups. The sudden shift from Breton in this locality makes credible the information from the commune of Trédarzec (figure V.5 and section 5.4), where the remarkably sudden collapse of Breton speaking was noted as much more rapid than that prevailing, for the most part, over the Breton study area. Vulnerable points, near the edge of the language area and/or subject to strong forces introducing the speaking of French, may indeed undergo this sudden process of collapse or disintegration of Breton within

the lifetimes of one or two generations of speakers.

Superimposed on the maps in figures VII.5 and VII.6 are the zones of language "establishment", "disintegration" and "regrouping" derived from chapters V and VII. It can be seen that Plouagat was not, in fact, placed in the "disintegration" zone, but in the "regrouping" one, on the basis of its reception of practising Breton-speakers as a result of migration. Châtelaudren was a more emphatic case of the same feature. The maps show that in the last case no age group was aware of the regrouping of potential speakers there. The phenomenon of "low potential/high actual" Breton speaking (figure V.22b and section 5.13) was not a particularly well-developed feature, and this lack of awareness of its existence, within the sample taken from the study area, may go some way towards explaining why.

7.10 The "local" - "non local" sub-groups:

The discussion of the opinions of the sub-groups based on local knowledge may be concluded briefly. Returning to 7.4 and considering the reasons why it was proposed to let respondents decide on their own behalf whether they were "local" people or not, it is understandable that such a decision was taken; but it was clearly a measure of some desperation, in the absence of any more objective or standard measure of how much respondents could

be expected to know about the two study areas. It may therefore, in retrospect, be scarcely surprising that the results, when mapped for this sub-group division, are less than helpful. They are presented on figure VII.7.

The results for the Welsh area, while not identical, indicate by their similarity that the classification probably divided the sample into two sub groups containing people of very similar background rather than isolating those respondents with particular local knowledge. Both maps are very similar to that for the general sample, VII.2, although those people who do not describe themselves as "of local origin" are understandably a little less certain about some points than are the "local" people. The Breton maps on VII.7 show more differences than their Welsh counterparts, but these differences seem inexplicable, particularly the extensive area to the west of the study area where the "local" people consider Breton to play a less important role than in the south of the study area itself. Nor does either sub-group produce a response which coincides with the zones of language-shift discussed in earlier chapters.

7.11 The sub-groups based on language spoken:

Compared with the "local/non-local" distinction, there can be little question of the relevance of dividing the sample into sub-groups based on the respondents' ability to speak Welsh or Breton. At first sight it may be

expected that the most accurate opinion on the location of the language borders and state of survival of Welsh or Breton should originate in that part of the sample which is able to speak either language, but this may not necessarily be so. The older Welsh or Breton speakers may have an opinion based on the language-distribution which existed when they first learned the language, or the Welsh or Breton speaking part of the sample may exhibit attitudes of defensiveness, aggression or territoriality which cause their opinion to be as far from the truth as that of any other sub-group.

The non-Welsh and non-Breton speaking part of the sample was divided, as a somewhat speculative measure, into those people who families contained some Welsh or Breton-speaking connections, and who might therefore be expected to be informed, to some extent, on the language in question, and those who had no family connections with Welsh or Breton. Once again, the distinction may be considered to be rather crude, especially as it was left, once more, to respondents to decide whether any such family connection existed, but the likelihood of uncertainty over whether respondents should include themselves in any speaking category was much smaller than in the "local/non local" case. In short, it might reasonably be expected that the threefold division based on language would reveal clear differences in opinion.

The results for the Welsh and the Breton

areas are presented on VII.8 and 9 respectively. The most surprising fact about them is that two almost opposite sets of attitudes to the language border are displayed by response sub-groups in the two areas.

If the maps of the Welsh area are first considered, it can be seen that they do not differ greatly from each other in essence, and that all three are rather similar to that for the general sample, VII.2. On each the response sub-group tends to extend the anglicised area further west within the limits of that part of the study area which lies within England, but on each the western area of the map is occupied by a zone where Welsh is thought to play a "very important part". On all three maps, Oswestry is perceived as having a little more importance, for Welsh speaking, than the areas surrounding it. It is notable that the part of the sample able to speak Welsh is a little less certain, at some points, of the language's role than are the non-Welsh speaking groups.

Comparing the three maps, some slight variations in modal opinion areas may be seen, and the overall conclusion is that the more closely-connected the speaking sub-group is with the Welsh language, the further westward does it consider the effective area of Welsh use to be. The non-Welsh speakers with no stated connection with the language opt, as a group, for the idea that an area in the west of the Shropshire portion of the study area centered

on Bryn and Craigllwyn (20) is "very important" for Welsh speaking, and attribute a "limited importance" to the language in a whole group of settlements from Pant to Llandrinio (24-27), whereas no other speaking sub-group considers that it has any importance there. By contrast, at Llangedwyn (19) and Llansantffraid (29) in the south-west of the area, Welsh speakers consider the language only to play a "limited" part, while the non-Welsh speaking groups think that it is "very important". The non-Welsh speakers with some family connection with the language occupy an intermediate position in their opinion of the role of Welsh at the various response-points.

It is very difficult to tell, from the potential, frequency and situation maps, which group is most nearly correct, but in a sense the question is unimportant, since the evidence from earlier parts of the study shows that the opinions of the speaking sub-groups (as were those of the age and locality sub groups) are so generalised as to be far from reflecting the reality of the language border, and this applies to all of the speaking sub-groups, including the Welsh speakers who might have been supposed to be more aware of detailed patterns. Most particularly, the lines superimposed upon the maps, representing the location of the zones described in 5.15, show that the area considered to be receiving speakers, and where "regrouping" is taking place, is considered by all speaking groups to be of "little or no

importance" for Welsh speaking. Oswestry alone, within the Shropshire part of the study area, is considered to retain a limited importance as a location of Welsh-speaking activity; yet, as earlier maps of speaking frequency have shown, it may claim to be one of the most important locations for Welsh-speaking in the whole study area.

This evidence from the speaking sub-groups in the Welsh area, compared with the information in earlier chapters, seems to make it necessary to give serious re-consideration to the supposition, expressed in 7.6, that opinion may "be instrumental in promoting or inhibiting the use of Welsh". It appears, rather, that two patterns exist: first, one of establishment, disintegration, and regrouping of the language, a pattern promoted largely by factors such as migration, speaking numbers and accessibility of one speaker to another; secondly, one of opinion on the importance or unimportance of the language. The two patterns are related in only the most general terms, and a lesser weight must be given to the role of perceived "importance" of Welsh in promoting the language's use than had previously been supposed. The patterns of opinion seem to relate more to distance westward, or to the presence of the upland areas, than to dynamic factors of population movement and change.

As already stated, the Breton speaking sub-group maps (VII.9) display some features which contradict those on the Welsh ones. Firstly, there is a greater

contrast between the three language sub-groups than there was in the Welsh area, and the zonation of opinion is not so straightforward as it was on the general map VII.1. It can now be seen why there is no sharp transition to an area in the west where opinion is practically unanimous that "Breton plays a very important part". It was postulated in 7.6 that this was because one section of the respondent sample was adamant that Breton had no very important part to play, whatever the location of the response point. It is now possible to see that the sub-groups maps based on language have succeeded in isolating such a group of respondents; they are the non-Breton speakers who have no connection with the language. It is perhaps a slightly aggressive attitude of this group towards the Breton language which causes the feature to appear, though it is notable that even this group allows that Breton has a "very important part" to play in the area including Lanrodec and Senven (23, 26, 27). At the other extreme, the Breton speakers extend the area where the language plays a "very important part" further eastwards, to within one or two kilometres of the "linguistic divide" as locally seen, though with a slightly greater tendency to allow that the language has retreated more in the north of the study area than in the south. The opinion of the intermediate speaking sub-group, the non-Breton speakers who claim some connection with the language, is different again; they are ready to believe that "Breton plays a very important part" in the south-west of the study area, and also in a

district to the north, but along the approximate course of the route nationale they are of the opinion that "Breton is of only limited importance". In particular, Plouagat, found to be a controversial response-point at the conclusion of 7.7, can be seen to be a source of disagreement among all sub-groups. It is the point at which the north-south line of the "linguistic divide", as distinguished by Béchard and others, crosses the east-west line of the route nationale. In this respect the locality seems to symbolise the conflict between perceptions of traditional cultural "territory" and the forces of change brought about by twentieth-century communications-patterns. The three maps indicate that the Breton speakers are strongly aware of the area in which their language has traditionally been spoken, and are trying to sustain this area, perhaps by a measure of over-statement of the language's degree of "importance". The other speaking sub-groups are more ready to give ground to the language-shift to French, and are less "territorial" in their opinion of the survival of Breton-speaking.

7.12 Differing degrees of "territoriality" in the two study areas:

If this defensiveness with regard to Breton-speaking territory, is exhibited by speakers of the language, really exists, it may fairly be asked: why do the results from the Welsh area show an entirely opposite feature, with the Welsh-speaking sub-group estimating that the retreat of the language area has been greater than that perceived by the

non Welsh-speakers?

The question is more easily asked than answered. Most of the information in foregoing chapters has indicated that the shift from Breton has been, if anything, more severe than that from Welsh. Several possible reasons suggest themselves.

The first is that, perhaps because of the more gradual shift from Welsh to English, instead of collapsing completely, the Welsh-speaking people in the study area have been able to adapt to changed conditions. Instead of allowing communications and migratory movements to destroy Welsh speaking permanently, speakers have used these same influences to re-assemble speaking groups elsewhere in the study area, to a far greater extent than their Breton counterparts. An alternative reason for the greater degree of regrouping in the Welsh area may be that institutional support such as chapels and schools, and the greater amount of Welsh broadcasting and printed matter available, have offered more support to Welsh-speaking groups during the period of shift. If so, the language sub-group maps would indicate that no desperate self-assertion, in the guise of "territorial claims", is made by the Welsh-speakers, and that the process is mainly a sub-conscious one. If the Welsh-speakers required territorial "markers" to which to attach their claims, these certainly exist, in the form of the Welsh national

border, or Offa's Dyke, or even the edge of the hill mass running north-south across the study area; but such markers are not used.

A further possible reason for the difference in the responses of the two sets of language sub-groups is that the "national conditioning" in the two areas has been different. This was suggested in 5.1 as a possible reason for differing responses from the two areas in Questionnaire I, and in the present case it may once again be that if the Breton speakers, identifying themselves as a distinct cultural minority, feel themselves oppressed by French-speaking influences, they may well react by developing a greater degree of "territoriality" than other sub-groups. In view of the consistent lack of co-operation, by central government, in such matters as the instigation of the teaching of Breton in schools, or the lack of a census-count of speakers, it does not seem unreasonable to suspect that such a feeling of oppression may exist.

Whatever the reason, such strong territorial feelings were much more in evidence in the Breton area than the Welsh one. During the preliminary survey of the Breton area, several respondents, when casually asked where they thought the transition to Breton took place, caused considerable surprise by noting the edge of the Breton language area in terms of streams, edges of woods and

hedgerows. The scenery of the Breton study area has been described, and the presence of a series of stream-gorges of up to 60 metres in depth has been noted (2.5). Respondents referring to what could be termed "landscape-markers" in the Breton area used the gorge of the Leff, taking a sinuous course northward from Châtelaudren, particularly often as a boundary line. South of the town, they had greater difficulty in choosing a landscape-marker, and opinions varied considerably more (figure VII.10). By far the majority of the sample, and also a majority of the Breton-speaking sub-group, it should be pointed out, made no mention of any such sudden border, which in any case does not correspond with either the "linguistic divide" drawn on earlier maps or with any distinct break in speaking frequency or situation variety. The descriptions chosen, for the most part, manifestly contradict each other.

The significant fact about the map is, however, not the location of the "landscape-markers" but the willingness of any of the respondents to countenance the idea of any such sharp transition. All except respondent A were Breton-speaking, and this may give some indication of the defensive or territorial attitude with which some Breton speakers regard the language area. It is evident from VII.10 that the mental "line of defence" is traced most clearly outside the village settlements, using long-established landscape features such as woodlands and

hedgerows. The idea is reinforced that such minor features of the landscape may attain, in the minds of some respondents, a status as boundary-markers far exceeding their visual significance. The words of Musset, already quoted (1.7) in connection with the Breton language border, return to mind:

> "... by historical chance, it crosses an area of particularly uniform country; nothing changes, when it is crossed, except the language ...".

This may be so for the outside observer, but for some residents of the study area, at least, the edge of the language area is clearly-defined. It is not difficult to imagine that in the more self-contained rural communities of the past such marking of linguistic territory would have been more pronounced than in modern times. In such circumstances, while doubt has been cast upon the term "linguistic divide" (2.1), it can be seen to be quite appropriate. Particularly during the present century, however, as economies have become more complex and inter-dependent and communications have developed in association with this change, both the concept of the closed, self-contained community and that of the linguistic divide probably require modification. The crossing of the "line of defence" and the route nationale provides a graphic example of the conflict between the traditional image of the language area and the overwhelming influence of modern communications.

7.13 Agreement and disagreement; another measure:

This conflict is made clear on figure VII. 11, the result of another way of measuring conflicting opinion. This method involves the procedure of taking each sub-group response in turn and comparing the proportion choosing each "importance" description with the general sample. Differences of five per cent and more having been noted, the number of such disagreements is plotted for each response point and a running mean used to produce figure VII.11. It confirms the area of disagreement stretching north to south across the study area, reaching its maximum just west of Plouagat, near the route nationale.

The same method employed for the Welsh area (VII.12) produces evidence, once more, that the Shropshire part of the study area is a source of particular disagreement. This time, the national border does emerge as a contentious feature, but other possible influences, such as Welsh placenames, Offa's Dyke or the linguistic divide, do not. The former coalmining area in north Shropshire occasions disagreement, and the line of the main road (or perhaps the edge of the hill mass, which it follows) is also the subject of disagreement. The results by this second method seem, nonetheless, to confirm those used to produce VII.1 and VII.2.

7.14 Further aspects of opinion on the questionnaire forms :

In addition to the "place-specific" opinions obtained by the methods used so far, it was pointed out in 7.4 that a number of additional questions had been included in the third questionnaire in case further information should be required. Since the two study areas have produced results which conflict in many respects, this further information may now be of assistance.

The first piece of information is based on the possibility that perhaps respondents might base their opinions, in part, on the types of settlement pattern existing in the study areas. For the purposes of the question these were simplified into the urban areas (though the description "urban" is not really satisfactory for Chatelaudren), "villages", further subdivided, in the Welsh case, into villages east and west of the national border, and "open countryside with scattered farms", a division difficult to standardise, but forming a landscape-type familiar to people in both areas. The results from the two areas are once more not strictly comparable, since in the light of experience of the question for the Welsh area, "declining" was subdivided into "slowly declining" and "rapidly declining" on the Breton version. The responses for the total sample for each area are shown on figure VII. 13.

In four of the seven cases, the main impression is of the tendency to evenness of distribution of opinions amongst response categories, indicating either general uncertainty or disagreement between the sub-groups. A feature of both urban areas was the tendency for a high proportion of respondents to be in the older age-groups, and thus more likely to speak Welsh or Breton on two accounts; their having learnt these languages during their youth when Welsh and Breton were more flourishing and more widespread, and the possibility of their having migrated to the towns from more strongly Welsh or Breton areas, during their lifetime. That the languages are spoken in both towns is manifest from earlier sections of the study. It is quite possible that in Oswestry the numbers of Welsh speakers are increasing, because of in-migration; they are almost certainly "holding their own". In Châtelaudren the situation is more doubtful, and to judge from earlier sections, either "declining slowly" or "declining rapidly" applies. Figure VII.13 shows that over ten per cent of the population of the Welsh study-area are unaware of the existence of Welsh in Oswestry, or are not prepared to acknowledge it, despite its daily, and in some cases almost exclusive, use. The great majority of people in the Breton area imagine Breton to have disappeared completely in Châtelaudren. For the villages, a different pattern applies; opinion is divided for the Breton villages,

and the language is said either to be "holding its own" or else "declining rapidly", depending perhaps upon which villages the respondent had in mind; for the Welsh area, opinion is different for the villages in Wales and in England, perhaps influenced by the presence of schools teaching Welsh within the Principality, though, as already noted (section 5.4), the effect of this is of limited extent. The only slightly surprising feature is the proportion of respondents who believe that Welsh has declined to the extent of disappearance in Shropshire villages. In the open country, opinion on the state of Welsh is almost identical to that for Welsh villages, and while it is not unreasonable to suppose that Welsh-speaking proportions are maintained in the villages by immigration of retired people from elsewhere in their hinterlands, investigation has already pointed to the very serious erosion of the Welsh language in many of the open country areas, especially in the postulated "zone of disintegration". Partly because of the occupation of abandoned farmsteads, mainly as second or retirement homes, by monoglot English speakers, the opinion that "Welsh is holding its own" or even "increasing" in many open country areas is demonstrably erroneous, and yet a substantial majority in the Welsh area subscribes to the first of these categories.

Question 16 on the Welsh form and 15 on the

Breton one were seen as an opportunity to investigate the role of local, or neighbourhood, speaking groups, as viewed by residents of the study areas. The question asked: "How important do you think it is to have neighbours who also speak the language?". The results are quoted on table VII.1.

The differences between the percentages are not, for the most part, extreme enough to form the basis of any definite conclusion, but some of the indications are interesting, since they tend to confirm traits of the two areas already noted. In the Welsh area, the group which attaches the least importance to the idea of proximity between Welsh-speakers as a necessary feature of a minority language-speaking group is the sub-group "Welsh-speaking". This same group scores highest in the category "no importance", but also scores relatively highly in the "don't know" category. The highest score for the idea that proximity to other Welsh speakers is important is recorded for the non-Welsh speakers with no Welsh connection. The "over 60" group also gives heavy support to this idea, somewhat confusingly; this may be because, as a group, they are less mobile and have less immediate access to transport. While it may seem therefore, from the "pocketed" appearance on IV.6 and V.17, that neighbourhood speaking-groups are an essential part of Welsh at its border, this table strengthens the

TABLE VII.1 : Questionnaire III, question 15/16:

"How important do you think it is to have neighbours who also speak Breton/Welsh?"

Percentage of respondents choosing each answer

Sub-group description	"very important"	"some importance"	"not important"	"don't know"
WELSH AREA				
Under 30	31	56	6	6
30–60	36	57	7	0
Over 60	50	33	8	8
Local	45	44	7	4
Non-local	33	58	6	3
Non - Welsh speaking; no Welsh connections	56	39	4	0
Non- Welsh speaking; Welsh connections	35	52	5	8
Welsh-speaking	23	60	10	7
BRETON AREA				
Under 30	50	33	17	0
30 - 60	39	52	7	2
Over 60	50	30	12	8
Local	44	43	8	5
Non-local	62	25	8	5
Non - Breton speaking; no Breton connections	38	51	11	0
Non-Breton speaking; Breton connections	34	49	13	4
Breton-speaking	70	19	5	6

belief that this is not necessarily the case. The pocketing seems to be a feature of the invasion of English, reflecting settlement and communications-patterns, economic circumstances and topography, rather than essential part of the mechanism of language-shift — a symptom rather than a cause. For its continued survival and vigour, Welsh appears to depend on longer-distance contacts than those prevailing in any particular neighbourhood, one further indication that, while in retreat, the language is not wholly on the defensive. Once again, the role of chapels, schools and Welsh societies must be taken into account, since they tend to extend the area over which a Welsh speaker is able to make contact with fellow speakers, and explain the more gradual transition across the border which is a feature of Welsh-speaking opinion.

In the experience of earlier results from the questionnaire, the breakdown of the Breton figures for this question is now almost predictable in its complete contrasts with the Welsh results. Whereas the Welsh speakers recorded the lowest score for "very important" and the highest for "some importance", in the case of the Breton-speakers the proportions are completely reversed; 70 per cent think that it is very important to have bretonnant neighbours. The non-bretonnant groups are, however, not clearly of the opinion that it is not important

to have Breton-speaking neighbours. The degree of disparity between Welsh and Breton speakers appears to make it unlikely that chance has given rise to these figures, but the difference is difficult to explain satisfactorily. Perhaps it arises from the fact that at its borders Breton is much more a "private" language, a language for speaking in informal situations such as the family or the immediate neighbourhood. Once the neighbourhood speaking group is gone, there is no semi-formal occasion such as the church service, the school lesson or the bretonnant social event to maintain the language, and the individual resorts almost completely to French.

7.15 Some questions to assess conscious opinions:

In the earlier parts of the questionnaire, respondents were discouraged, as far as possible, from expressing conscious group opinions on the characteristics of the language-borders. Questions 14 and 15 (13 and 14 on the Breton form) ask: "Do you think it is important to keep the Welsh (Breton) language going?" and: "If you said yes, how important do you think it is to preserve the language in the border area?" Some respondents pointed out that they were not certain about the interpretation they should give to "important", and wished to substitute "desirable", "worthwhile", "souhaitable". In itself,

neither question, perhaps, has much meaning, though they both tend to separate attitudes, hostile or otherwise, to the minority languages. It was thought that the French attitude to Breton might either be more hostile or more apathetic than the English attitude to Welsh. The second question was motivated less by the belief that respondents, as a group, could offer any well-considered view on the relative importance of the language in the heart and on the border of the area over which it is spoken, than by the hope that answers in the two areas might reveal something of the conscious attitudes of respondents to the proximity of the language "border area" (though they would all undoubtedly construe this area differently).

Table VII.2 summarises the results of the first question. In all subgroups more respondents think that it is important to "keep Welsh and Breton going" than do not, and in most of the subgroups the majority is a substantial one. The lowest proportion is 59 per cent in the Breton "under 30s" and 62 per cent in the non-Welsh speakers with no Welsh connections. Whether or not this is "lip-service" to the current ideals of conservation, extended from the physical to the cultural realm, is difficult to establish. It is evident, however, that in both cases the younger people attach slightly less importance than the older groups to the maintenance of the minority languages, that in both cases the difference between local

TABLE VII.2 : Questionnaire III: "Do you think it is important to keep the Welsh/Breton language going?

WELSH AREA	Yes	No
Under 30	73	27
30 - 60	82	18
Over 60	96	4
Local	83	17
Non-local	85	15
Non-Welsh-speaking; no Welsh connection	62	38
Non-Welsh-speaking; Welsh connection	84	16
Welsh-speaking	97	3

per cent

BRETON AREA		
Under 30	59	41
30-60	80	20
Over 60	89	11
Local	76	24
Non-local	80	20
Non-Breton-speaking; no Breton connection	69	31
Non-Breton-speaking; Breton connection	71	29
Breton-speaking	78	22

and non-local opinion is not great enough to be convincing, and that, also in both, the majority is smallest in the cases of subgroups who have no connection with minority language speaking (and who may therefore regard "important" in the sense of "expedient, from the point of view of communication") and largest in the cases of Welsh or Breton speaking subgroups (whose interpretation may include ideas of cultural identity or of nostalgia). Lastly, majorities in favour of retaining the minority language are consistently higher in the Welsh than in the Breton case, presumably as a result of a national conditioning which has placed much less emphasis on the necessity of retaining Breton and has stressed the unifying influence of one national language, French, whereas it has now become a matter of pride, among "professional" people for example, to be able to speak Welsh, and in some cases even a necessity. Once again it is striking that while only three per cent of Welsh speakers thought it was unimportant to retain the language, the proportion of Bretonnants thinking the same of Breton was 22 per cent. For the opinion of a committed group, this is a remarkable figure, though on the basis of one question, and with the evidence, already seen, of a subconscious defensiveness and territoriality on the part of the Breton speakers, it would be very unwise to draw any definite conclusion on their attitude. This task must await further study.

Of the second stage of the question, concerning particularly the preservation of minority languages at their borders, little can be said, except that the sub group responses reveal differences which are almost wholly inexplicable (Table VII.3). To some extent the attitudes of the Welsh and Breton speakers are confirmed, particularly the contrast between them. While the "Welsh speaking" sub-group makes no more than average use of the "more important" option, the Breton speakers form the sub-group which is most inclined to stress the importance of maintaining the language at the border. This may offer some confirmation of their "defensiveness" and "territoriality", already discussed. More evidently, in all cases, the majority opts for "of equal importance". Probably, if a "not certain" option had been provided, the majority would have opted for it instead. If any conclusion can be drawn, it is that most people living at the language border, regardless of whether or not they speak the minority language, and regardless of their knowledge of the area, do not exhibit any particularly marked personal attitude to the language border which they can express in words; this despite the fact that, as already stated, some sub-groups are subconsciously more "territorial" than others.

The questions considered in this section have set out to measure aspects of people's conscious (or perhaps formal) opinions on the two language borders, as opposed to

TABLE VII. 3 **"If you said 'yes' to question 13/14 (see table VII.2), how important do you think it is to preserve the language in the border area?"**

(percentages choosing each)

	More important than in areas where the language is more widely used	Less important than in areas where the language is more widely used	Of equal importance
WELSH AREA			
Under 30	13	25	62
30 - 60	15	23	62
Over 60	14	11	75
Local	19	25	56
Non-local	10	16	74
Non-Welsh-speaking; no Welsh connection	7	35	58
Non-Welsh-speaking; Welsh connection	34	17	49
Welsh-speaking	14	15	71
BRETON AREA			
Under 30	24	26	50
30 - 60	24	25	51
Over 60	29	29	42
Local	24	30	45
Non-local	28	22	50
Non-Breton-speaking; no Breton connection	28	30	42
Non-Breton-speaking; Breton connections	20	29	51
Breton-speaking	35	24	41

attitudes which they may prefer not to express publicly, or may not even realise they possess. The questions on the "importance" of retaining Welsh and Breton allow due regard to be given to ideas which respondents perhaps feel they should express; but there is one further question which demonstrates even more the half-truth which may accompany the "formal" aspect of opinion (and also the danger of seeking opinions by the method of asking direct questions such as those just examined). This final question is based on the observation that hostile attitudes frequently emerged in the first stages of the survey, mainly between language groups in the two areas, but that hostile remarks rarely appeared in written form on the questionnaires. The question simply asks: "How well do you think the Welsh (Breton)- and non-Welsh (Breton) speaking communities get along with each other in the border area?" To such a question, there is a very strong likelihood that the answers will be an expression of the respondents' formal, public belief, which may well be different from their innermost, private, perhaps not even conscious, beliefs. Four choices of description were given, ranging from the statement that the two communities get on "very well" to "very badly". The translations on the Breton form are not exactly the same, in their shade of meaning, as those on the Welsh one, and this discourages comparability. A summary of the results from the two areas appears in table VII.4.

TABLE VII.4 Questionnaire III : "How well do you think the Welsh (Breto
and non-Welsh (-Breton) speaking communities get along
with each other in the border area?

	"very well"	"not always well, but usually"	"usually rather badly"	"very badly"
		(percentages)		
WELSH AREA				
Under 30	31	62	6	0
30 - 60	71	26	3	0
Over 60	73	23	4	0
Local	64	36	0	0
Non-local	69	25	6	0
Non-Welsh-speaking; no Welsh connection	52	43	4	0
Non-Welsh-speaking; Welsh connections	65	35	0	0
Welsh-speaking	73	24	3	0
BRETON AREA				
Under 30	42	48	10	0
30 - 60	60	27	13	0
Over 60	67	22	11	0
Local	56	33	11	0
Non-local	63	27	10	0
Non-Breton-speaking; no Breton connection	53	35	12	0
Non-Breton-speaking; Breton connection	68	20	12	0
Breton-speaking	53	36	11	0

The main feature of both sets of figures appears to be that of the four categories only three have been used. No respondent chose to employ the description "very badly" for community relations at the border. Small numbers of respondents opted for "usually rather badly" but in the Welsh case this was always less than 10 per cent of the sample, and in some sub-groups the description was, again, not used at all; 10 to 13 per cent of the Breton respondents used the category. The majority category for seven out of the eight Welsh sub-groups was "very well", as it was for seven of the Breton sub-groups also. The fact that, in the face of a number of degrees of description, that implying the least hostility was most used, seems to be significant, especially since, as has already been noted, conditions prevailing in the two areas seem to be vastly different, with bretonnants adopting a largely defensive pose and Welsh speakers a much more aggressive one. The most immediately obvious conclusion would be that, regardless of the state of decline or "morale" of Welsh and Breton, the language-shift seems to be accepted without severe inter-group hostility in most cases. On further reflection, and in view of the observations already made on opinions held at differing levels of consciousness, it may seem more likely that the question has simply succeeded in elucidating the response which respondents felt they ought to give, revealing nothing of the fierce hostility which was sometimes expressed informally.

The internal details of the tables reveal little new information, in view of earlier questions. In both areas, the youngest age-groups, seen to be the least knowledgeable in many of the cases, supply an answer whose proportion is well below average in the "very well" category, and a similar proportion above average in the "not always well, but usually" one. The speaking groups, as almost everywhere before, provide something of a contrast. The Welsh example is straightforward, ranging from least support for "very well" from the non-Welsh speakers with no Welsh background, to the greatest support from the Welsh speakers. Information from parts of the study area (for example the Shropshire village of Weston Rhyn, where the largely Welsh-speaking parish-council made a nearly - successful attempt to change street-names from English into Welsh, to the indignation of one section of the village community) indicates that the Welsh-speakers do not feel themselves threatened, and are quite prepared to accept that they get along "very well" with the non-Welsh groups, who for their part are not quite so certain. In the Breton case, the Breton speakers and those who have no connection with the language share a low estimation in the "very well" category, and while this is quite in accordance with the attitudes of local Breton-speakers as already discussed, it is a slightly unusual reaction for the non-bretonnant category, which might be expected to regard Breton as an anachronism to be treated with tolerance. In connection

with Table VII.4, despite the lack of comparability, it is difficult not to comment on the general and consistent indications that agreement between communities is slightly less in the Breton study area, especially in the "usually rather badly" column, though if this is a just comparison it may only apply to the two restricted localities in question.

7.16 Some opinions volunteered by respondents:

The final, and most evidently conscious and formal, stage of this discussion of "levels of consciousness" of opinion, must be examination of ideas and opinions unsolicited by the researcher but nonetheless offered, as written comments on questionnaire forms or at interviews with respondents. These may be construed either as the most important conscious concerns of respondents, uppermost in their minds, or else as the opinions, not necessarily sincerely held, which they felt the researcher would like to hear, or ought to hear. They are therefore difficult to interpret, but are presented in table VII.5, in order of frequency with which they were expressed.

It can be seen that in terms of the total number of people interviewed, or who responded to questionnaires, those who volunteered opinions are few. Comments 1, 7, 9, 12, 14, 18 and 19 from the Welsh area and 1 and 5 from the Breton one show that some respondents are aware of the importance of "situations" in promoting or discouraging the use of a language, and particularly in the Welsh case,

TABLE VII.5 Unprompted comments on the roles of the Welsh and Breton languages
(ranked according to the number of occasions on which they appeared)

	nature of comment	number of times comment was made
	WELSH AREA	
1	Importance of the chapel in maintaining Welsh	21
2	Effects of migration in changing Welsh speaking in particular areas or locality in general	20
3	Strength of Welsh in Oswestry	17
4	Impoliteness or necessity of speaking Welsh in "mixed company"	16
4	Effect of second homes on Welsh speaking	16
6	Intermarriage as an Anglicising factor	15
7	Lack of Welsh-teaching in Shropshire schools	10
8	Welsh-speaking as an age-specific feature	9
9	Helpfulness (or otherwise) of Urdd, Eisteddfodau and Welsh Societies in maintaining language and identity	7
9	Mutual tolerance of Welsh and English communities	7
11	Lack or necessity for continued existence of Welsh language	6
12	Inappropriateness of Welsh for workplace situation	5
12	Lesser need for Welsh in border area	5
12	Inadequate or insufficient Welsh teaching in schools within Wales	5
12	Importance of Welsh as national language	5
16	Superior "expressiveness" and "versatility" of Welsh language	4
16	Insufficient television and radio programmes in Welsh	4
18	Adverse effect of school closures on local Welsh communities	3
18	Importance of home as propagator of Welsh	3
	BRETON AREA	
1	Breton as language of the home	33
2	Breton-speaking as an age-specific feature	20
3	Intermarriage as a factor prompting French-speaking	13
3	"Where people know French it should be used in preference to Breton"	13
5	Lack of Breton classes in schools	10
6	Lack of adaptability of Breton to modern speaking-situations	6
6	Migration as a factor prompting Breton decline	6
8	Parochialism and inward-looking nature of Breton-speaking communities	5
9	Insufficient television and radio programmes in Breton	4
9	Declining importance of Breton in Chatelaudren and Plouagat	4
11	Expression of total indifference to Breton language	3
12	Difficulty of conversing with Breton-speakers from outside the locality	2
12	"Breton language will survive if it deserves to"	2
12	Breton as national language	2
12	Lack of accurate figures on number of Breton-speakers	2

where there is a greater number, as well as a greater variety, of situations in which the language may be used. There is also, as the Welsh comments 2, 3 and 5 and the Breton comments 7 and 10 show, an awareness of migratory effects in changing the distribution of language speakers, and sixteen people specifically mentioned the presence of non-Welsh-speakers in second homes as a factor adverse to the survival of Welsh. The model drawn in figure IV.12 is present, at least implicitly, in the minds of some respondents, but this statement must be qualified to the extent that there is, surprisingly, no mention of the "altitude" or "relief" factor (section 4.6), and no mention of migration as a means of creating speaking potential, as well as destroying it. Even in the case of Oswestry, respondents, with only a few exceptions, used the words "surviving" in preference to "growing", when describing the state of Welsh.

Among the features not so far specifically discussed but which appear in the comments of respondents, the effect of intermarriage between Welsh and non-Welsh speaking people (comment 6), and Breton and non-Breton speaking people (comment 3), appears important. Where one partner is unable to speak Welsh or Breton, and English and French are the common languages, minority languages are frequently not passed on to children. This stresses both the importance of the home in language-generation and the

setback to the language when use of Welsh and Breton in the home ceases, and it also highlights the pressure on Welsh and Breton as languages which are superfluous in terms of simple communication of ideas, to the large majority of people in the two study areas. When there is not an absolute necessity for their use, an attitude begins to make its appearance, to the effect that "the majority language should be used even when all speakers are capable of speaking the minority one" (comment 4 in both cases). The necessity assumes, in the minds of some respondents in both areas, almost the proportions of an obligation. On the other hand, some Welsh respondents, as section 6.11 has already indicated, voiced a similar obligation to ignore any such inhibition, and so to speak Welsh wherever possible, regardless of accusations of impoliteness. Four other comments in the Breton area (4, 6, 8, 11) may be taken to imply antagonism to the language, whereas only one (11) in the Welsh area may be so interpreted, and some respondents in the latter area (10) go out of their way to express a tolerant attitude.

In view of the existence of pressures, in both areas, to speak English and French, rather than Welsh or Breton, in any company of people where even one is unable to speak the minority language, the lesser speaking frequency in the fringe of the language areas (already referred to as the "zone of language disintegration") may be thought to

be explained, especially in view of the Welsh comment 13, that there is a lesser need for Welsh in its border areas. Certainly, towards the border, there is a greater likelihood of encountering, and of marrying, someone unable to speak Welsh or Breton; but this cannot be the whole explanation for the lesser activity at the edge of the language area, since the apparent existence of a "zone of language regrouping", with both an increased language frequency and variety of situations, has been pointed out. It is clear that to be so greatly outnumbered and yet to speak Welsh with such relative freedom, speakers in the "zone of regrouping" in the Welsh area must ignore any such inhibition to some extent, and certainly to a greater extent than those in the "zone of regrouping" in the Breton area. The different degree of hostility may go some way to explaining why.

Of the remaining comments, most are by now predictable: an expression of pride in the Welsh language (16) with, notably, no Breton equivalent; the role of language, in both areas, as a means of national identification (Welsh 15, Breton 14); and, not surprisingly, three comments (5, 9, 15) from the Breton area and three from the Welsh one (7, 14, 17) on the lack of facilities for propagating the languages. The Breton comment on the lack of a regular census count is worthy of note but by no means commonly-stated. In the Welsh case, two comments (3, 7)

show that the part of north-west Shropshire in the study area is still widely-regarded as part of the Welsh language area and thought to be under-provided with facilities for the teaching of Welsh.

7.17 Perceptions and opinions on the two language-borders; a conclusion :

The discussion based on the results of the third questionnaire has been protracted and often inconclusive. Nevertheless, the study of the characteristics of the two areas has advanced in several ways.

Firstly, it can be seen that people in the study areas are generally aware of their location at a language-border. Within the overall sample, it is possible to discover variations between sub-groups based on age and language background, and other variations could undoubtedly have been found if the sample had been divided into other sub-groups (for example, on the basis of home location). Further, these variations can be protrayed cartographically, though the information has first to be considerably generalised.

The methods used here have simplified the very complex results into a series of zones, indicating a belief in a sharp transition westward into the two language areas, and running approximately parallel to the course of linguistic divides as conventionally portrayed. Despite

the complexity of opinion-patterns, there is still strong evidence that many details, both spatial and non-spatial, are unnoticed by most respondents. Among these, the failure to note the atypical strength or weakness of Welsh or Breton in particular localities and the general unawareness of such features as the "country-cottage phenomenon" could be quoted as examples. Elements of the physical landscape (for example, the hills in the Welsh area, the river-gorges in the Breton one) may play an important part in influencing opinion, whereas processes such as migration and depopulation, which are frequently of far greater importance in producing patterns of potential and actual use, are little noticed. Thus it is that the significance of the accumulation of speakers in the "regrouping-zone" is almost entirely unperceived.

An important consideration seems to be that at no stage of the discussion has it been possible to make the crucial deduction that the perception of language shift at any particular locality promotes the use or non-use of Welsh, and the decision to use Breton in any particular place appears to be based on the location of the traditional linguistic divide rather than upon any consideration of the local strength or weakness of Breton-speaking potential. In short, two sets of patterns have been obtained: those resulting from variations in the potential and actual use of Welsh and Breton, resulting largely from processes such

as population movement; and those existing in the opinion of the respondent sample. There seems to be little concordance between the two. Within the general opinions in the two study areas there are sharp, and often inexplicable, contradictions, and other contrasts which seem to be the result of the differing "national conditioning" and state of morale of the two minority language groups.

How, then, has the examination of opinion advanced the study of language borders? The pessimistic conclusion seems to be that the fate of Welsh or Breton in the two areas seems to depend less on the feeling of group identity existing among the speakers of the two languages than upon uncontrollable external processes promoted by social, economic and demographic changes, among others. Usually unperceived, these changes build or destroy language speaking groups and determine the stage of language-shift in the various localities of the study areas, almost regardless of local opinions.

CHAPTER VIII

THE GEOGRAPHICAL METHOD APPRAISED

8.1 The scale problem reviewed:

The point has now been reached where a better perspective on methods and problems can be obtained and a conclusion offered. Foremost among the problems must be that of the scale of approach. The "micro-scale" has been the basis of the investigation, and it was realised early in the study (3.12) that the choice of such a scale involved a risk that no recognisable pattern or process would emerge from the mass of detail which would result, and a further difficulty has been that of reconciling local findings with the literature at the regional or national scale. The potential surface and speaking - frequency maps confirm that the problem of over-abundant detail did exist. This does not mean that such a scale for data-collection was a mistake, but rather underlines the degree of potential information which usually has to be sacrificed in geographical studies of language and stresses the difficulty of sampling at random within localities. There is a clear place, in the future study of linguistic geography, for further micro-studies using hundred per cent samples.

Given the locality and detail of the information, some aspects of the approach, for example the attempt to relate language to altitude, accessibility or distance from the langüage border may appear optimistic, even naïve. Nevertheless, it may fairly be asked: if such variables may be related to language at all (as they frequently are at the national or regional scales), why is this exercise not permissible also the the local scale, and at what point is

it considered realistic to begin generalising about language and topography, or similar relationships? It was on the principle that no satisfactory answer could be found to such questions that the local examination was considered justified, and in fact many of the relationships tested appear to hold good even at the micro-scale.

Most particularly, the chosen scale has shown that at the location usually known as the "linguistic divide", a series of complex and varied patterns of language use emerges, as a result of social, economic, demographic and historical factors, among others. The divide is a zone, rather than a line, in most respects, and presents a fragmented appearance. This last has been seen to be, for the most part, a symptom of the processes taking place, rather than an inherent feature of the divide, though there are places in which the size of the various pockets of language is of crucial importance (for example, the pockets of English and French in the zone where Welsh and Breton have been said to be "established"). Near the edge of the language area, the delicate balance which permits the continued frequent use of Welsh or Breton may be upset by even a slight change in the proportions of people able to speak these languages, or by a slight increase in the size of pockets of English or French, acting as a "trigger mechanism" which precipitates the phase of sudden language disintegration or collapse which is indicated on figure III.6 The degree of resistance of language communities to

the gradual change in the proportions of speakers of the various languages provides a fruitful subject for future study, as do the characteristics of the phase of collapse. III.6 shows that census data have a part to play in such a study, but it could be contended that the geographical contribution to the study of the sometimes subtle changes leading to the phase of collapse could be greatly increased in value if more micro-studies were made. The mechanisms operating to produce language shifts are only likely to be revealed by considerably more detailed information than census data can at present provide.

8.2: The language area:

Many of the same considerations of scale can be associated with another aspect of language which has assumed some importance in earlier chapters: the characteristics of the "language area". This feature has frequently been treated as a clearly-defined areal unit, particularly on the national scale, and distinctive sub-areas have been discerned within it (for example, the areas of relative strength and weakness of Welsh observed by Bowen within the language area of le Pays de Galles). The foregoing evidence, especially that based upon frequency and variety of language use, has pointed strongly, though perhaps not irrefutably, to the fact that even within the confines of the two restricted areas under study, a "core and fringe" effect is visible. The fringe, or area where language patterns are disintegrating, seems to owe this characteristic

in large part to its proximity to the neighbouring language area. In other words, it appears that there is a distinctly spatial element in the process of language shift, and that the language area has some kind of integrity, which exists regardless of the effects of such influences as topography or communications.

As to the precise extent of the language area, it has been seen that it is partly dependent on the varying perceptions of different age and language groups. Further, its characteristics may vary with the speed of decline and state of morale of the language in question. The relative intensity of language use in the core and fringe is thus variable; the harder - pressed is the minority language in question, the greater may be its conscious effort to defend its territory and the more persistent the vestigial use of language at the fringe.

8.3 Language and the physical landscape:

The possible links between language and the physical landscape have been examined in three contexts in particular: firstly, in terms of the shape of the ground with the implication that the less accessible areas may have shielded Welsh and Breton for longer than neighbouring localities; then, as a major influence in creating the traditional ways of life in the two study areas (for example, the traditional agricultural systems and settlement patterns); finally, as a possible source of visible markers to which linguistic groups may attach their ideas of the territorial

extent of their language. Such associations, at least as thus expressed, may seem unduly simplistic in approach. Certainly, it is not surprising that in none of the cases could a totally satisfactory generalisation be made on the connection between language and landscape.

The topographic influence on language, when examined, produced some features which were quite the opposite of those which had been expected, though on reflection they do not seem surprising. The "relief principle" (4.6) appeared to hold good in general terms, until it was realised that both it and the language potential might be varying in response to extraneous factors such as situation within the language area itself. On the other hand, it is certain that topography influences the pattern of communications, which in turn play a role in channelling potential speakers from one point to another, creating unexpectedly large groups of people able to speak the minority languages outside the areas with which they are normally associated and thereby contributing to the feature termed the "zone of regrouping".

As one of the factors contributing to the creation of the traditional patterns of life which have been associated with the Welsh and Breton languages, the physical landscape again plays an indirect part in the process of language shift. A return to figure IV.12A (the hypothetical model of the relationship between language and topography) may help to illustrate something of this role. The abandonment

of marginal agricultural land, as a result of adjustment of traditional agriculture to changing economic conditions within and outside the Welsh study area, has meant that hilltop areas with less suitable conditions have been vacated by Welsh speakers and sometimes reoccupied by English- speaking people. While such examples as this underline the interrelationship between the physical landscape and the cultural one, the strength of the association remains difficult to summarise.

The third aspect of the physical landscape, namely the possible use of landscape markers by linguistic groups as a way of defining the edge of the language area, would also require considerably more investigation before any satisfactory conclusion could be stated. The evidence from chapter VII shows that despite a plentiful supply of possible markers (breaks of slope, gorges, or even man-made features such as Offa's Dyke) in the Welsh area, no physical feature was generally perceived as marking the edge of the language area. This does not necessarily mean that respondents do not think of the language border in terms of the physical landscape, but simply that every respondent tends to use a different set of physical markers for this purpose. If this is the case, it implies that the feature, if it exists at all, is of relatively little significance in defining the location of the language border. In the Breton area, as figure VII. 10 has indicated, a small number of respondents defined the edge of the language area quite precisely in terms of landscape features, but

showed very little unanimity of opinion.

8.4 Language and population processes:

Demographic processes and population movements have been a constantly-recurring theme in the foregoing pages, with population mobility and migratory patterns being seen as especially significant in the process of language shift. Once again, several expected features did not appear. In this case, for example, the migrant population was composed, in large part, of older people, moving for purposes of retirement, rather than the younger people, usually regarded as more mobile. Since a greater proportion of the older age groups can speak Welsh and Breton, this has altered resultant patterns of language potential significantly. Another complication which has emerged during the examination of the relationship between language and migration is that the effect of migratory movements on language potential and practice depends on the type of migration being considered. Lifetime movements from "generation areas" of language may be significant in the maintenance of the language area at large, while weakening the hold of Welsh or Breton in these areas of generation. Within the two study areas, the processes of rural de - population has been seen as a factor promoting the disintegration of language groups pnce a certain critical threshold has been passed in the proportion of Welsh to English, Breton to French speakers. On the other hand, it should not be forgotten that the movement of population

along communications axes is a two-way diffusion, and the in-migration of Welsh and Breton speakers in the regrouping zones is a process which constructs potential speaking groups, perhaps to that threshold point at which use of Welsh and Breton becomes possible once again. Unfortunately, this second part of the process is often not recognised, by language planners or by potential speakers themselves, and opportunities for language maintenance are lost.

8.5: Language and settlement patterns:

There is a school of thought, in geographical literature, which, if not associating the Welsh and Breton languages with a traditional, rural existence, tends at least to regard the urban settlement as a feature alien to these languages, and a source of diffusion of Anglicizing or Gallicizing influences which spread into the surrounding countryside. Carter and Thomas (1957, pp.258-9) provide a typical statement of the association, drawn from considerable experience and the examination of market towns all over Wales. The situation in the Breton study area may be seen as confirming this, with Châtelaudren providing an almost wholly negative effect on the Breton language. On the other hand, Oswestry demonstrates another, and opposite, effect of urban areas. On the "potential" map, figure IV.4, it appears an unpromising location for active Welsh speaking. Yet Welsh is used there with a greater frequency (V.17) and variety (VI.4) than almost anywhere else in the study area, and there seems no reason to suppose that the use could not be further increased if this level of

activity were recognised more generally. It can be seen that "dilution" of Welsh speakers amongst the population as a whole is not a seriously inhibiting factor, and is counteracted by the high absolute number of speakers, as well as their proximity and their ease of access to each other. Within the urban area it is possible again to recognise variations in both potential and actual language use, based upon speaker proximity and contact rather than on the Welsh-speaking proportion of the population.

Conversely, it is where the communications network is sparse and the speaker proximity low, in the rural parishes of the study areas, that the proportion of Welsh or Breton speakers must remain above the threshold which leads to language disintegration. Village systems, with the range of services and contacts which they have traditionally provided, have helped to maintain Welsh and Breton in some localities despite a certain degree of language dilution. With their accumulation of potential speakers (IV.4 and IV.5), it might be surprising if always, as the Donegal study (2.6) indicates, they had a "negative linguistic influence". In some cases in the study areas they give support to areas in surrounding districts of low potential (for example, the case of Llansilin and Moelfre, 5.13), just as in others they fail to do so (for example, Rhydycroesau, 5.12). Whether or not their effect is positive or negative seems to depend upon their location in relation to the language area as a whole. Villages in the "disintegration" zone often fail to counteract the shift, while those in

areas where language may be said to be "established" may help to prolong Welsh or Breton speaking. This is only the most general of observations, since it might be contended (with considerable reservations) that the larger the settlement and the greater its accumulation of absolute numbers of potential speakers, the further it can be from the language area whilst still retaining an active Welsh or Breton speaking population. The hierarchies of Oswestry - Birmingham - London or St. Brieuc - Rennes - Paris could be cited as examples.

8.6 Language and situation:

The term "situation", as used in the present study, has referred merely to a series of locations and institutions of varying formality, and takes little account of the varying age and social status of speakers, as the sociolinguistic concept of a "dyad" (6.1) might be considered to do. Despite this shortcoming, the information gathered illustrates the importance of speaking situations in promoting or inhibiting Welsh or Breton use.

The supreme importance of the home situation has become clear, thrpughout the Breton area and especially in those parts of the Welsh area in which the shift has reached the "disintegration" phase. The home is the last situation to be abandoned in the fight for minority language retention. It is treated by speakers as a private location in which the use of the vernacular may continue; yet evidence from both areas shows that good communications, promoting contact

between people potentially able to speak Welsh or Breton, play an unexpectedly important role in maintaining these languages even within so apparently independent a situation as the home. There is further evidence (table V.3) that those speakers who learned Welsh or Breton in the home situation speak it more frequently (and probably, also, in a greater variety of other situations) than those who learned either language elsewhere.

The future role of school Welsh and Breton is a particular problem. Section 5.4 indicates that school lessons in the Welsh area are of relatively little effect in maintaining the frequent use of Welsh outside the classroom. This may be a function of the small number of hours and the restricted subject- matter for which the language is used. It could be maintained that this reflects a rather passive strategy, intended to maintain a nominal Welsh language presence in schools, rather than to extend the language's frequency or versatility in situations elsewhere. The most likely way of counteracting this problem seems to be to increase the number of hours of school Welsh, but in a selective manner. If English is considered more suitable to some of the subject matter at secondary level, it may be retained, with a concentration, instead, of Welsh teaching in the early school years, continuing the home tradition and allowing the individual speaker to develop enough versatility in the language to choose for himself the language best adapted to various speaking situations

outside the school.

Such a method contrasts sharply with language - teaching priorities in Brittany. Breton has been permitted as a subject for the baccalauréat since 1970 (Gwegen, 1975, p.116). Gwegen anticipates considerable problems, however, in persuading the educational establishment to allow Breton lessons in the earliest school years, where children might more easily develop the necessary linguistic versatility to use the language informally, and where the home speaking tradition could be continued without interruption.

The relatively small use at present made of Welsh or Breton - speaking situations outside the home is not to deny the importance of any of the other situations in which the two languages may be spoken. Uses outside the home may be considered to have their own part to play in language maintenance, since they help to ensure that Welsh and Breton are used in public places, thus giving them an increased credibility as languages applicable to daily life in the twentieth century, and also increase the sense of identity of the minority language groups in question. If this is the case, the relative infrequency of use of Welsh and the extreme infrequency of Breton in the school and workplace is a serious sign, as is the fact that Welsh learned in school is so little used, by the respondents concerned, in situations outside the school (table V.3). The general dearth of speaking situations in the Breton study area, while

it may not be a conclusive sign of the language's extinction as a daily medium of communication in this part of Brittany, does make clear the state of advancement of the language shift, and also gives an indication of the state of decline of "morale", or perhaps just of the lack of self-assertion, of the Breton-speaking community.

Finally, as already stated, differences in location within the language area appear to give rise to different use of speaking situations (figure VI.4,iv-v). The disintegration zone is represented by a lesser variety of situations, while the regrouping areas show some recovery in this respect. The frequently small proportions of Welsh and Breton speakers in relation to the total population in the regrouping areas, however, makes it difficult to envisage anything more than a limited recovery in the number of situations in which it is possible to use Welsh or Breton. Certainly, the recovery in the Breton case is scarcely perceptible.

8.7: Patterns of language use, existing and perceived:

The examination of patterns of perception and opinion which occupied chapter VII was intended to counteract, to some extent, the impression which had been given that language patterns were creation of a set of physical, historical and other circumstances, and had little to do with the attitudes of the speakers themselves. In this aim it cannot be counted a great success. There remains the suspicion that the investigation assigned an undue importance to verbal descriptions of the state of language shift and the location of the language border, and that the

results would have been more reliable had some alternative method of scoring perceptions been devised. It is also clear that the method was based upon the assumption that respondents possessed a more accurate geographical knowledge of the study areas, and perhaps also a more accurate sense of distance and direction, than appears to be the case.

Even if a way could be found of counteracting these problems, however, it is still doubtful whether any more detailed picture of opinions and attitudes could be obtained from the general sample of respondents. In view of the complexity of the language patterns found to exist, the discovery that most respondents' opinions are generalised and often inaccurate is scarcely surprising. The two language borders are recognised to exist in general terms, following approximately the course of the linguistic divide. It is in their perception of local detail within the two areas that respondents, almost without exception, are out of date or otherwise inaccurate in their appreciation of changing language patterns, and this applies to localities within even a few miles of their home.

In view of the importance attached, in earlier chapters, to the role of micro-processes and local speaking groups, the general failure to appreciate the state of language shift in particular localities may be significant. The question of scale once again emerges. Speakers can form a general opinion of the survival of Welsh or Breton in national or even regional terms (though even here there

may be considerable inaccuracy), but when the investigation is transferred to local details, much greater discrepancies between respondents' opinions are found. This lack of unanimity must be a contributory factor to language disintegration and shift. It would not be likely to exist if the language were universally used by the great majority of the population, but would occur during the period of disintegration. Where opinions are so variable, it becomes difficult to mobilise the local population in concerted counter-measures against the shift.

If this is a valid argument, it may be that opinions and attitudes are significant, if only for rather negative reasons. While the language is in its "established" phase, it is viewed similarly by the whole speaking population in the locality, as essential to the functioning of daily life. When the shift, promoted by extraneous factors such as communications or changing agricultural methods, has reached its point of "disintegration", opinion on its functions and importance becomes much more variable. The disagreement, between individuals and groups, on the desirability of continuing to use the language and on which situations are suitable to its continued use, must be instrumental in destroying morale and confidence amongst the minority language group as a whole, thereby further precipitating the process of language-shift.

8.8 Language models and forecasts:

Nowhere has a final model of language shift

been proposed, nor even one of the shift as it affects Welsh and Breton. Some generalisations of particular features (for example, language and topography in the Welsh area) have been attempted, but the overall impression has been that many of the features encountered have been the unique product of a combination of local factors, topographical, historical and demographic, for example. To propound a model for application elsewhere would be to deny the complexity of the reality, and to assume that every major influence upon language shift has been encompassed within two such restricted areas would be misleading. Future work at much the same scale may eventually enable such a general model to be derived, if necessary.

It may be questioned, however, whether there is any particular merit in constructing such a model. A more practical approach may be that of applying the information obtained to the forecasting of the variety of possible futures for Welsh and Breton within the various localities of the two study areas, and to predicting which areas are next open to the sequence of language shift. This is already being done at the national scale (for example by C.H. Williams, forthcoming), but has been attempted only rarely at the local one. Where it has been done, the purpose has more usually been to further the cause of the invading language than to defend the one which is subjected to the shift. An example is provided by Jernudd (1968), in his study of the shift from various dialects of the For language to Arabic in the Sudan, where successive regimes

are intent upon furthering the diffusion of the latter language in the interests of state unity. Jernudd recommends that if the process is to be hastened, this can be accomplished by a number of means including : taking advantage of the tendency for Arabic to be spoken to strangers, by increasing the number of occasions when speakers of the minority language might travel out of the area (for example, to market) or when strangers might travel into it; increasing the availability and length of formal education; and, particularly interestingly, by stressing the role of For as a language of "tribal" occasions, as opposed to the use of Arabic for business, education and other essential purposes (op.cit. pp.176-8).

Such methods of influencing language are not unfamiliar. While methods of changing language such as those quoted may not have been deliberately used in Wales and Brittany, it is precisely such selective use of situations which is characteristic of Welsh and Breton, and the choice of language for the various situations seems to follow a similar pattern, despite the dissimilar contexts. Jernudd foresees a situation of eventually stable co-existence of the two languages, with each being reserved for its own situations. Whether the shift can be brought about in this controlled manner, in order to achieve one "essential" and one "tribal" language, without the eventual total disintegration of the minority language, is perhaps questionable, especially where one language is of low prestige while the

other is of world status. The attempts to infiltrate Arabic as the universal medium of communication in the Jebel Marra area may prove considerably more successful, from the Arabic point of view, than ever imagined.

The detailed knowledge of processes of language-shift seems thus to be a potent weapon in multilingual societies which are seeking to promote one chosen language. Can the same knowledge be used to bolster minority languages affected by shifts, so that they may more effectively resist the process?

The answer appears to be that if this is possible it is not simply a matter of setting into reverse all of the processes of development which have been contributory factors in the languages' decreased use. It is inconceivable, for example, to recommend that if factors such as increased efficiency of communications or changes in retailing patterns are responsible for language-shifts then such influences should be avoided or discontinued as far as possible. It is to be hoped that minority language maintenance does not necessitate a closed or undeveloped society, but simply one in which speaking thresholds are maintained at a high enough level to enable all languages present to be used customarily and with equal ease, if not always for identical purposes, without precipitating the disappearance of the minority language in question. The example of education, mentioned in 8.6, gives an indication that the school, particularly at its primary level, may be used to provide the minority language with an increased

adaptability and versatility, as well as being a weapon of language distintegration. The same communications systems which initiated or exacerbated the language-shift may be used by minority language speakers to create new language groups in spite of considerable disruption. The likelihood of minority language groups' making such use of changing conditions, however, depends on a number of variables, such as their morale or confidence, their degree or organisation or self - recognition, and these have also to be assessed before realistic language forecasting can be undertaken. For this reason, studies of national identity and of state attitudes, which may influence morale and identity to a great extent, are a useful complement to even the most local of language - studies.

8.9 Geography and language study: in retrospect:

" Les sciences progressent par leurs marges", remarked Jean Brunhes.[1] Such a statement (quoted out of context) calls to mind two aspects of the present study. First, it has attempted to explore some of the territory which separates the disciplines of geography and of linguistics. That if has frequently been far from successful in this aim may be explained by the difficulty, noted at the outset, of applying geographical, particularly cartographic, methods to the study of invisible cultural features such as languages. The same problem may be responsible,

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†: As reported by Mariel Jean-Brunhes Delamarre (1968) and quoted, in turn, by Breton (1975), p.513.

in part, for the lack of lingusitic studies using geographical methods which might supply a ready-made methodology for use in the present instance.

The second aspect of the "margin" theme is not one which Brunhes intended to convey, but it does seem that concentration of the investigation upon the margins of the two language areas, rather than districts within the core areas of Welsh and Breton, has helped to isolate some of the processes of language shift, of which the two borders themselves are a geographical expression. It has appeared, however, especially in the Breton area, that the study areas have been too restricted to encompass all of the phases of the shift, and this problem of scale has been a recurrent one.

Whatever the problems, it is almost certain that they would have been more severe had individual, for example semantic and syntactic, aspects of language been examined. rather than language as a total concept. It is not difficult to understand why R. Breton, as quoted in 1.3, feels that the geographer should consign the analysis of such aspects to the linguistician or other specialist. If this is indeed an appropriate delegation of duties, has the geographer nothing to give to linguistics in return?

The evidence has indicated that the language area does possess distinct sub-areas, associated with the frequency and variety of language use within it. More than this, it has shown that with even the most conceptually

simple of data, the linguistics student, if he were only to set out his information in spatial terms as well as those more usually employed, could gain a quite new perspective on the processes contributing to the changing fortunes of the languages he studies.

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A GEOGRAPHICAL STUDY OF LANGUAGE BORDERS IN WALES AND BRITTANY

A thesis submitted by

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for the degree of Doctor of Philosophy
of the University of Glasgow

October 1978

VOLUME II

(Illustrations and Appendices)

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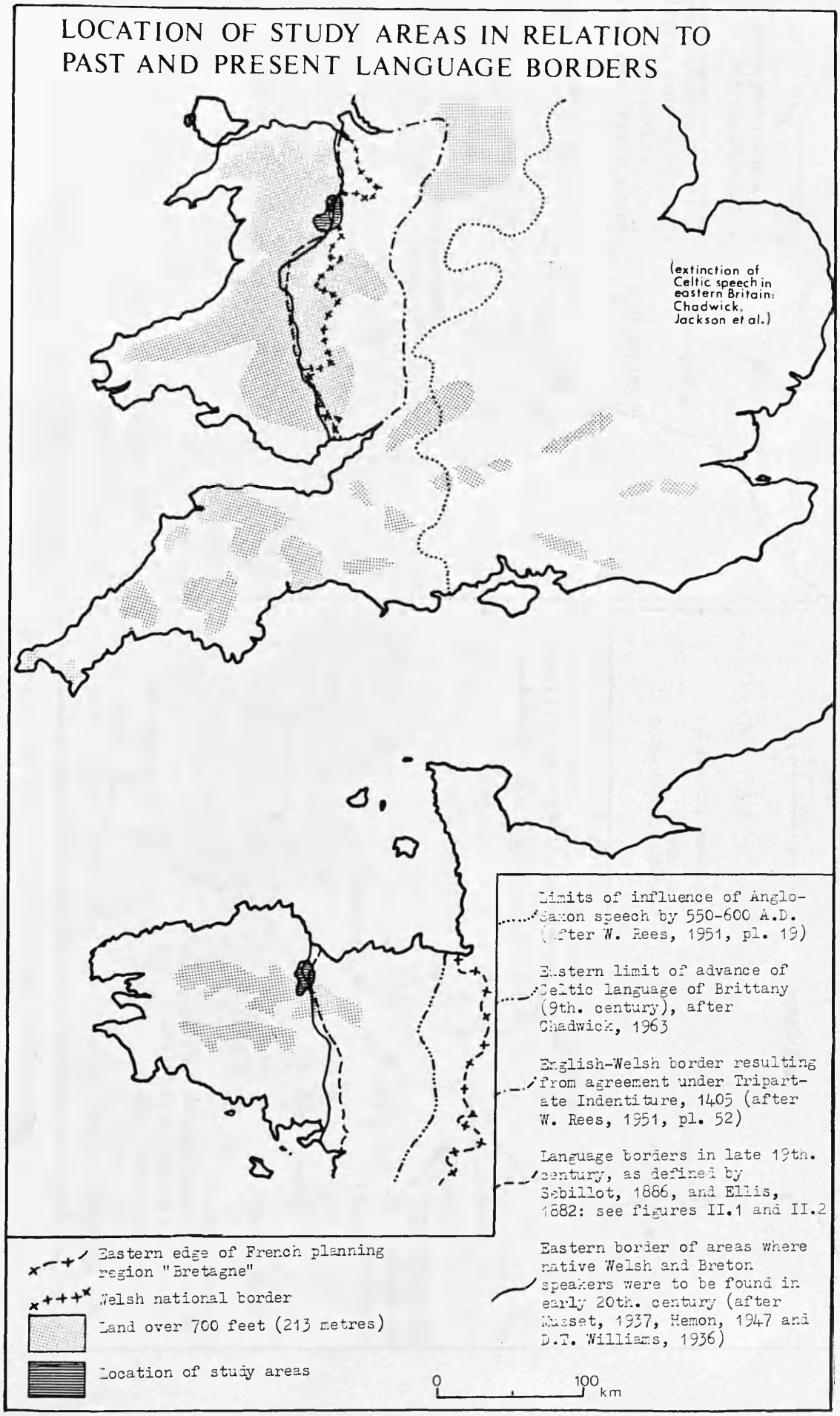
Figure I.1


LOCATION OF STUDY AREAS IN RELATION TO PAST AND PRESENT LANGUAGE BORDERS
(extinction of Celtic speech in eastern Britain: Chadwick, Jackson et al.)
Limits of influence of Anglo-Saxon speech by 550-600 A.D. (after W. Rees, 1951, pl. 19)
Eastern limit of advance of Celtic language of Brittany (9th. century), after Chadwick, 1963
English-Welsh border resulting from agreement under Tripartate Indentiture, 1405 (after W. Rees, 1951, pl. 52)
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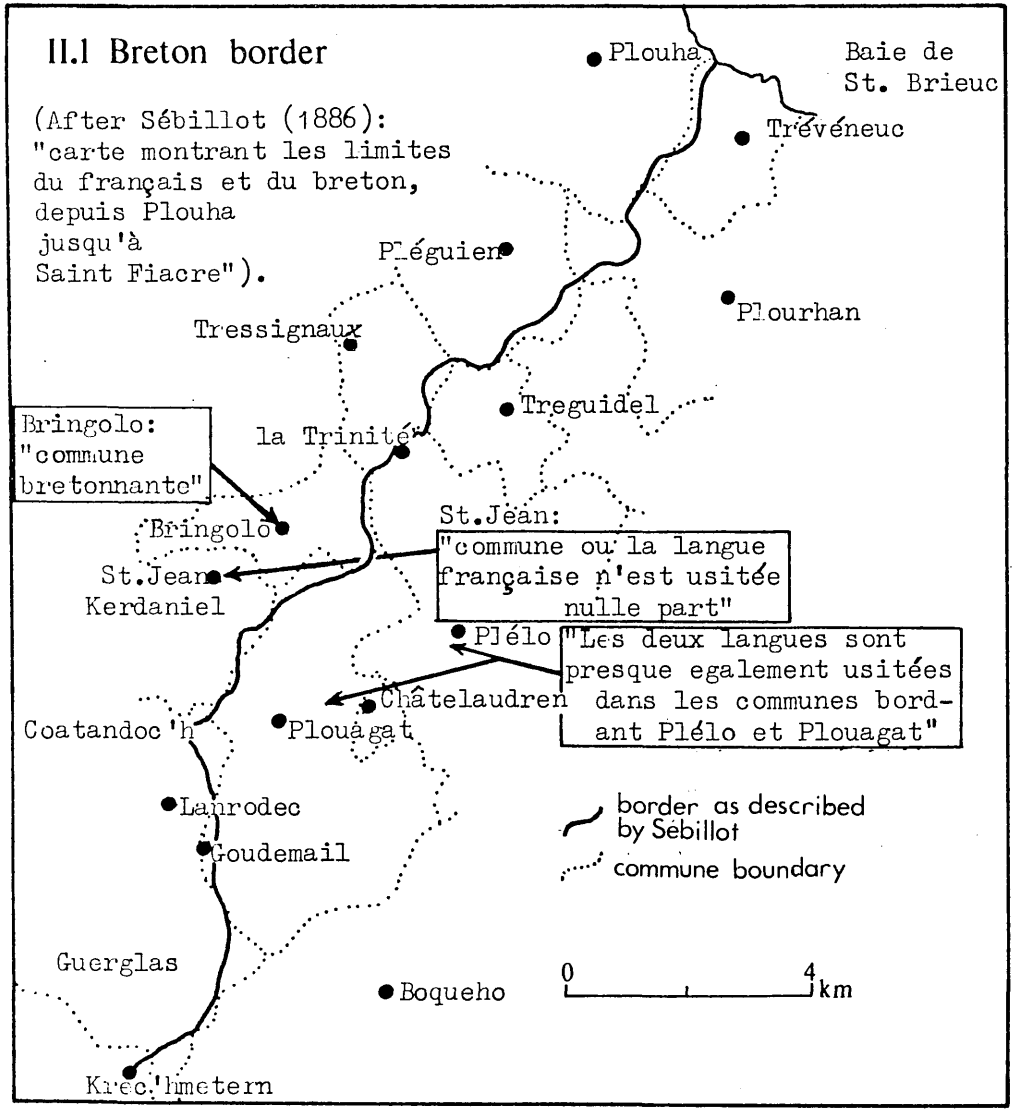
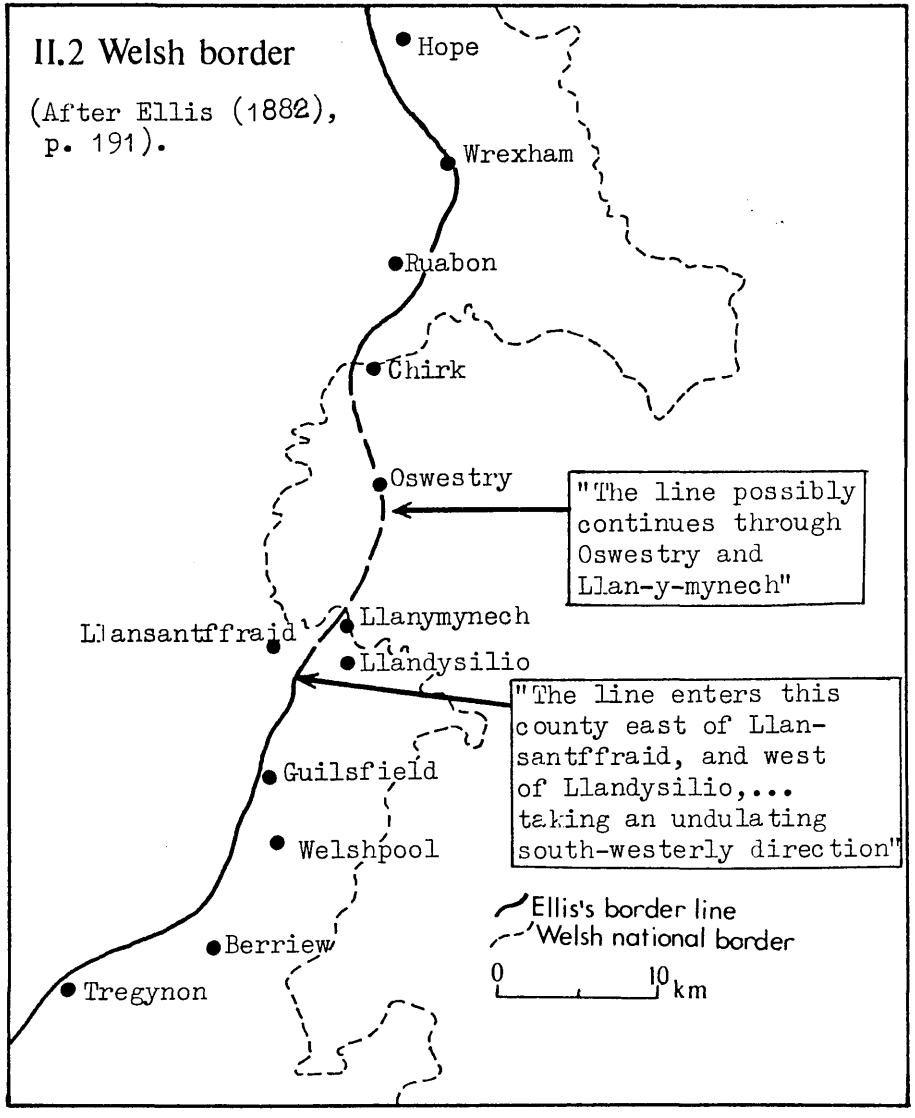
Eastern edge of French planning region "Bretagne"
Welsh national border
Land over 700 feet (213 metres)
Location of study areas
Eastern border of areas where native Welsh and Breton speakers were to be found in early 20th. century (after Musset, 1937, Hemon, 1947 and D.T. Williams, 1936)
0
100 km

Nineteenth-century descriptions of language border locations





Figures II.1, II.2

Figure II.3

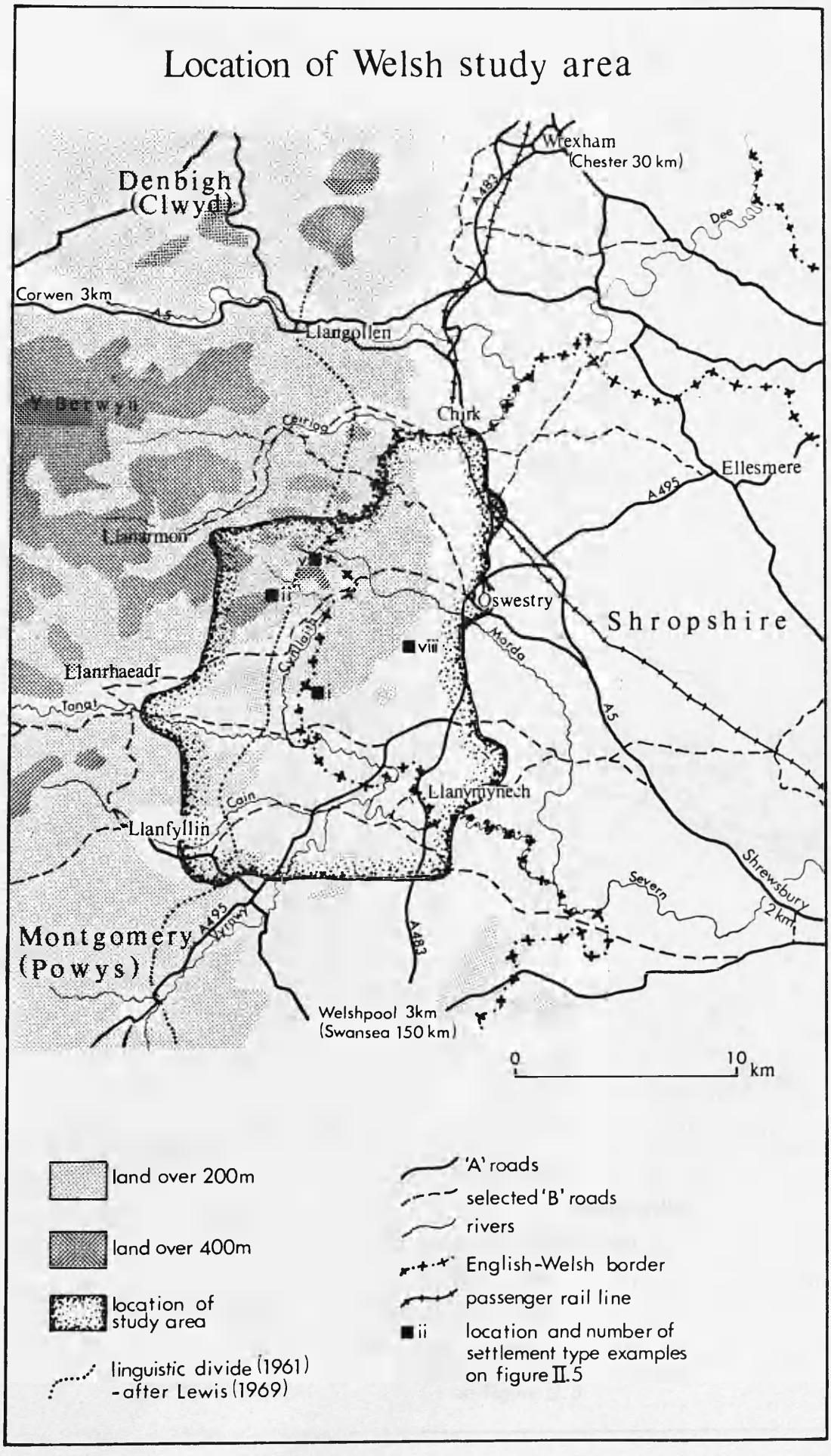

Location of Welsh study area
Denbigh (Clwyd)
Wrexham (Chester 30 km)
A483
Dee
Corwen 3km
A5
Llangollen
Y Berwyn
Ceiriog
Chirk
Ellesmere
A495
Llanarmon
v
ii
Oswestry
Shropshire
viii
Morda
Llanrhaeadr
Cynllaith
i
Tanat
A5
Llanymynech
Cain
Llanfyllin
Severn
Shrewsbury
2 km
Montgomery (Powys)
A495
Rhiw
A483
Welshpool 3km (Swansea 150 km)
0
10 km
land over 200m
land over 400m
location of study area
linguistic divide (1961) - after Lewis (1969)
'A' roads
selected 'B' roads
rivers
English-Welsh border
passenger rail line
ii location and number of settlement type examples on figure II.5

Figure II.4

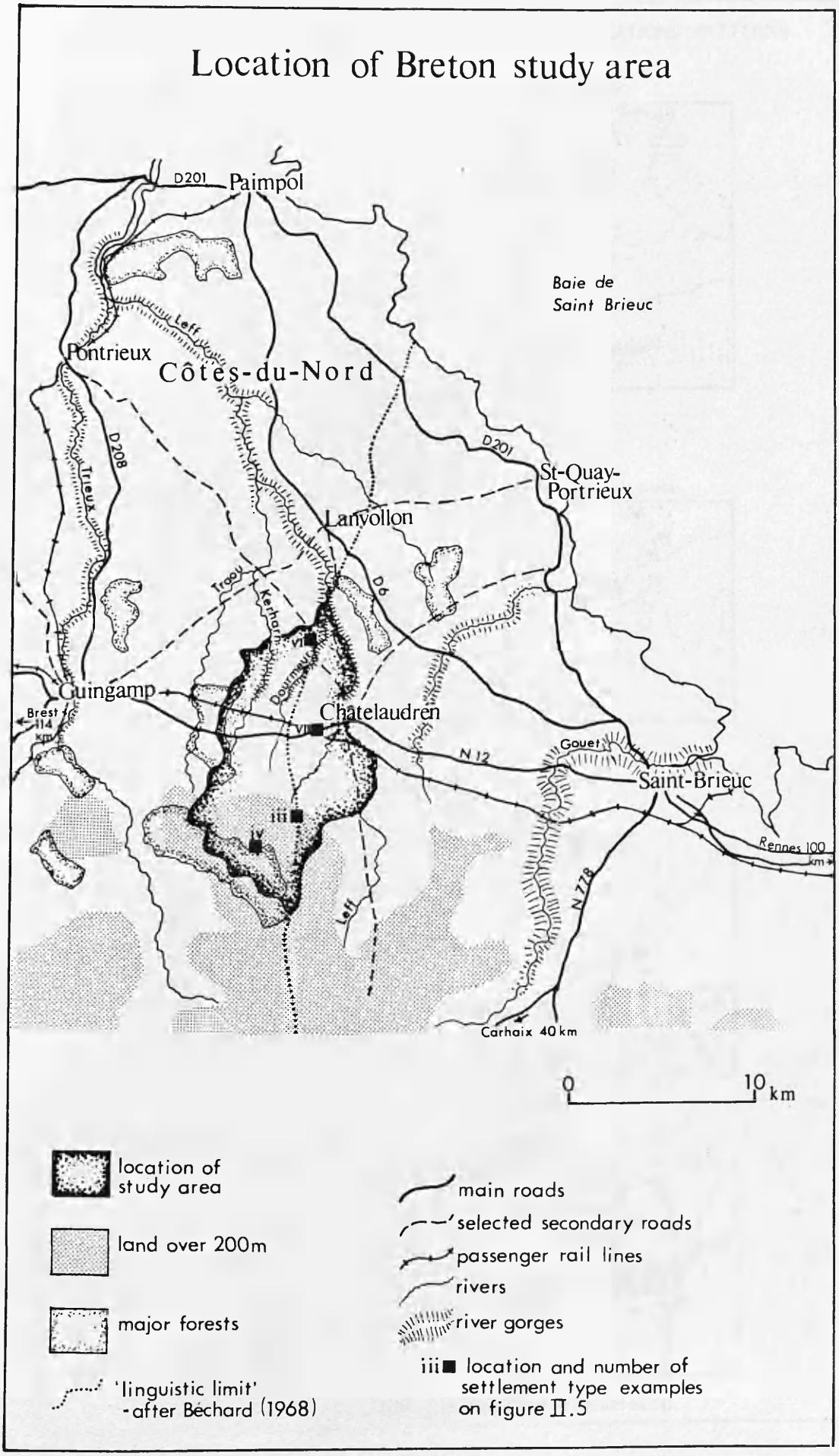
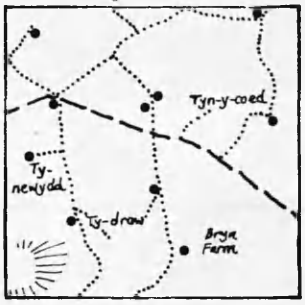

Location of Breton study area
D201
Paimpol
Baie de
Saint Brieuc
Leff
Pontrieux
Côtes-du-Nord
D208
Trieux
D201
St-Quay-
Portrieux
Lanvollon
Traou
Kerhan
D6
VI
Dourmeur
Guingamp
Brest
114
km
Chatelaudren
VII
N 12
Gouet
Saint-Brieuc
iii
iv
Rennes 100
km
N 778
Leff
Carhaix 40 km
0
10 km
location of
study area
land over 200m
major forests
'linguistic limit'
-after Béchard (1968)
main roads
selected secondary roads
passenger rail lines
rivers
river gorges
iii location and number of
settlement type examples
on figure II.5

Figure II.5

SOME TYPES OF RURAL SETTLEMENT AND COMMUNICATIONS PATTERNS

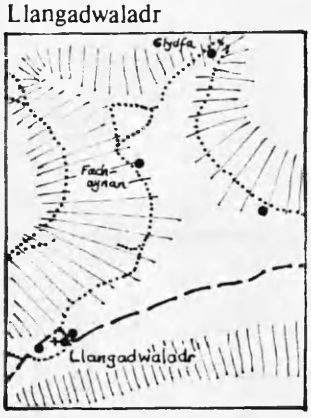
Bryn, Llanyblodwel



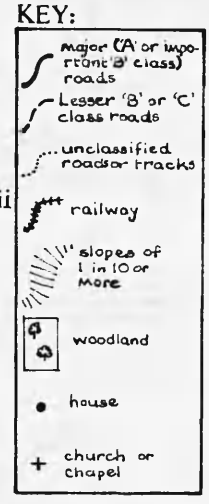
i

Llangadwaladr

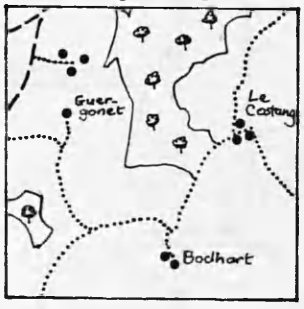
ii



KEY:



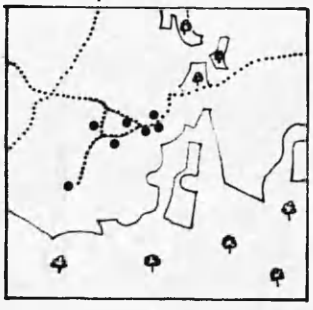
Le Costang, Plouagat



iii

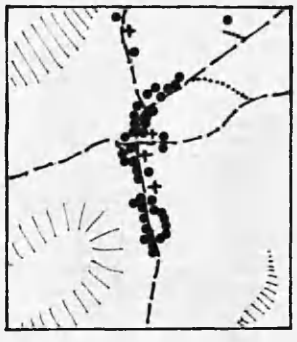
Le Quinquis, Lanrodec

iv



0 500 metres

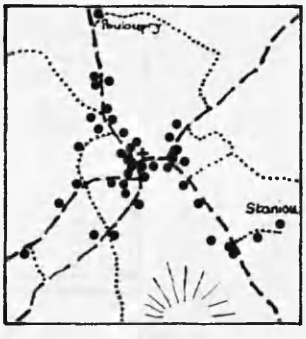
Llansilin



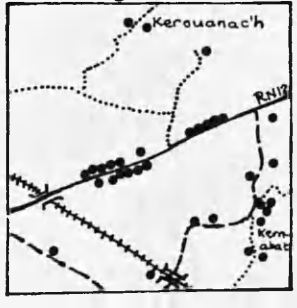
v

Bringolo

vi



Between Châtelaudren and Plouagat



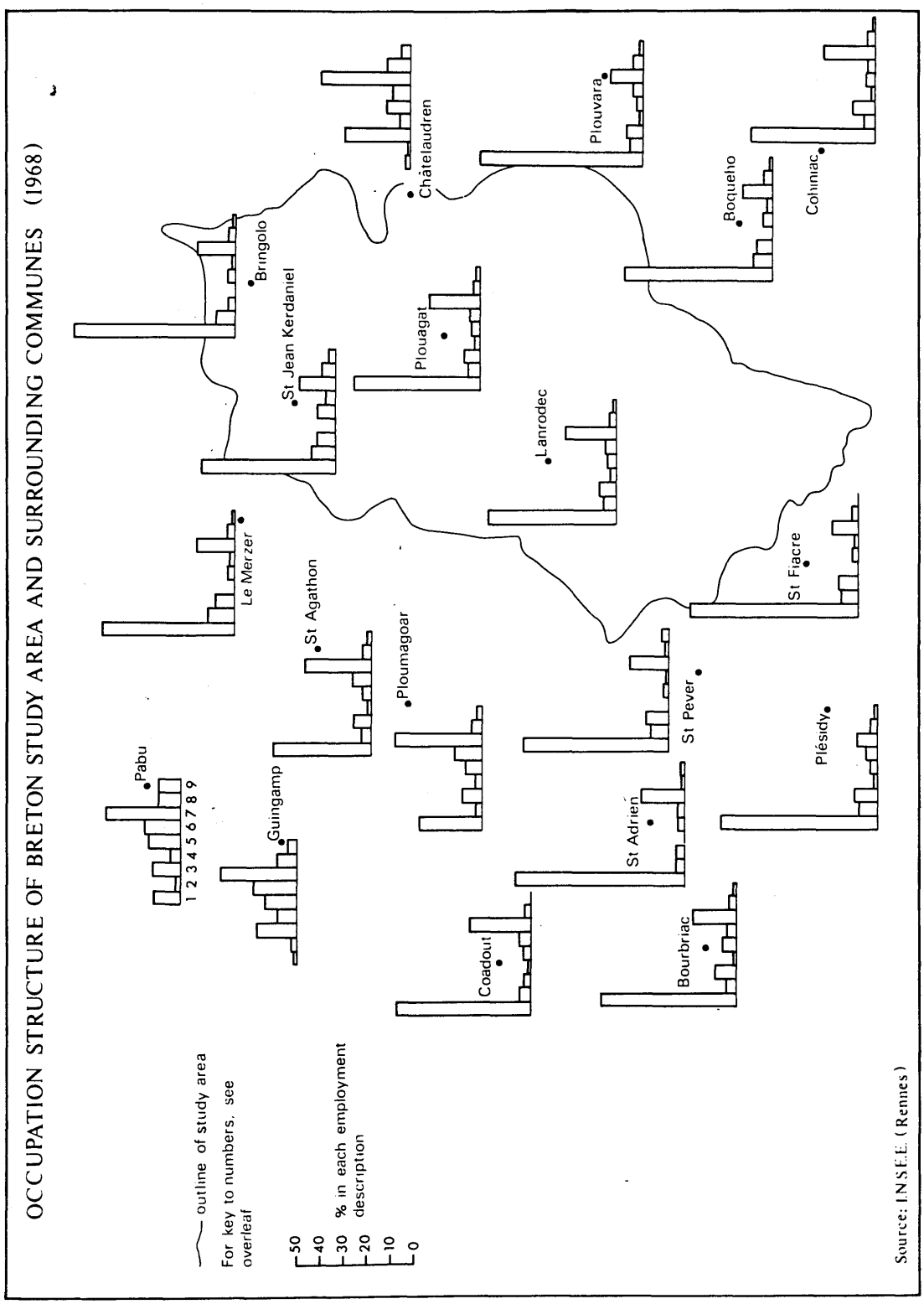
vii

Trefonen

viii

(maps i, ii, v and viii refer to Welsh area, remainder to Breton area)

Figure II.6

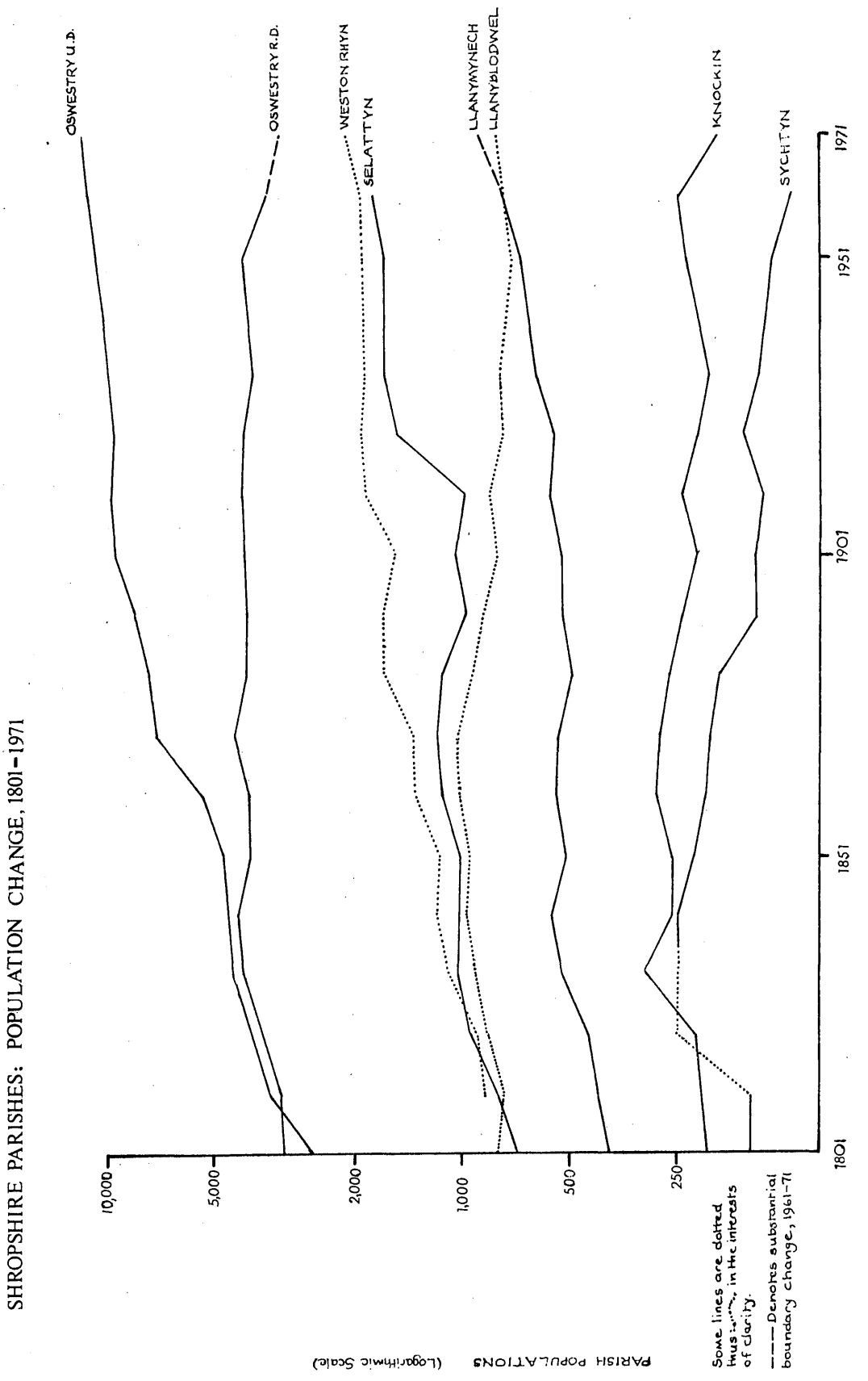

OCCUPATION STRUCTURE OF BRETON STUDY AREA AND SURROUNDING COMMUNES (1968)
outline of study area
For key to numbers, see overleaf
50
40
30
20
10
0
% in each employment description
1 2 3 4 5 6 7 8 9
Pabu
Guingamp
St Agathon
Ploumagoar
Le Merzer
Bringolo
St Jean Kerdaniel
Châtelaudren
Plouagat
Lanrodec
Plouvara
Boquelho
Cohiniac
St Fiacre
St Pever
St Adrien
Coadout
Bourbriac
Plésidy
Source: I.N.S.E.E. (Rennes)

Key to figure II.6:

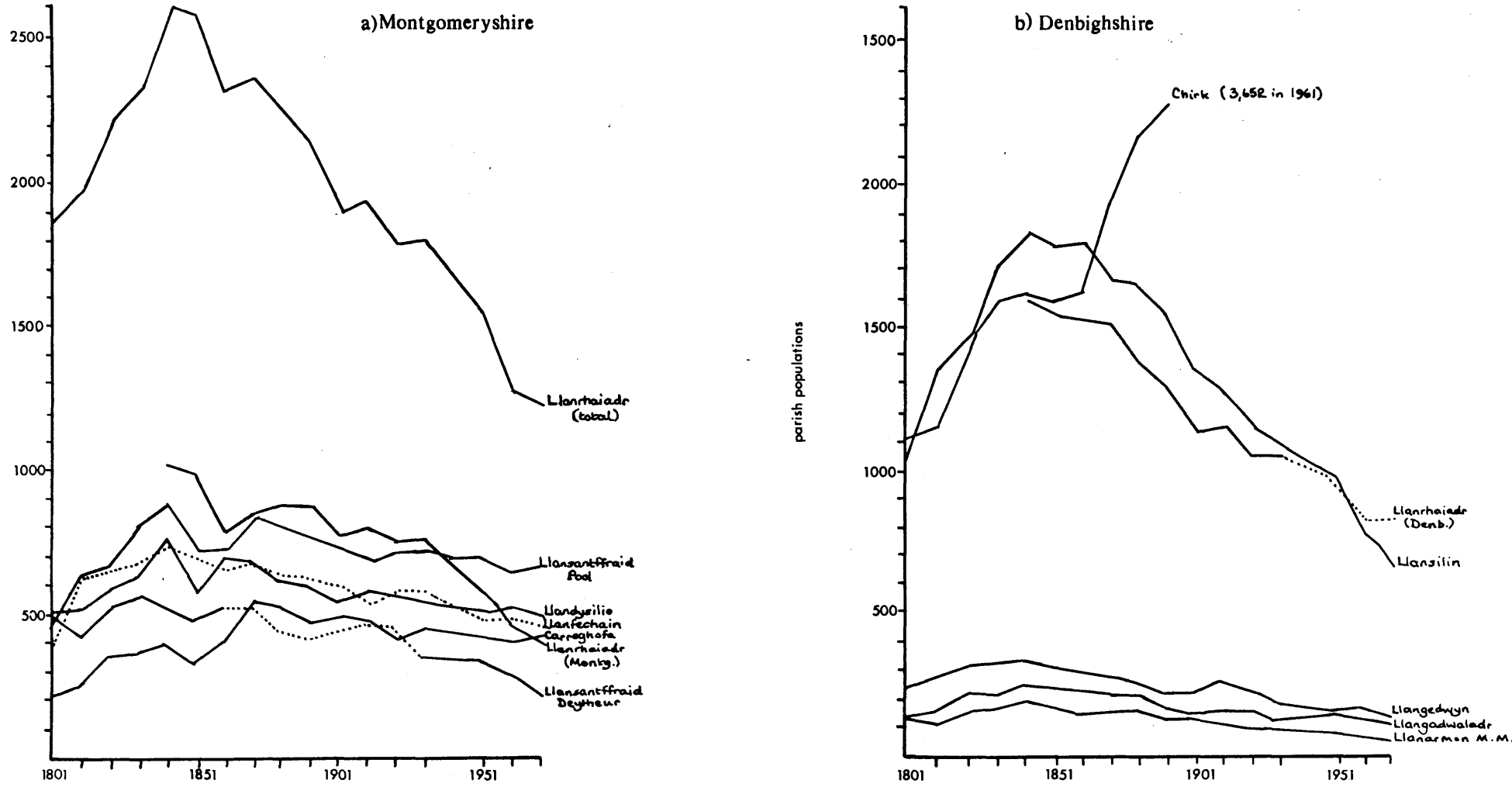
Column no.	employment description
1	Agriculteurs exploitants (land-owning or tenant farmers)
2	Salariés agricoles (agricultural labourers)
3	Patrons de l'industrie et du commerce (commercial and industrial owners and owner-operators)
4	Professions libérales et cadres supérieurs (Professions and upper management)
5	Cadres moyens (middle management)
6	Employés (clerical and office workers)
7	Ouvriers (manual workers)
8	Personnels de service (personal and tertiary service workers)
9	Autres catégories (others)

Source: I.N.S.E.E. Recensement de la population de 1968 (Dépouillement exhaustif, table E.9 - "Population totale d'après la CS individuelle -- ménages et population des ménages d'après la CS du chef de ménage")

Figure II.7


SHROPSHIRE PARISHES: POPULATION CHANGE, 1801-1971
OSWESTRY U.D.
OSWESTRY R.D.
WESTON RHYN
SELATTYN
LLANYMYNECH
LLANYBLODWEL
KNOCKIN
SYCHTYN
10,000
5,000
2,000
1,000
500
250
1801
1851
1901
1951
1971
PARISH POPULATIONS (Logarithmic Scale)
Some lines are dotted thus in the interests of clarity.
—— Denotes substantial boundary change, 1961-71

POPULATION CHANGE, 1801–1971



(some lines are drawn thus in the interests of legibility)

Source: Census reports, 1801 – 1971

Figure II.8

Figure II.9

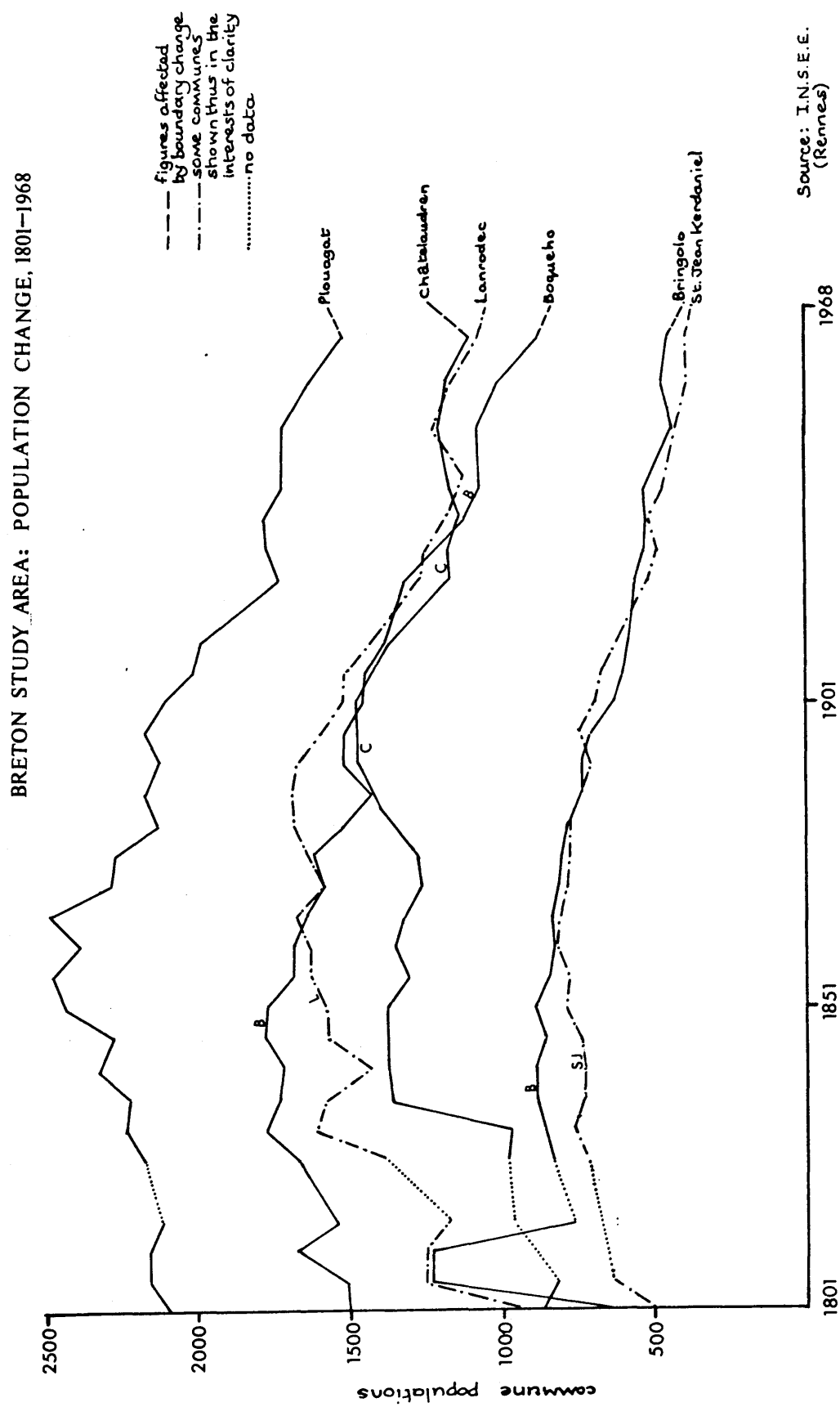

BRETON STUDY AREA: POPULATION CHANGE, 1801–1968
figures affected by boundary change
some communes shown thus in the interests of clarity
no data
Plougat
Châteaudren
Lanrodec
Boquého
Bringolo
St. Jean Kerdaniel
B
C
SJ
commune populations
2500
2000
1500
1000
500
1801
1851
1901
1968
Source: I.N.S.E.E. (Rennes)

Figure II.10

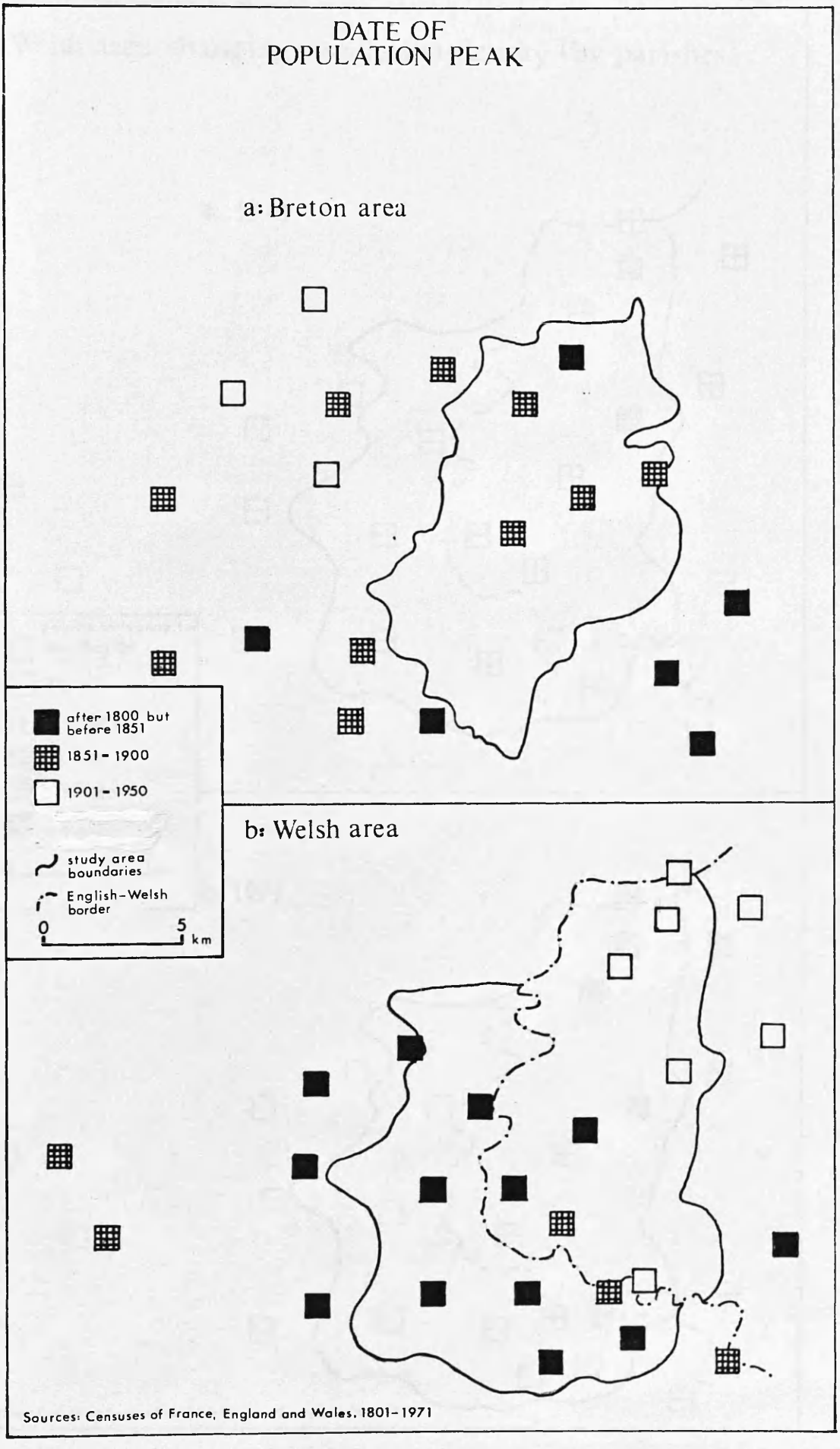

DATE OF
POPULATION PEAK
a: Breton area
b: Welsh area
after 1800 but before 1851
1851 - 1900
1901 - 1950
study area boundaries
English-Welsh border
0
5
km
Sources: Censuses of France, England and Wales, 1801-1971

Figure II.11 (i)

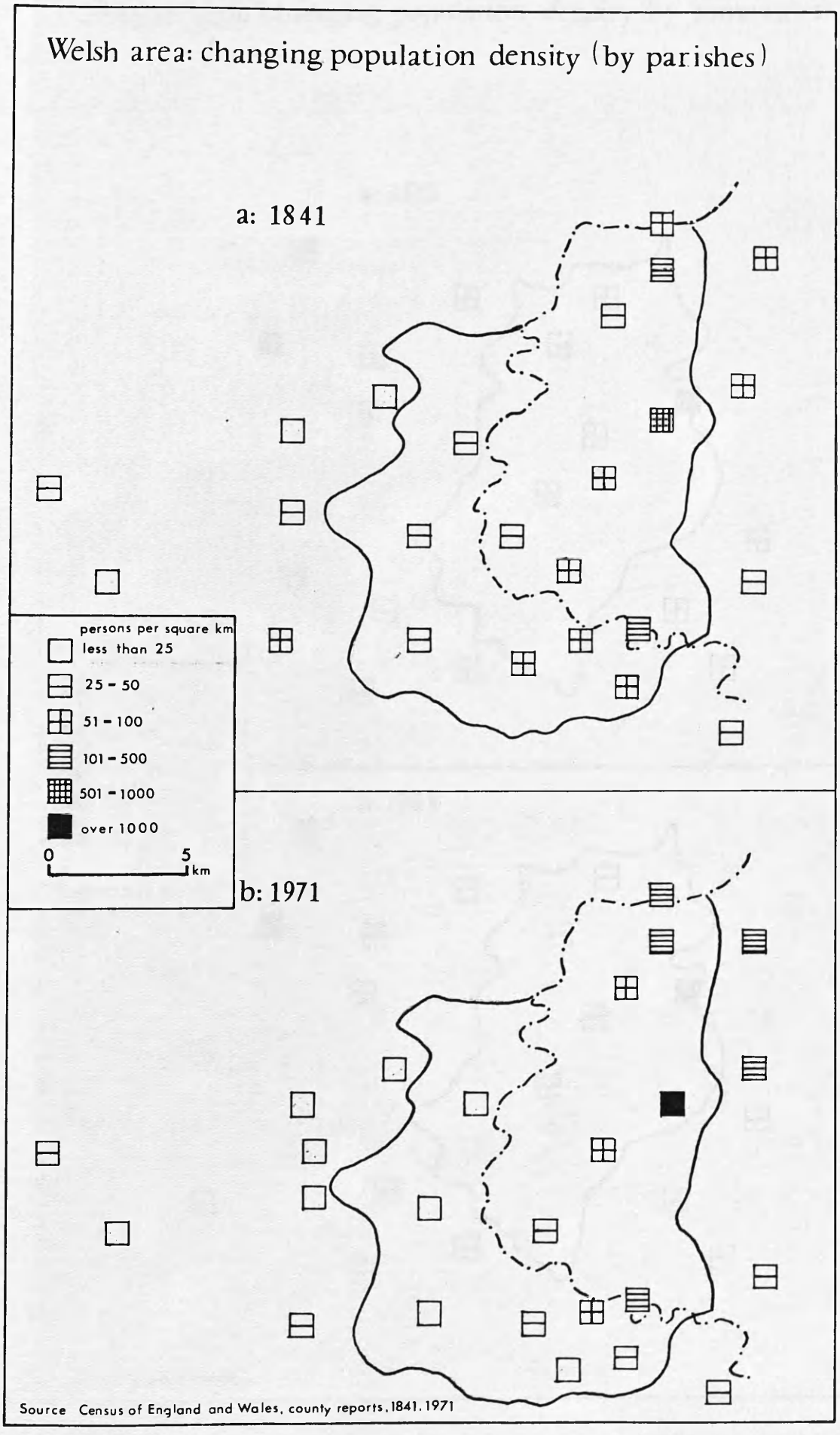


Figure II.11 (ii)

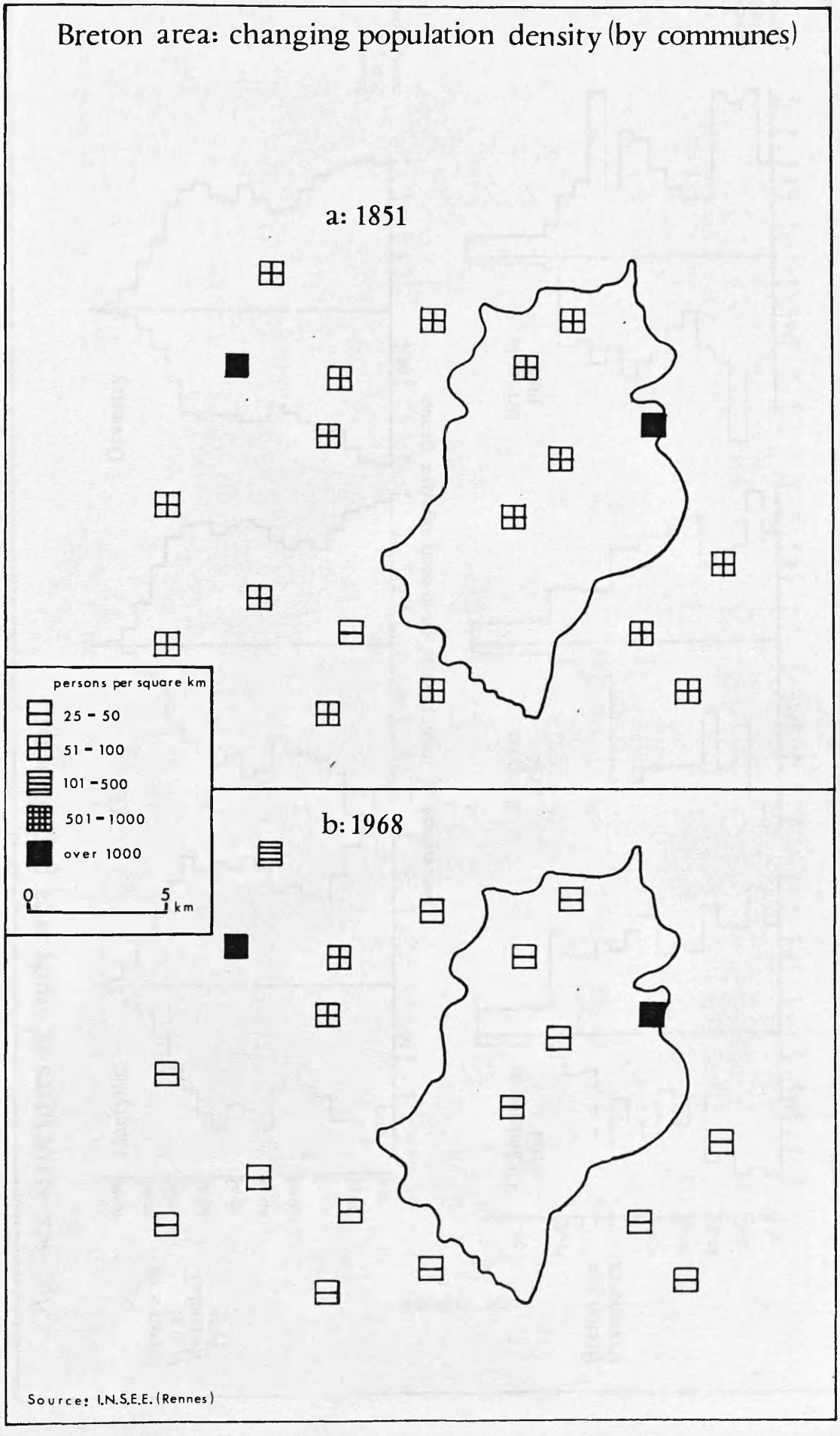


Figure II.12

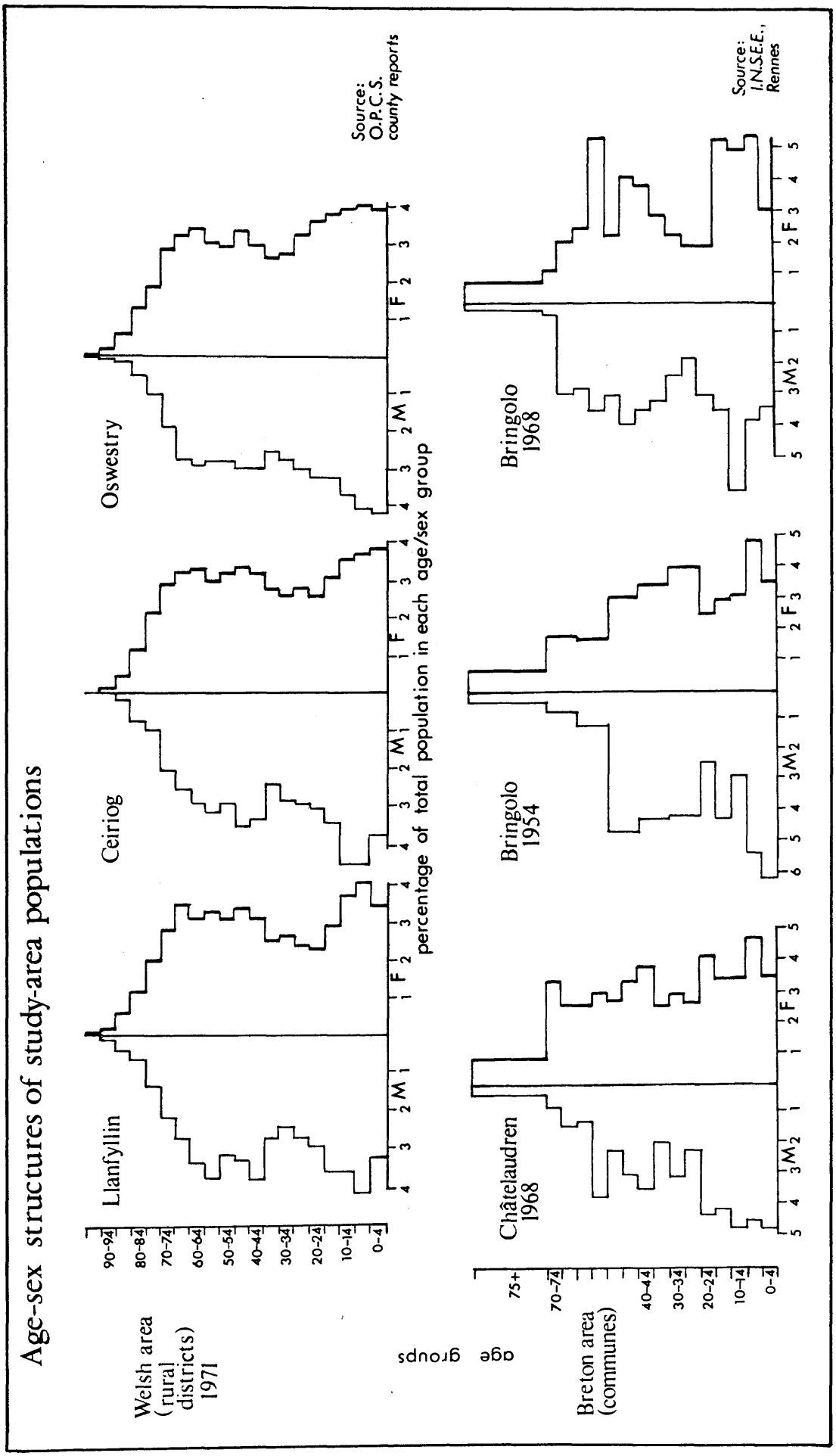

Age-sex structures of study-area populations
Welsh area (rural districts) 1971
Llanfyllin
Ceiriog
Oswestry
Source: O.P.C.S. county reports
Breton area (communes)
Châtelaudren 1968
Bringolo 1954
Bringolo 1968
Source: I.N.S.E.E., Rennes
age groups
0-4
10-14
20-24
30-34
40-44
70-74
75+
percentage of total population in each age/sex group

Figure II.13

Age-structure of Breton agricultural work force, 1968

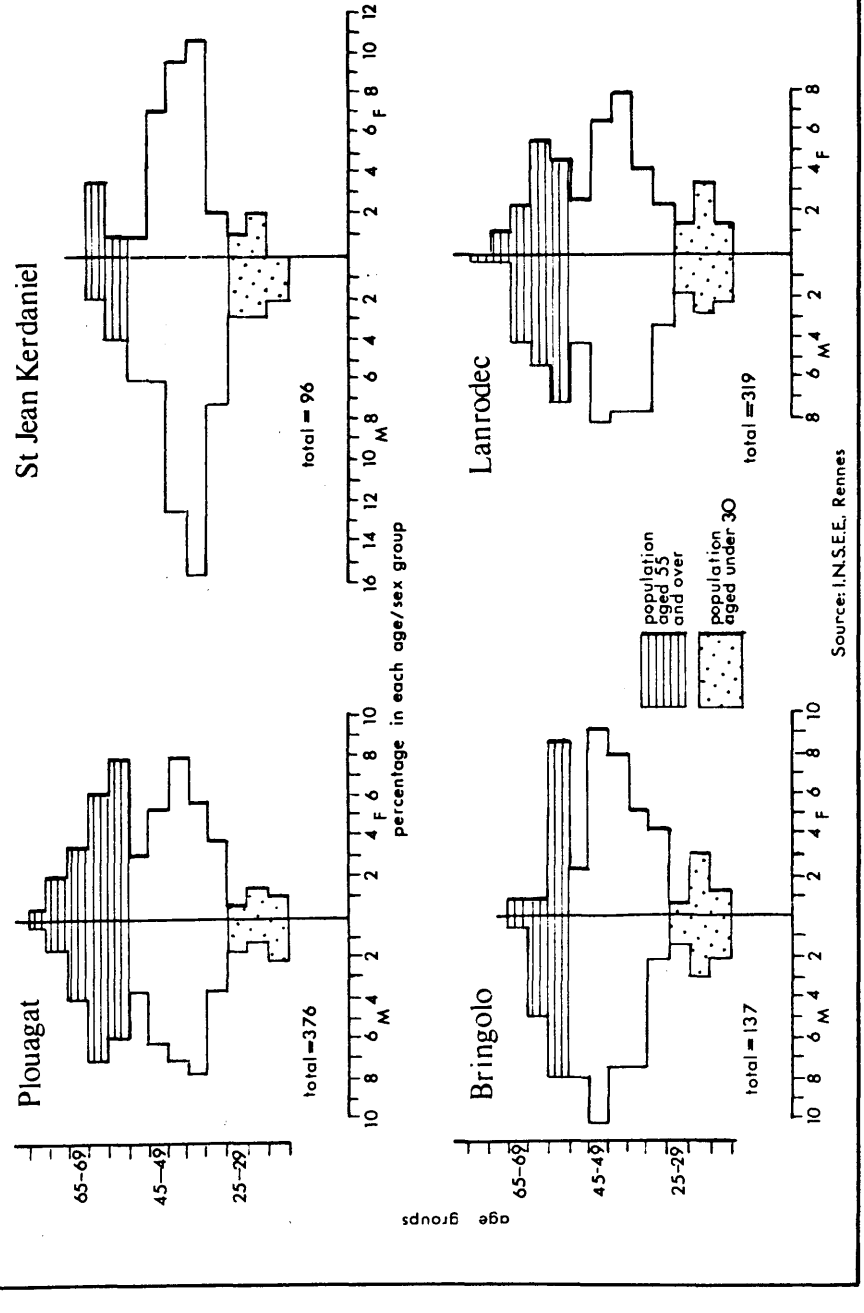


Figure II.14

Age structure and language spoken in a hypothetical commune

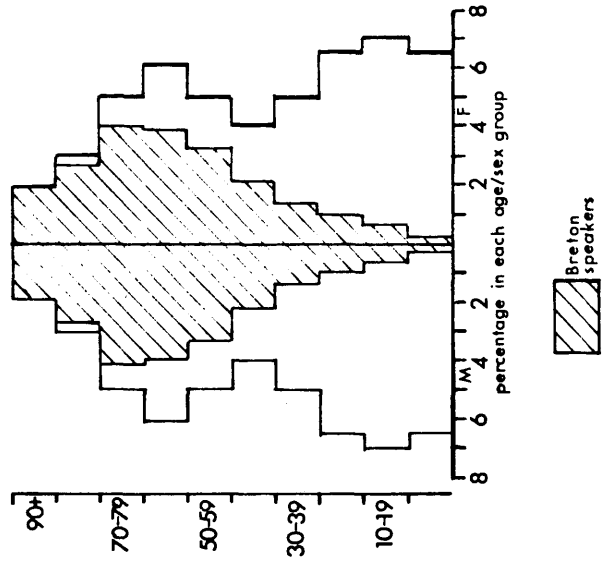
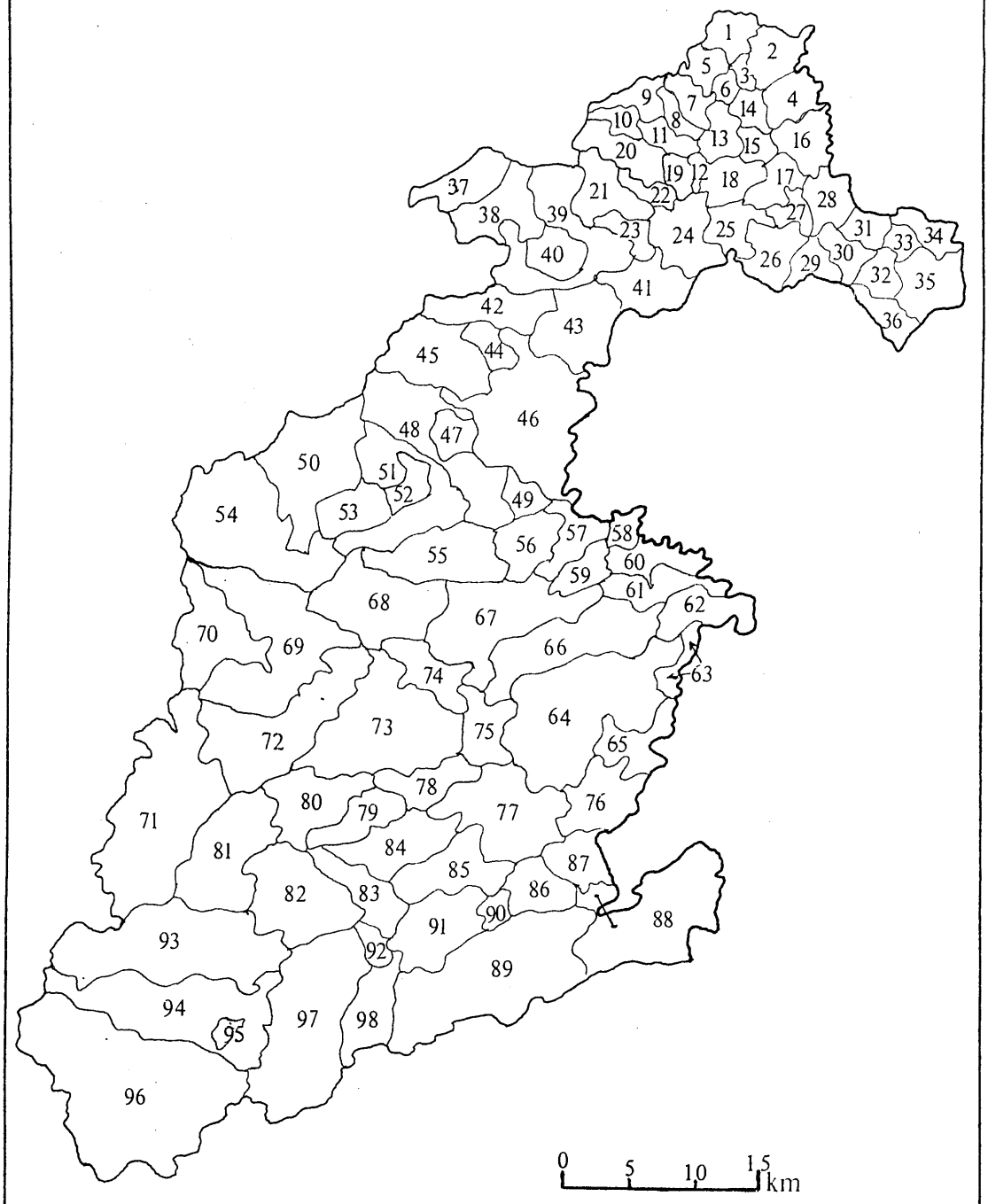


Figure III. 1

EXTENDED WELSH STUDY AREA: PARISHES USED AS A BASIS FOR CENSUS INFORMATION, 1921-71



(For key to numbers see over)

Key to figure III.1

1 Burton
2 Allington
3 Marford and Hoseley
4 Holt
5 Llay
6 Gresford
7 Gwersyllt
8 Broughton
9 Brymbo
10 Minera
11 Bersham
12 Erddig
13 Wrexham
14 Bieston
15 Abenbury
16 Isycoed
17 Sesswick
18 Marchwiel
19 Esclusham Below
20 Esclusham Above
21 Penycae
22 Rhosllanerchrugog
23 Cefn
24 Ruabon
25 Erbistock
26 Overton
27 Bangor
28 Worthenbury
29 Penley
30 Halghton
31 Willington
32 Hanmer
33 Tybroughton
34 Isycoed
35 Bronington
36 Bettisfield
37 Bryneglwys
38 Llantysilio
39 Llangollen Rural
40 Llangollen Urban
41 Chirk
42 Llansantffraid Glynceiriog
43 Glyntraian
44 Llangadwaladr
45 Llanarmon Dyffryn Ceiriog
46 Llansilin
47 Llanarmon Mynydd Mawr
48 Llanrhaeadr yn Mochnant
49 Llangedwyn
50 Llangynog
51 Llanrhaeadr-ym-Mochnant
52 Pennant
53 Hirnant
54 Llanwddyn
55 Llanfyllin
56 Llanfechain
57 Llansantffraid Pool
58 Carreghofa
59 Llansantffraid Deytheur
60 Llandysilio
61 Llandrinio
62 Bausley
63 Middletown
64 Welshpool
65 Trelystan
66 Guilsfield Without
67 Meifod
68 Llanfihangel
69 Llangadfan
70 Garthbeibio
71 Llanbrynmair
72 Llanerfyl
73 Llanfair Caereinion
74 Llangyniew
75 Castle Caereinion Rural
76 Forden
77 Berriew
78 Manafon
79 Llanwyddelan
80 Llanllugan
81 Carno
82 Llanwnog
83 Aberhafesp
84 Tregynon
85 Bettws
86 Llandyssil
87 Montgomery
88 Churchstoke
89 Kerry
90 Llanmerewig
91 Newtown and Llanllwchaiarn
92 Penstrowed
93 Trefeglwys
94 Llanidloes Without
95 Llanidloes
96 Llangurig
97 Llandinam
98 Mochdre

Parish names, spellings and boundaries are as constituted on the 1:100,000 Ordnance Survey Administrative Areas Diagrams published since the Local Government Act of 1972.

Figure III. 2

PERCENTAGE OF PARISH POPULATIONS ABLE TO SPEAK WELSH, 1921

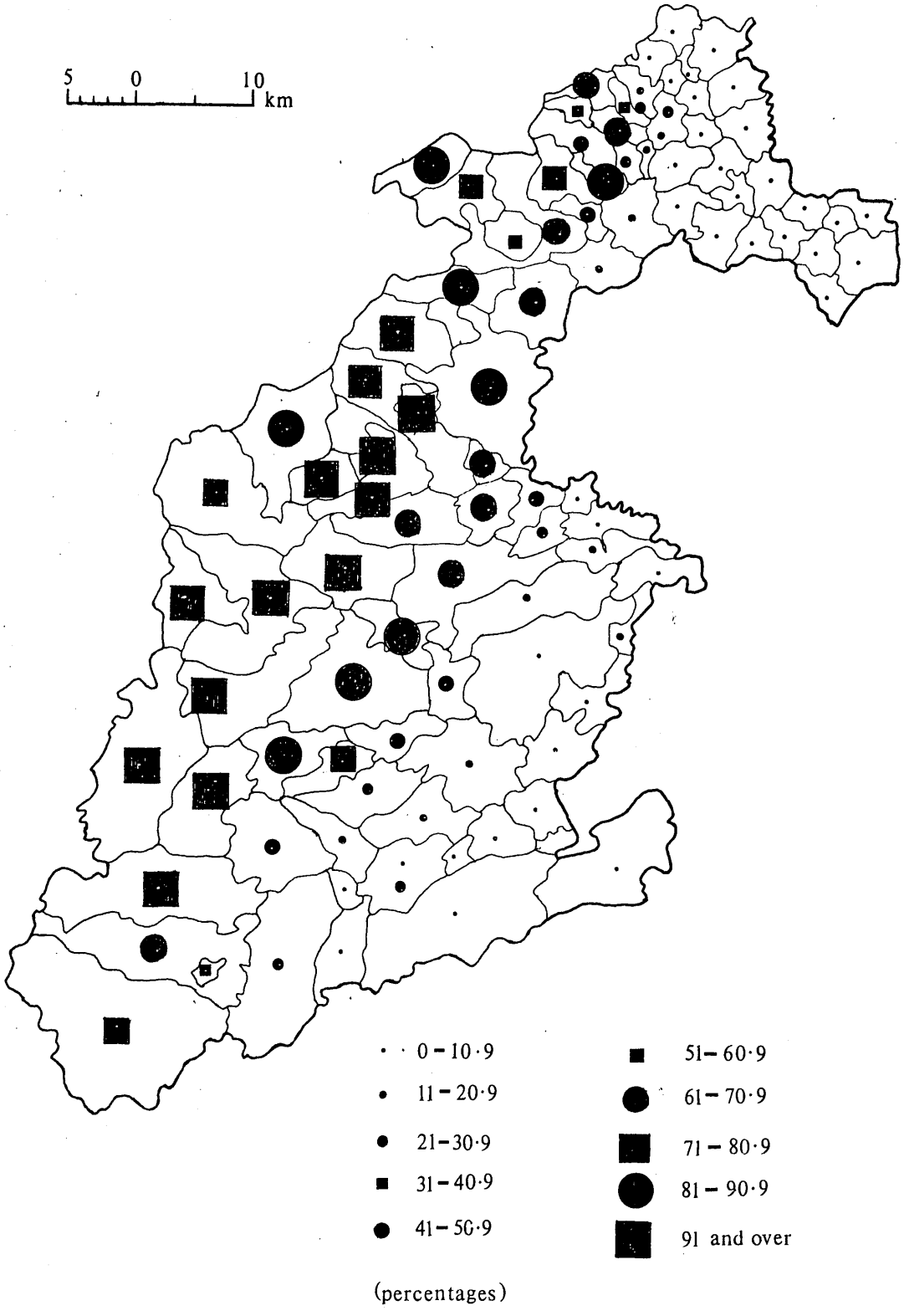


Figure III.3

PERCENTAGE OF PARISH POPULATIONS ABLE TO SPEAK WELSH, 1971

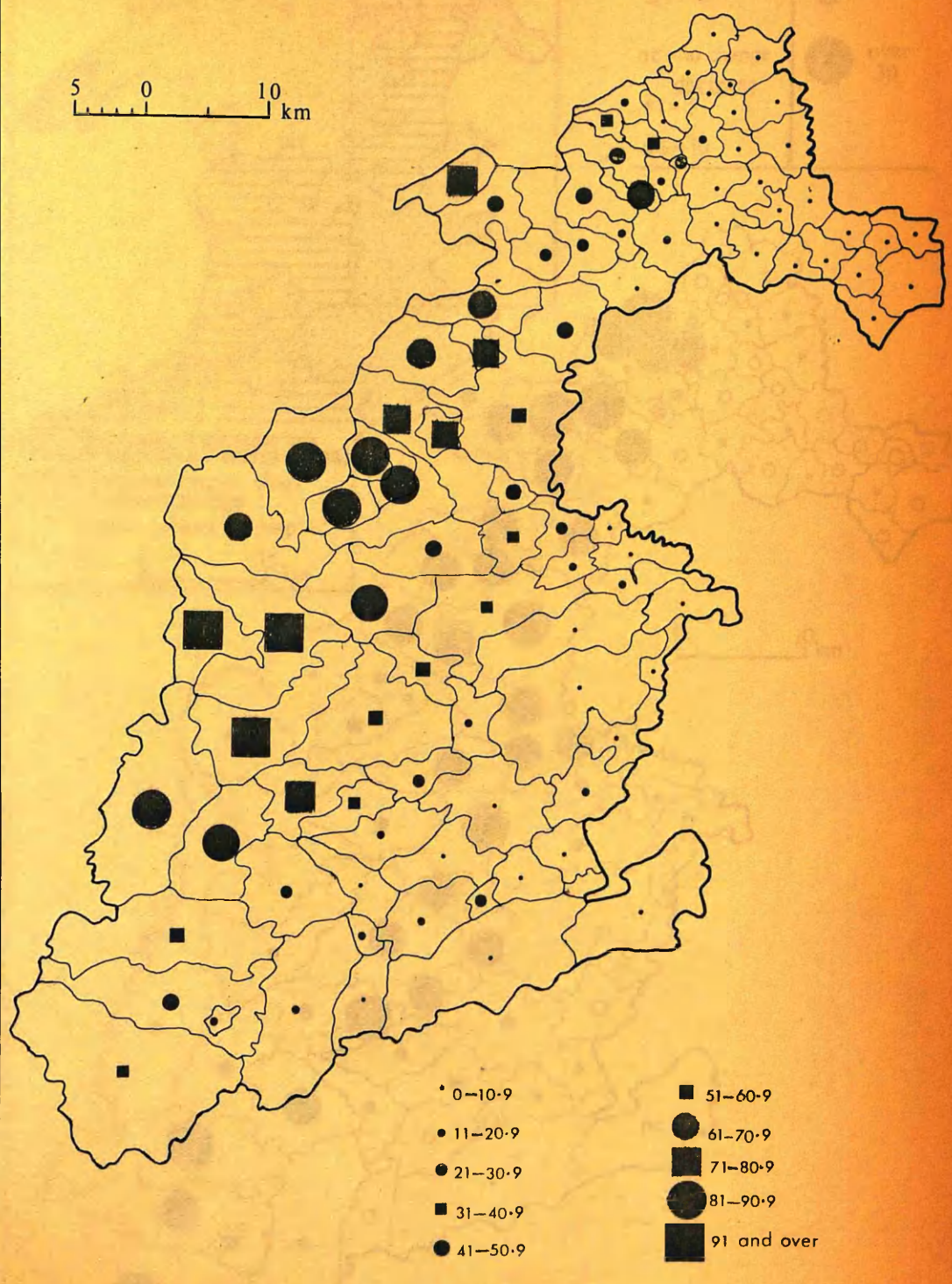


Figure III.3
PERCENTAGE OF PARISH POPULATIONS ABLE TO SPEAK WELSH, 1971

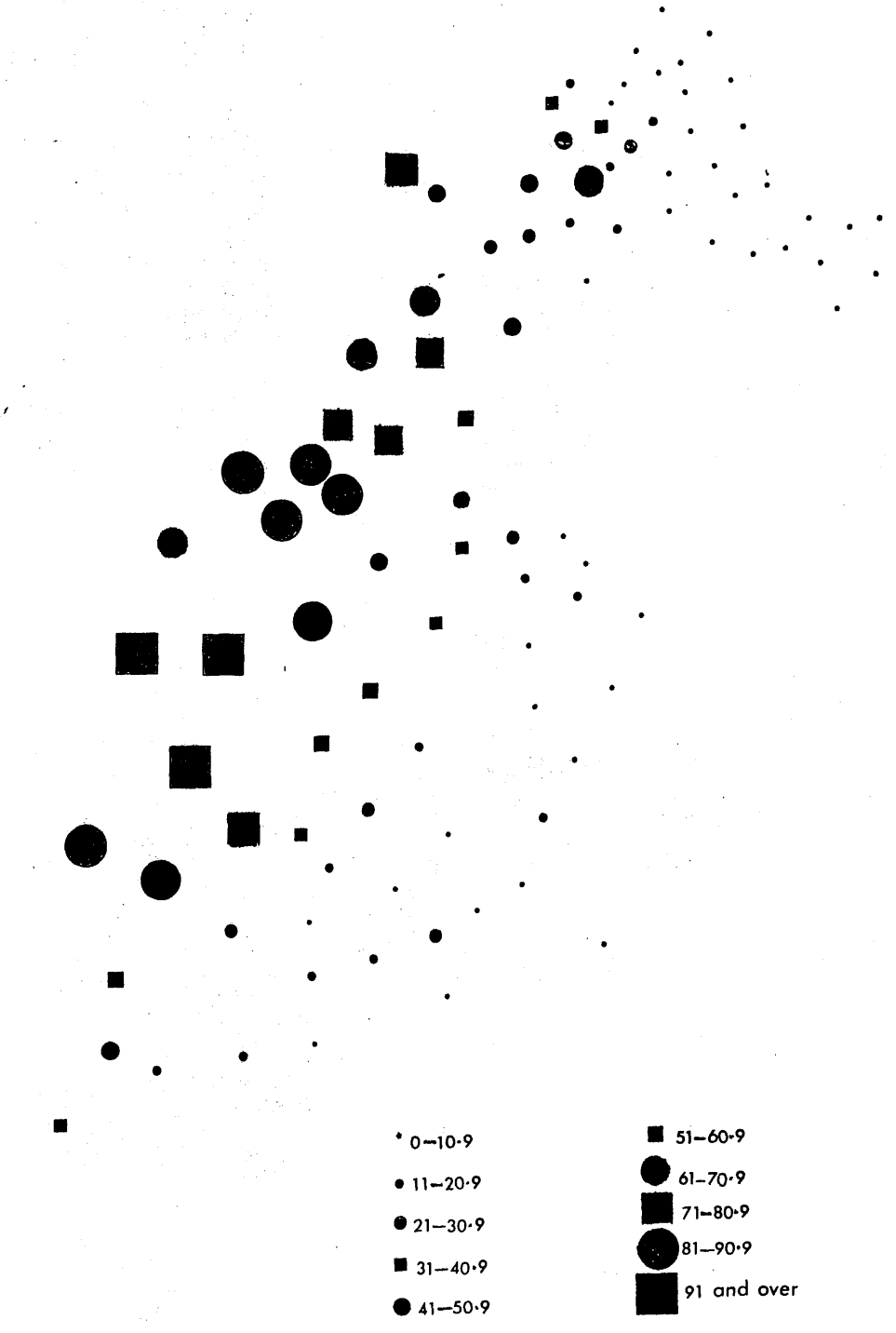
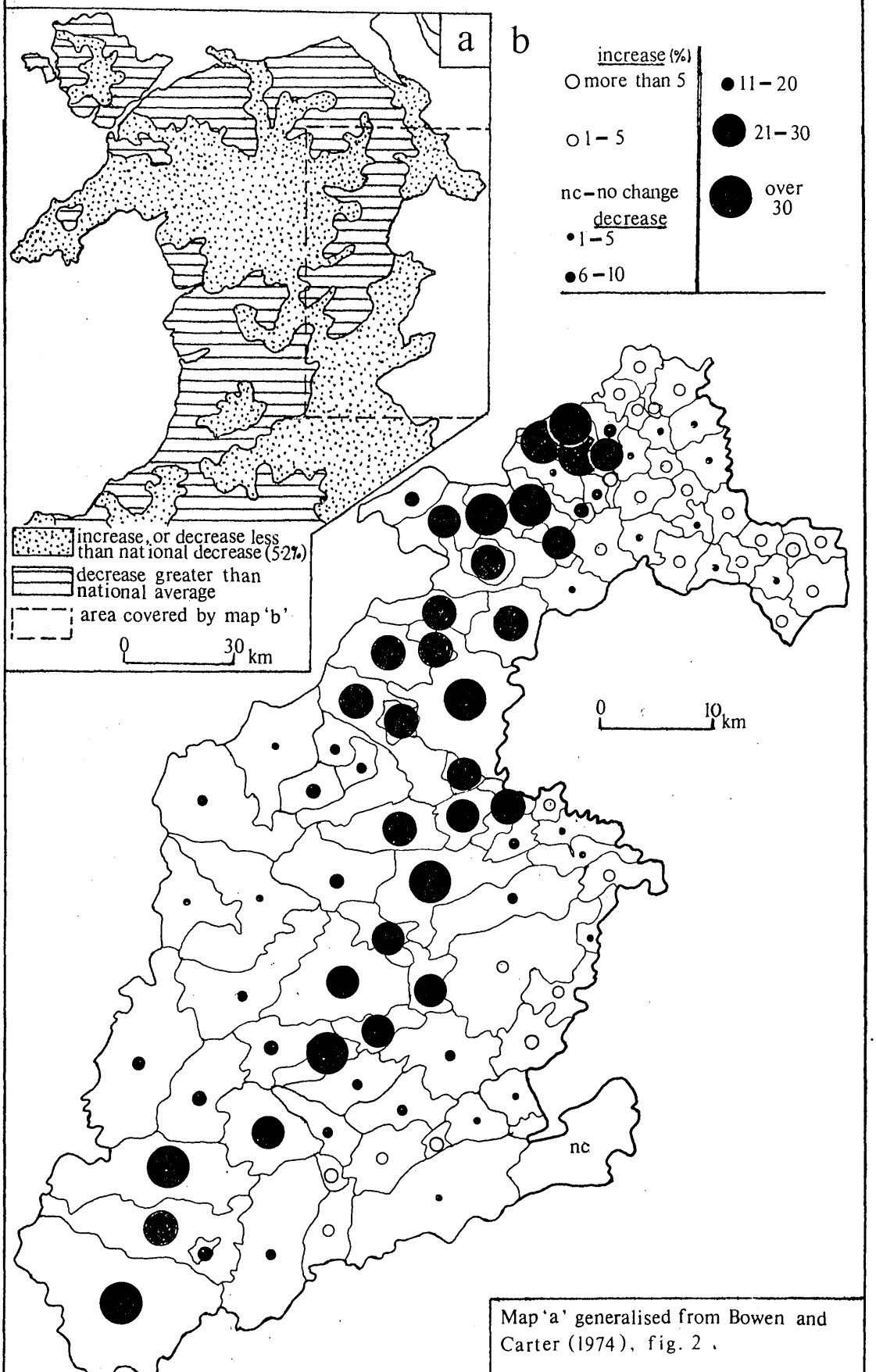


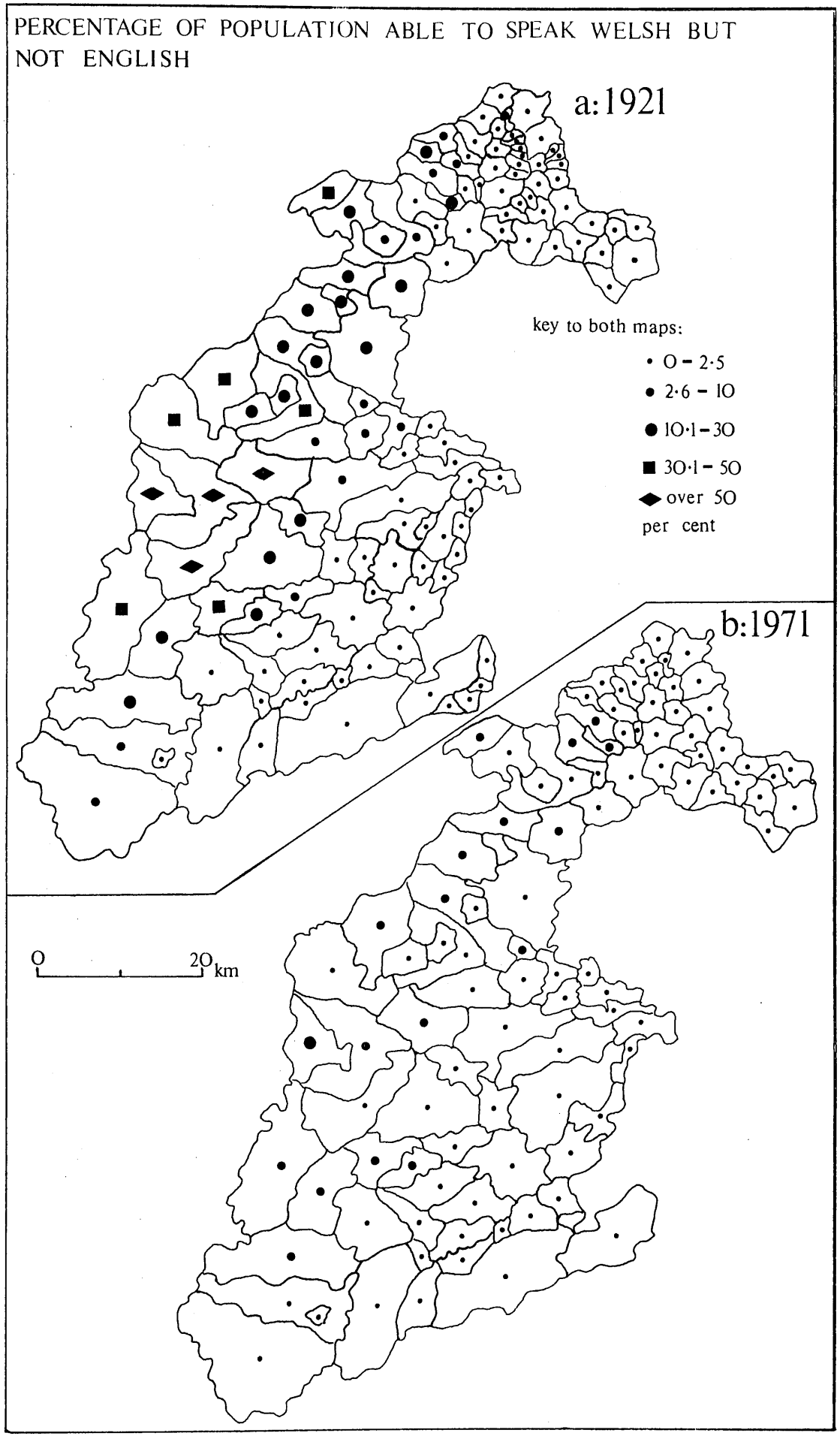
Figure III. 4

(a)CHANGE IN PERCENTAGE OF POPULATION OVER THREE ABLE TO SPEAK WELSH IN NORTH WALES, 1961–71. (b)CHANGE IN PERCENTAGE ABLE TO SPEAK WELSH IN STUDY AREA, 1921–71



Map 'a' generalised from Bowen and Carter (1974), fig. 2.

Figure III. 5


PERCENTAGE OF POPULATION ABLE TO SPEAK WELSH BUT NOT ENGLISH
a:1921
key to both maps:
• 0 – 2·5
• 2·6 – 10
● 10·1 – 30
■ 30·1 – 50
◆ over 50
per cent
b:1971
0
20 km

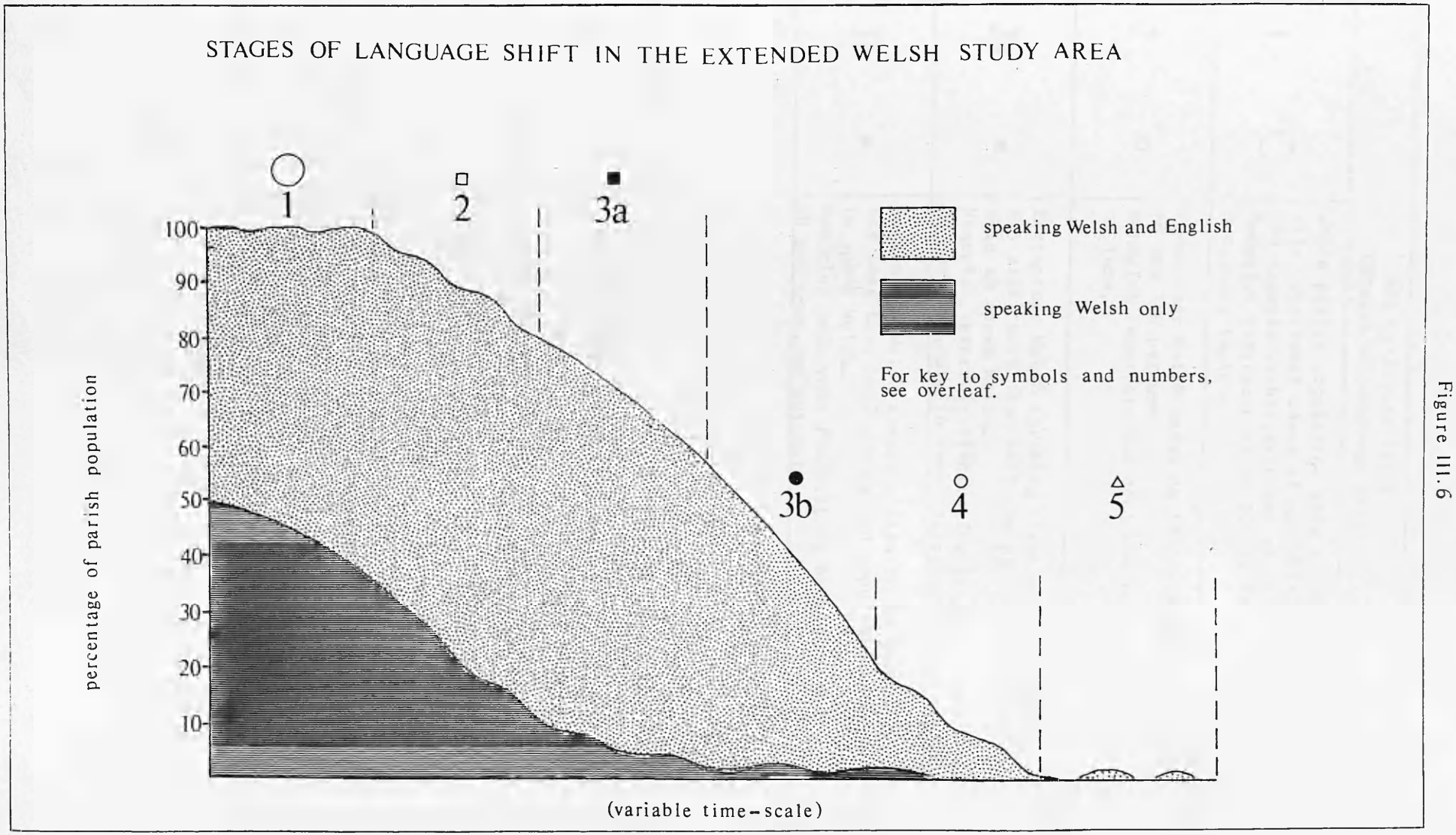
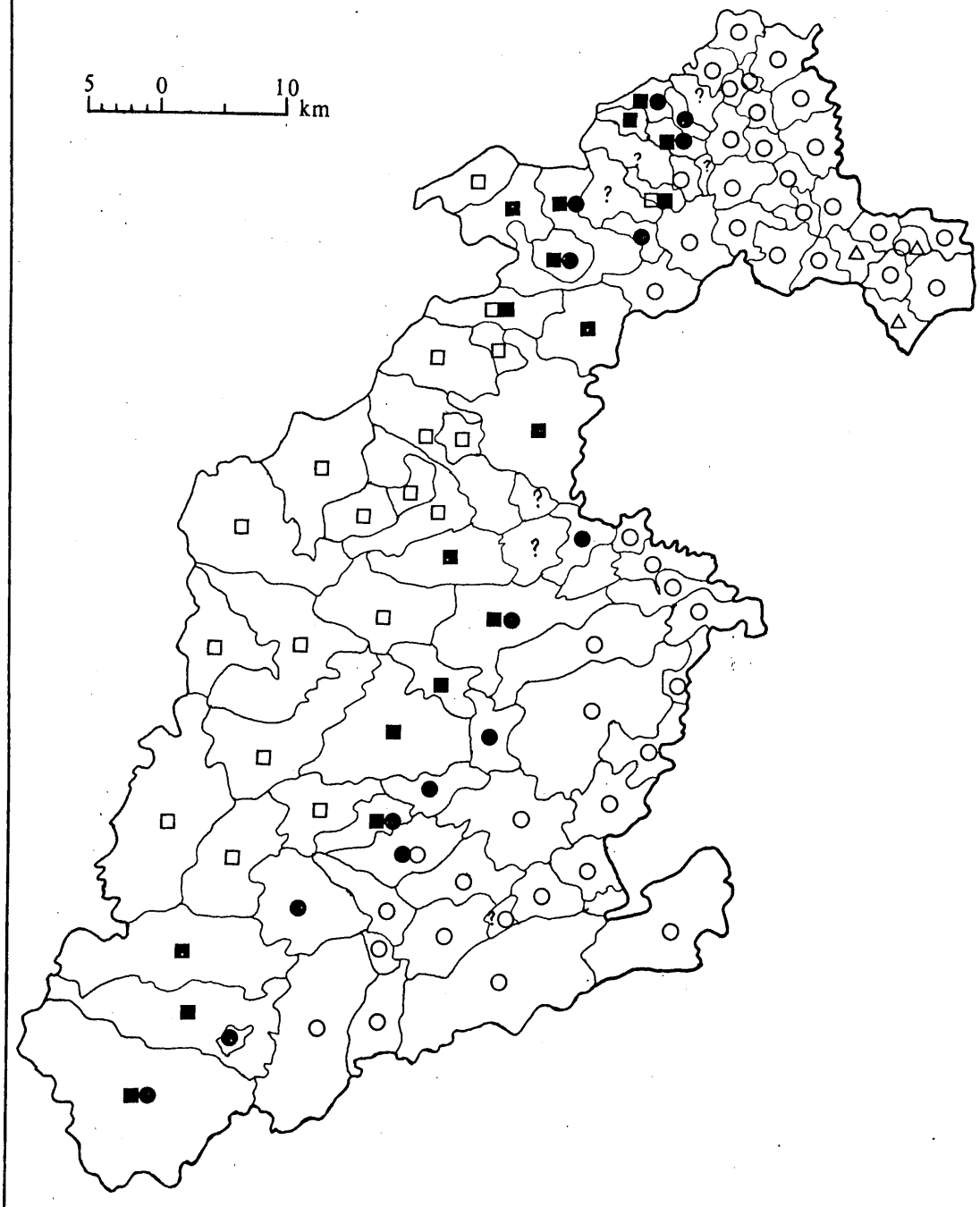

STAGES OF LANGUAGE SHIFT IN THE EXTENDED WELSH STUDY AREA
1
2
3a
3b
4
5
100
90
80
70
60
50
40
30
20
10
percentage of parish population
speaking Welsh and English
speaking Welsh only
For key to symbols and numbers, see overleaf.
(variable time-scale)

Figure III.6

Key to figure III.6 (Stages of Language Shift)	
1 ○	Whole parish population able to speak Welsh; only occasional cases of non Welsh speaking. (No example within extended study area.) Monoglot reservoir up to 50 per cent, but declining rapidly.
2 □	Percentage Welsh speaking fluctuates between 80 and 100 per cent. Monoglot reservoir has declined to 20 per cent or less.
3a ■	Percentage Welsh speaking clearly in decline, but still more than half the parish population able to speak Welsh. Monoglot reservoir fluctuating between 1 and 20 per cent, or, in some cases, practically extinct.
3b ●	Percentage Welsh speaking clearly in decline, and less than half the parish population able to speak Welsh. Monoglot reservoir fluctuating between 1 and 10 per cent, or extinct.
4 ○	Percentage Welsh speaking fluctuates between 1 and 20 per cent. Monoglot reservoir usually less than 5 per cent, and sometimes extinct.
5 △	Welsh speaking sporadic or extinct. Monoglot reservoir non-existent.
?	Parish does not fall clearly into any of the above categories.
In some cases, parishes are in transition from one of these phases to another during the 50 year period, and more than one of the above symbols is shown.	

Figure III.7

EXTENDED STUDY AREA: STAGES OF LANGUAGE SHIFT



←(see key overleaf and appendix 1)

Figure III.8

PERCENTAGE OF WELSH SPEAKERS ABLE TO READ WELSH, 1971

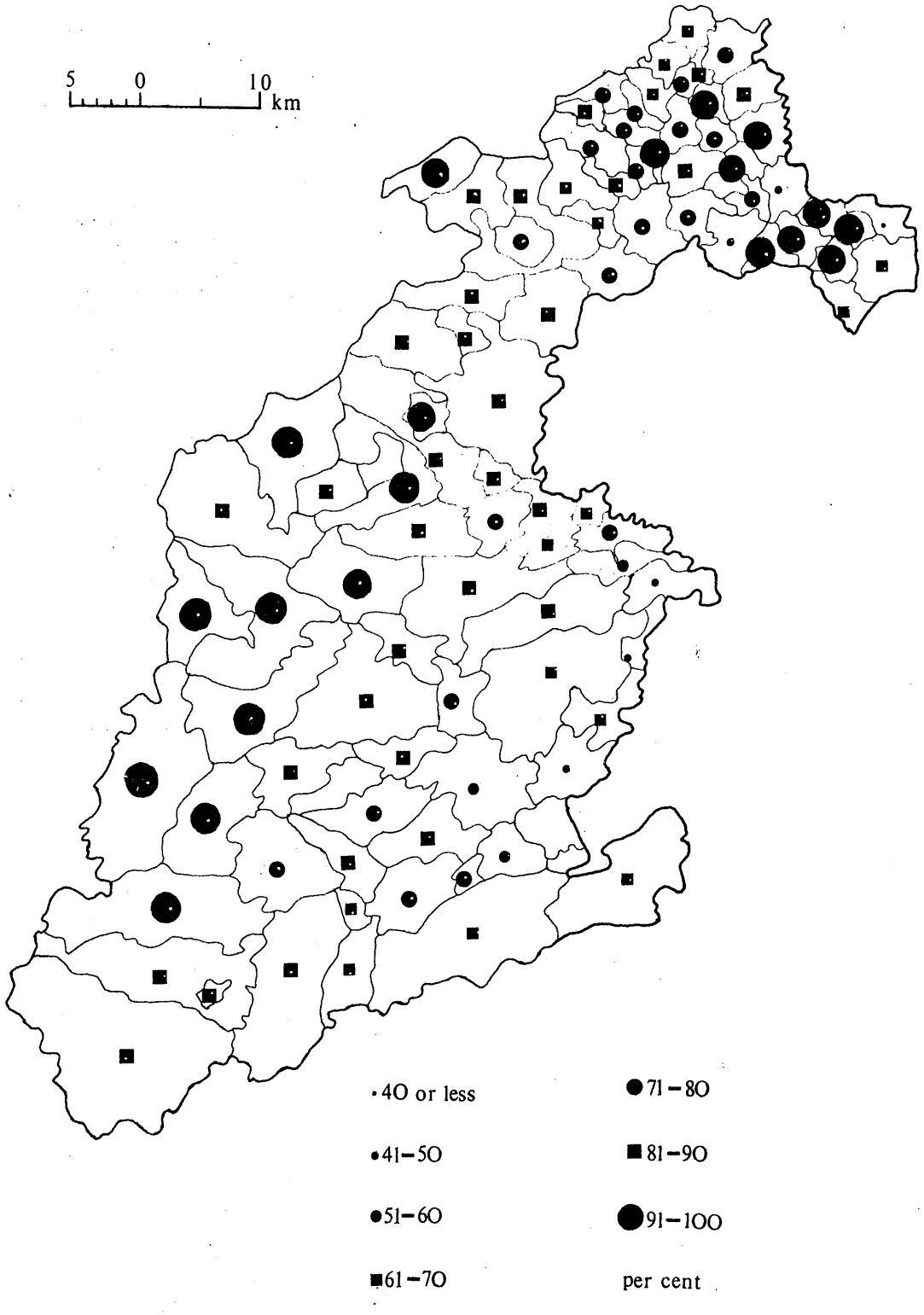


Figure III.9

PERCENTAGE OF WELSH SPEAKERS ABLE TO WRITE WELSH
1971

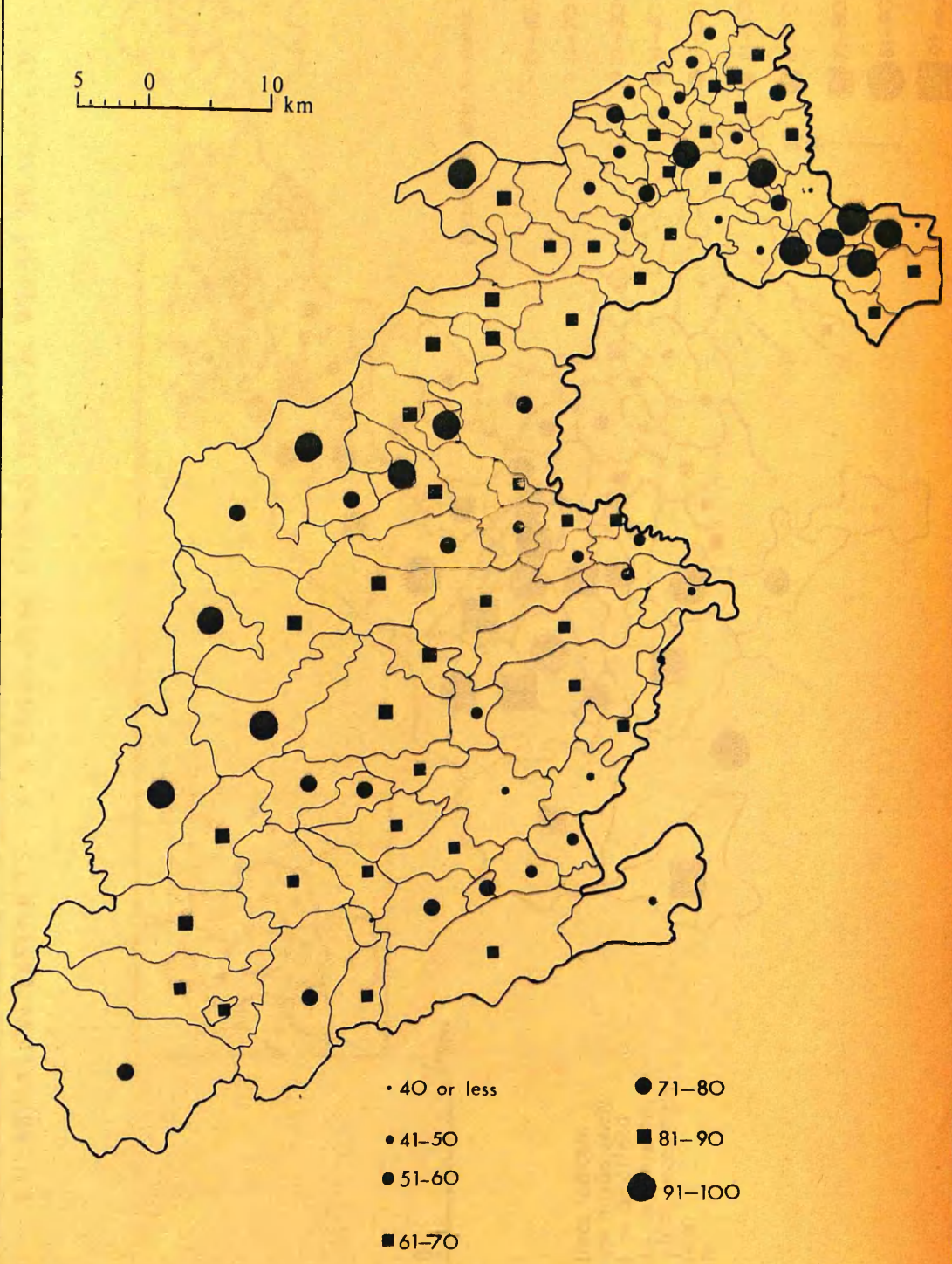
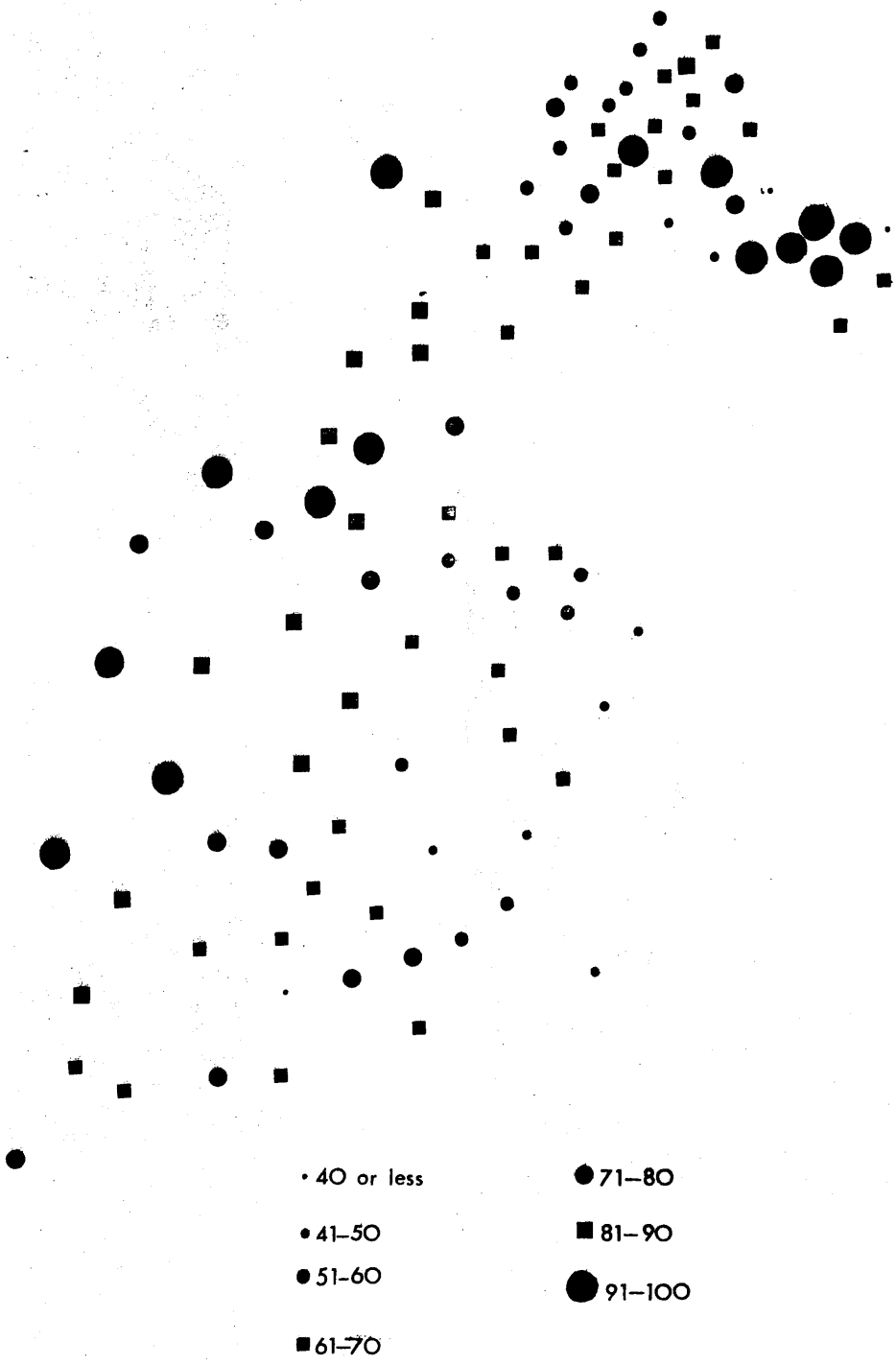


Figure III.9
PERCENTAGE OF WELSH SPEAKERS ABLE TO WRITE WELSH
1971



ENUMERATION DISTRICTS AS A BASIS FOR CENSUS DATA ON WELSH SPEAKING, 1971

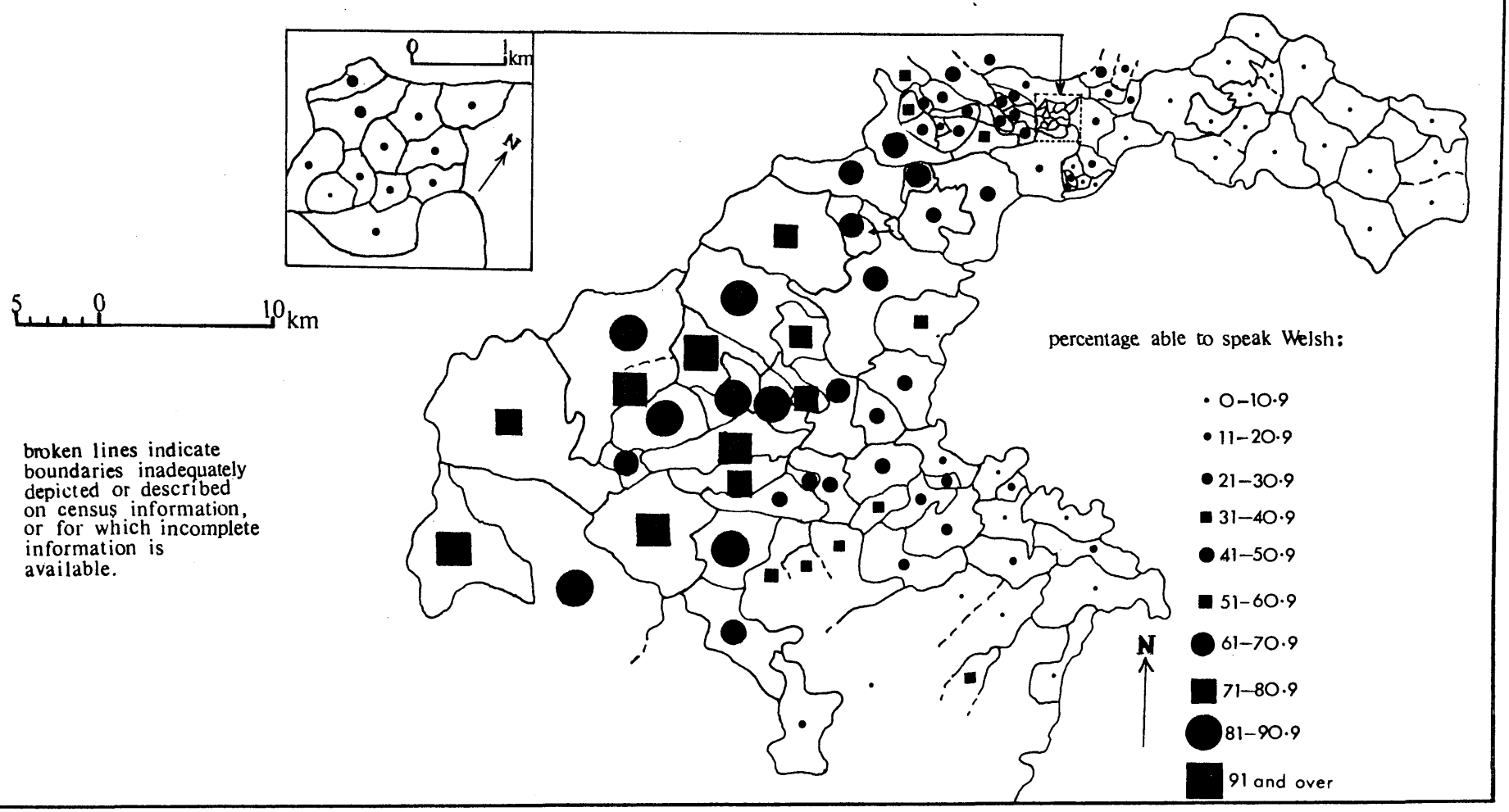


Figure III.10

Figure IV.1

EXAMPLES OF DATA OBTAINED FROM PRELIMINARY SURVEY ('POTENTIAL' WELSH AND BRETON)

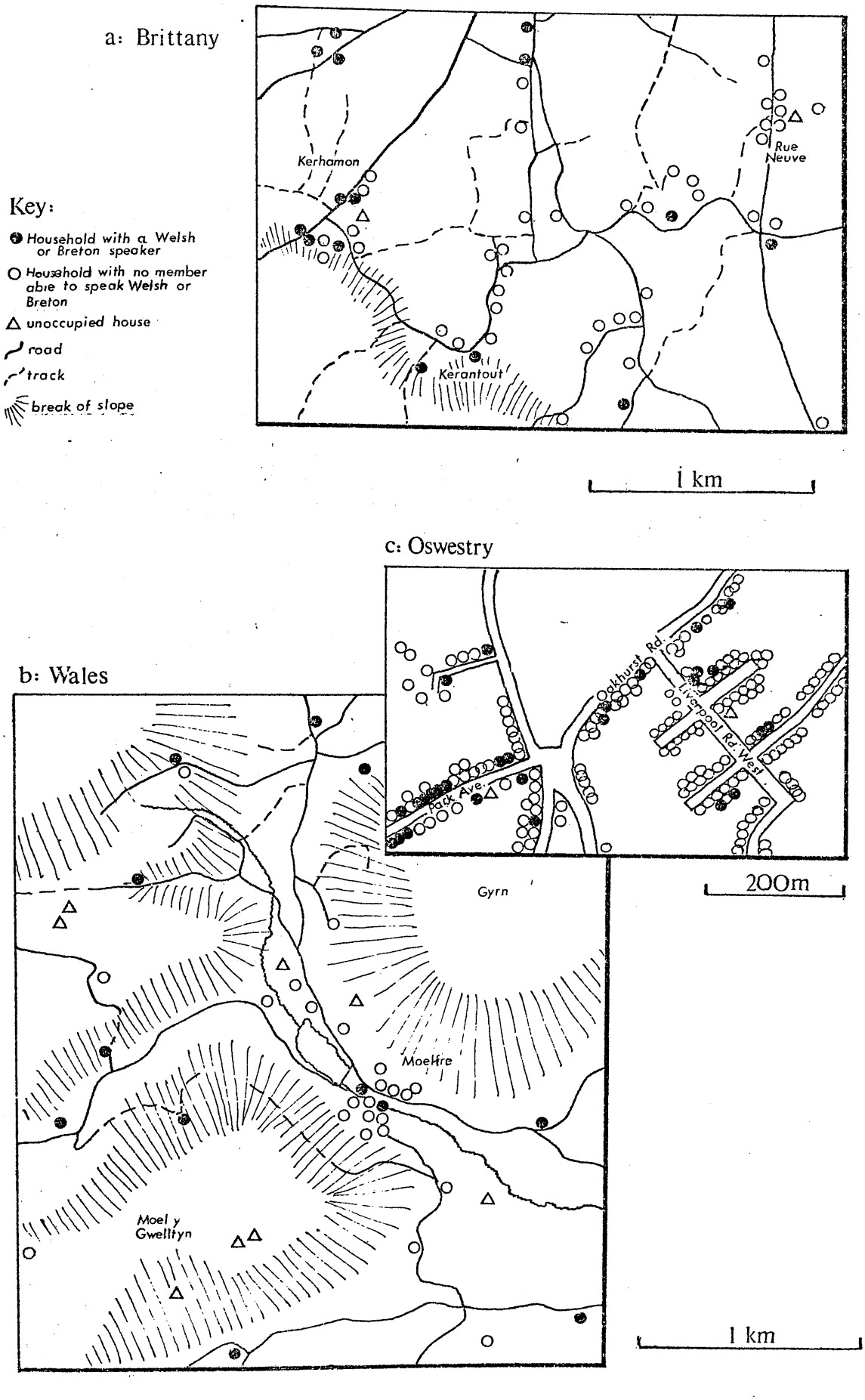
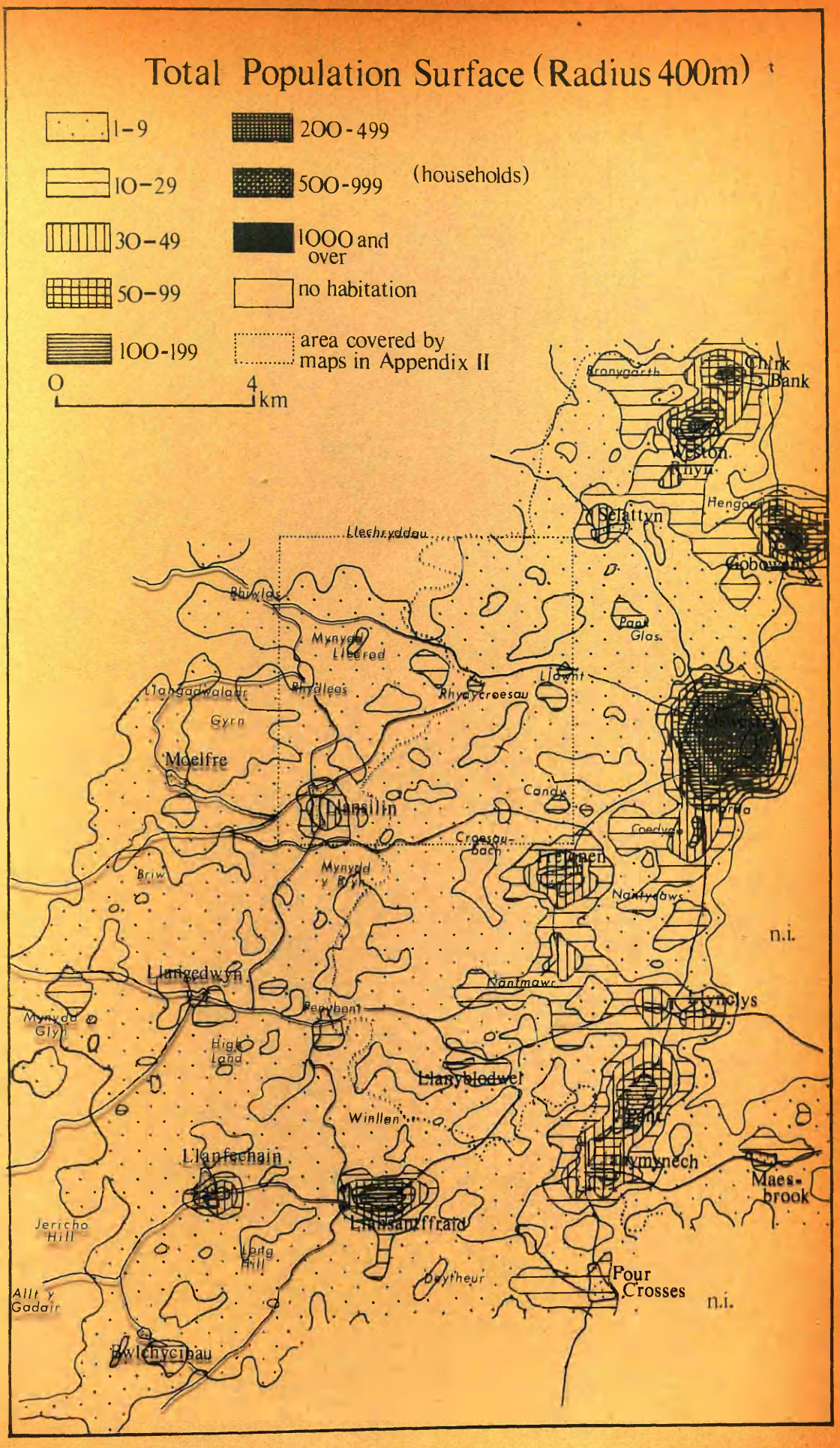


Figure IV.2



Total Population Surface (Radius 400m)
1-9
10-29
30-49
50-99
100-199
200-499
500-999
1000 and over
(households)
no habitation
area covered by maps in Appendix II
0
4
km
Bronygarth
Chirk Bank
Weston Rhyn
Selattyn
Hengoed
Llechryddau
Rhiwlas
Mynydd Llecrod
Pant Glas
Llangadwaladr
Rhydlees
Rhydycroesau
Llawnt
Gyrn
Moelfre
Llansilin
Candy
Croesau-bach
Coedydd
Briw
Mynydd y Bryn
Nantycaws
n.i.
Llangedwyn
Nantmawr
Penybont
Mynydd Glyn
High Land
Llanyblodwel
Winllan
Llanfechain
Llanymynech
Maes-brook
Jericho Hill
Llansantffraid
Long Hill
Deytheur
Pour Crosses
n.i.
Allt y Gadair
Bwlchycibau

Figure IV.2

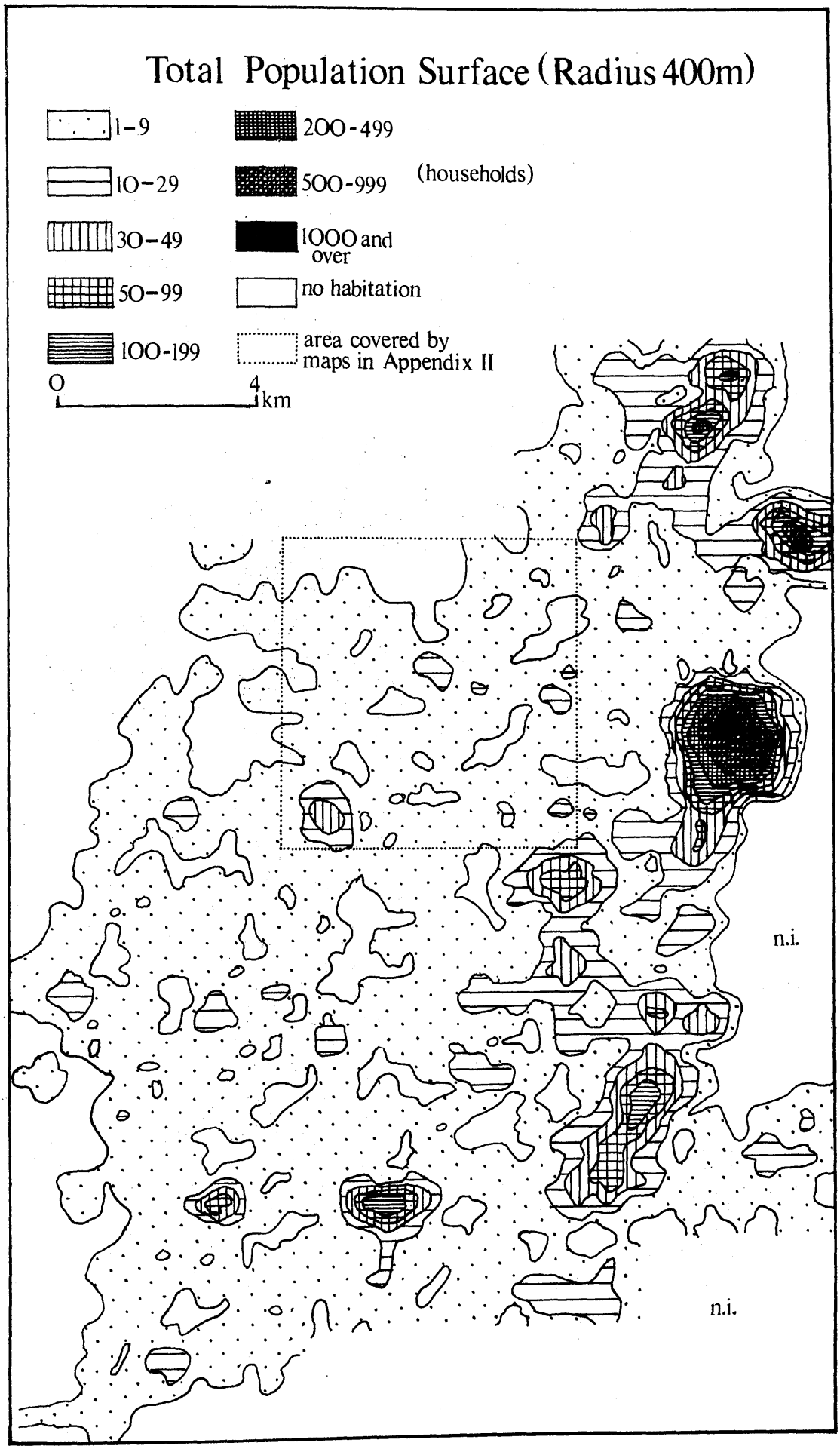

Total Population Surface (Radius 400m)
1-9
10-29
30-49
50-99
100-199
200-499
500-999
1000 and over
(households)
no habitation
area covered by maps in Appendix II
0
4
km
n.i.
n.i.

Figure IV.3

Breton Study Area: Total Household Surface (Radius 400 m)

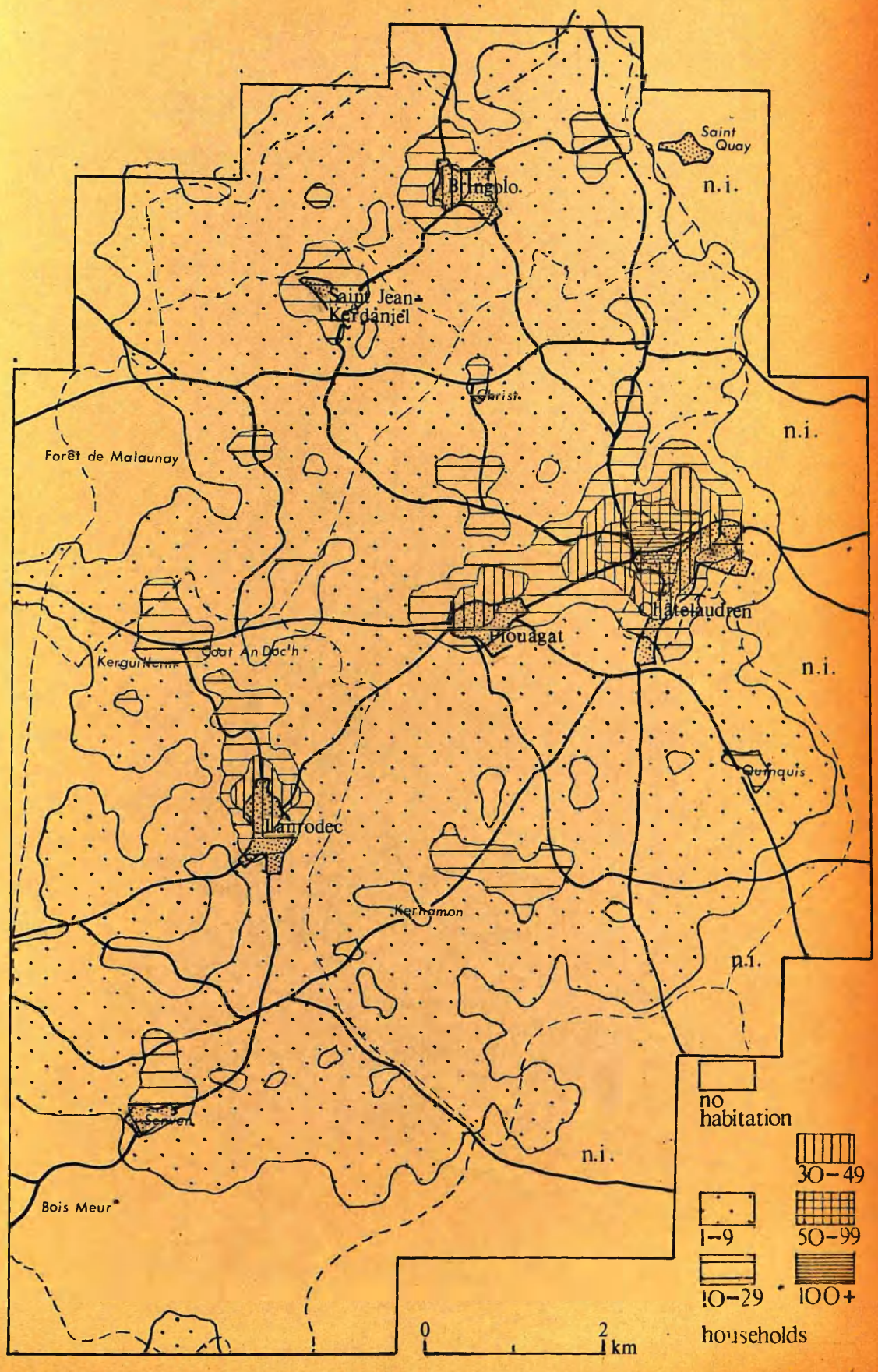


Figure IV.3

Breton Study Area: Total Household Surface (Radius 400 m)

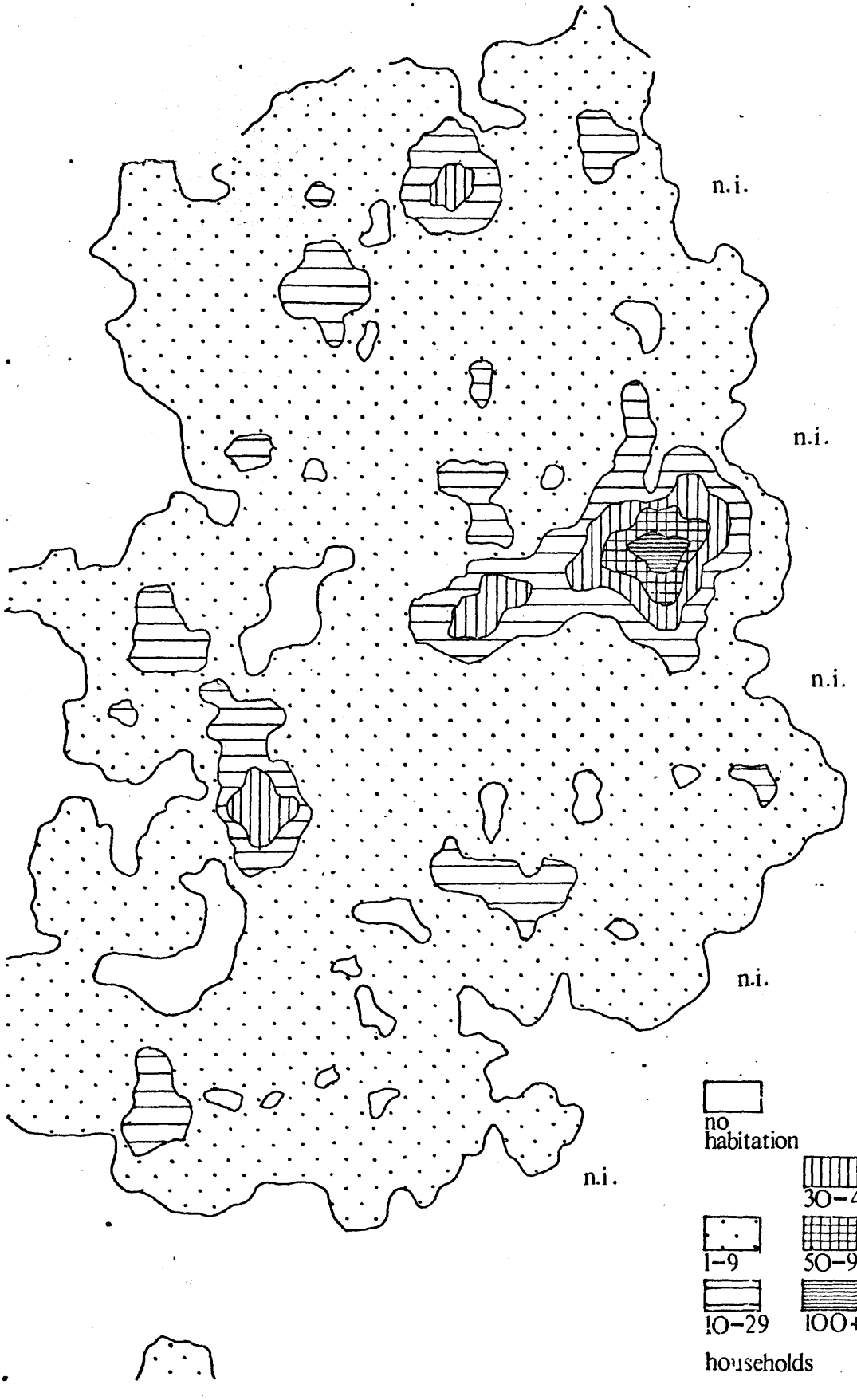


Figure IV.4

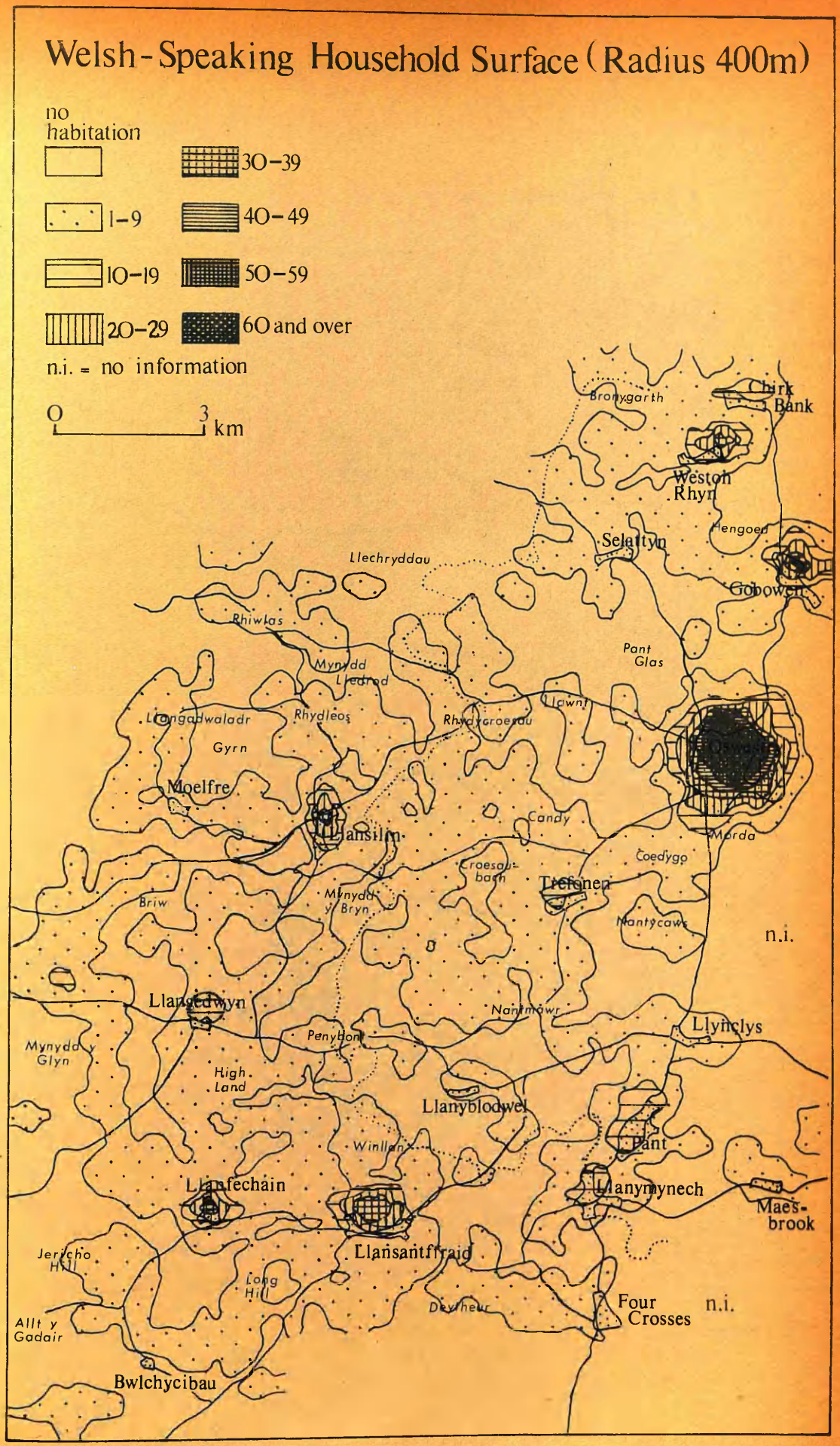

Welsh-Speaking Household Surface (Radius 400m)
no habitation
1-9
10-19
20-29
30-39
40-49
50-59
60 and over
n.i. = no information
0
3
km
Bronygarth
Chirk Bank
Weston Rhyn
Selattyn
Hengoed
Gobowen
Llechryddau
Rhiwlas
Mynydd Llwyd
Pant Glas
Llawnt
Llangadwaladr
Rhydleos
Rhwyfaroesau
Gyrn
Moelfre
Candy
Morda
Llansilin
Croesau-bach
Coedygo
Trefonen
Briw
Mynydd y Bryn
Nantycaws
n.i.
Llangedwyn
Nantmawr
Llynclys
Mynydd y Glyn
Penybont
High Land
Llanyblodwel
Winllan
Pant
Llanfechain
Llanymynech
Maesbrook
Jericho Hill
Llansantffraid
Long Hill
Four Crosses
n.i.
Allt y Gadair
Bwlchycibau

Figure IV.4

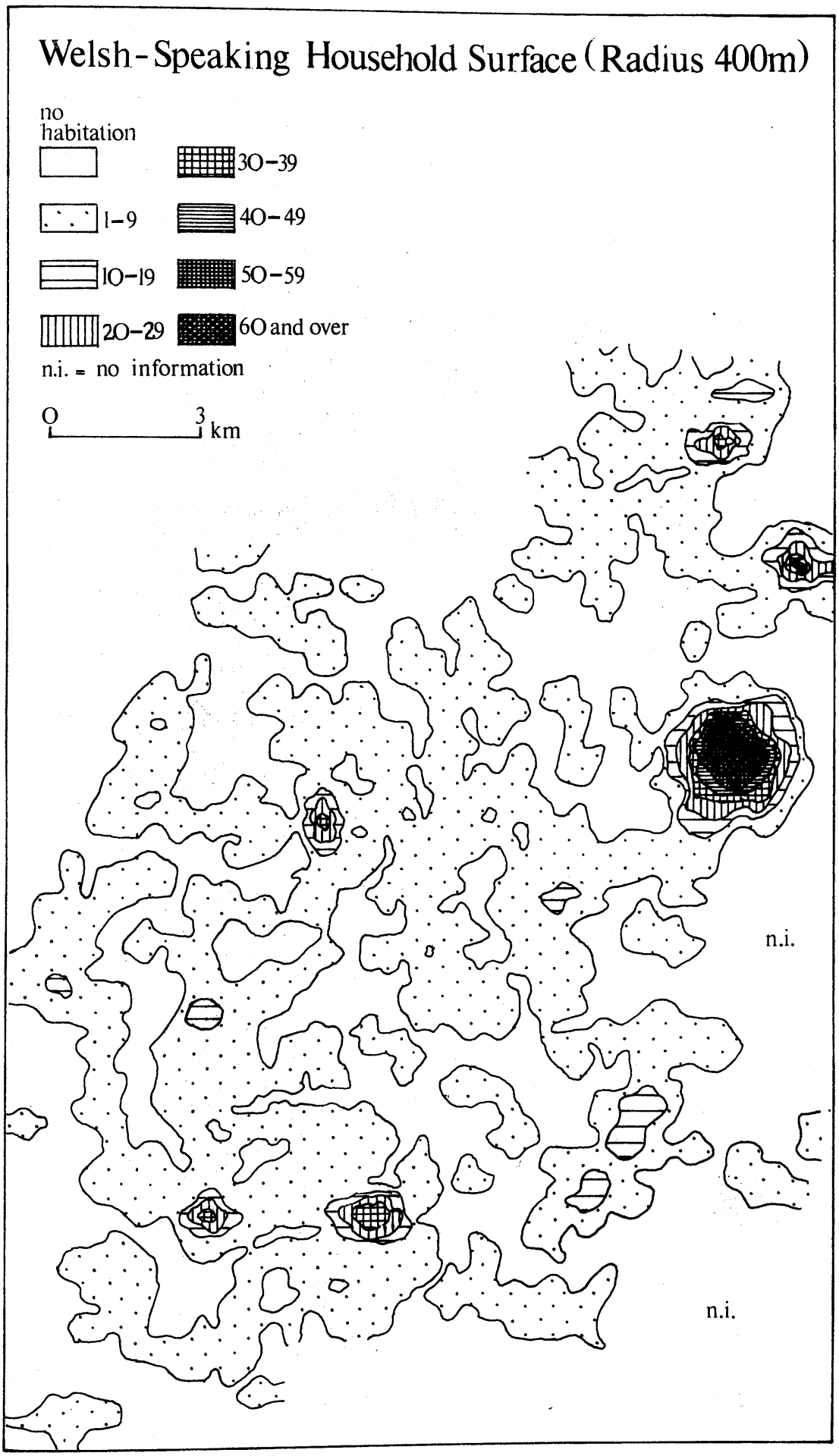

Welsh-Speaking Household Surface (Radius 400m)
no habitation
1-9
10-19
20-29
30-39
40-49
50-59
60 and over
n.i. = no information
0
3
km
n.i.
n.i.

Figure IV.5

Breton-Speaking Household Surface (Radius 400 m.)

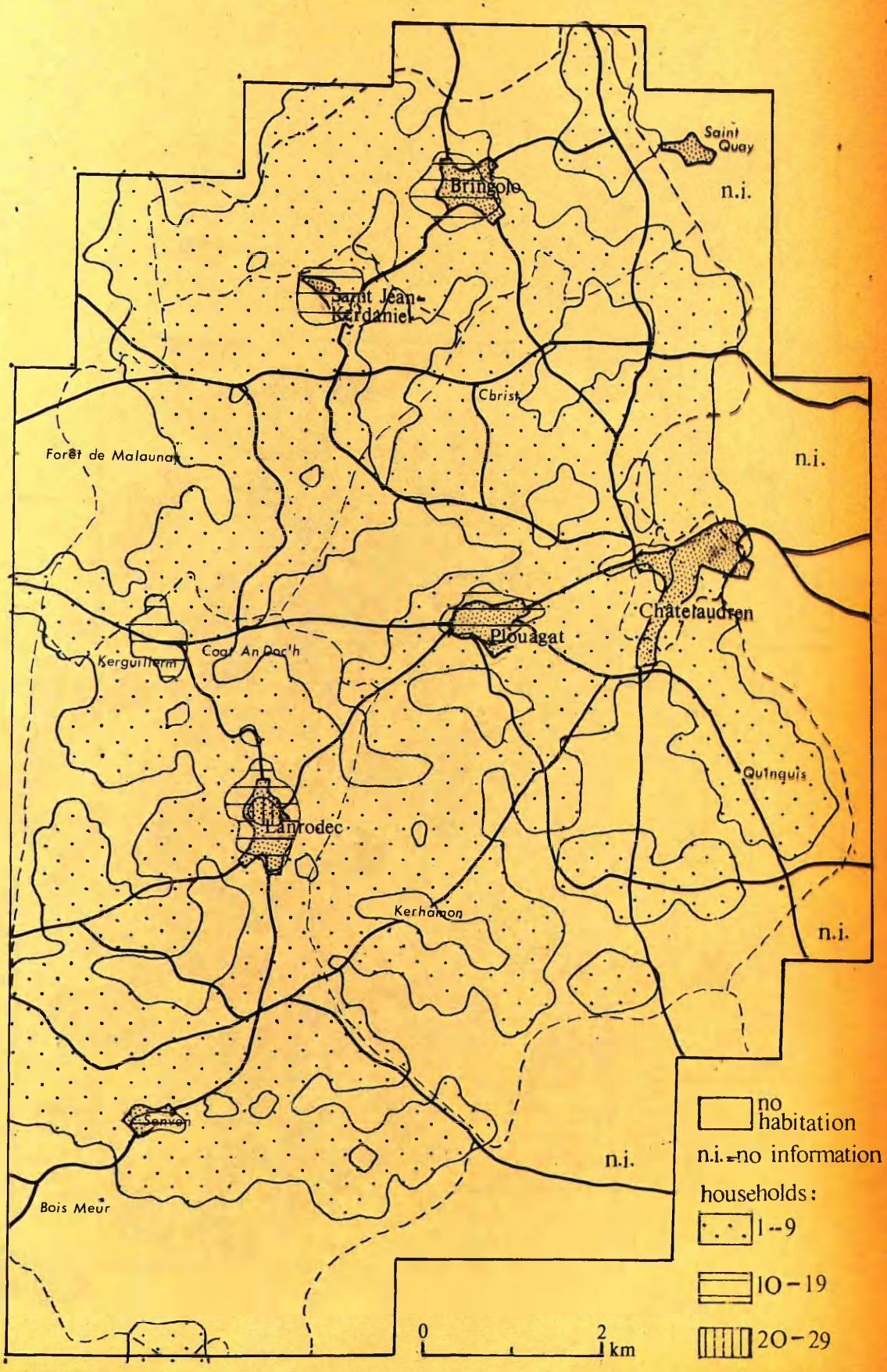


Figure IV.5

Breton-Speaking Household Surface (Radius 400 m.)

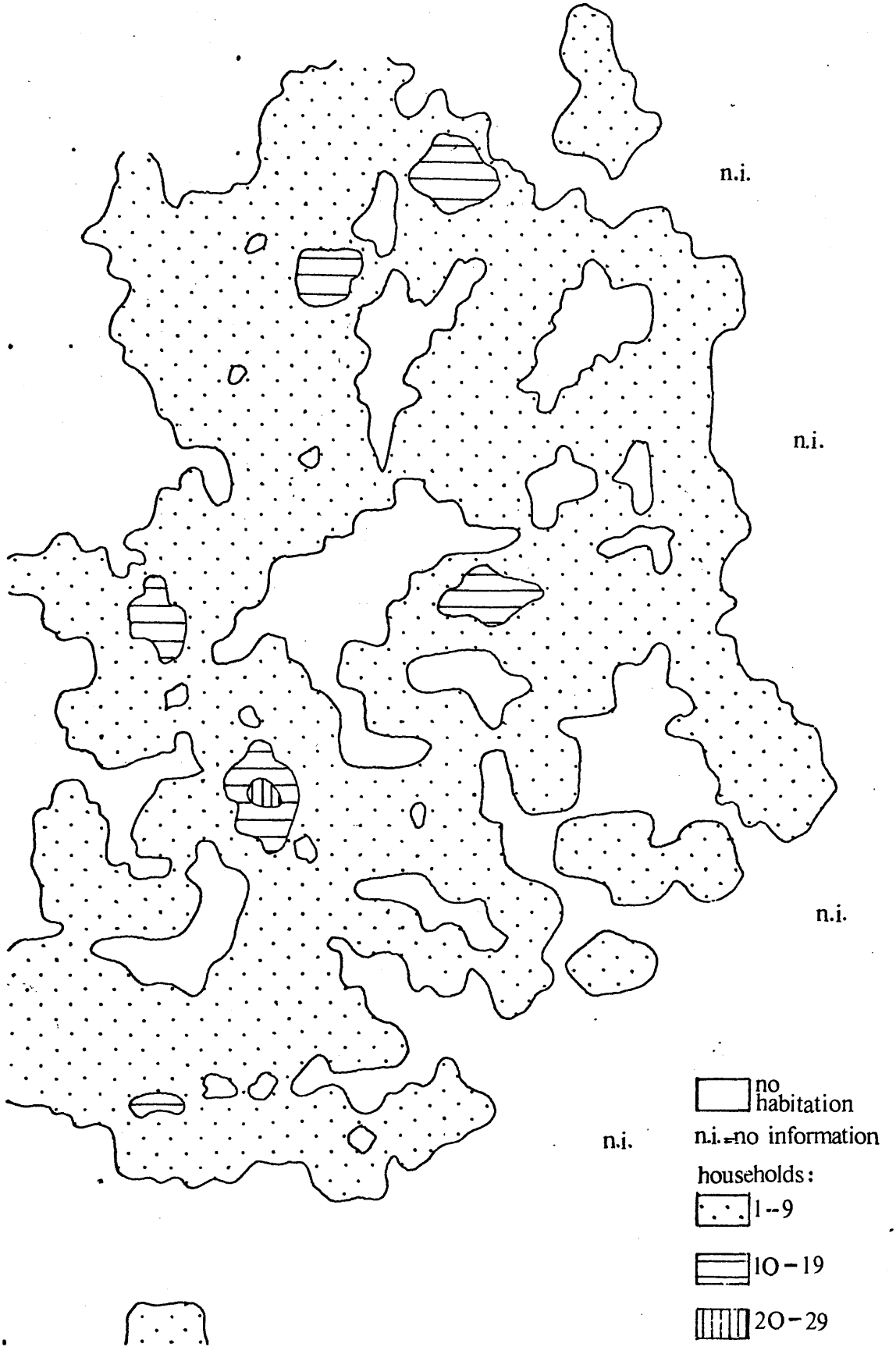


Figure IV.6

"POTENTIAL WELSH SPEAKING" SURFACE, 1972

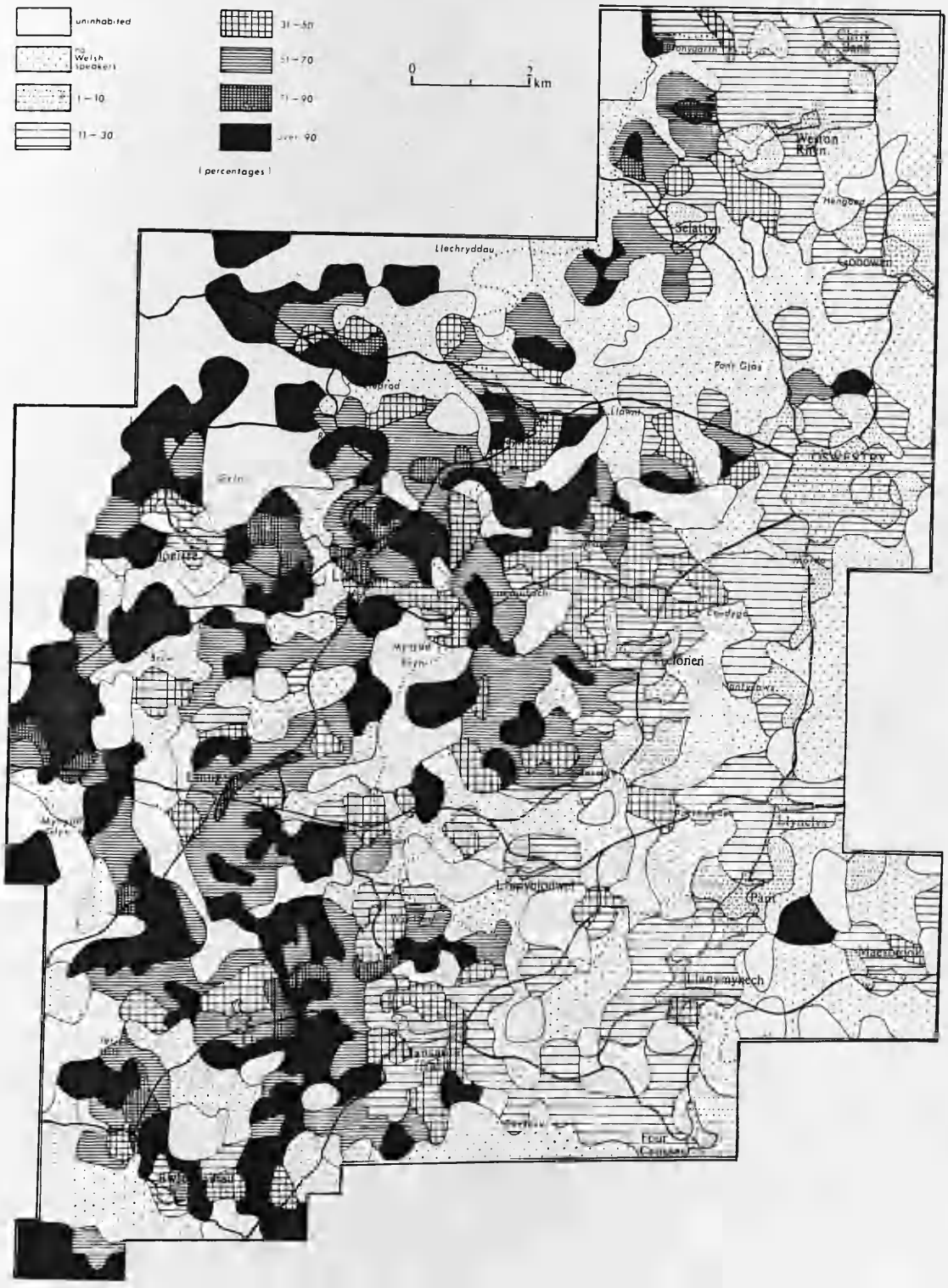


Figure IV.6

"POTENTIAL WELSH SPEAKING" SURFACE, 1972

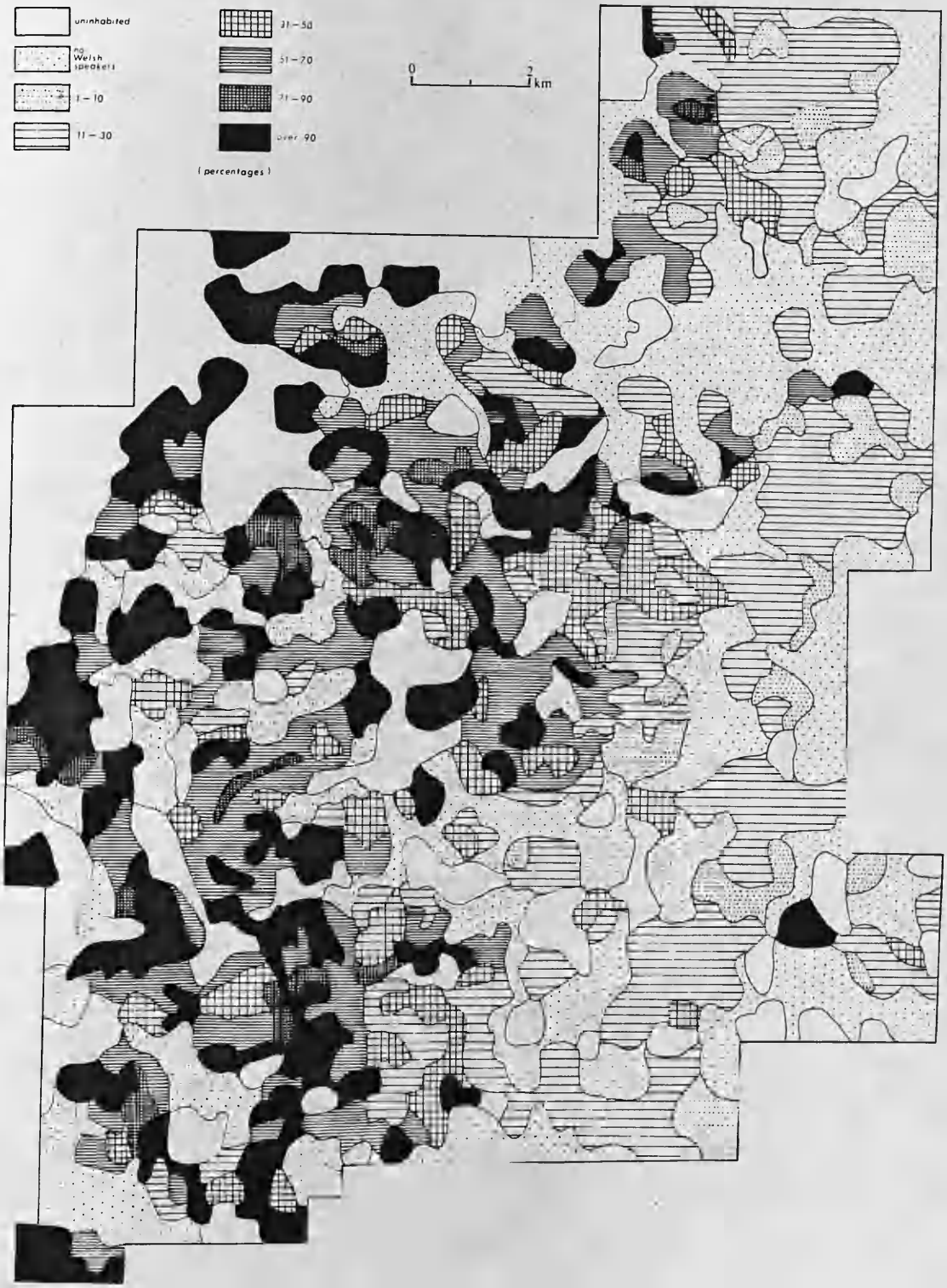


Figure IV.7

PERCENTAGE POTENTIAL BRETON SPEAKING SURFACE, 1972 (GENERALISED)

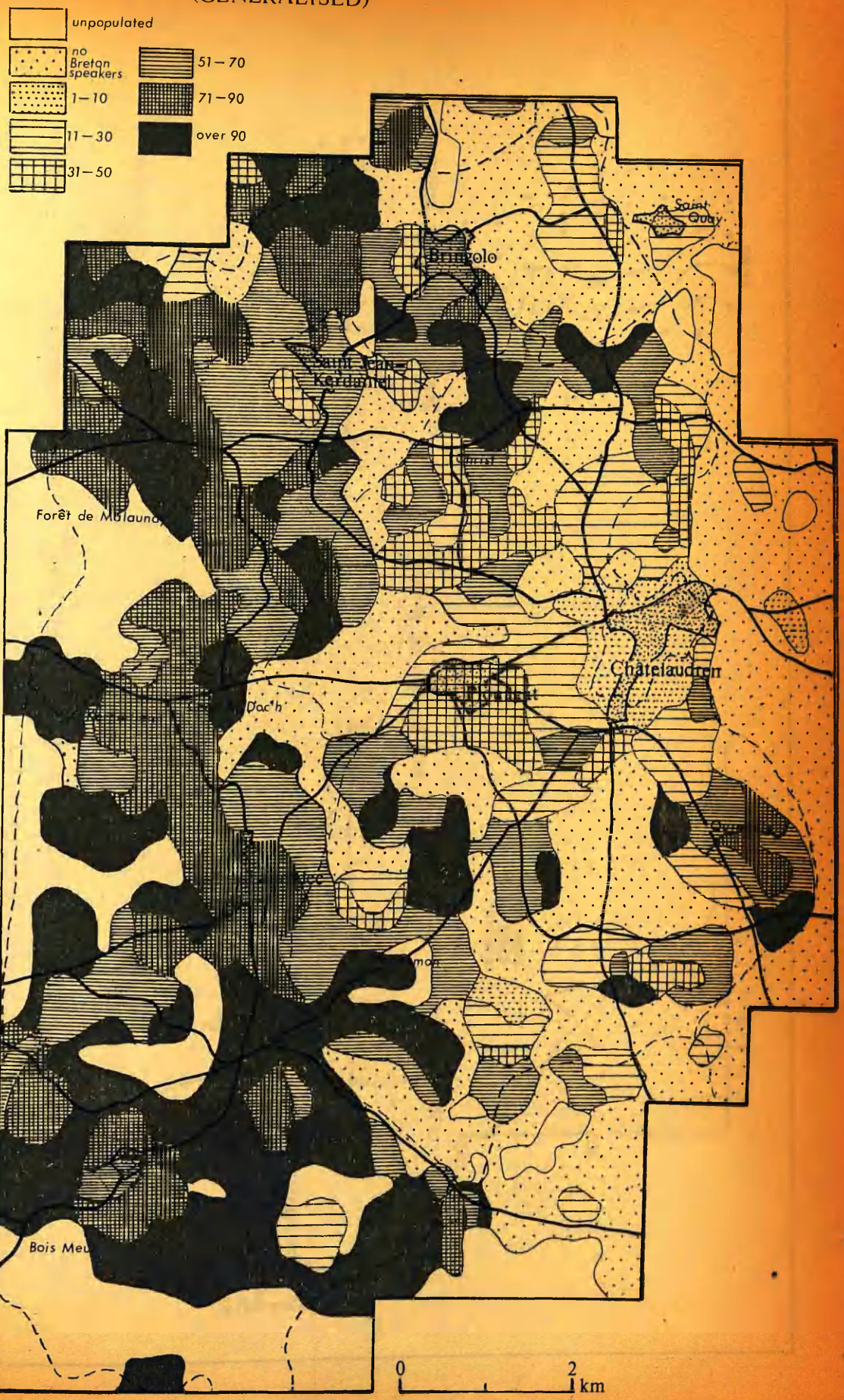
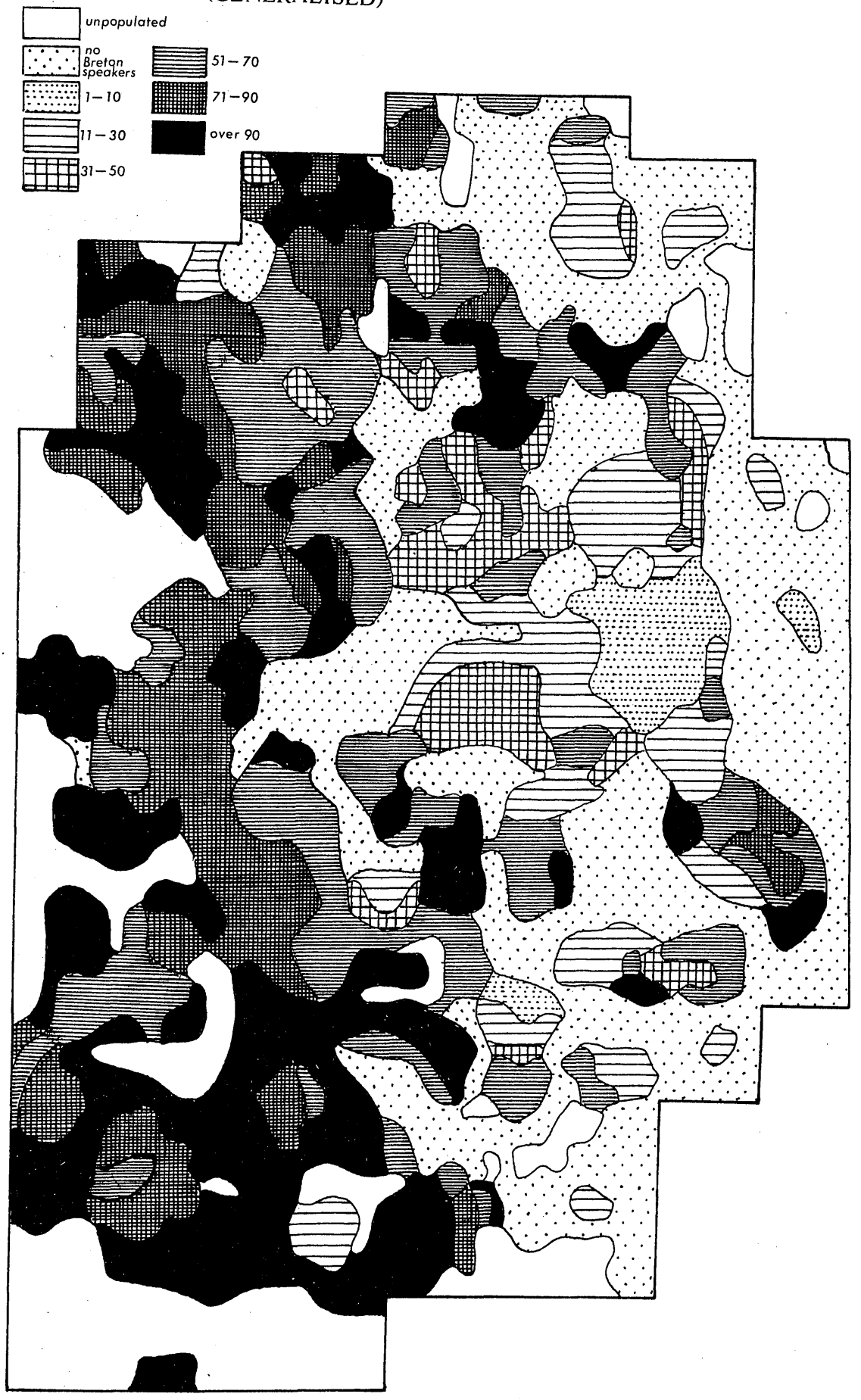


Figure IV.7

PERCENTAGE POTENTIAL BRETON SPEAKING SURFACE, 1972
(GENERALISED)



THE 'SITUATIONAL PRINCIPLE' AND LANGUAGE SPEAKING

Welsh area, using (a) national border and (b) linguistic divide as basis of calculation

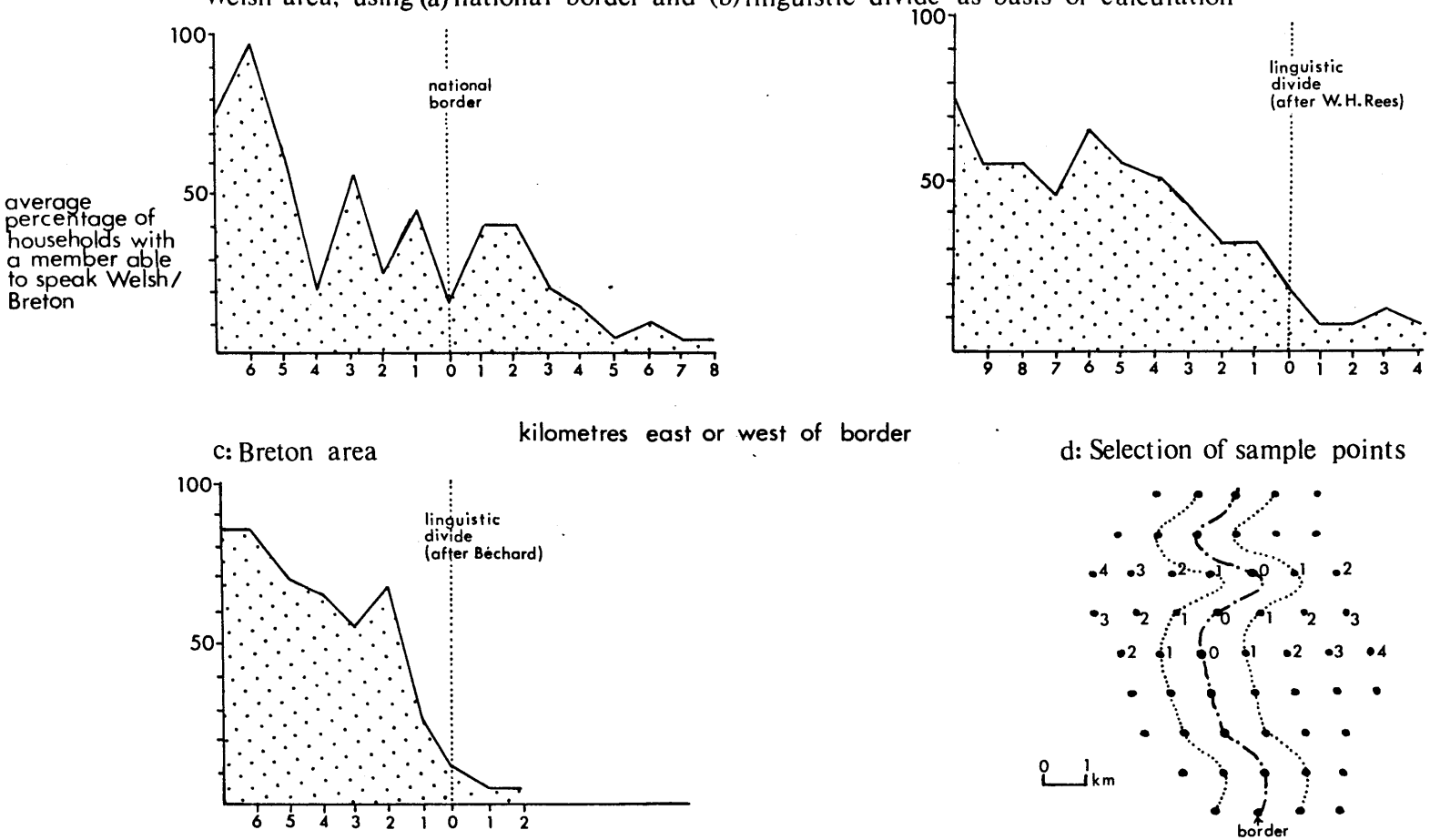


figure IV.8

figure IV.9

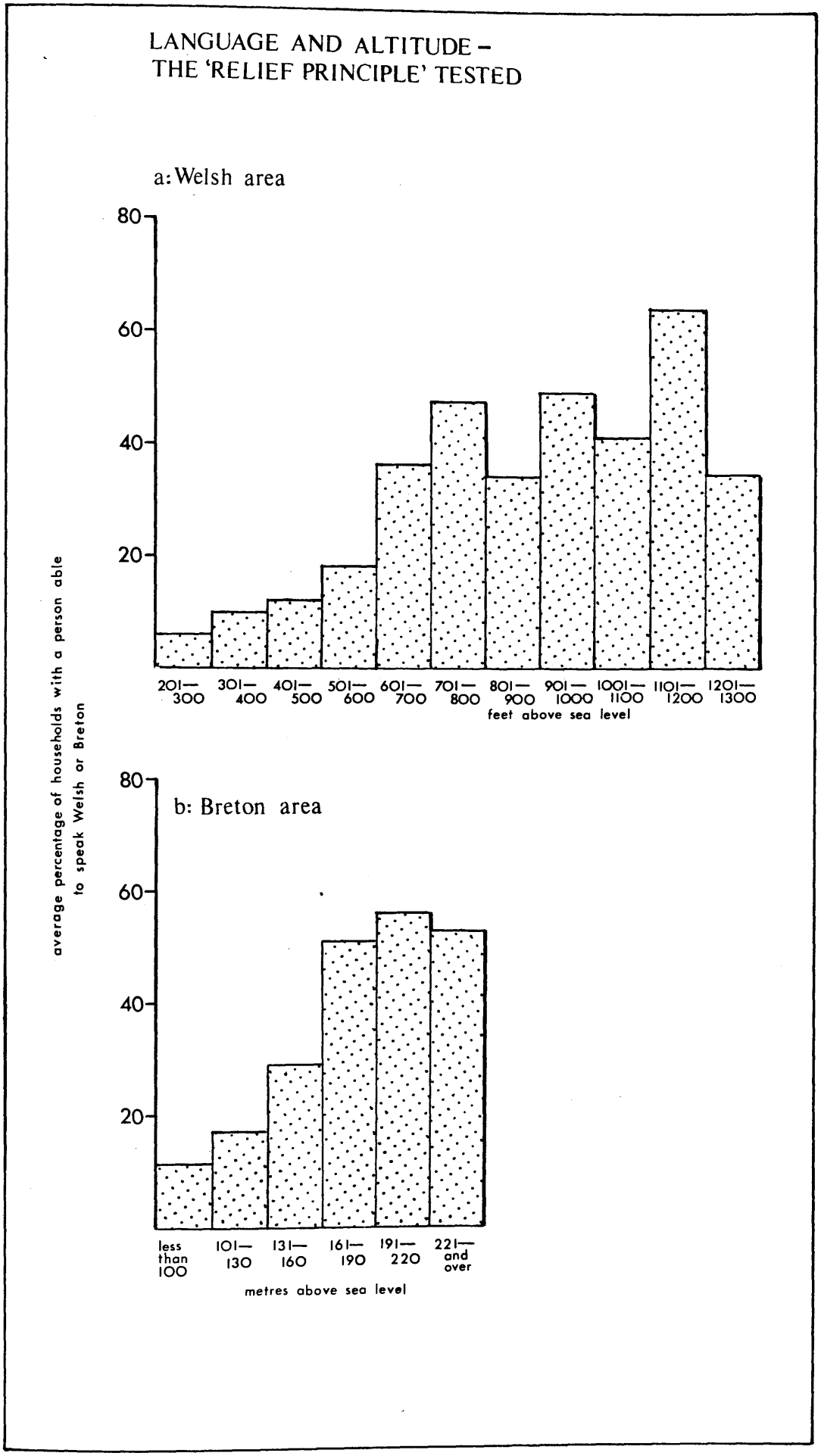

LANGUAGE AND ALTITUDE –
THE 'RELIEF PRINCIPLE' TESTED
a: Welsh area
80
60
40
20
201— 300
301— 400
401— 500
501— 600
601— 700
701— 800
801— 900
901— 1000
1001— 1100
1101— 1200
1201— 1300
feet above sea level
average percentage of households with a person able to speak Welsh or Breton
b: Breton area
80
60
40
20
less than 100
101— 130
131— 160
161— 190
191— 220
221— and over
metres above sea level

Figure IV.10

Welsh Area: Ease Of Surface Intercommunication

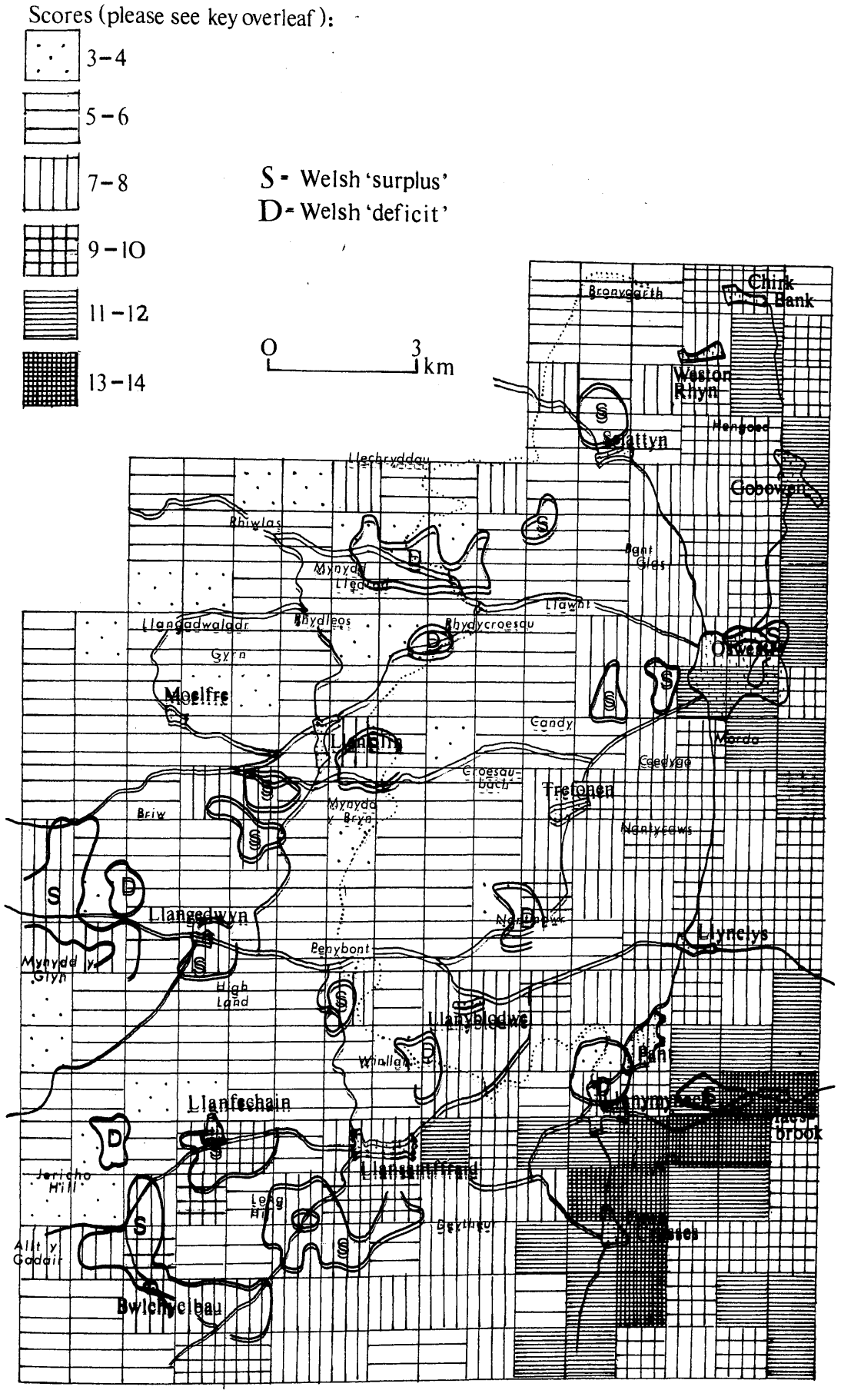
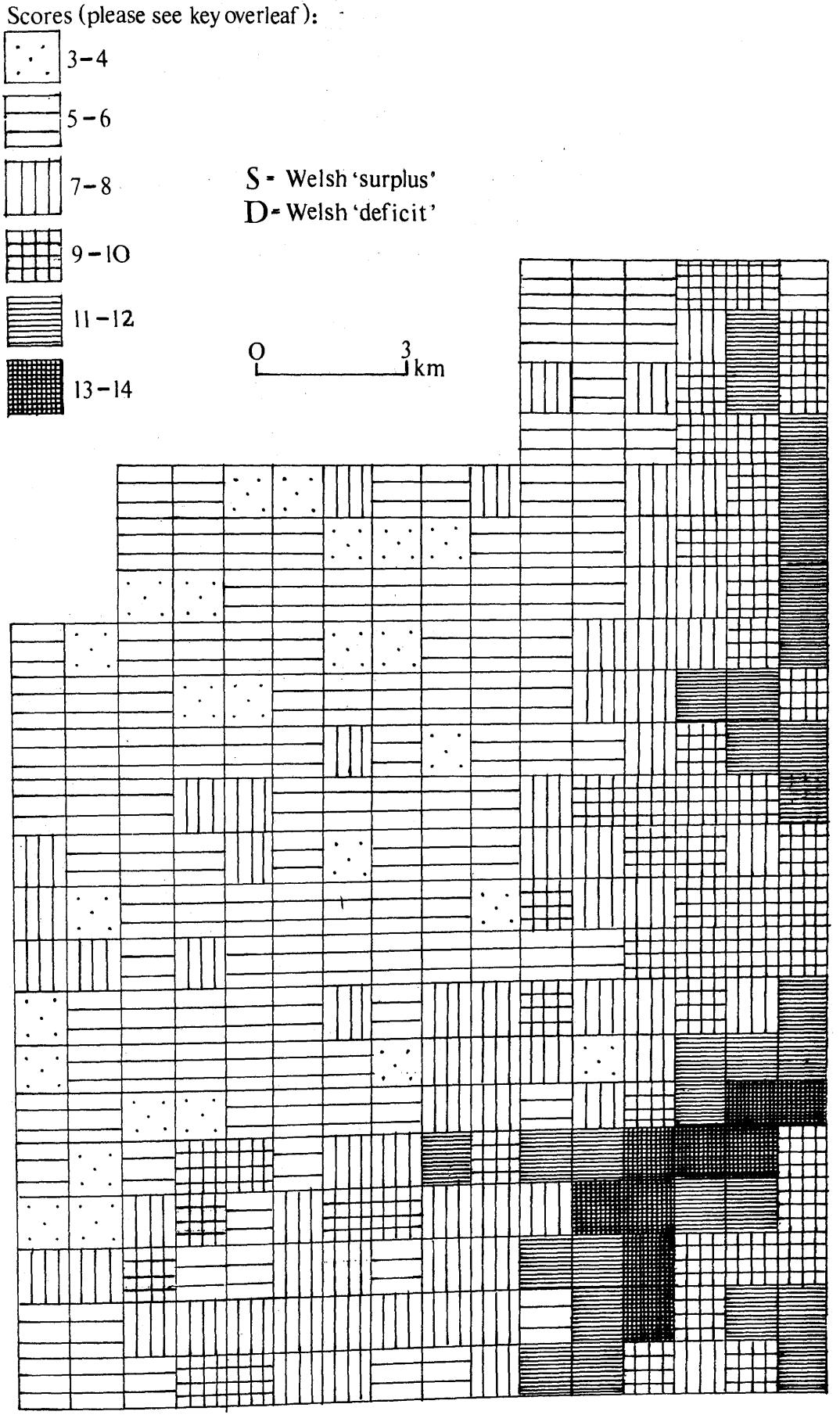


Figure IV.10

Welsh Area: Ease Of Surface Intercommunication



DERIVATION OF SCORES ON FIGURES IV.10 AND IV.11:

("EASE OF SURFACE INTERCOMMUNICATION")

The calculations were based upon information visible on maps at a scale of 1:50,000 for both areas. Because of differences in map symbols and classifications, and particularly differences in contour intervals (the British map was in feet, the French one in metres), the results are not perfectly comparable.

Three components were taken into consideration in the calculation of scores for grid-squares:

a) relative relief of square; b) steepest slope in square;
c) quality of best road in square

(ALL POINTS SCORES ARE ADDED TO GIVE SCORE WHICH APPEARS ON MAPS)

a) Relative relief:

Description of conditions		Points score
Welsh area	Breton area	
Relative relief of more than 300 feet (i.e. more than 6 contours visible between highest and lowest point)	-	1
150 - 300 feet (4 to 6 contours visible)	-	2
50 - 149 feet (2 or 3 contours)	More than 15 metres (more than 3 contours visible)	3
1 - 49 feet (1 contour)	Up to 15 metres (1 - 3 contours)	4
No relief visible (no contours)	No relief visible (no contours)	5

b) Steepest slope :

(calculated from contours)	(calculation the same in both areas)	
1 in 5 to vertical		1
1 in 10 to 1 in 6		2
1 in 80 to 1 in 11		3
no slope visible on map		4

c) Best road:

No road or track visible	No road or track	1
Best road unmetalled	Best road unmetalled	2
Best road "C" class	Best road metalled but un-numbered	3
Best road "B" Class	Best road classified "D"	4
Best road "A" class	Best road classified "N"	5

Figure IV.11

Breton Area: Ease of Surface Intercommunication

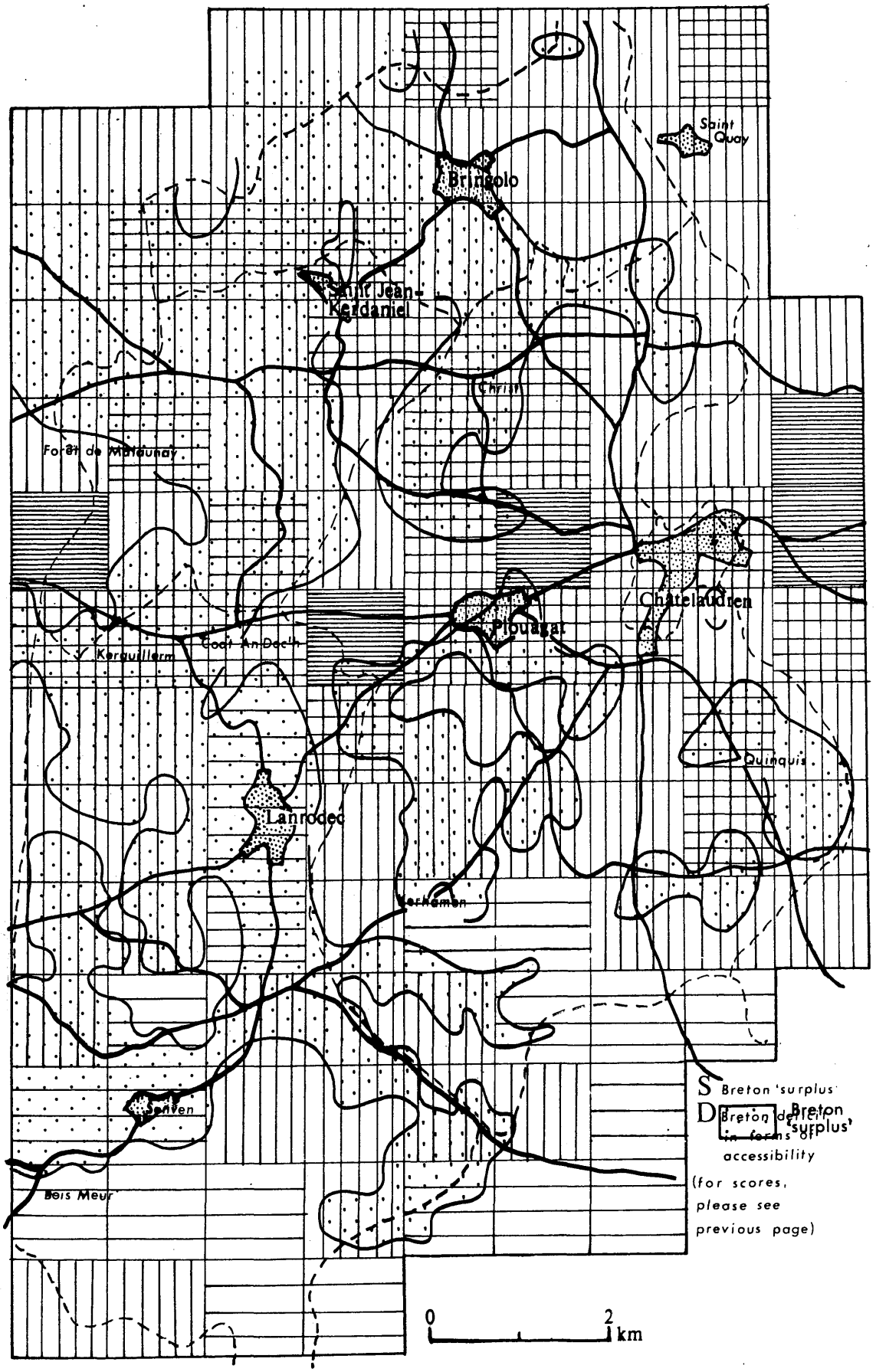
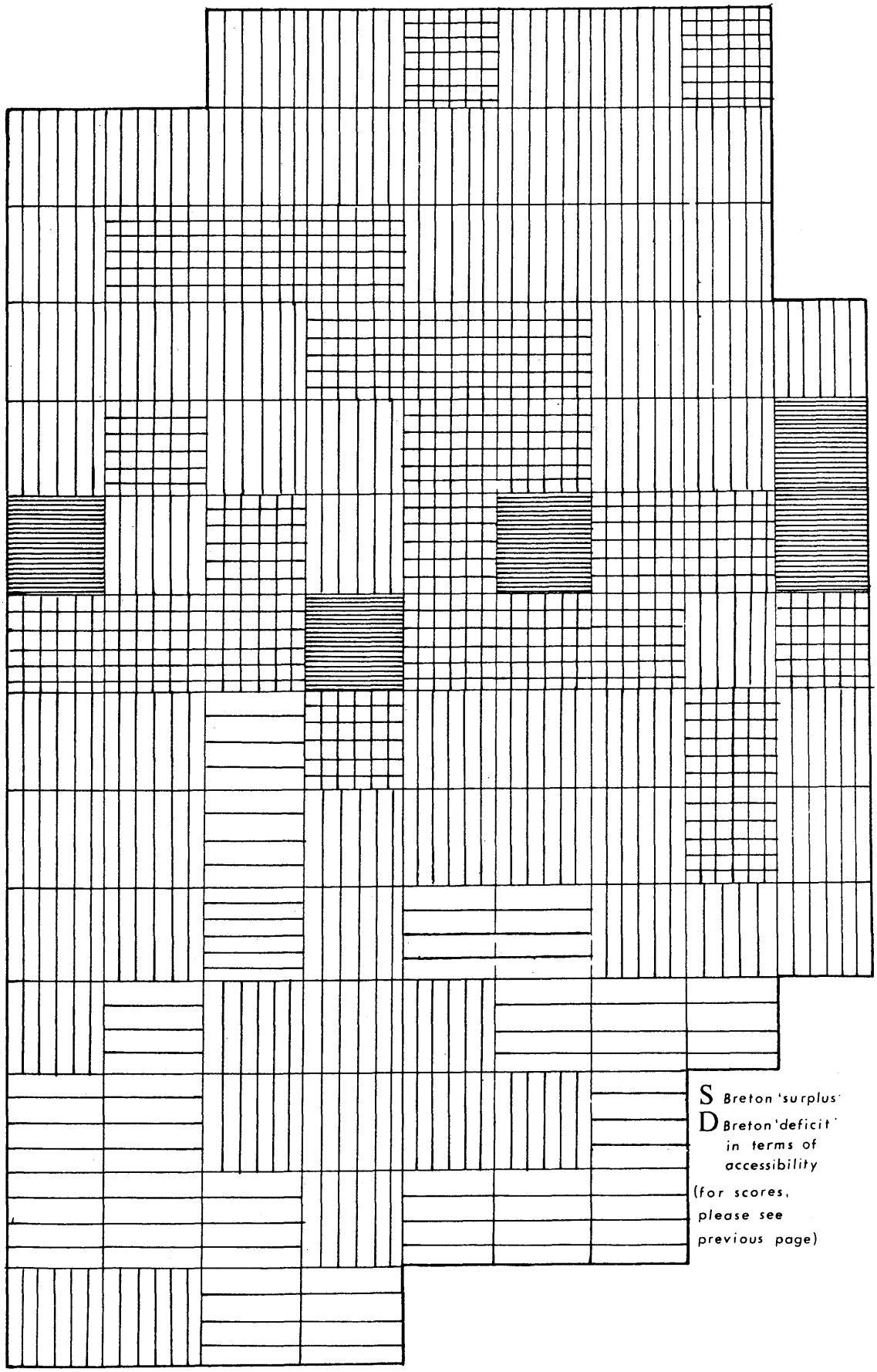


Figure IV.11

Breton Area: Ease of Surface Intercommunication



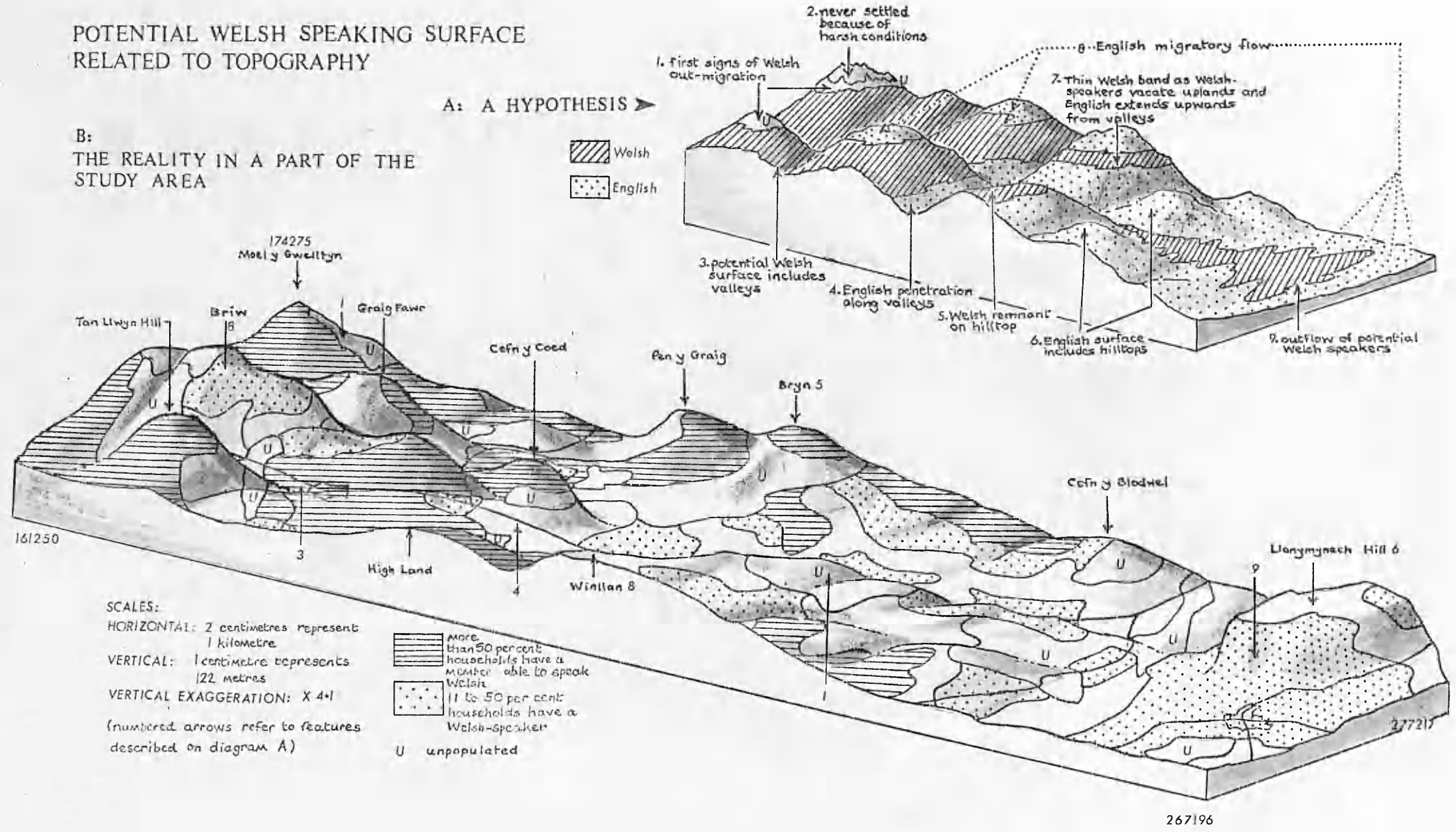
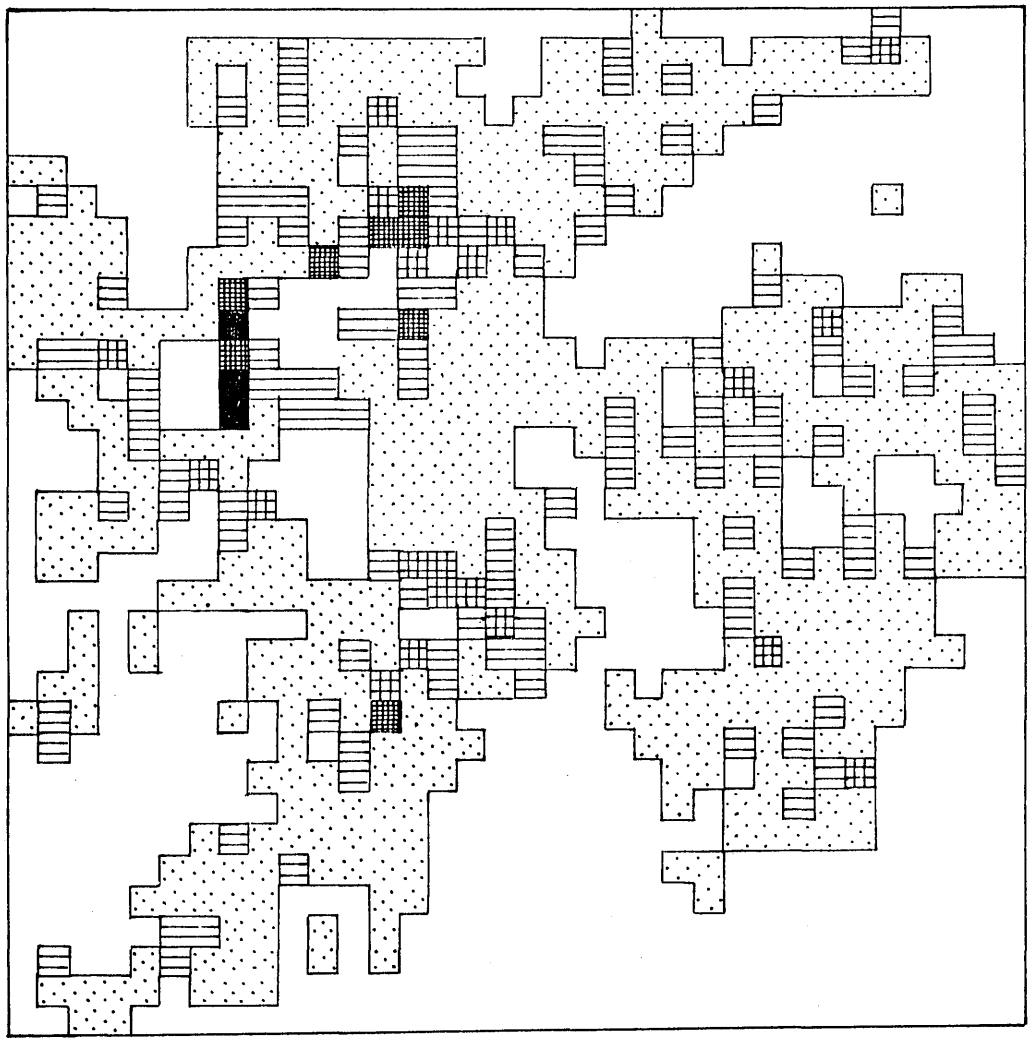

POTENTIAL WELSH SPEAKING SURFACE RELATED TO TOPOGRAPHY
A: A HYPOTHESIS
B:
THE REALITY IN A PART OF THE STUDY AREA
Welsh
English
1. first signs of Welsh out-migration
2. never settled because of harsh conditions
3. potential Welsh surface includes valleys
4. English penetration along valleys
5. Welsh remnant on hilltop
6. English surface includes hilltops
7. Thin Welsh band as Welsh-speakers vacate uplands and English extends upwards from valleys
8. English migratory flow
9. outflow of potential Welsh speakers
174275
Moel y Gwelltyn
Tan Llwyn Hill
Briw
Graig Fawr
Cefn y Coed
Pen y Graig
Bryn 5
Cefn y Blodwel
Llanymynech Hill 6
High Land
Winllan 8
161250
277217
SCALES:
HORIZONTAL: 2 centimetres represent 1 kilometre
VERTICAL: 1 centimetre represents 122 metres
VERTICAL EXAGGERATION: X 4·1
(numbered arrows refer to features described on diagram A)
more than 50 per cent households have a member able to speak Welsh
11 to 50 per cent households have a Welsh-speaker
U unpopulated
267196

Figure IV.12

Figure IV.13

OSWESTRY: NUMBER OF HOUSEHOLDS WITH ONE OR MORE MEMBERS ABLE TO SPEAK WELSH, 1972



number per 65 metre square:

- no population
- 0 – 1
- 2 – 3
- 4 – 5
- 6 – 7
- 8 – 9

0 200 m

Figure IV.14

OSWESTRY: PERCENTAGE OF HOUSEHOLDS WITH ONE OR MORE MEMBERS ABLE TO SPEAK WELSH, 1972

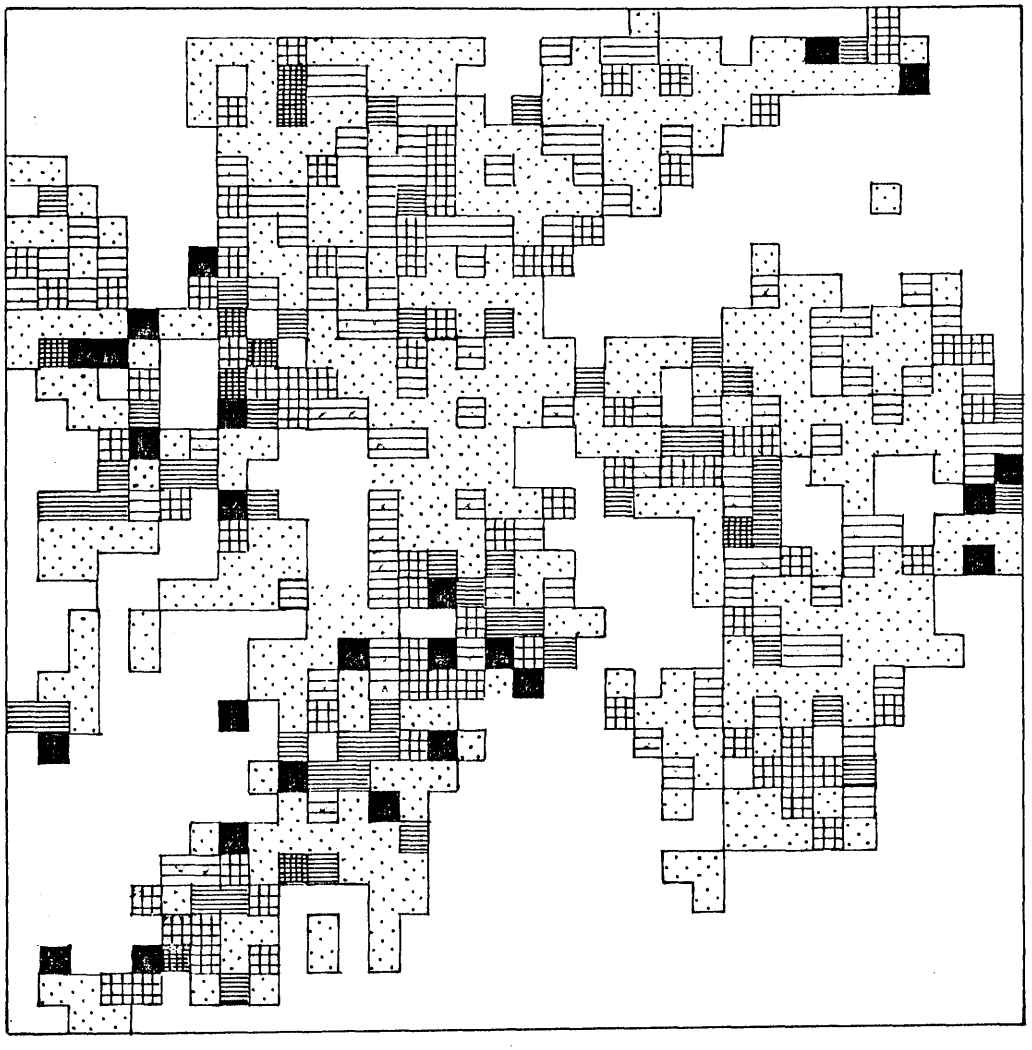


Figure IV.15

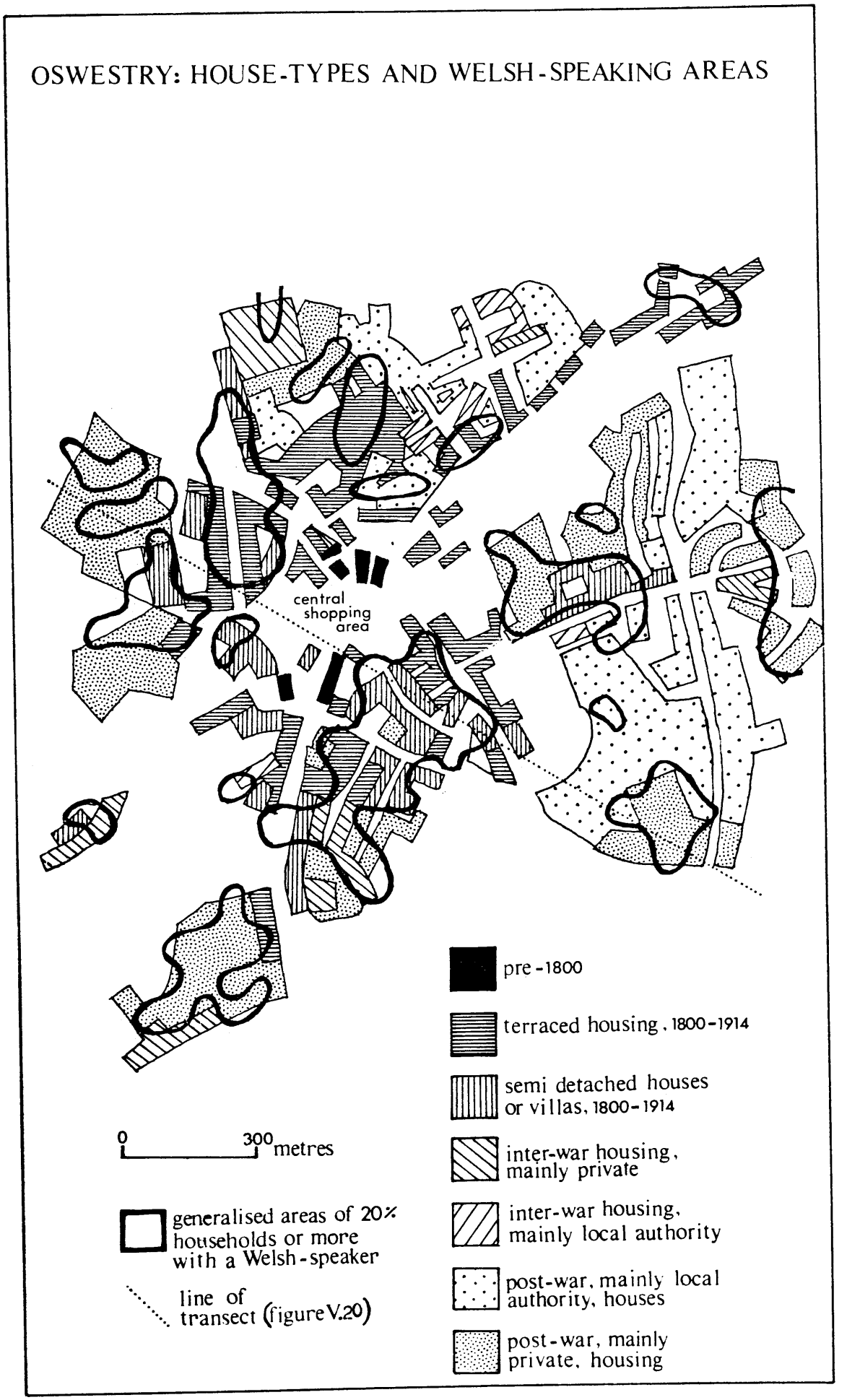
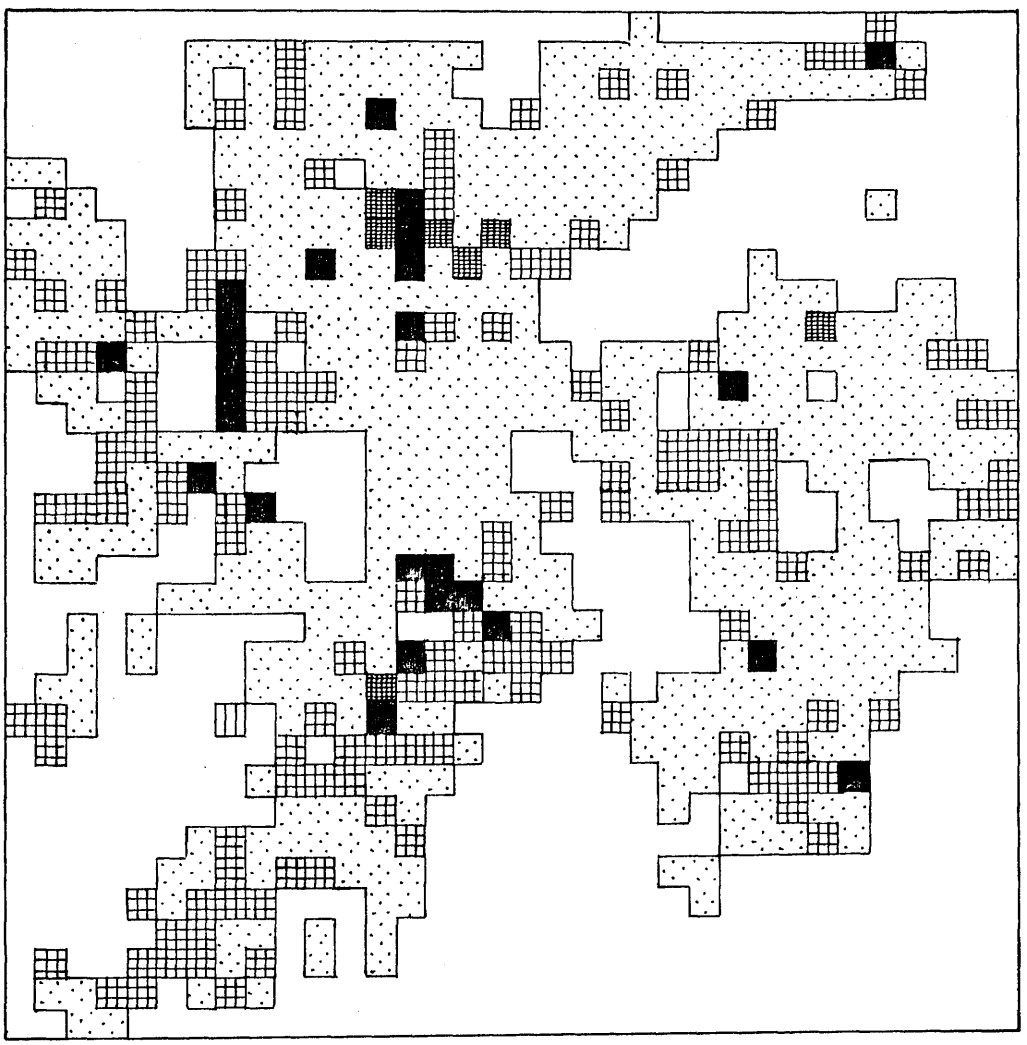

OSWESTRY: HOUSE-TYPES AND WELSH-SPEAKING AREAS
central shopping area
0
300 metres
generalised areas of 20% households or more with a Welsh-speaker
line of transect (figure V.20)
pre-1800
terraced housing, 1800-1914
semi detached houses or villas, 1800-1914
inter-war housing, mainly private
inter-war housing, mainly local authority
post-war, mainly local authority, houses
post-war, mainly private, housing

Figure IV.16

OSWESTRY: AREAS OF GREATEST WELSH SPEAKING POTENTIAL



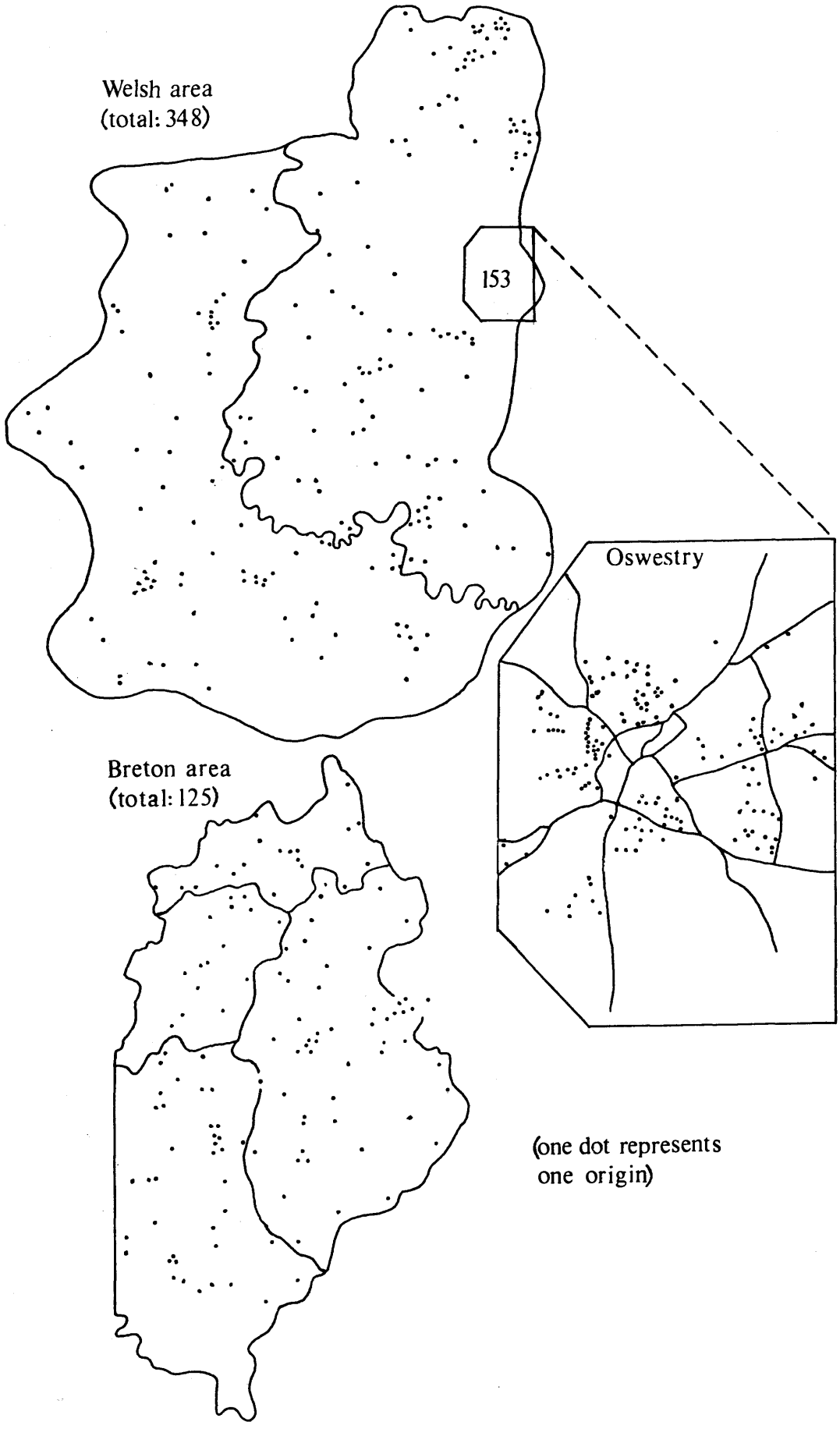
KEY:

- High number and percentage
- High number; low percentage
- High percentage; low number
- Low number and percentage

0 200 m

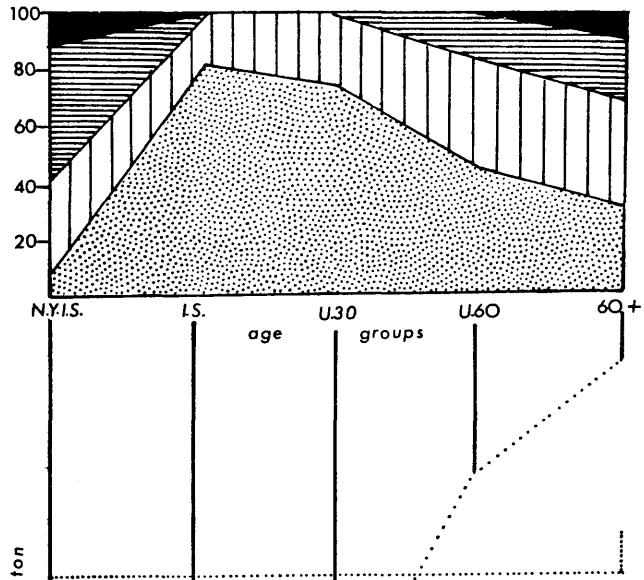
figure V.1

Questionnaire I: origins of completed forms (households)



PERCENTAGE SPEAKING FREQUENCIES, BY AGE-GROUPS, AND PROPORTIONS OF NON WELSH/BRETON SPEAKERS IN A SAMPLE OF FAMILIES WITH ONE OR MORE MEMBERS ABLE TO SPEAK WELSH/BRETON

V.2: Breton area



speaks only Welsh (Breton)

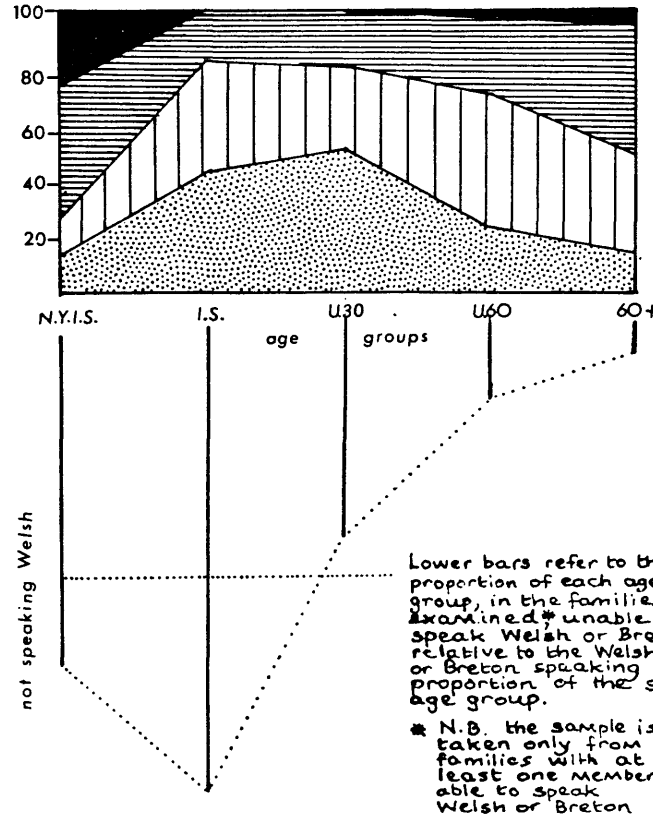
speaks more Welsh (Breton) than English (French)

sometimes speaks Welsh (Breton)

can speak Welsh (Breton) but rarely or never does so

N.Y.I.S. not yet in school
I.S. in school
U.30 no longer in school; aged under 30
U.60 30–60
60+ over 60

V.3: Welsh area



Lower bars refer to the proportion of each age-group, in the families examined* unable to speak Welsh or Breton, relative to the Welsh or Breton speaking proportion of the same age group.

* N.B. the sample is taken only from families with at least one member able to speak Welsh or Breton

Figure V.4

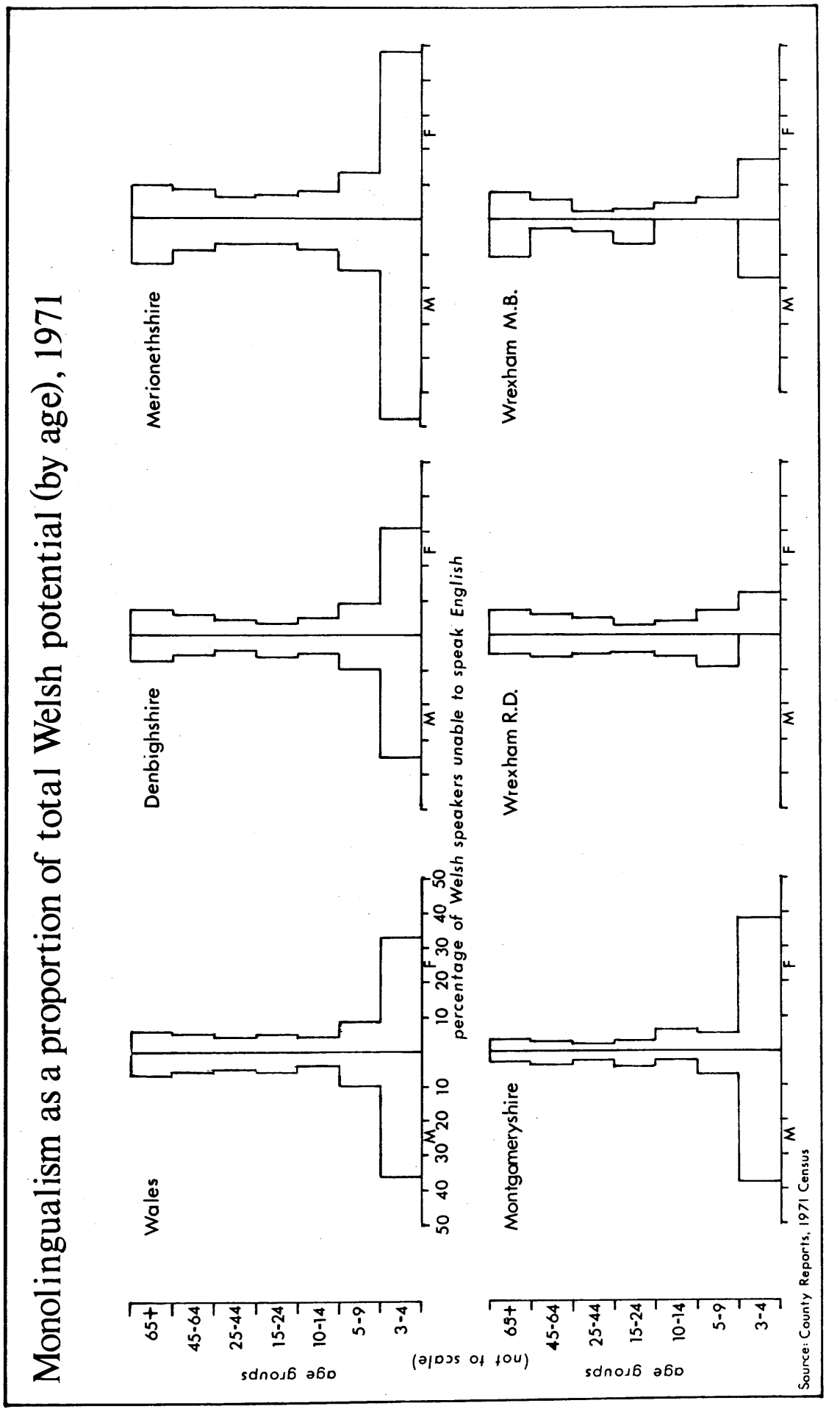
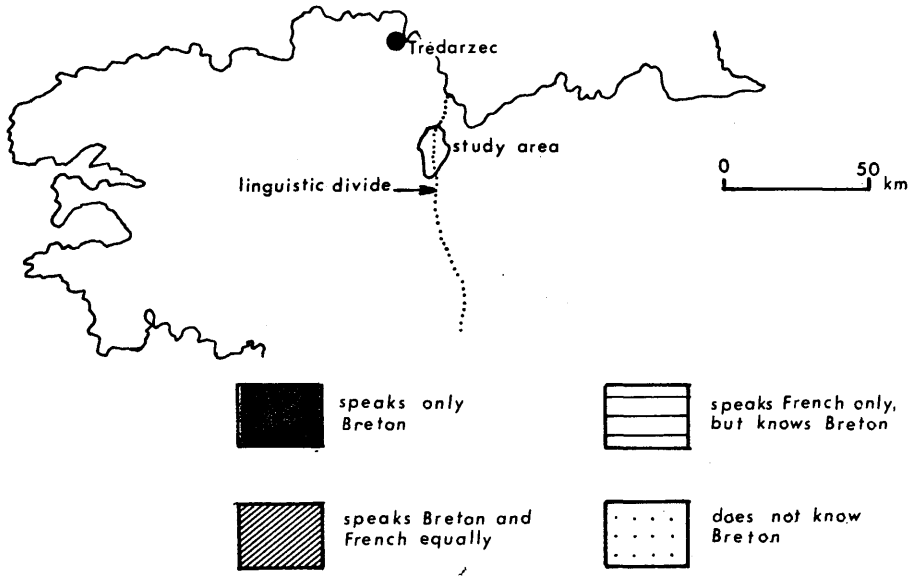
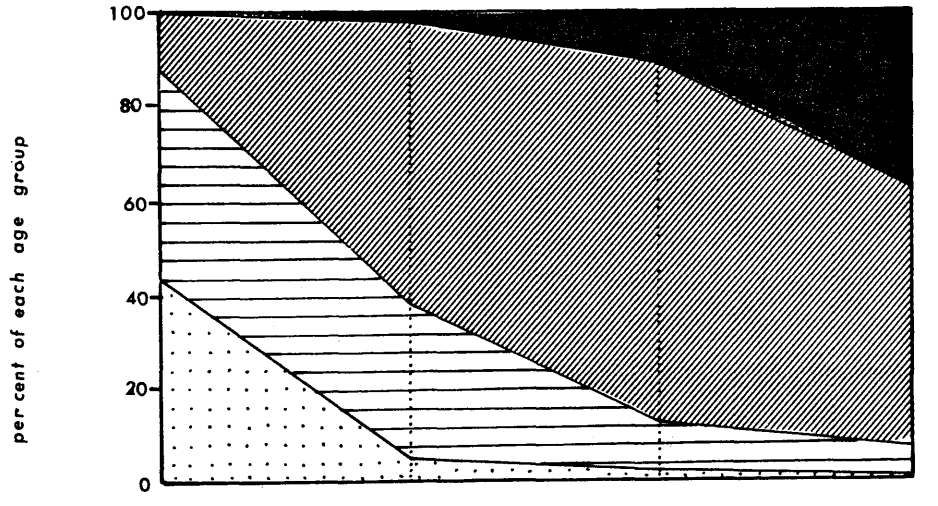

Monolingualism as a proportion of total Welsh potential (by age), 1971
Wales
Denbighshire
Merionethshire
Montgomeryshire
Wrexham R.D.
Wrexham M.B.
age groups
65+
45-64
25-44
15-24
10-14
5-9
3-4
M
F
50 40 30 20 10
10 20 30 40 50
percentage of Welsh speakers unable to speak English
(not to scale)
Source: County Reports, 1971 Census

Figure V.5

Speaking frequencies of Breton in the commune of Trédarzec, Côtes-du-Nord, 1971





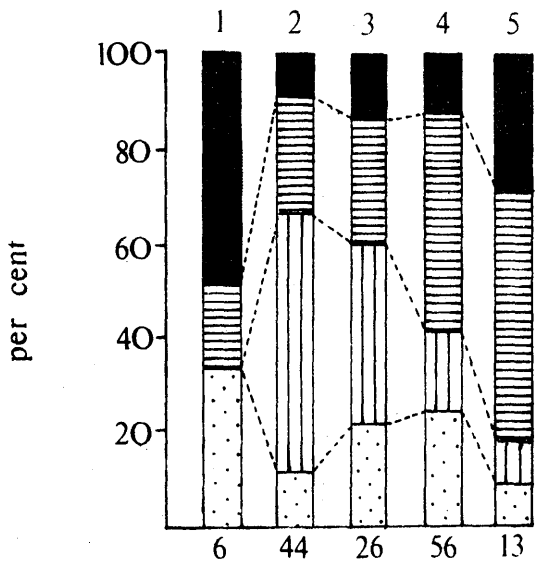
age group	under 20	21-50	51-70	over 70
number in sample	140	144	86	30

Source: Gwegen (1975), p. 58

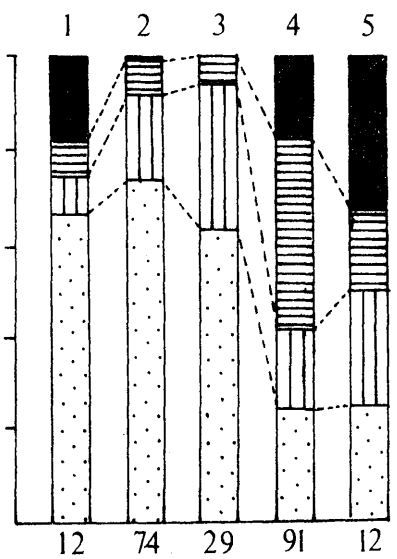
Figure V.6

WELSH OR BRETON SPEAKING FREQUENCY IN FAMILIES WITH SCHOOL-AGE CHILDREN, 1973

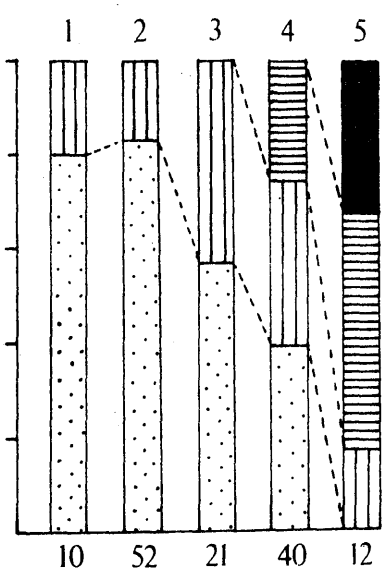
a: West of Welsh national border



b: East of border



c: Breton area



KEY:

columns:

1 not yet in school
2 in school
3 no longer in school; aged under 30
4 30–60
5 over 60

shadings:

- speaks no Welsh (Breton)
- can speak Welsh (Breton), but rarely or never does so
- sometimes speaks Welsh (Breton)
- speaks more Welsh (Breton) than English (French)

figure at foot of each column refers to number of people in sample.

Figure V.7

"RESIDENTIAL MOBILITY"

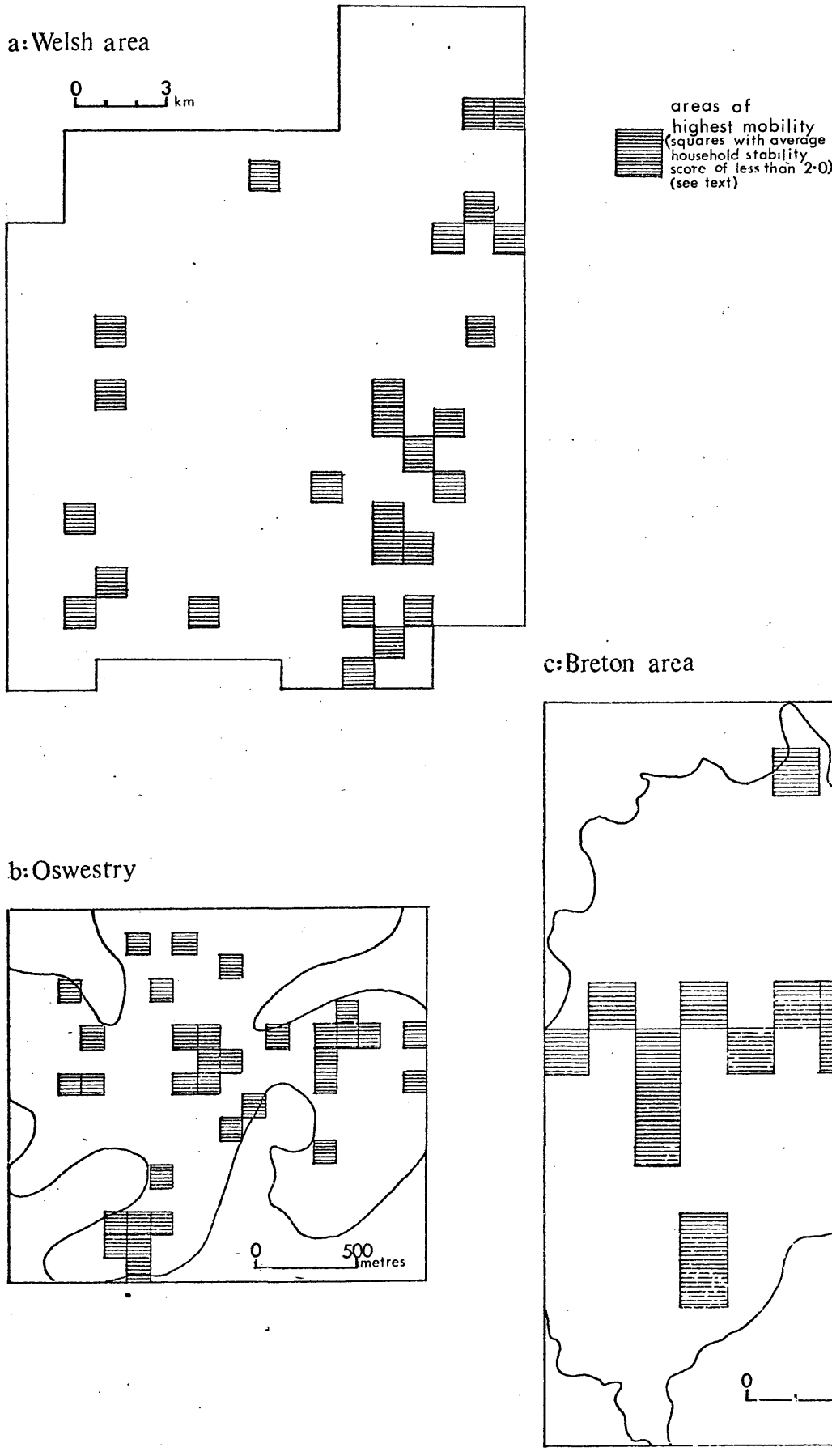
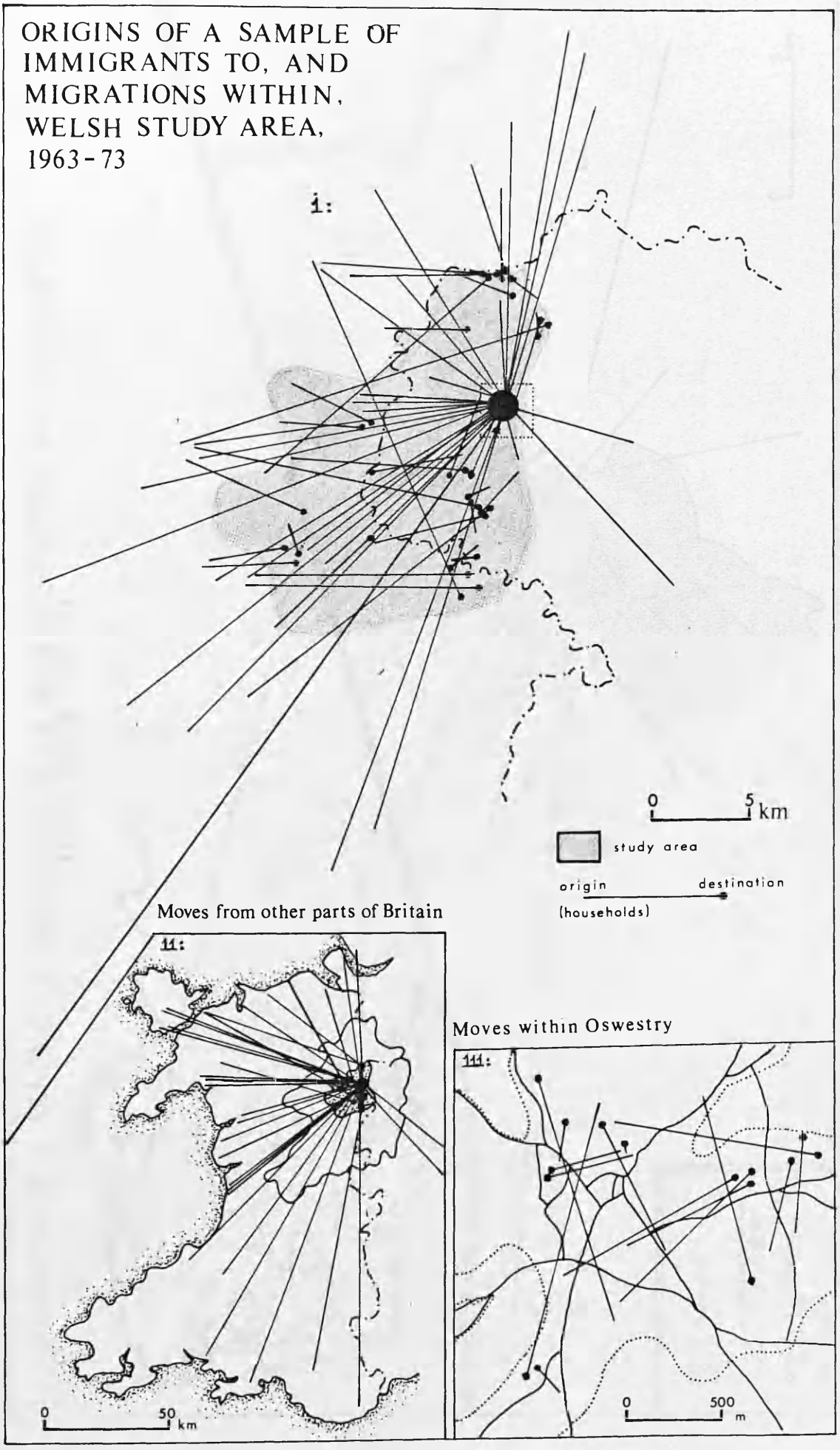


Figure V.8


ORIGINS OF A SAMPLE OF IMMIGRANTS TO, AND MIGRATIONS WITHIN, WELSH STUDY AREA, 1963-73
i:
0 5 km
study area
origin
destination
(households)
Moves from other parts of Britain
ii:
0 50 km
Moves within Oswestry
iii:
0 500 m

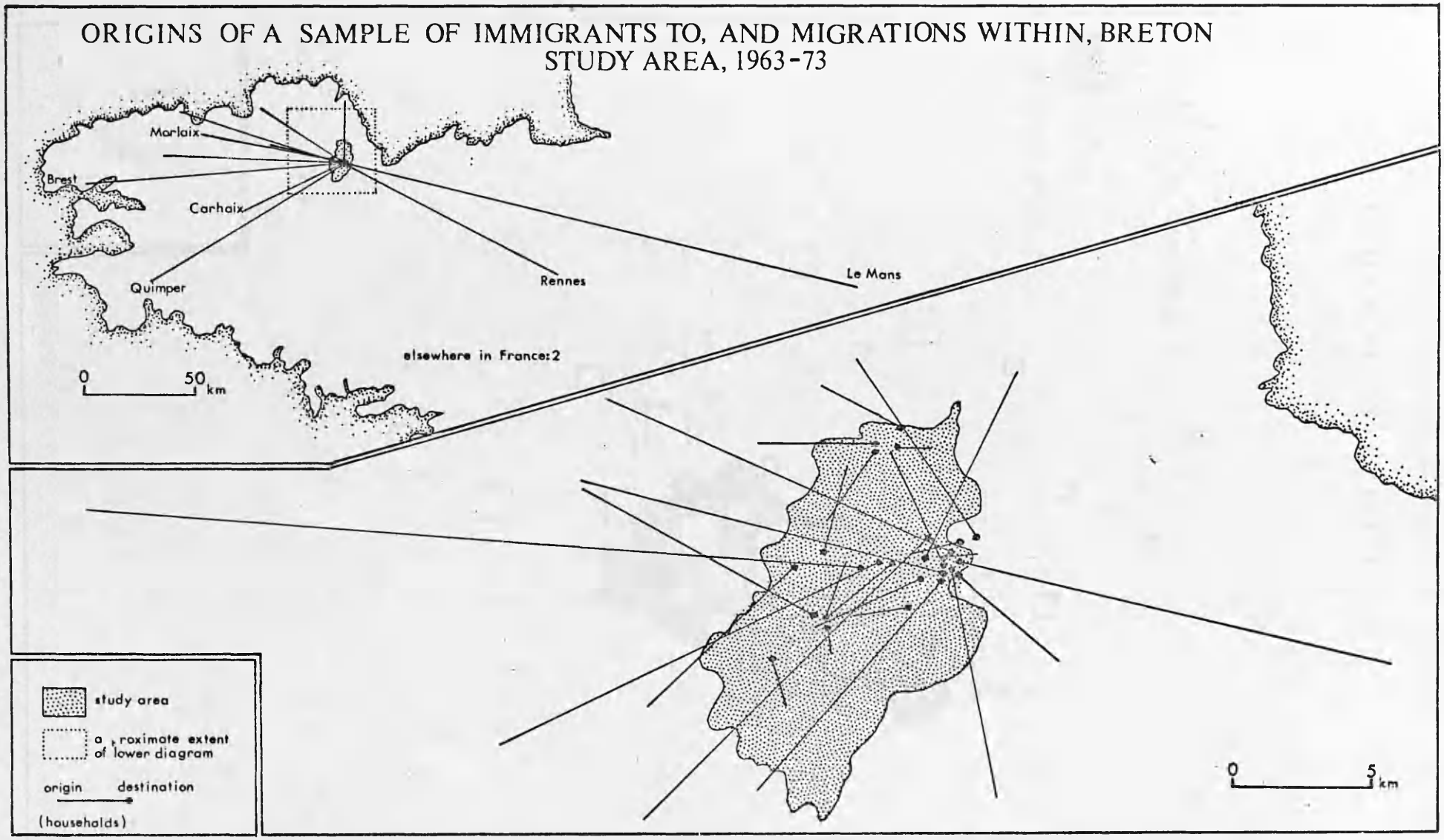

ORIGINS OF A SAMPLE OF IMMIGRANTS TO, AND MIGRATIONS WITHIN, BRETON STUDY AREA, 1963-73
Morlaix
Brest
Carhaix
Quimper
Rennes
Le Mans
elsewhere in France: 2
0
50
km
study area
approximate extent of lower diagram
origin
destination
(households)
0
5
km

Figure V.9

Figure V.10

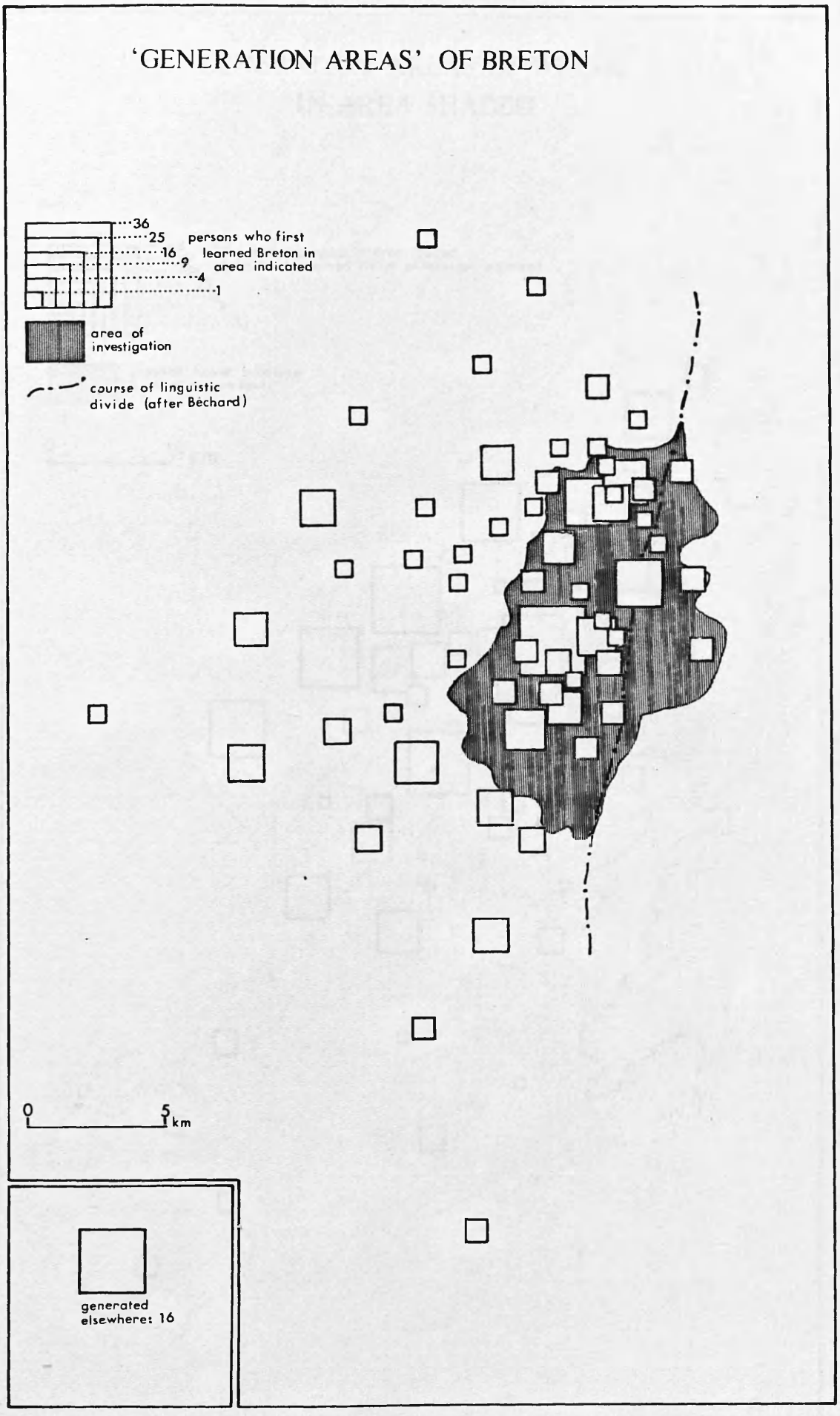

'GENERATION AREAS' OF BRETON
36
25
16
9
4
1
persons who first learned Breton in area indicated
area of investigation
course of linguistic divide (after Béchard)
0
5
km
generated elsewhere: 16

Figure V.11

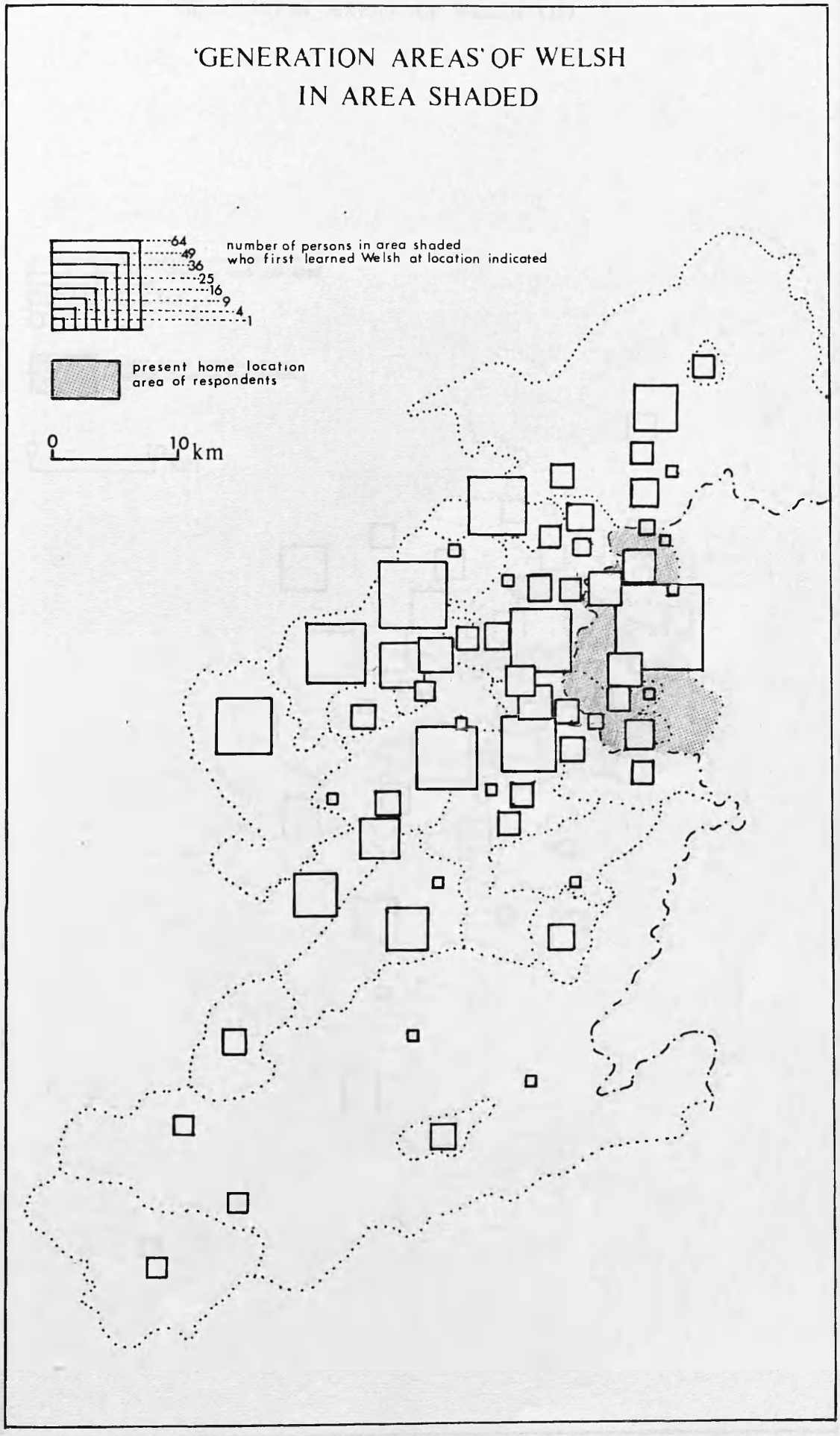

'GENERATION AREAS' OF WELSH
IN AREA SHADED
64
49
36
25
16
9
4
1
number of persons in area shaded
who first learned Welsh at location indicated
present home location
area of respondents
0
10 km

Figure V.12

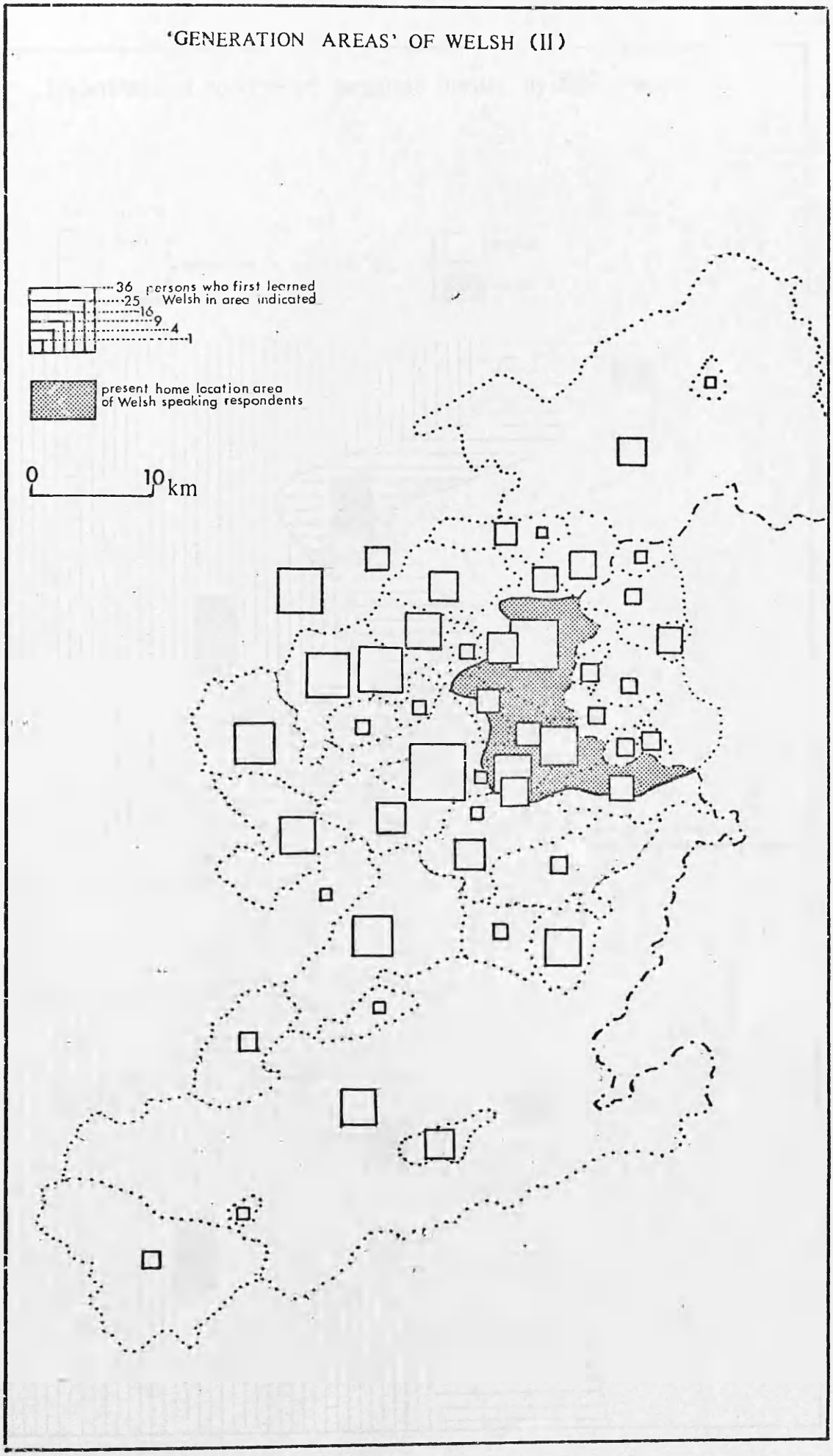

'GENERATION AREAS' OF WELSH (II)
36 persons who first learned
25 Welsh in area indicated
16
9
4
1
present home location area
of Welsh speaking respondents
0
10 km

Figure V.13

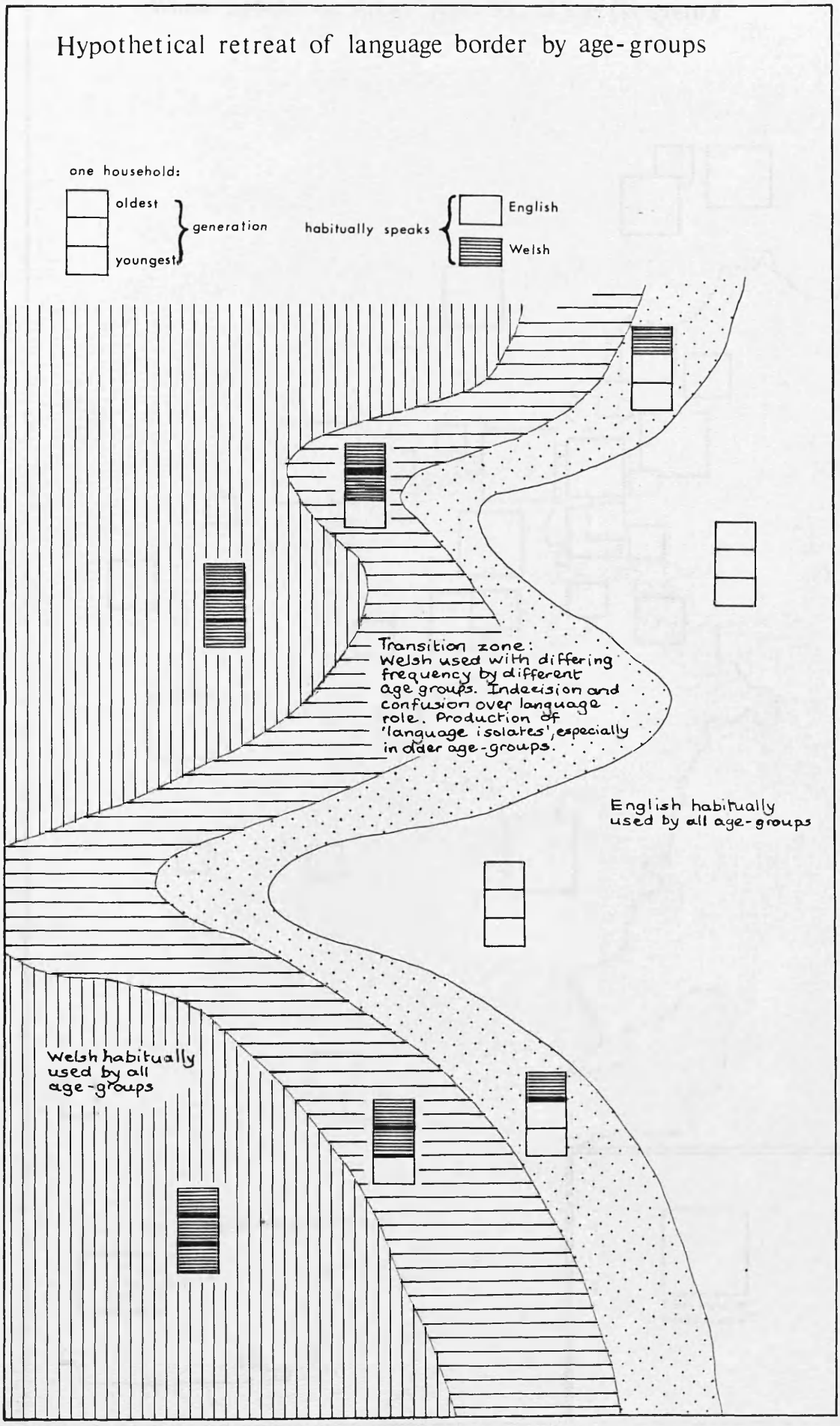

Hypothetical retreat of language border by age-groups
one household:
oldest
youngest
generation
habitually speaks
English
Welsh
Transition zone: Welsh used with differing frequency by different age groups. Indecision and confusion over language role. Production of 'language isolates', especially in older age-groups.
English habitually used by all age-groups
Welsh habitually used by all age-groups

Figure V.14

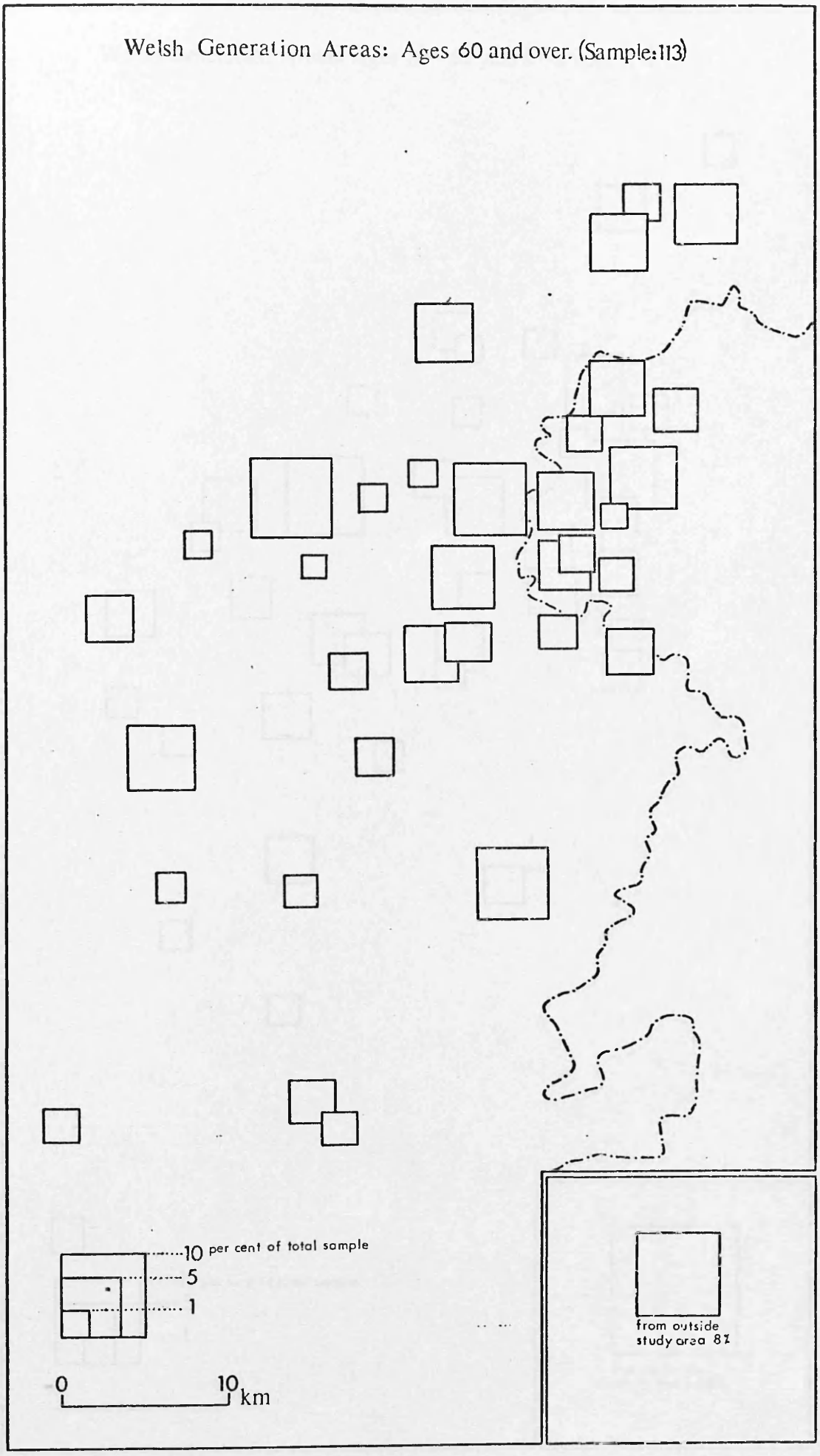

Welsh Generation Areas: Ages 60 and over. (Sample:113)
10 per cent of total sample
5
1
0
10 km
from outside study area 8%

Figure V.15

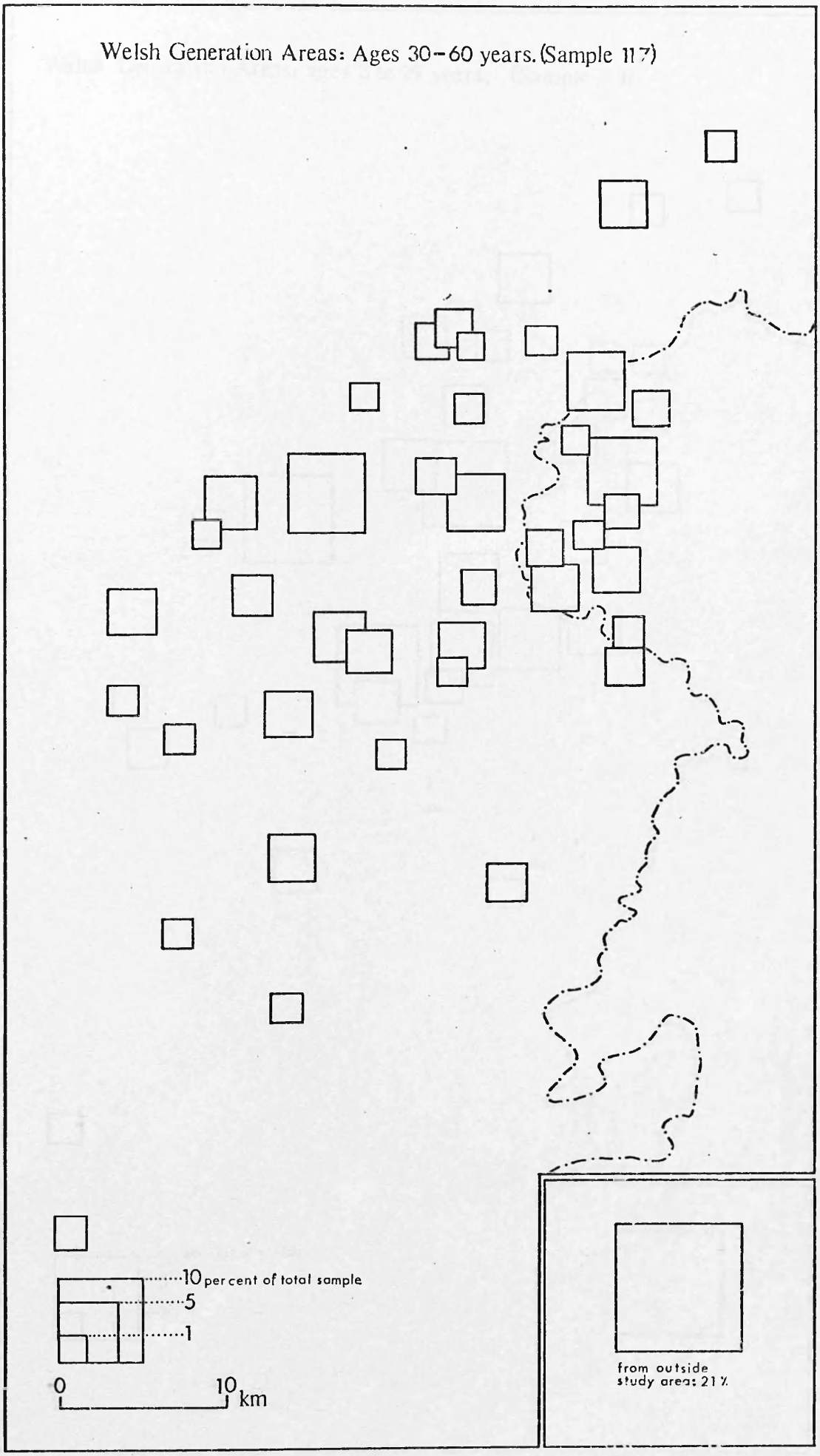

Welsh Generation Areas: Ages 30-60 years. (Sample 117)
10 per cent of total sample
5
1
0
10 km
from outside study area: 21%

Figure V.16

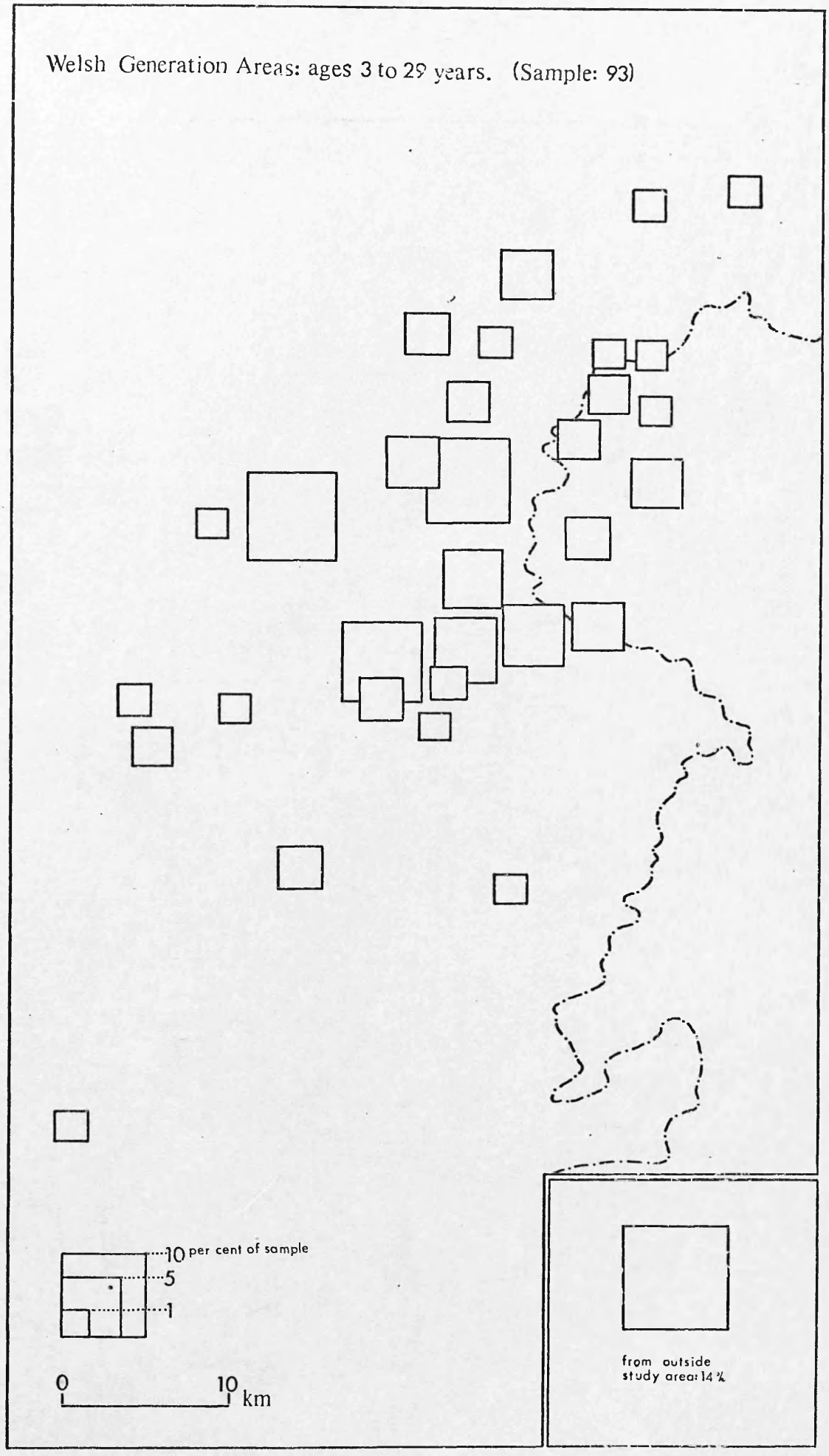

Welsh Generation Areas: ages 3 to 29 years. (Sample: 93)
10 per cent of sample
5
1
0
10 km
from outside
study area: 14 %

Figure V.17a

AVERAGE FREQUENCY SCORES FOR WELSH SPEAKING, 1973

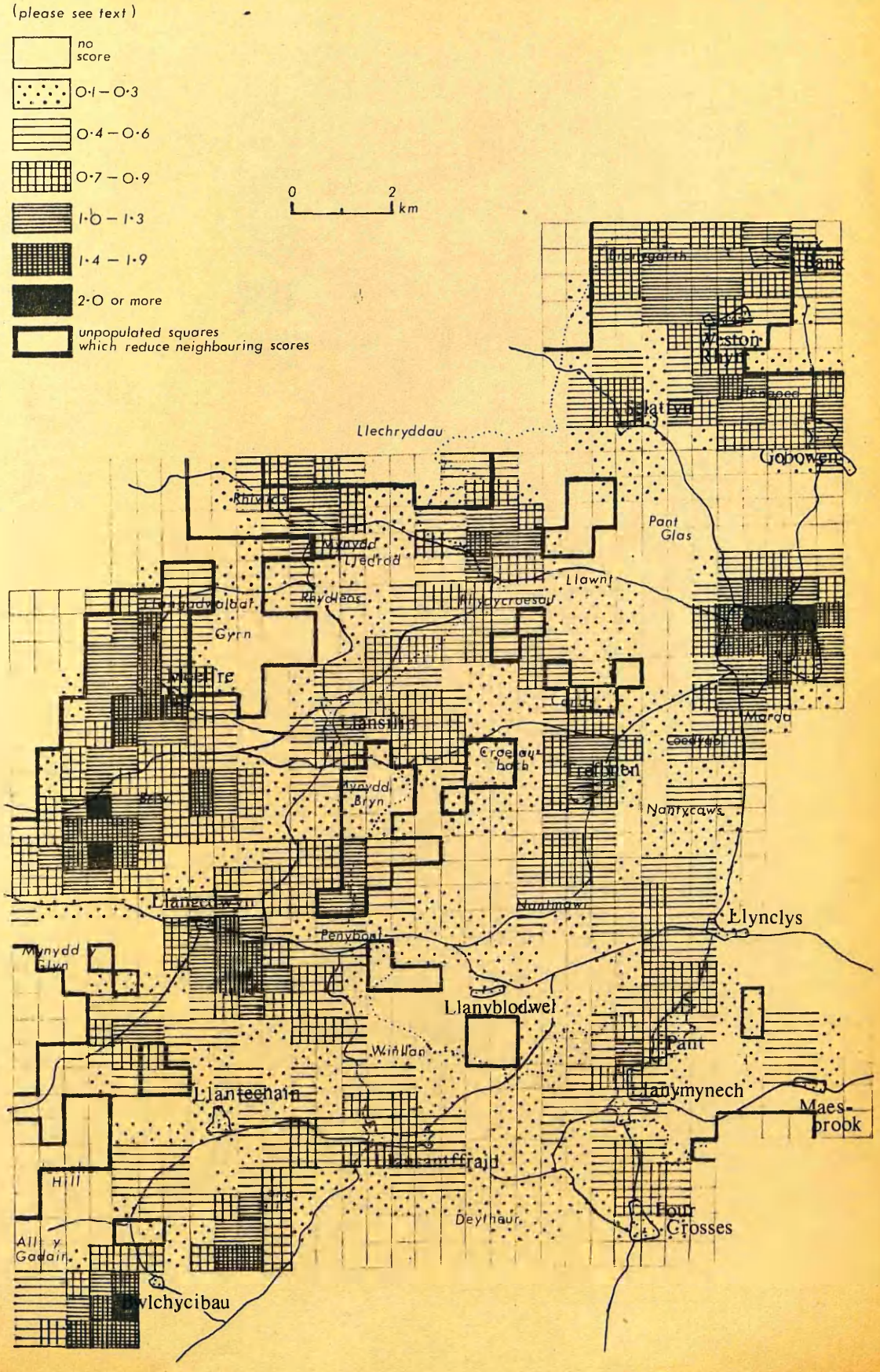


Figure V.17a

AVERAGE FREQUENCY SCORES FOR WELSH SPEAKING, 1973

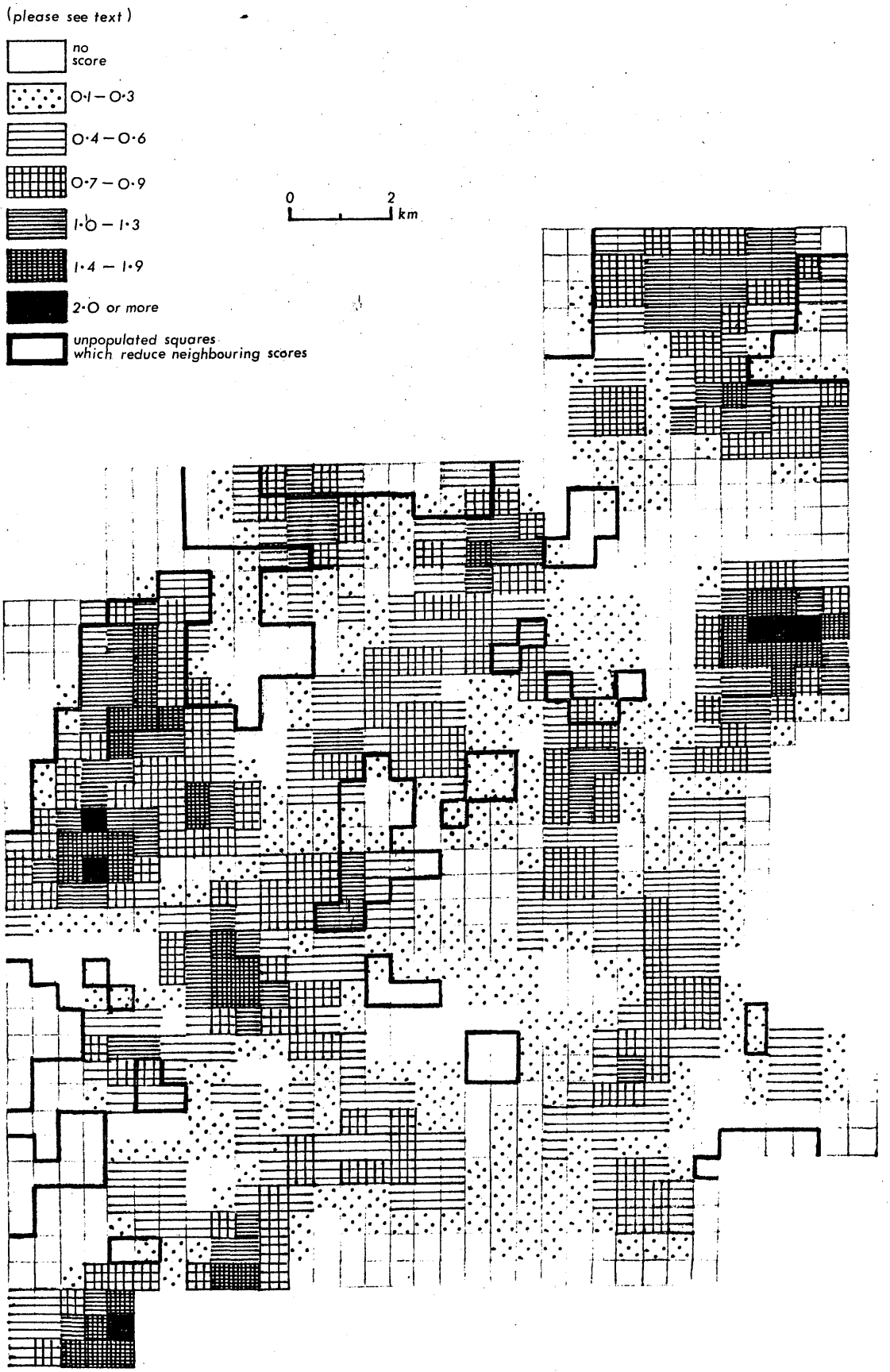


Figure V.17b

AGGREGATE FREQUENCY SCORES FOR WELSH SPEAKING, 1973

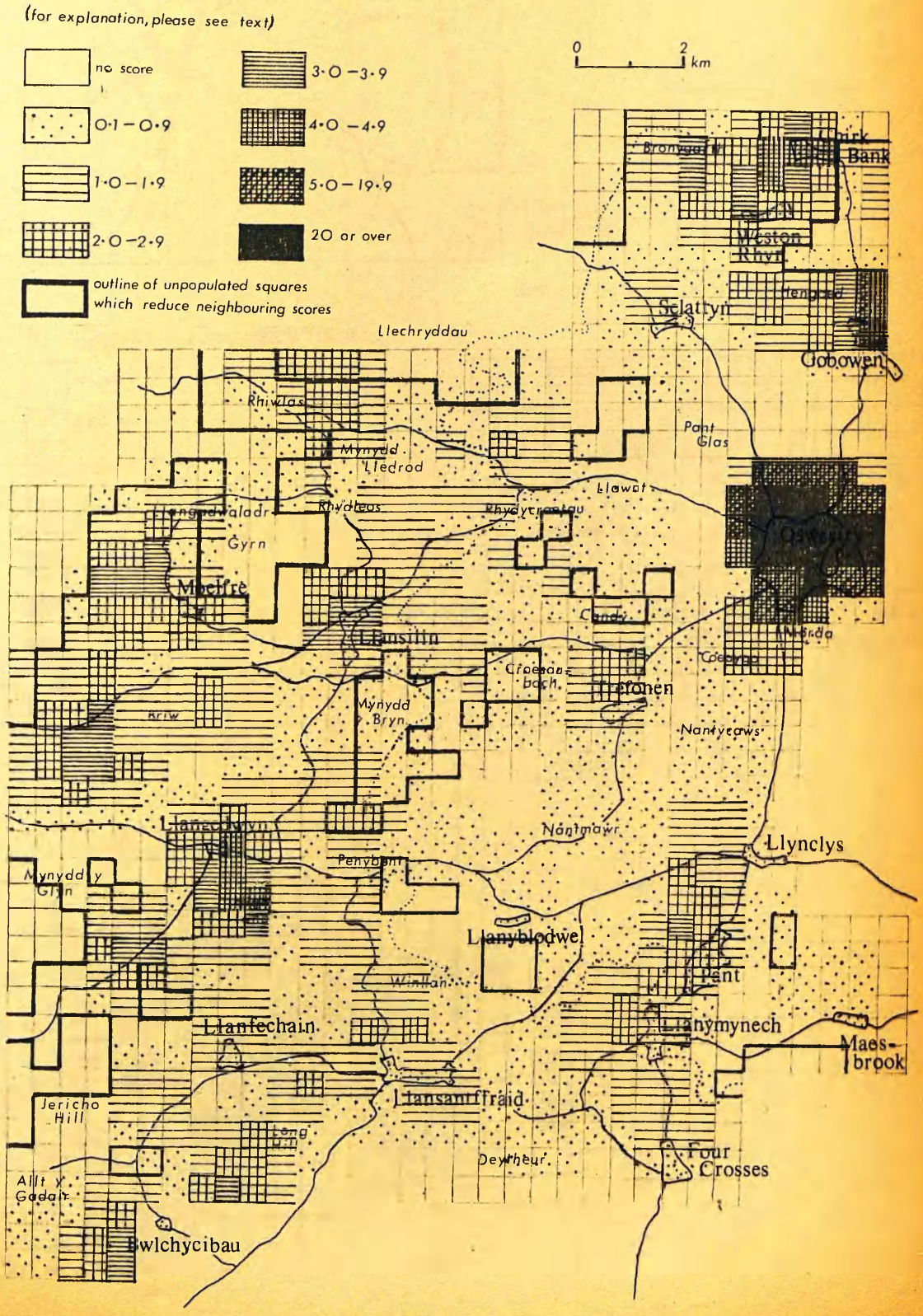
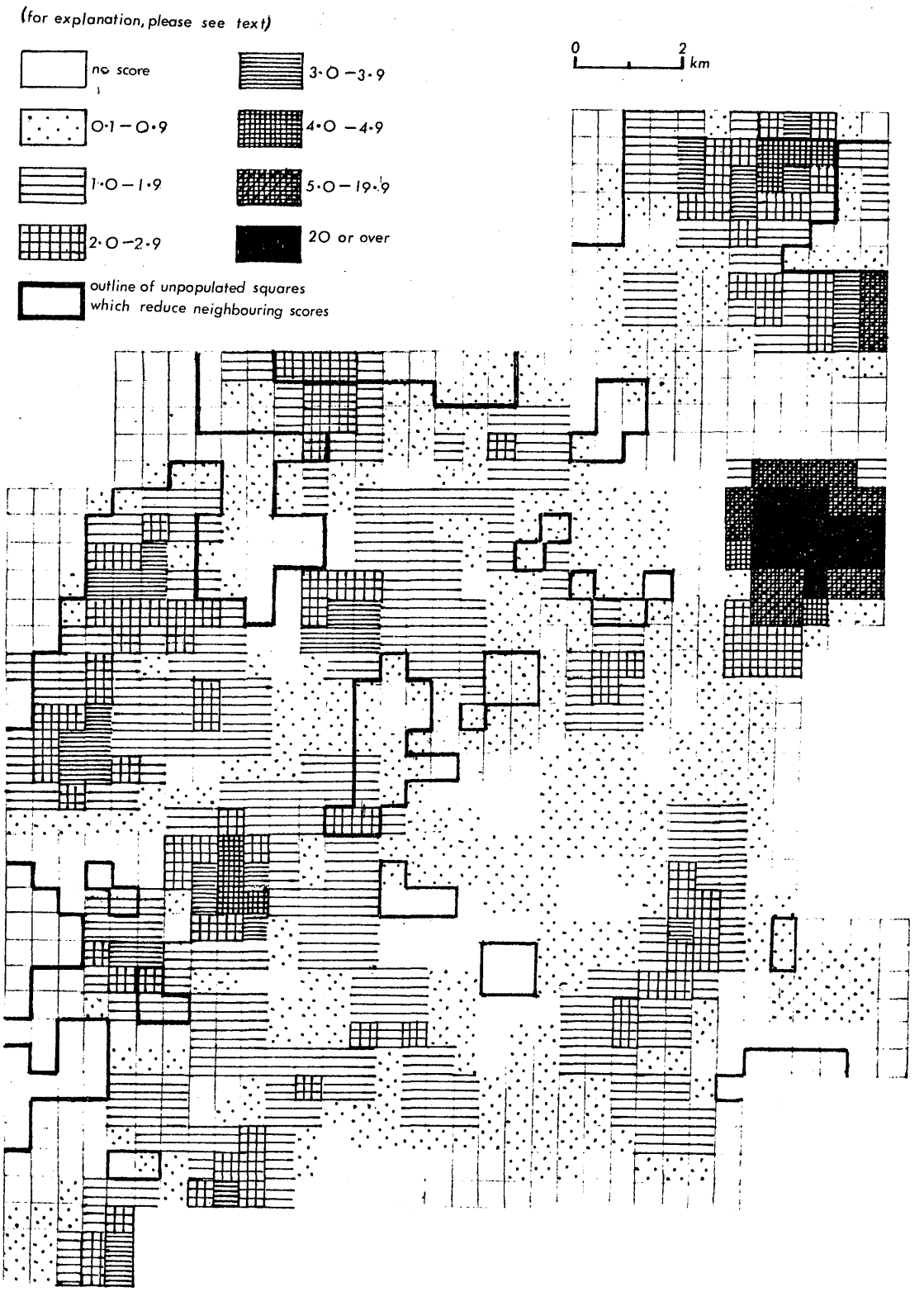


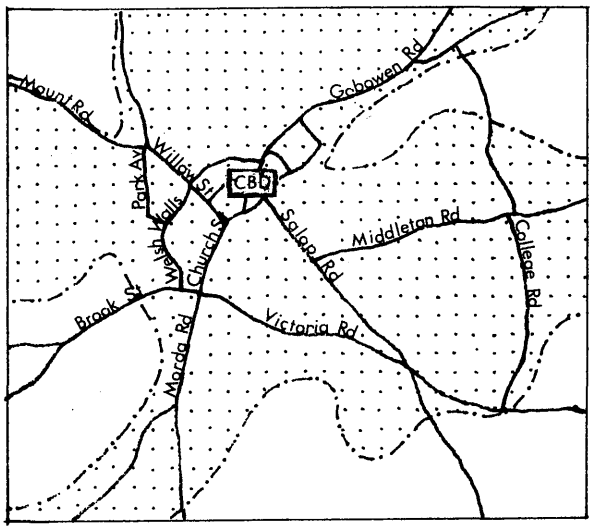
Figure V.17b

AGGREGATE FREQUENCY SCORES FOR WELSH SPEAKING, 1973



OSWESTRY: REPORTED FREQUENCY OF USE OF WELSH. 1973

a: Location Map



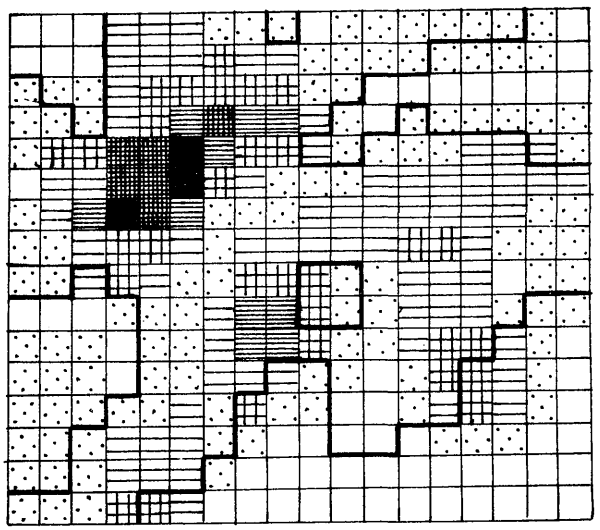
0 500 metres

built-up area

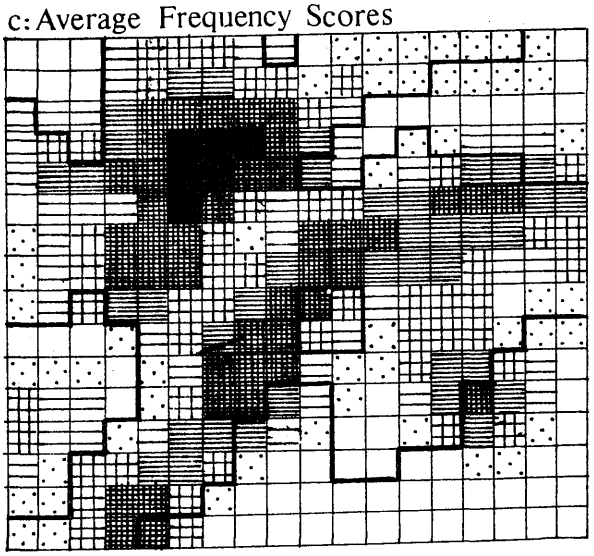
(for explanation of scores, please see text)

b: Aggregate Frequency Scores

- no score
- 0·1–1·9
- 2·0–3·9
- 4·0–5·9
- 6·0–7·9
- 8·0–9·9
- 10·0 or more
- outline of built up area



c: Average Frequency Scores



- no score
- 0·1–0·3
- 0·4–0·6
- 0·7–0·9
- 1·0–1·3
- 1·4–1·9
- 2·0 or more
- outline of built up area

Figure V.19a

AVERAGE FREQUENCY SCORES FOR BRETON SPEAKING, 1973

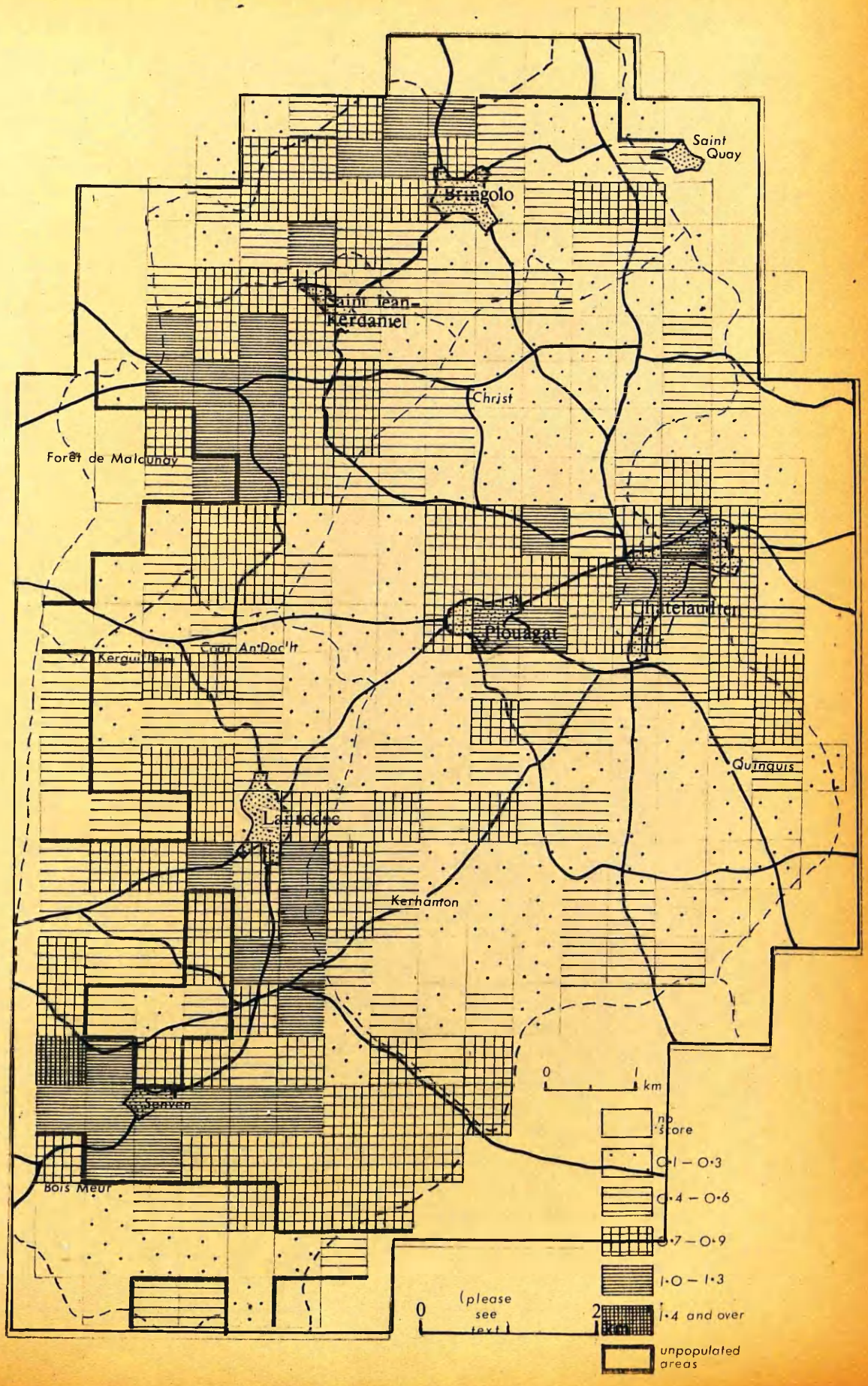


Figure V.19a

AVERAGE FREQUENCY SCORES FOR BRETON SPEAKING, 1973

Figure V.19b

AGGREGATE FREQUENCY SCORES FOR BRETON SPEAKING, 1973

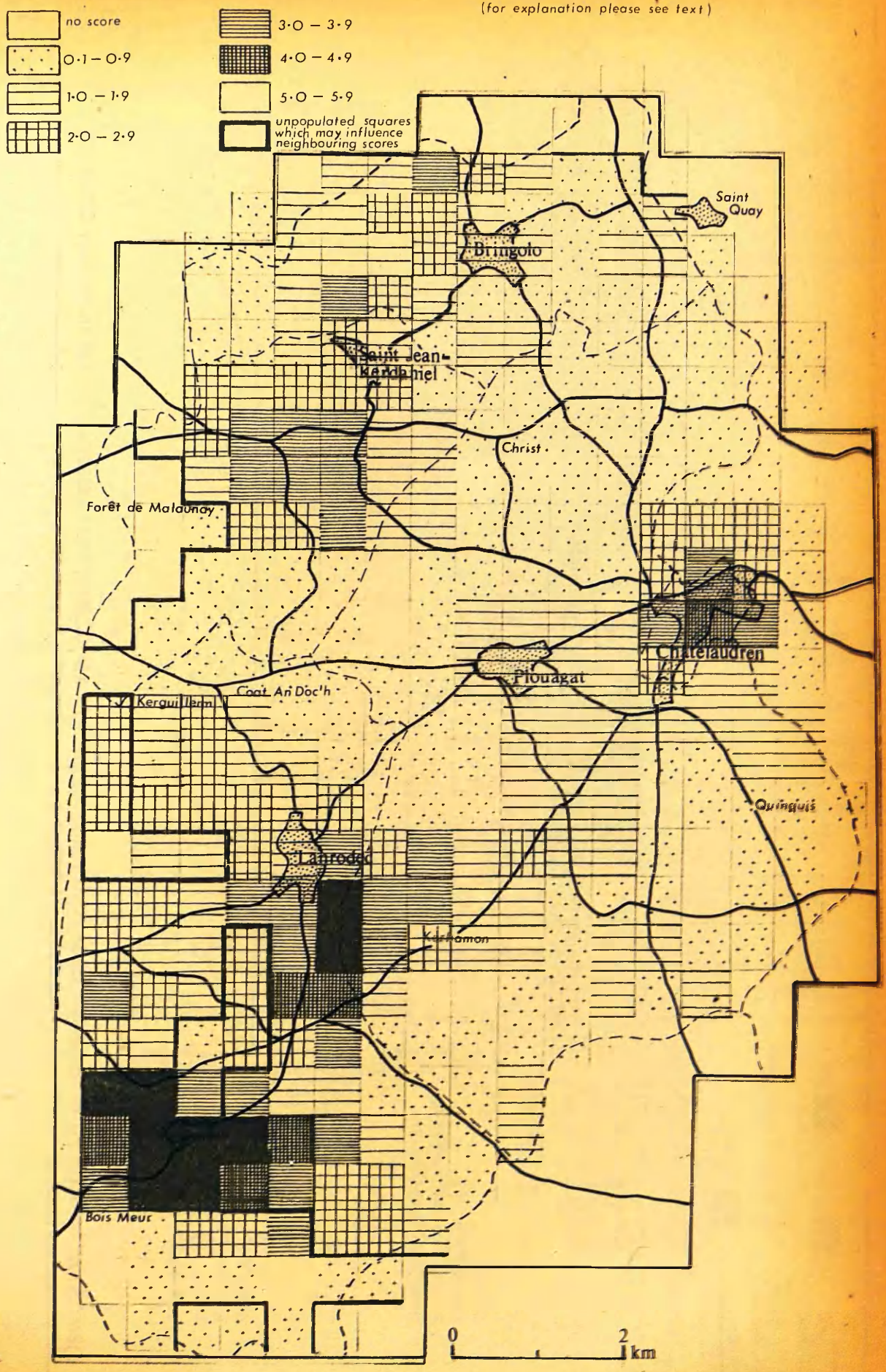


Figure V.19b

AGGREGATE FREQUENCY SCORES FOR BRETON SPEAKING, 1973

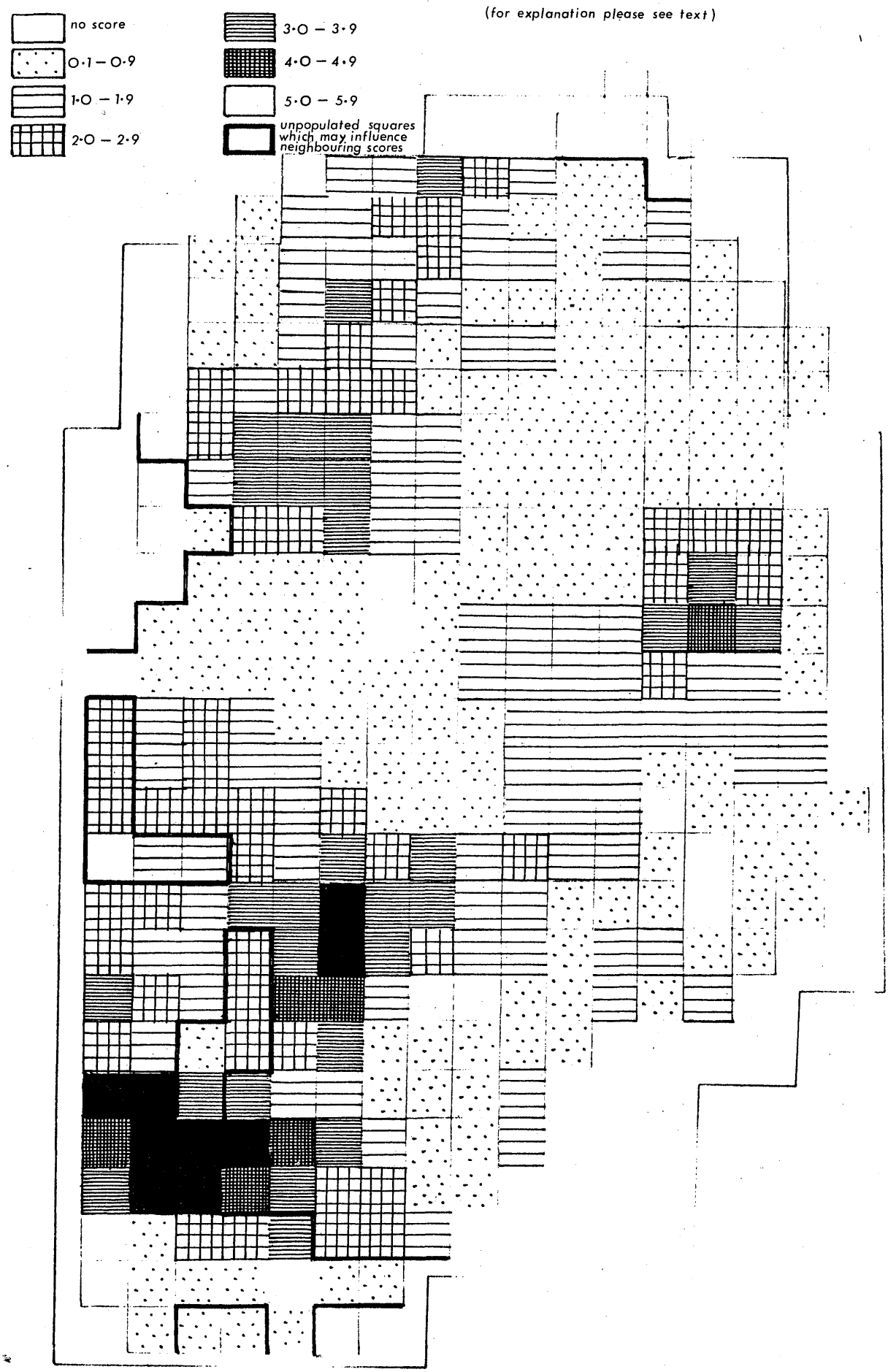
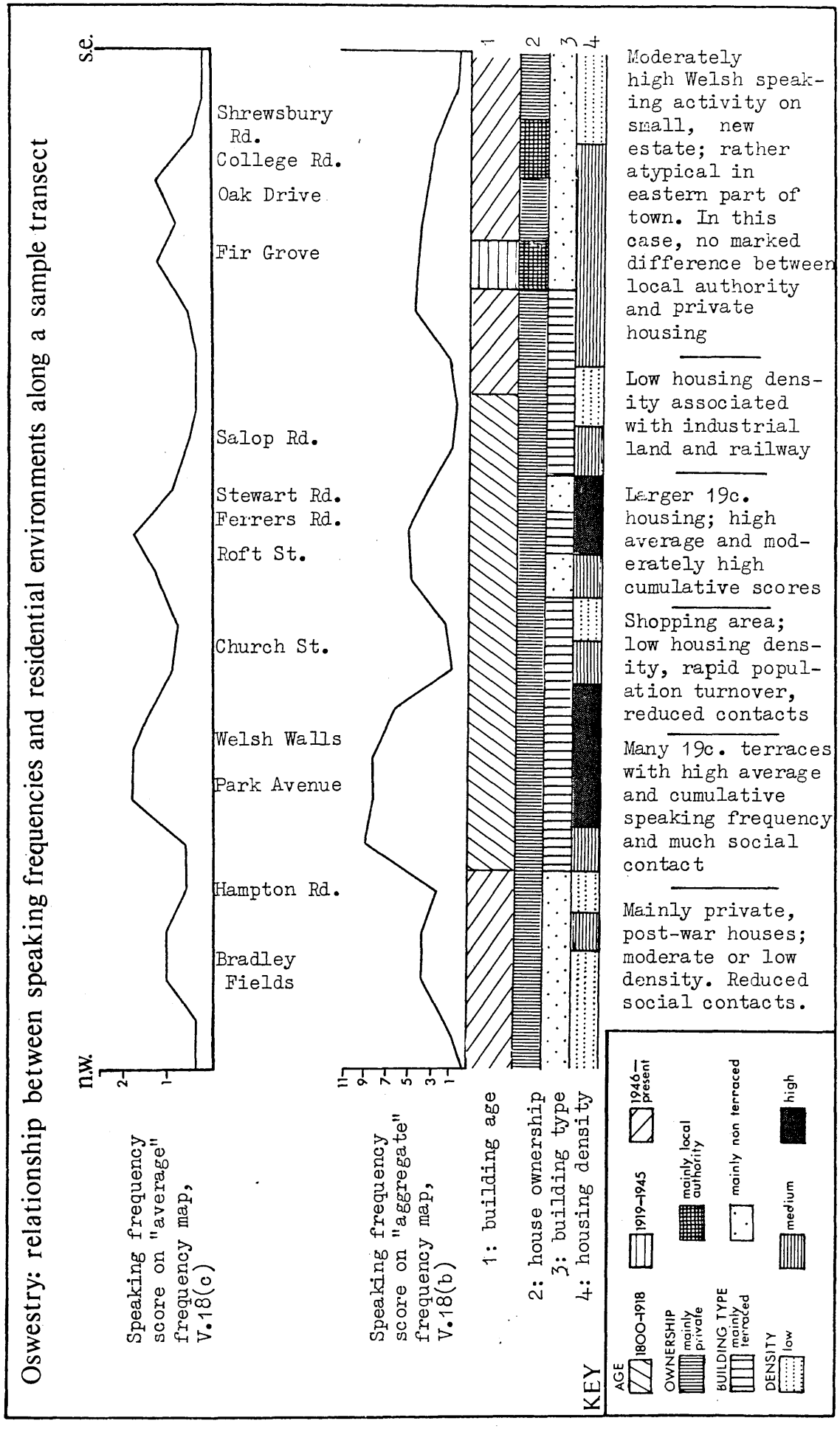


Figure V.20


Oswestry: relationship between speaking frequencies and residential environments along a sample transect
S.E.
N.W.
Shrewsbury Rd.
College Rd.
Oak Drive
Fir Grove
Salop Rd.
Stewart Rd.
Ferrers Rd.
Roft St.
Church St.
Welsh Walls
Park Avenue
Hampton Rd.
Bradley Fields
Speaking frequency score on "average" frequency map, V.18(c)
Speaking frequency score on "aggregate" frequency map, V.18(b)
1: building age
2: house ownership
3: building type
4: housing density
KEY
AGE
1800-1918
1919-1945
1946-present
OWNERSHIP
mainly private
mainly local authority
BUILDING TYPE
mainly terraced
mainly non terraced
DENSITY
low
medium
high
Moderately high Welsh speaking activity on small, new estate; rather atypical in eastern part of town. In this case, no marked difference between local authority and private housing
Low housing density associated with industrial land and railway
Larger 19c. housing; high average and moderately high cumulative scores
Shopping area; low housing density, rapid population turnover, reduced contacts
Many 19c. terraces with high average and cumulative speaking frequency and much social contact
Mainly private, post-war houses; moderate or low density. Reduced social contacts.

AREAS OF HIGH 'POTENTIAL' BUT LOW 'ACTUAL' WELSH SPEAKING FREQUENCY

Areas where 70 to 100% of households have one or more members able to speak Welsh (i.e. high potential) but with average frequency scores of less than 0·4 (■) or 0·4 to 0·6 (▦) in practice (i.e. low actual frequency).

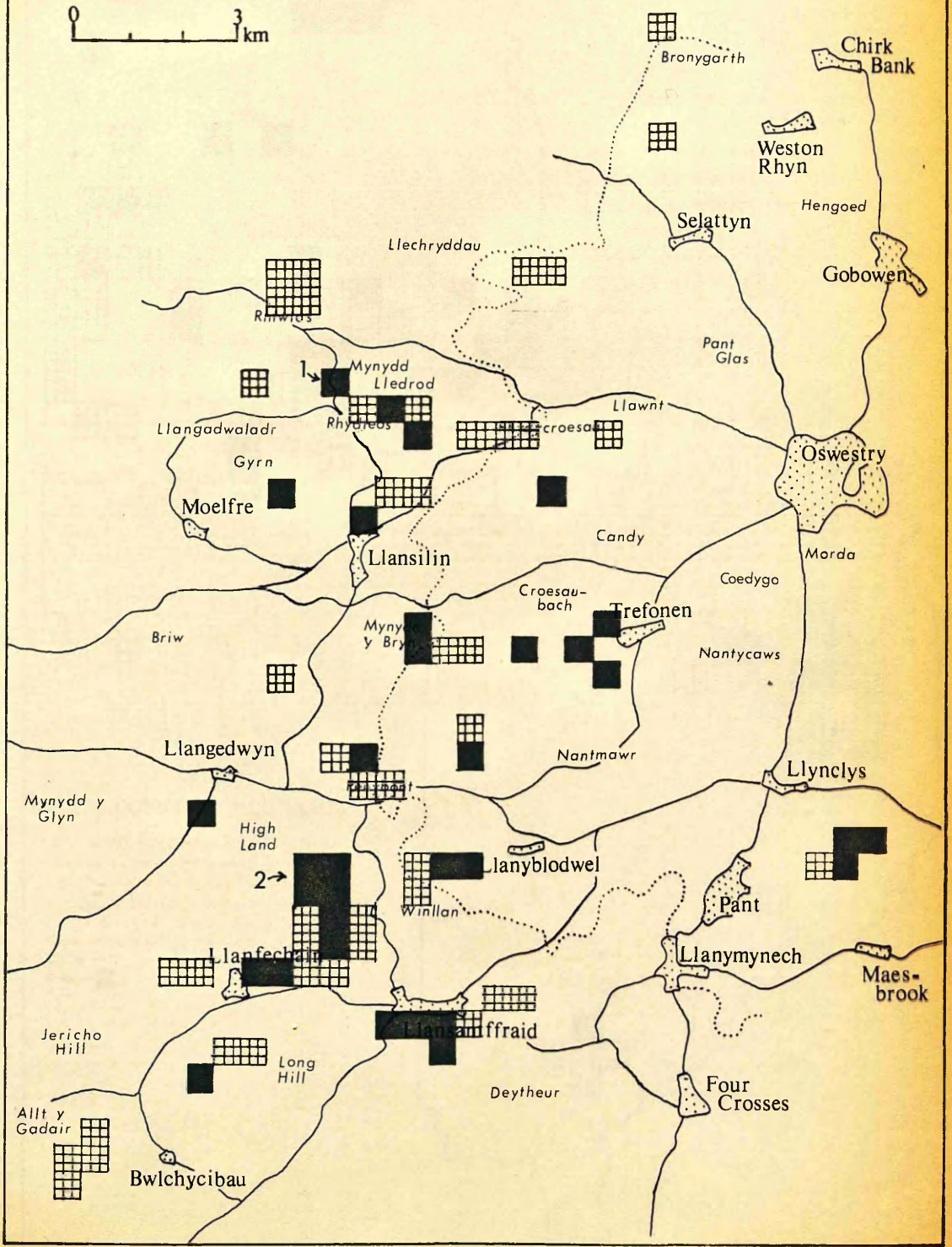


Figure V.21

AREAS OF HIGH 'POTENTIAL' BUT LOW 'ACTUAL' WELSH SPEAKING FREQUENCY

Areas where 70 to 100% of households have one or more members able to speak Welsh (i.e. high potential) but with average frequency scores of less than 0·4 (■) or 0·4 to 0·6 (▦) in practice (i.e. low actual frequency).

Figure V.22

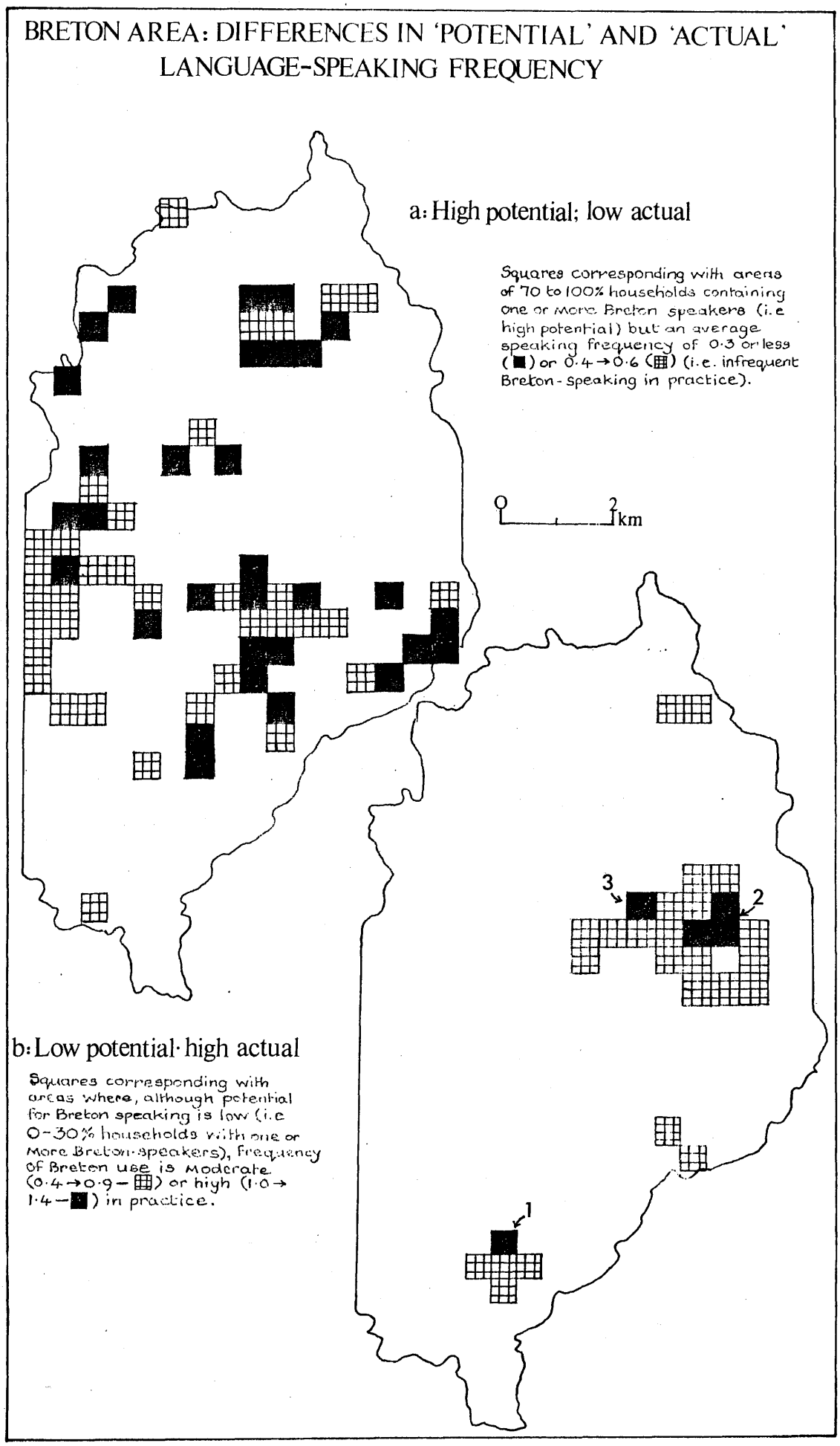

BRETON AREA: DIFFERENCES IN 'POTENTIAL' AND 'ACTUAL' LANGUAGE-SPEAKING FREQUENCY
a: High potential; low actual
Squares corresponding with areas of 70 to 100% households containing one or more Breton speakers (i.e high potential) but an average speaking frequency of 0·3 or less (■) or 0·4 → 0·6 (▦) (i.e. infrequent Breton-speaking in practice).
0
2
km
3
2
1
b: Low potential · high actual
Squares corresponding with areas where, although potential for Breton speaking is low (i.e 0-30% households with one or more Breton-speakers), frequency of Breton use is moderate (0·4 → 0·9 — ▦) or high (1·0 → 1·4 — ■) in practice.

Figure V.23

AREAS OF LOW 'POTENTIAL' BUT HIGH 'ACTUAL' WELSH-SPEAKING FREQUENCY

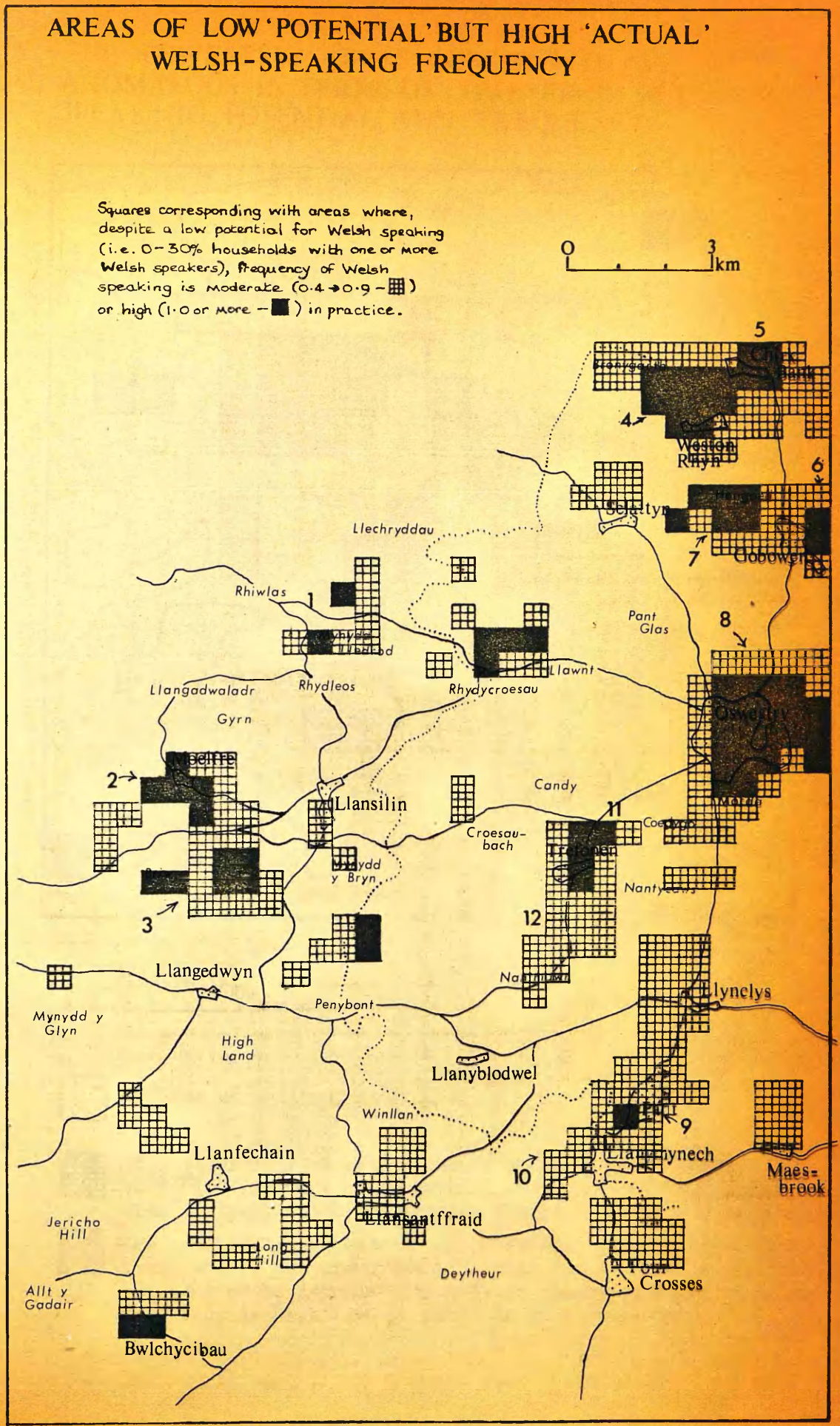


Figure V.23

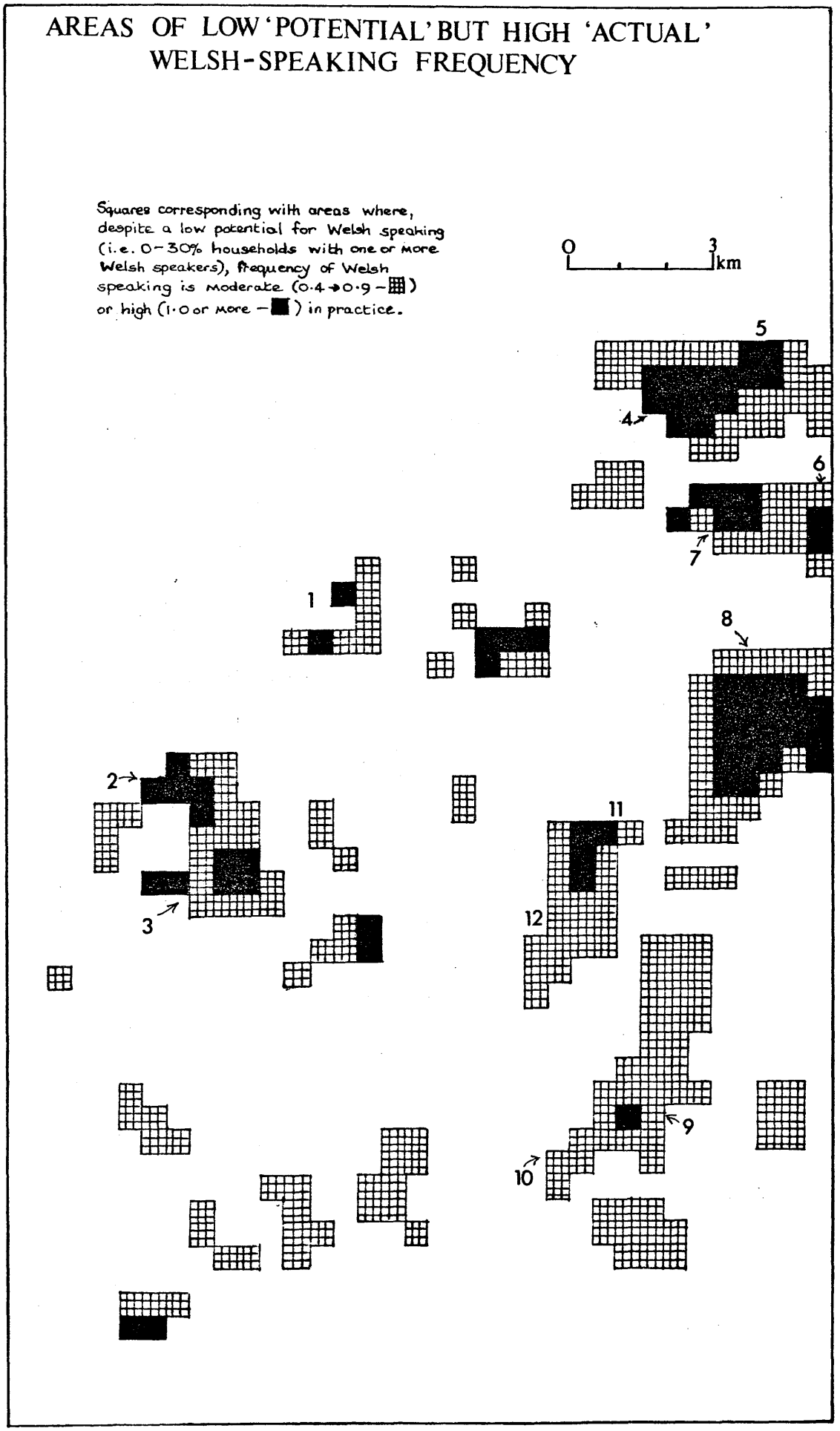
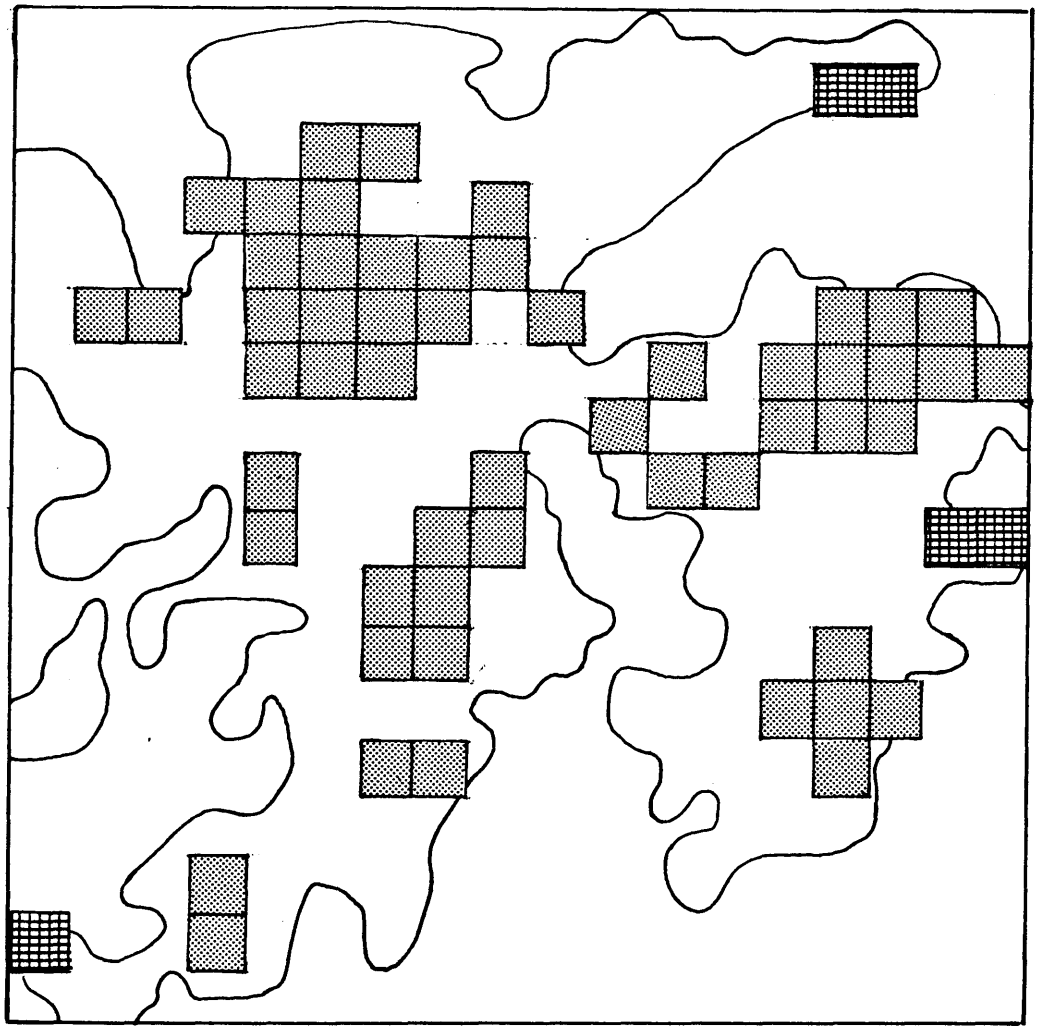

AREAS OF LOW 'POTENTIAL' BUT HIGH 'ACTUAL' WELSH-SPEAKING FREQUENCY
Squares corresponding with areas where, despite a low potential for Welsh speaking (i.e. 0–30% households with one or more Welsh speakers), frequency of Welsh speaking is moderate (0·4→0·9 – ▦) or high (1·0 or more – ■) in practice.
0
3
km
1
2
3
4
5
6
7
8
9
10
11
12

Figure V.24

OSWESTRY: AREAS CONSIDERED 'ANOMALOUS' IN TERMS OF COMPARISON BETWEEN SPEAKING POTENTIAL AND FREQUENCY



0 400 metres

Outline of built-up area

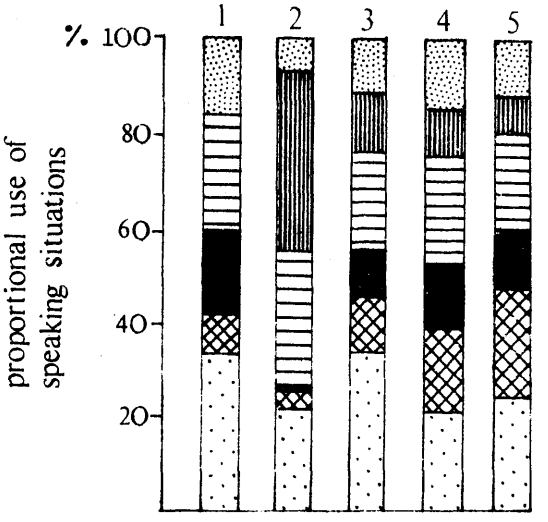
High Potential/low actual use of Welsh: squares where 70 to 100 per cent of households have one or more members able to speak Welsh but average frequency scores of less than 0.4

Low potential/high actual use of Welsh: squares corresponding with areas where, despite a low potential for Welsh speaking (i.e. 0 - 30 per cent of households with a Welsh speaker), Welsh speaking frequency is high (1.0 or more) in practice.

Figure VI.1

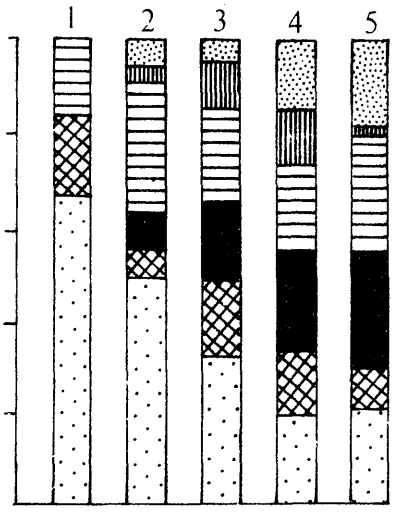
VARIETY AND RELATIVE USE OF SPEAKING SITUATIONS BY MEMBERS OF FAMILIES CONTAINING SCHOOL-AGE CHILDREN

a: West of Welsh border



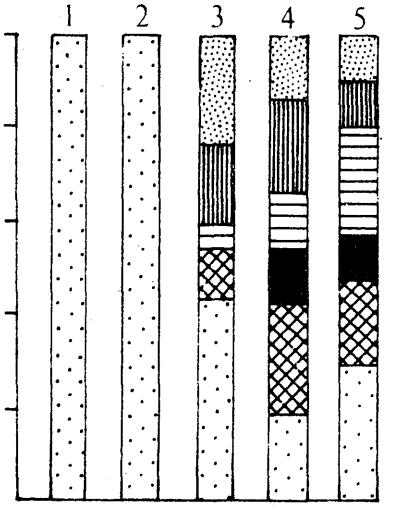
	1	2	3	4	5
total number of speaking situations (a)	12	85	48	120	38
number in sample (b)	6	44	26	56	13
average number of situations used by group (a/b)	2·0	1·9	1·5	2·1	2·9

b: East of border



	1	2	3	4	5
	6	35	19	182	24
	12	74	29	91	12
	0·5	0·5	0·7	2·0	2·0

c: Breton area



	1	2	3	4	5
a	2	4	9	37	34
b	10	42	18	40	12
a/b	0·2	0·1	0·5	0·9	2·8

KEY:

columns:

1 not yet in school
2 in school
3 no longer in school; aged under 30
4 " 30–60
5 over 60

situations:

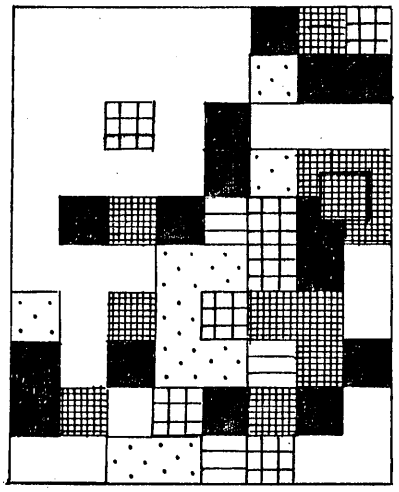
- in home
- with neighbours
- in street and shops
- at church or chapel
- at school or work
- elsewhere

Figure VI.2

WELSH 'AT HOME' AND 'WITH NEIGHBOURS', OSWESTRY DISTRICT

Percentage speaking Welsh at home

i

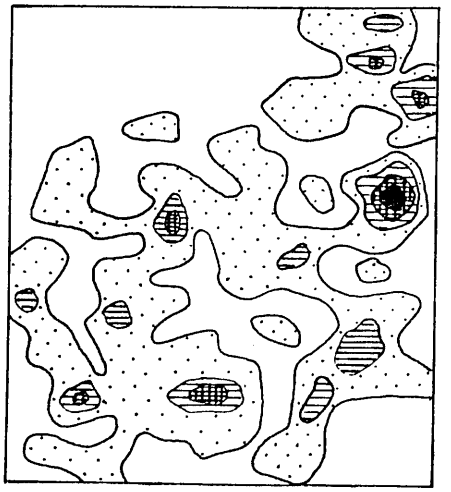


Key:

- 0–20
- 21–40
- 41–60
- 61–80
- 81 or over

Generalised aggregate Welsh speaking surface (households)

ii

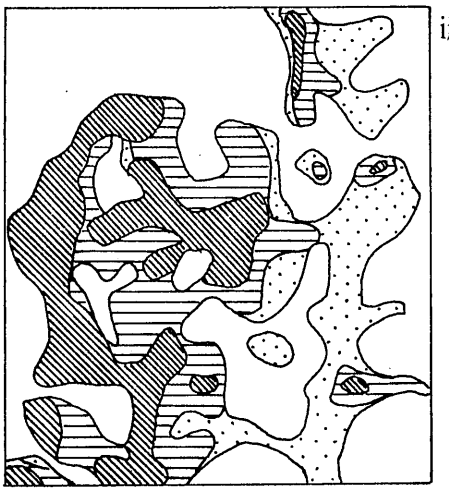


- 1–9
- 10–29
- 30–59
- 60 or over

0 5 km

Generalised percentage Welsh speaking surface (households)

iii

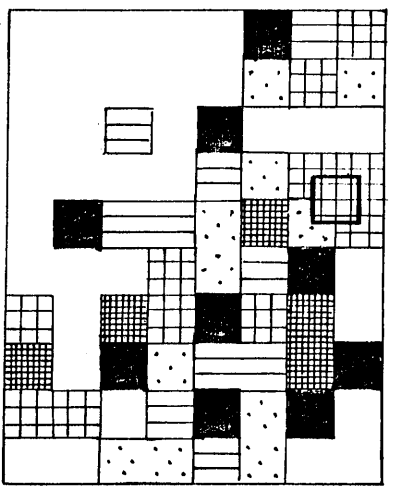


- 10–49
- 50–69
- 70 or over

Source: Questionnaire 1

Percentage speaking Welsh with neighbours

iv



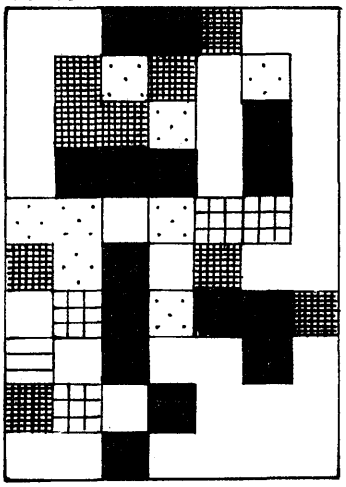
key as for i

The area covered by figures ii and iii extends 1 km further west than that on i and iv.

Figure VI.3

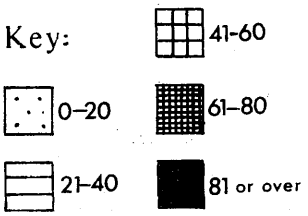
BRETON-SPEAKING 'AT HOME' AND 'WITH NEIGHBOURS'

Percentage speaking Breton 'at home'.



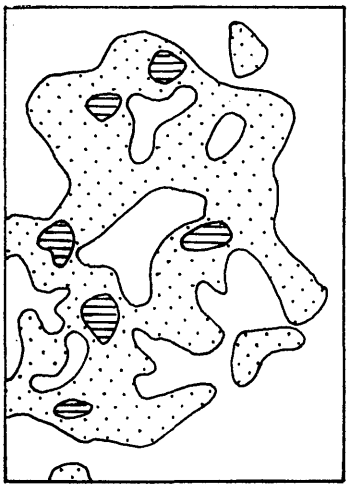
i

Key:

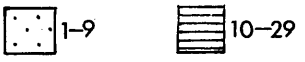


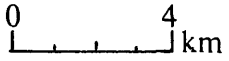
Generalised aggregate Breton surface

ii

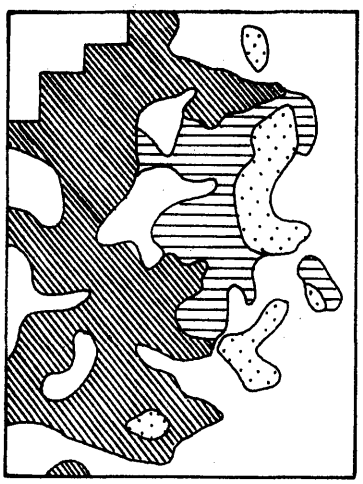


(households)

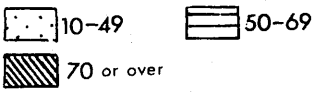




Generalised percentage Breton speaking surface

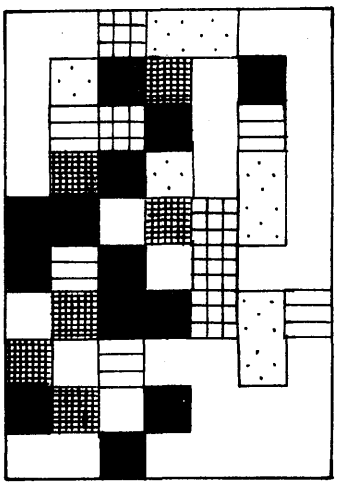


iii



Percentage speaking Breton 'with neighbours'.

iv

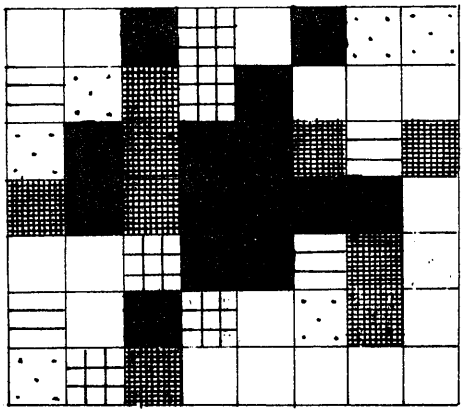


key as for i

Figure VI.4

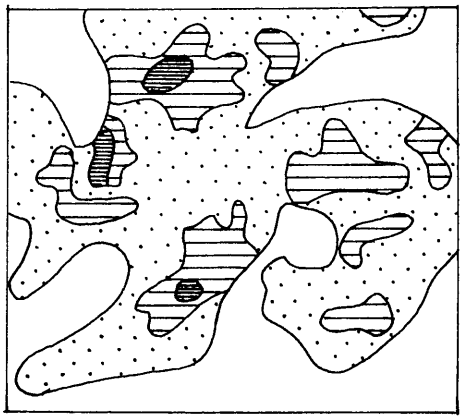
WELSH 'AT HOME' AND 'WITH NEIGHBOURS', OSWESTRY

Percentage speaking Welsh 'at home'



i

Absolute numbers of Welsh speaking households per 65m square



ii

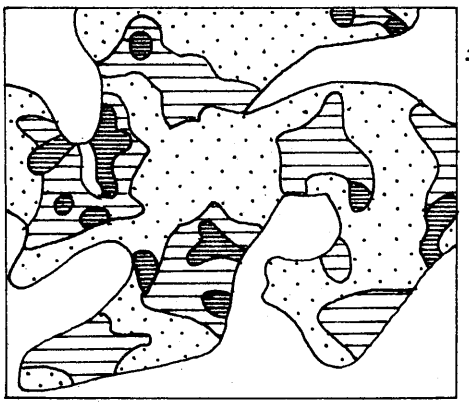
KEY:

- 0–20
- 21–40
- 41–60
- 61–80
- 81 or over

- 0–1
- 2–5
- 6 and over

0 1 km

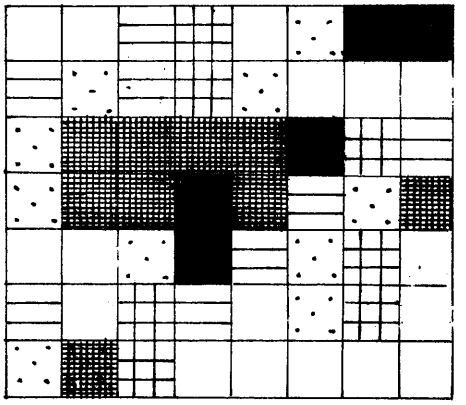
Generalised percentage Welsh-speaking households per 65m square



iii

- 0–19
- 20–39
- 40 and over

Percentage speaking Welsh 'with neighbours'



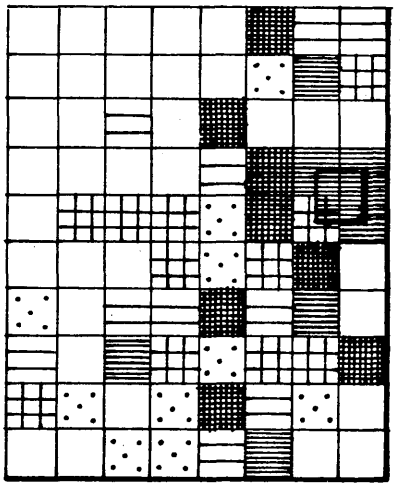
iv

key as for i

Figure VI.5

WELSH SPEAKING IN 'PUBLIC' AND 'INSTITUTIONAL' SITUATIONS

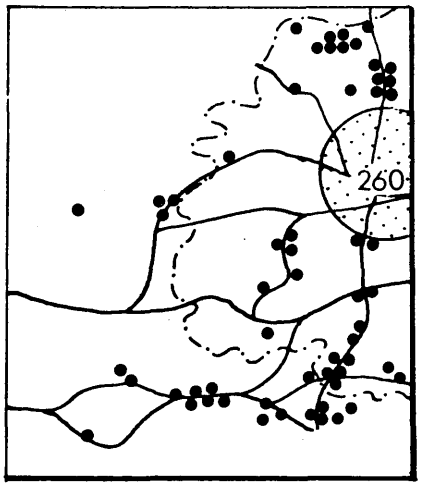
WELSH IN STREET AND SHOPS



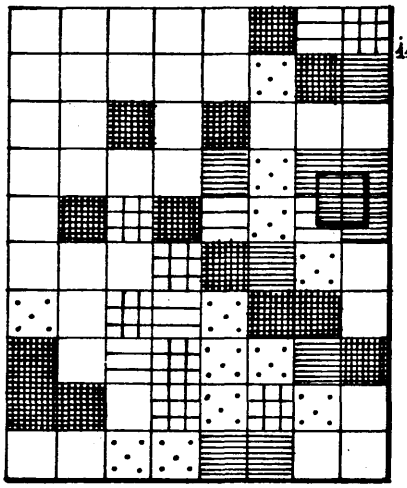
i

DISTRIBUTION OF SHOPS IN STUDY AREA

ii



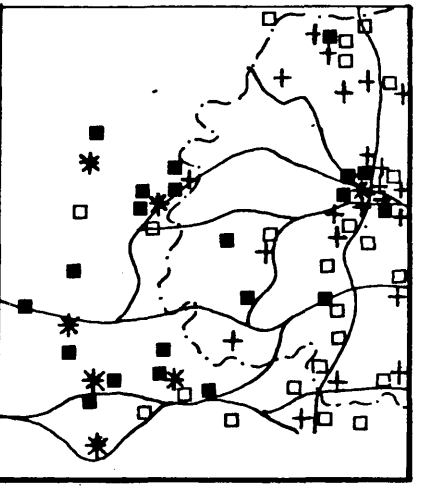
WELSH IN CHURCH AND CHAPEL



iii

CHURCH AND CHAPEL DISTRIBUTION

iv



KEY:

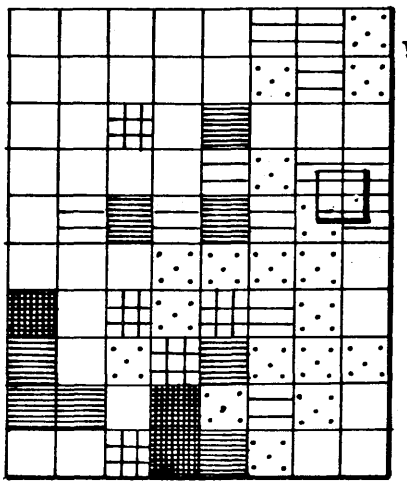
- main road
- English-Welsh border
- shop
- + church □ chapel (English only)
- ✱ church ■ chapel (partly or exclusively Welsh)
- □ primary △ secondary school (English only)
- ■ primary ▲ secondary school giving Welsh lessons
- primary school catchment area

0 5 km

- 0–20
- 21–40
- 41–60
- 61–80
- 81 or over

percentage respondents

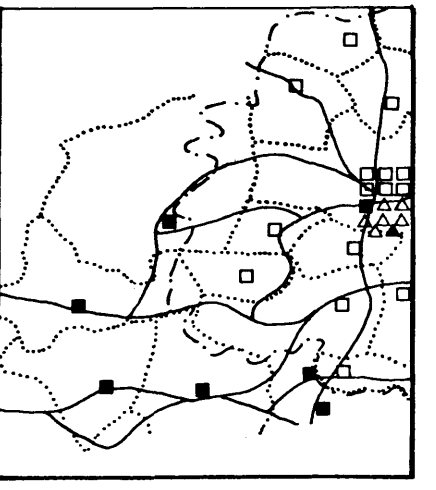
WELSH IN SCHOOL OR AT WORK



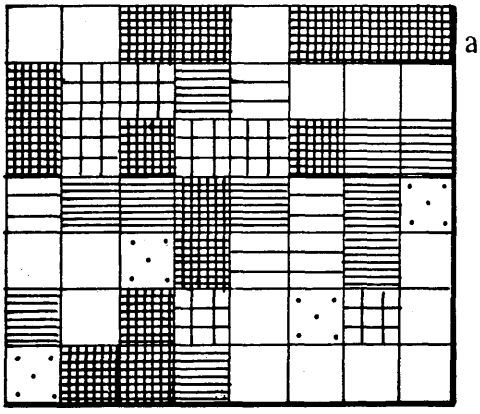
v

SCHOOLS IN STUDY AREA

vi

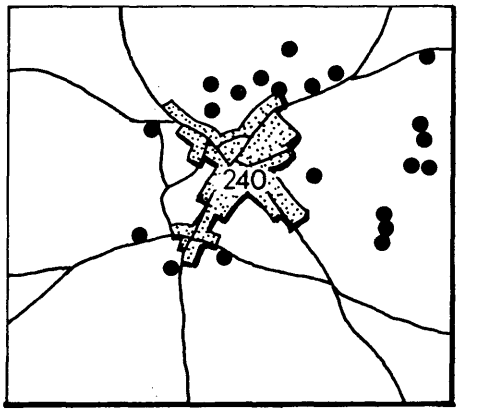


PERCENTAGE WELSH SPEAKING IN "PUBLIC" AND "INSTITUTIONAL" SITUATIONS: OSWESTRY



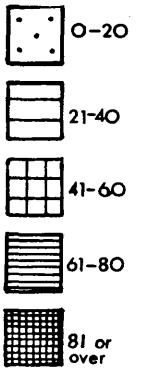
a

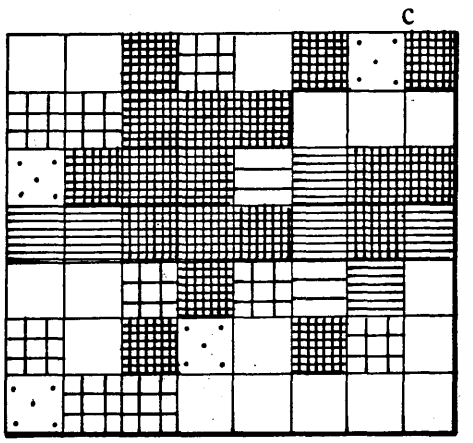
WELSH IN STREET AND SHOPS



b

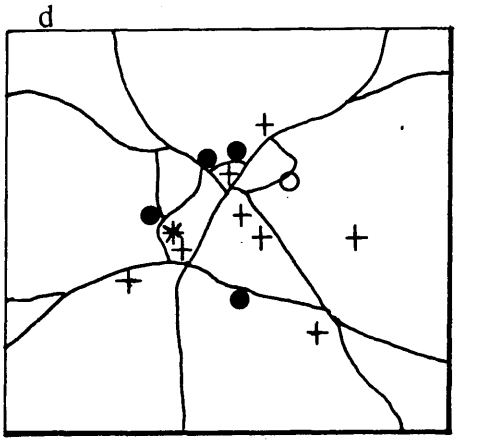
DISTRIBUTION OF SHOPS IN OSWESTRY
(one dot represents one establishment)





c

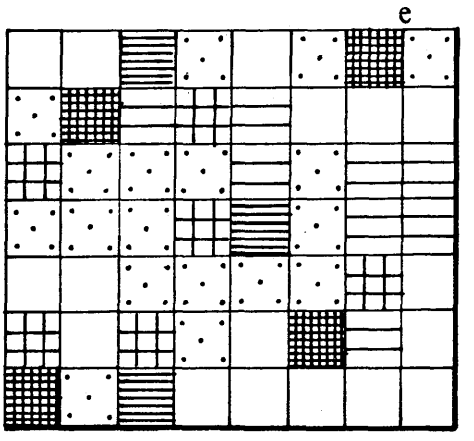
WELSH IN CHURCH AND CHAPEL



d

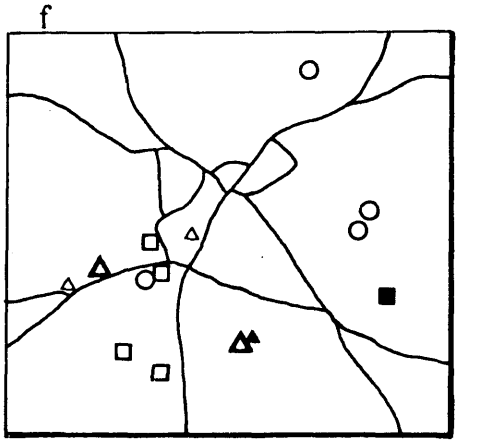
DISTRIBUTION OF CHURCHES AND CHAPELS

+church, ○chapel=English only
✱church, ●chapel=partly or exclusively Welsh



e

WELSH IN SCHOOL OR AT WORK



f

SCHOOLS IN OSWESTRY

○primary, state-run
□secondary " "
△primary, private
△secondary, "

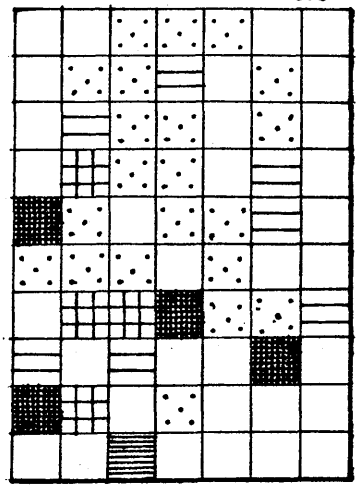
(closed symbol indicates Welsh taught)

Source: Questionnaire 1

Figure VI.7

BRETON SPEAKING IN 'PUBLIC' AND 'INSTITUTIONAL' SITUATIONS

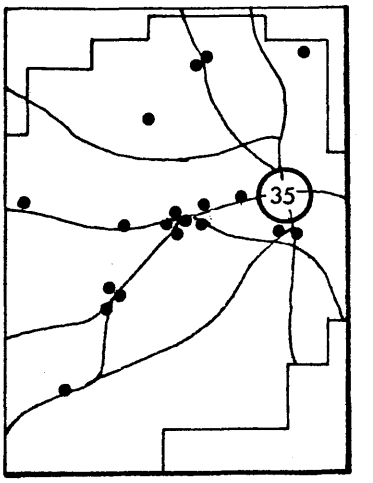
BRETON IN STREET AND SHOPS



i

DISTRIBUTION OF SHOPS IN STUDY AREA

ii



KEY:

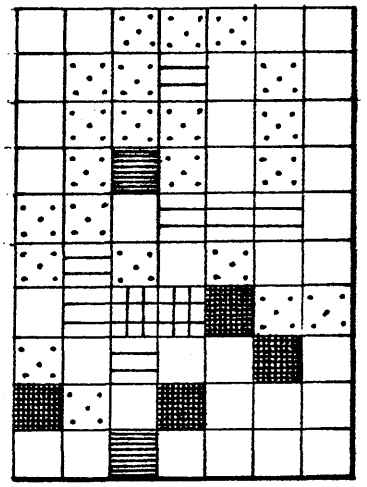
- main road
- shop
- church, "chapelle"
- primary △ secondary school French only
- secondary school some Breton tuition

0 4 km

- 0 20
- 21 40
- 41 60
- 61 80
- 81 or over

percentage respondents

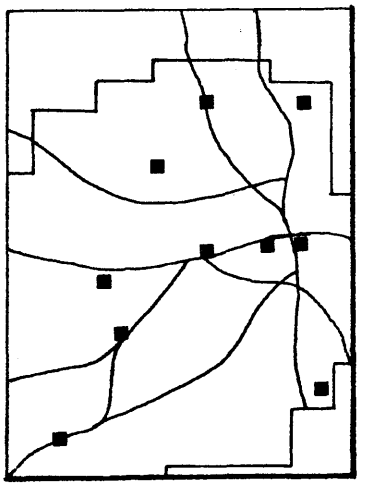
BRETON IN CHURCH



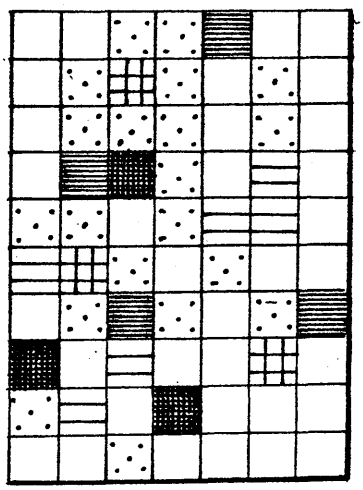
iii

CHURCHES AND CHAPELS

iv



BRETON IN SCHOOL OR AT WORK



v

SCHOOLS IN STUDY AREA

vi

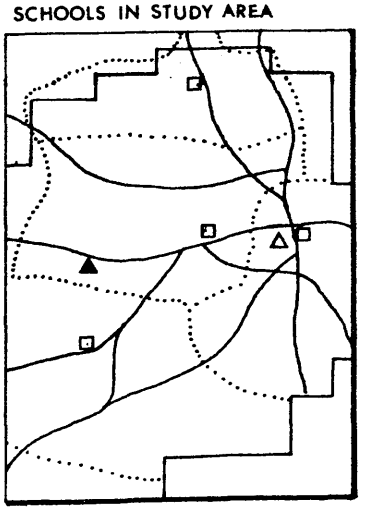


Figure VI.8

OSWESTRY: HOME LOCATIONS OF HOUSEHOLDS ON SUBSCRIPTION-LISTS OF WELSH CHAPELS, 1971

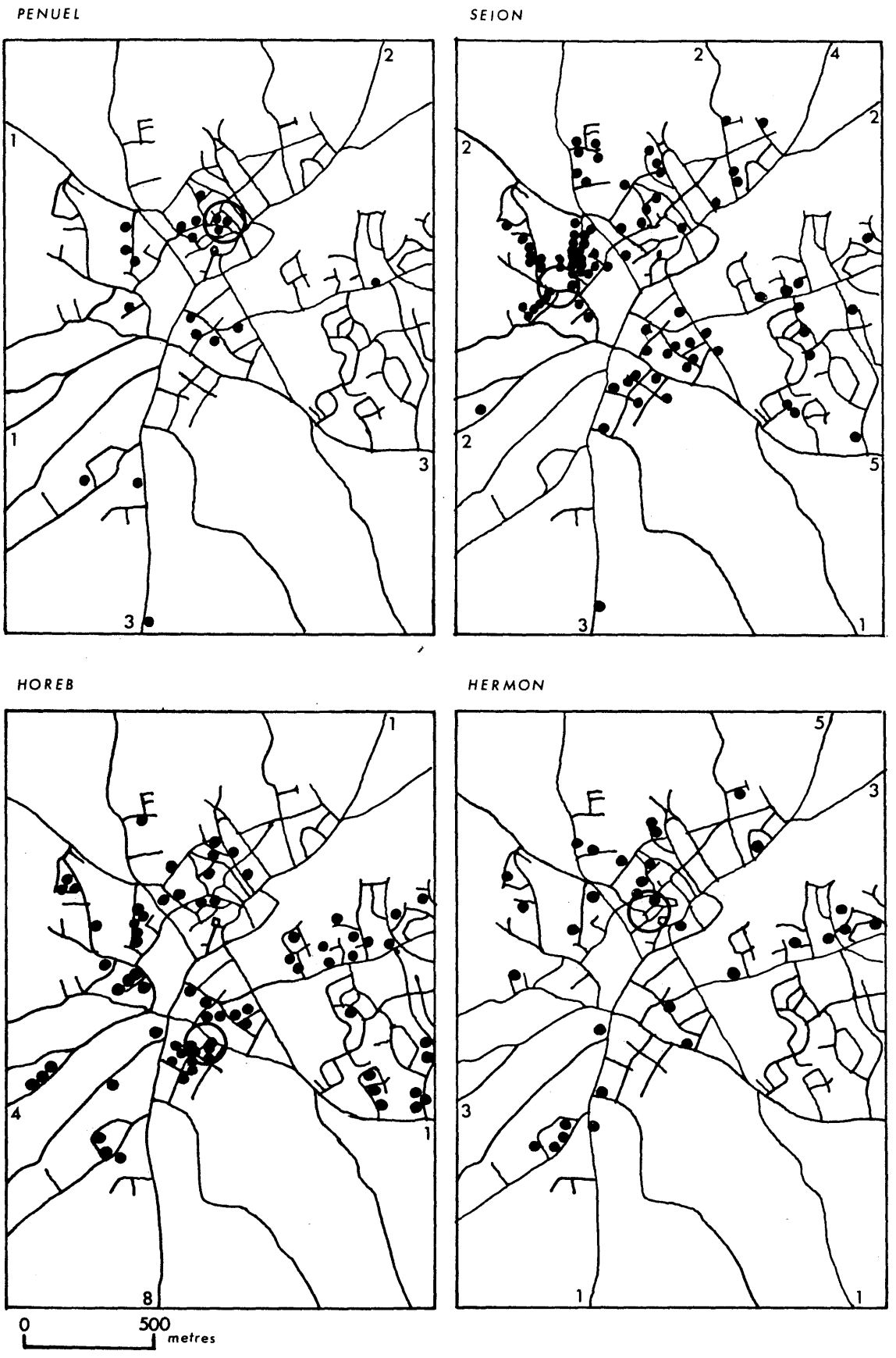


Figure VI.9

a: Welsh and Breton speaking "elsewhere"
b: total number (i.e. variety) of speaking situations

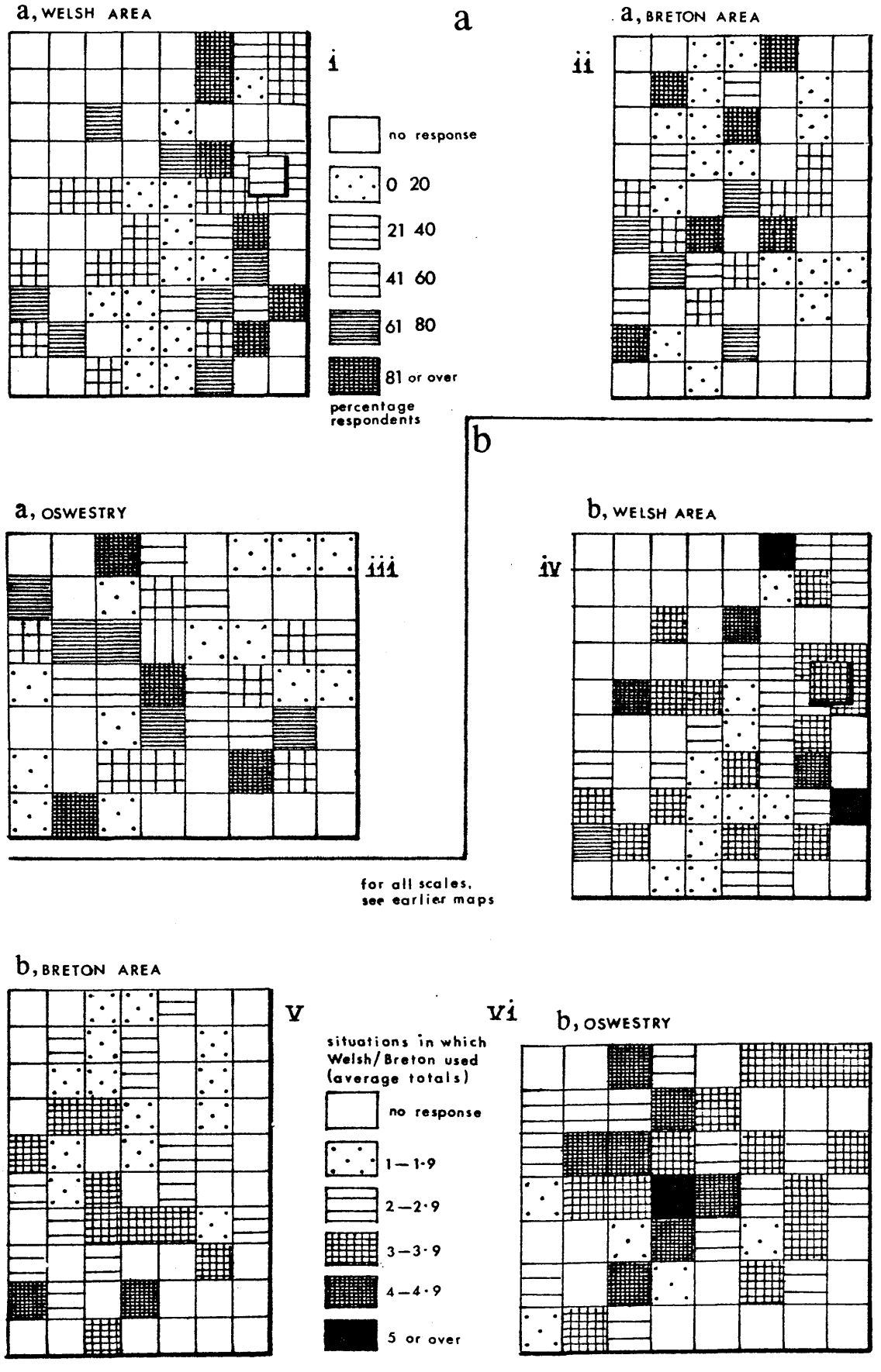


figure VI.10

DETAILS OF SAMPLE POPULATION FOR 'DIARY' EXPERIMENT
(QUESTIONNAIRE II)

a) Age breakdown of diary respondents (percentage)

age description:	in school	no longer in school; aged under 30	30 - 60	over 60
percentage in age-group	1	8	41	50

b) Origins of completed copies of the "diary":
(one dot represents one origin)

c) Breakdown of answers to question 7: "Think back over the seven days when you were filling in this form. Do you think that during this time you spoke more or less Welsh than usual?"

(percentage of sample)	more	the same	less
	24	61	15

d) Breakdown of answers to question 8: " Looking back over the places where you've spoken Welsh during the last seven days, do you think they were fairly typical of the places where you generally speak Welsh?"

(percentage of sample)	yes	no
	85	15

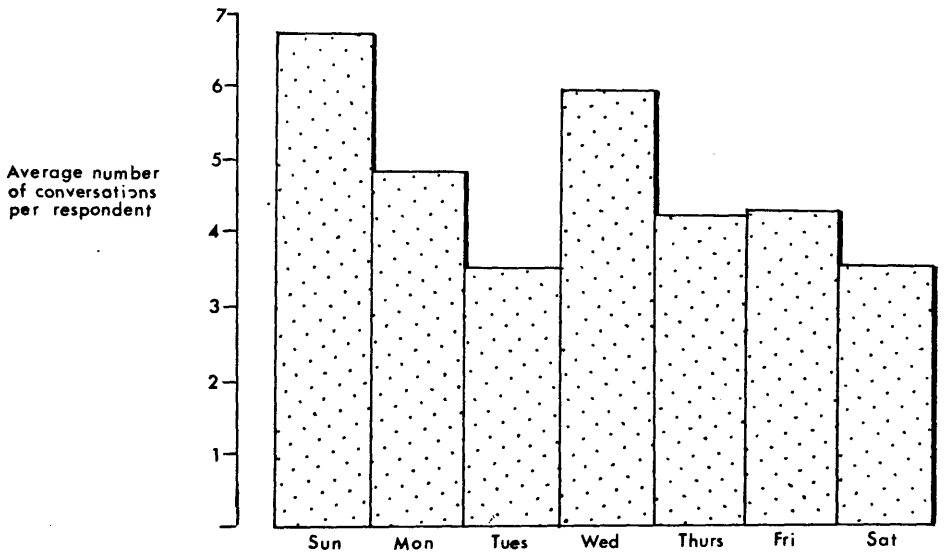
Figure VI.11

"DIARY" SAMPLE: RELATIVE USE OF SPEAKING-SITUATIONS AND OF CONVERSATION-LENGTHS
a) Situations outside immediate family circle
proportion of all conversations of each type ("brief"/"long") taking place in each situation
35
30
25
20
15
10
5
"brief" conversations
"long" conversations
In home(with people other than members of family)
In other people's houses
with neighbours
in street and shops
in school/ at work
in chapel or church
in Welsh clubs and societies
in other clubs and societies
outside the local district
other
b) Within family
percentage of respondents using Welsh with each average frequency in the home situation during week
40
30
20
10
no Welsh spoken
a little Welsh spoken
less than half conversation in Welsh
more than half conversation in Welsh
all conversation in Welsh

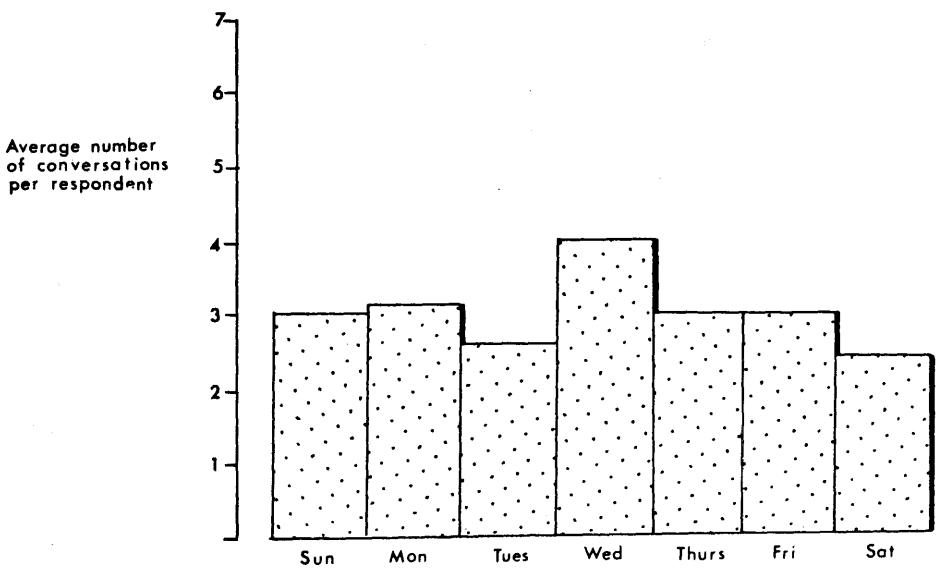
Figure VI.12

Welsh 'diary' respondents: conversation activity through week (excluding household conversations).

a: 'short' conversations



b: 'long' conversations



OPINION ON LOCATION OF BRETON LANGUAGE BORDER: GENERAL SAMPLE

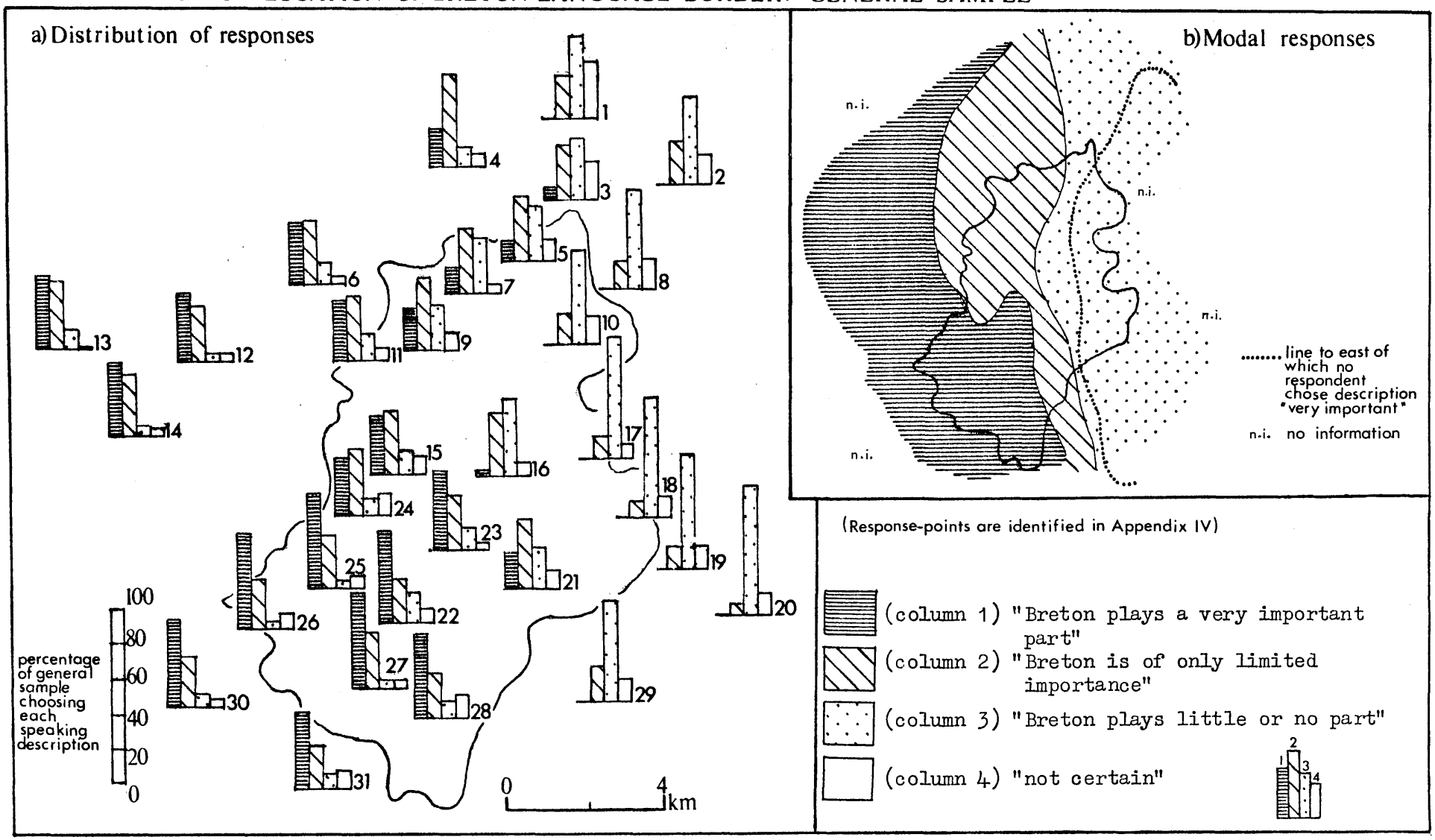


Figure VII.1

OPINION ON LOCATION OF WELSH LANGUAGE BORDER: GENERAL SAMPLE

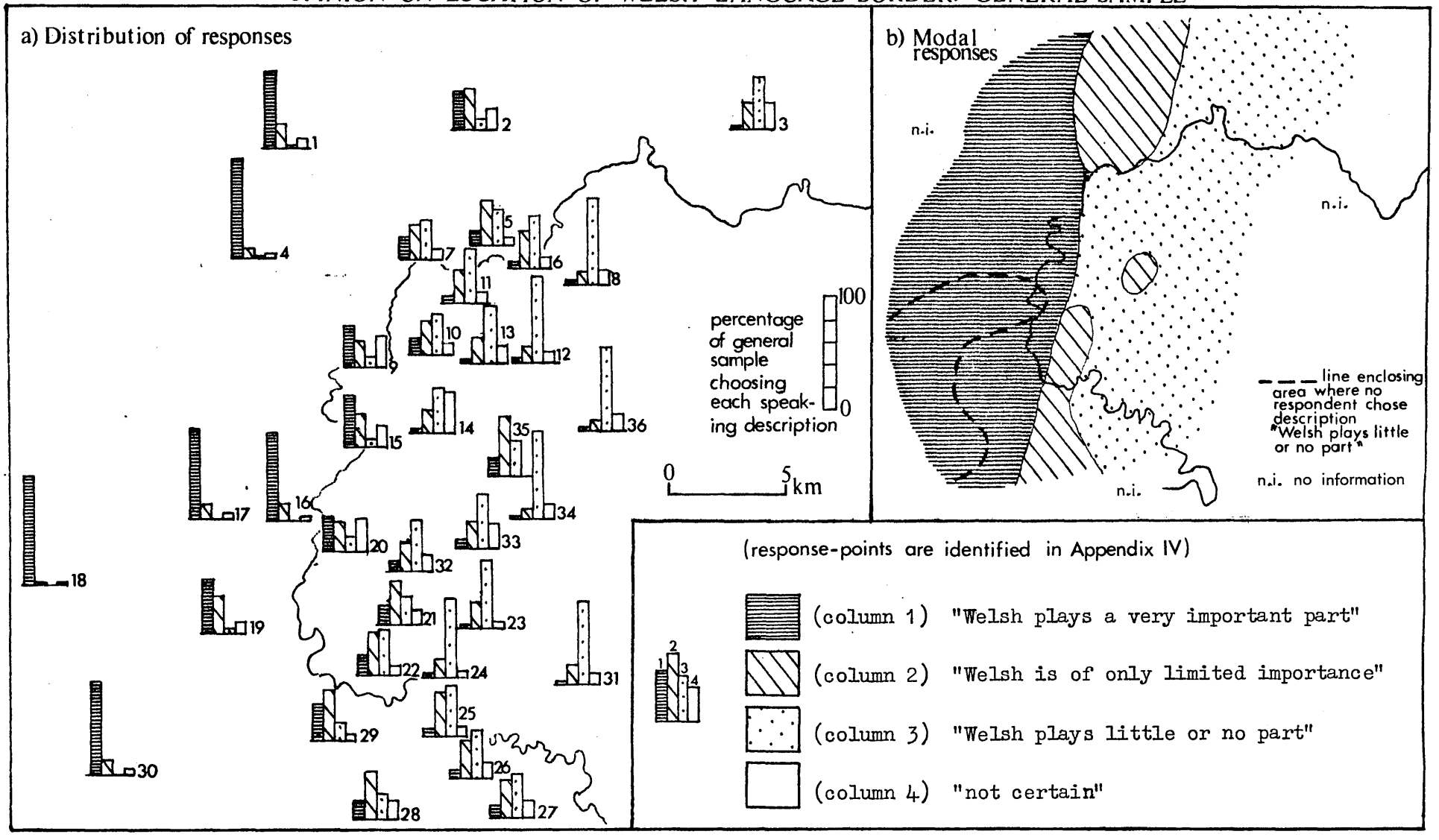


Figure VII.2

Discrepancy between observed Welsh and Breton speaking activity (from chapters IV, V) and sample opinion on state of language survival (from questionnaire III)

KEY TO SCORES:

First score: actual use of Welsh/Breton

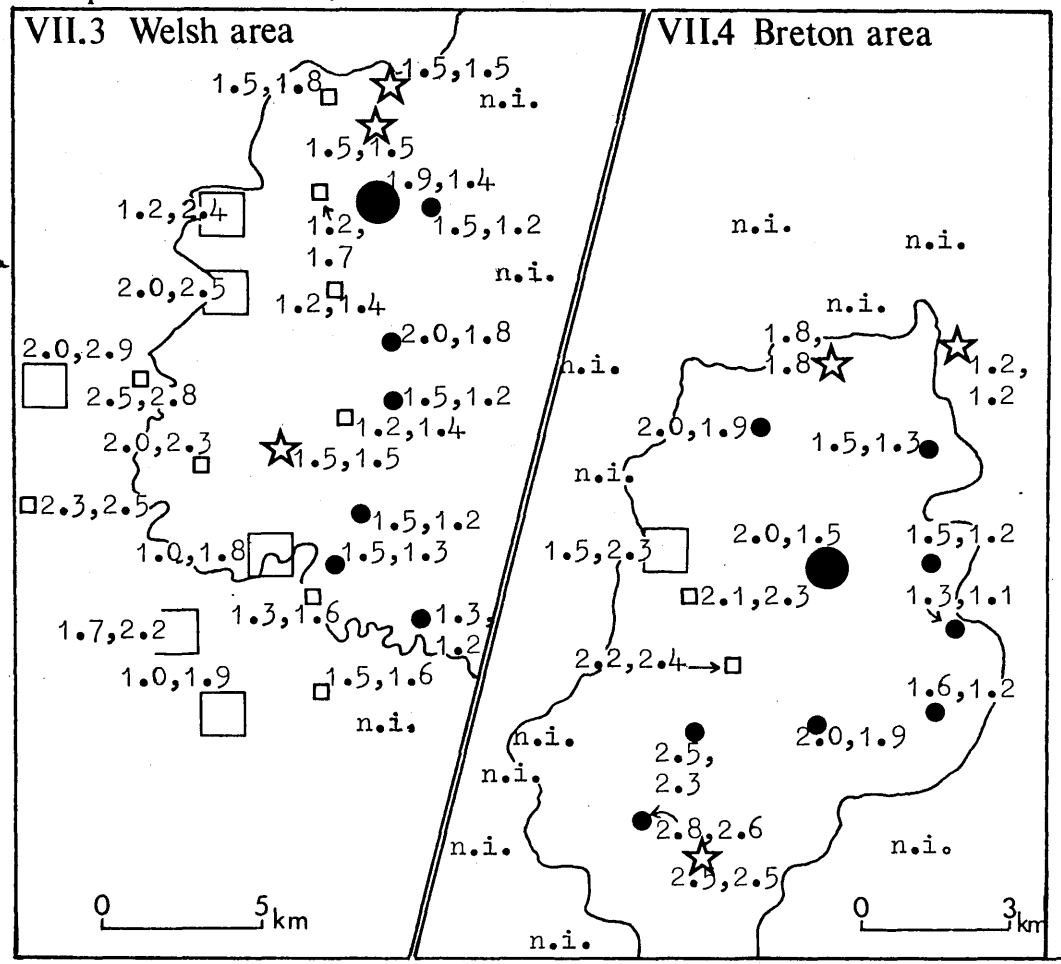
averaged (a) from figures IV.6,7 (percentage household surface) and (b) from figures V.17a,19a (average speaking frequency).

Interpretation of scores:

(a) 0-39%: little or no part....score 1
40-69%: Welsh/Breton of limited importance..score 2
70% or over: W/B plays a very important part....score 3

(b) 0 - 0.6 on average frequency map = little or no part..score 1
0.7-1.3 = limited importance... score 2
1.4 or over = very important.... score 3

Second score: sample opinion on use of Welsh/Breton (average of all responses on Questionnaire III:



1 = "W/B plays little or no part", 2 = "W/B of limited importance", 3 = "W/B plays a very important part"

KEY TO SYMBOLS:

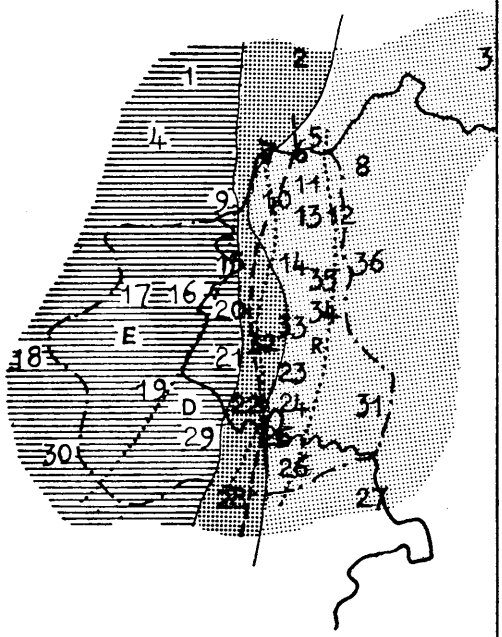
- probable "extreme over-estimation" - opinion score at least 0.5 higher than actual estimated score
- probable "over-estimation" -opinion score 0.1-0.4 higher than actual estimated score
- identical scores
- probable "under-estimation" - opinion score 0.1-0.4 lower than actual estimated score
- probable extreme "under-estimation" - opinion score at least 0.5 below actual estimated score

Figures VII.3 and VII.4

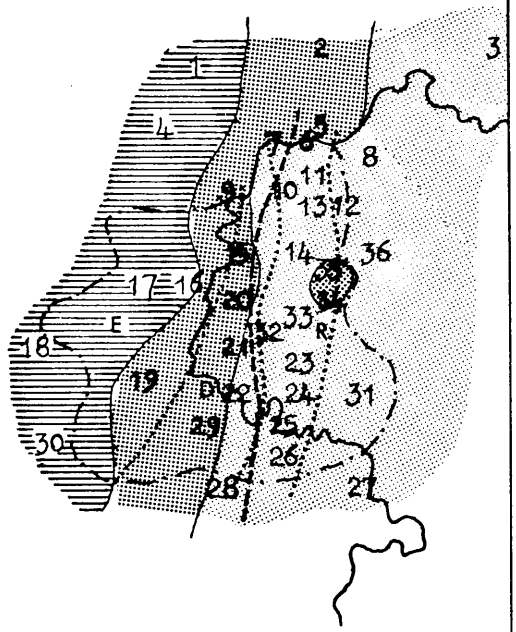
Figure VII.5

OPINION ON LOCATION OF WELSH LANGUAGE BORDER: AGE SUB-GROUPS

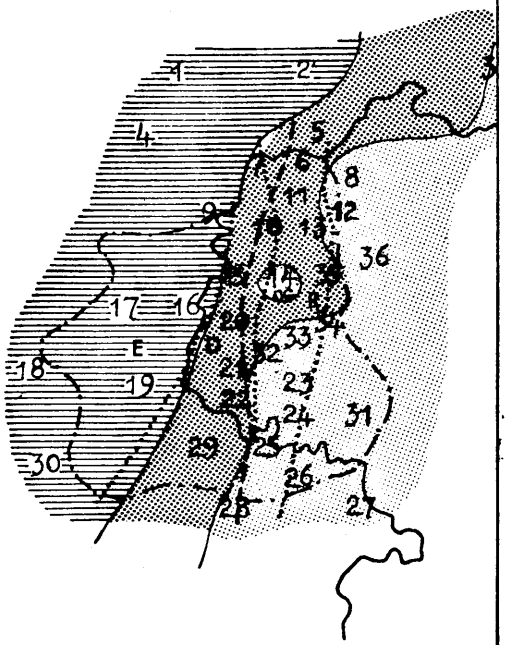
a: under 30



b: 30 to 60



c: over 60



KEY:

0 10 km

modal response category:

"Welsh plays a very important part"

"Welsh is of only limited importance"

"Welsh plays little or no part"

n.c not certain

Welsh national border

boundary of study area

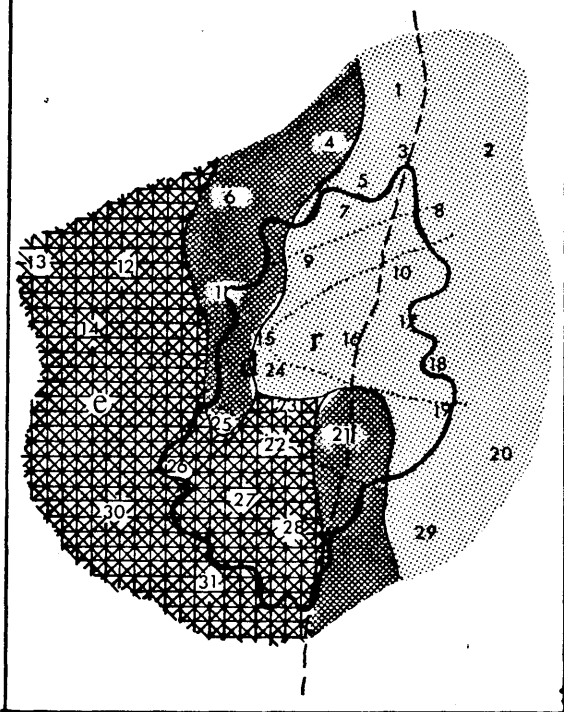
linguistic divide after Williams (1935), Rees (1947), Lewis (1970)

Approximate locations of zones of establishment (E), disintegration (D) and regrouping (R)

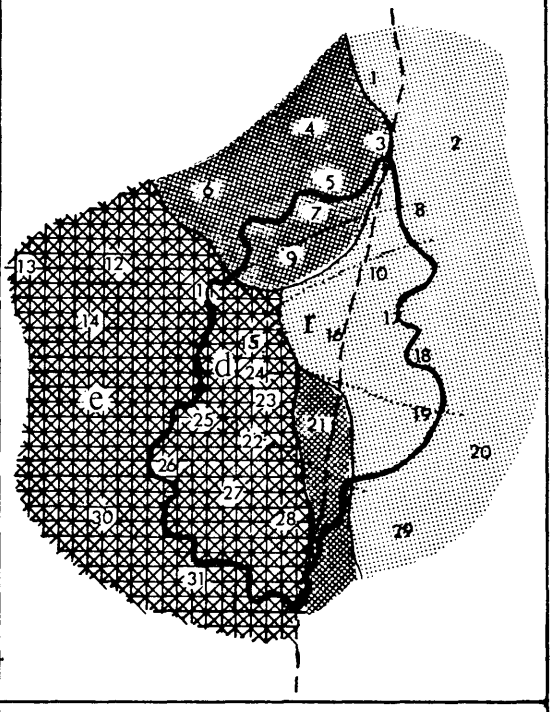
Figure VII.6

OPINION ON LOCATION OF BRETON LANGUAGE BORDER: AGE SUB-GROUPS

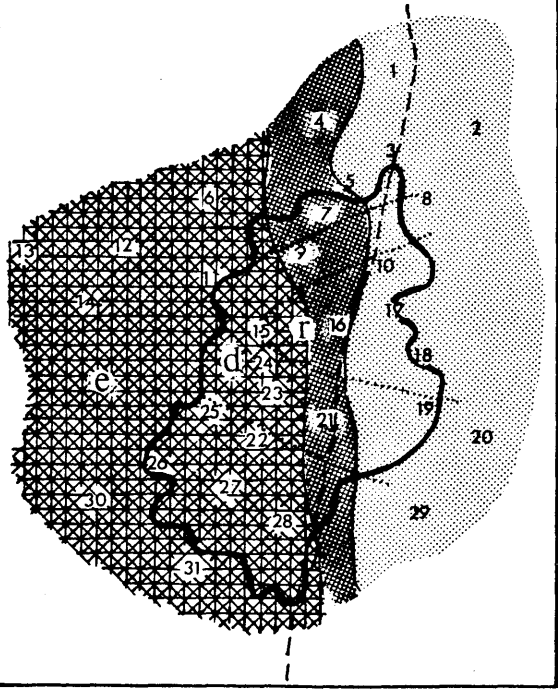
UNDER 30



30 - 60



OVER 60



KEY:

0 — 10 km

modal response category:

"Breton plays a very important part"

"Breton is of only limited importance"

"Breton plays little or no part"

outline of study area

linguistic divide after Bechard (1968)

approximate location of zones of establishment (e), disintegration (d) and regrouping (r)

Figure VII.7

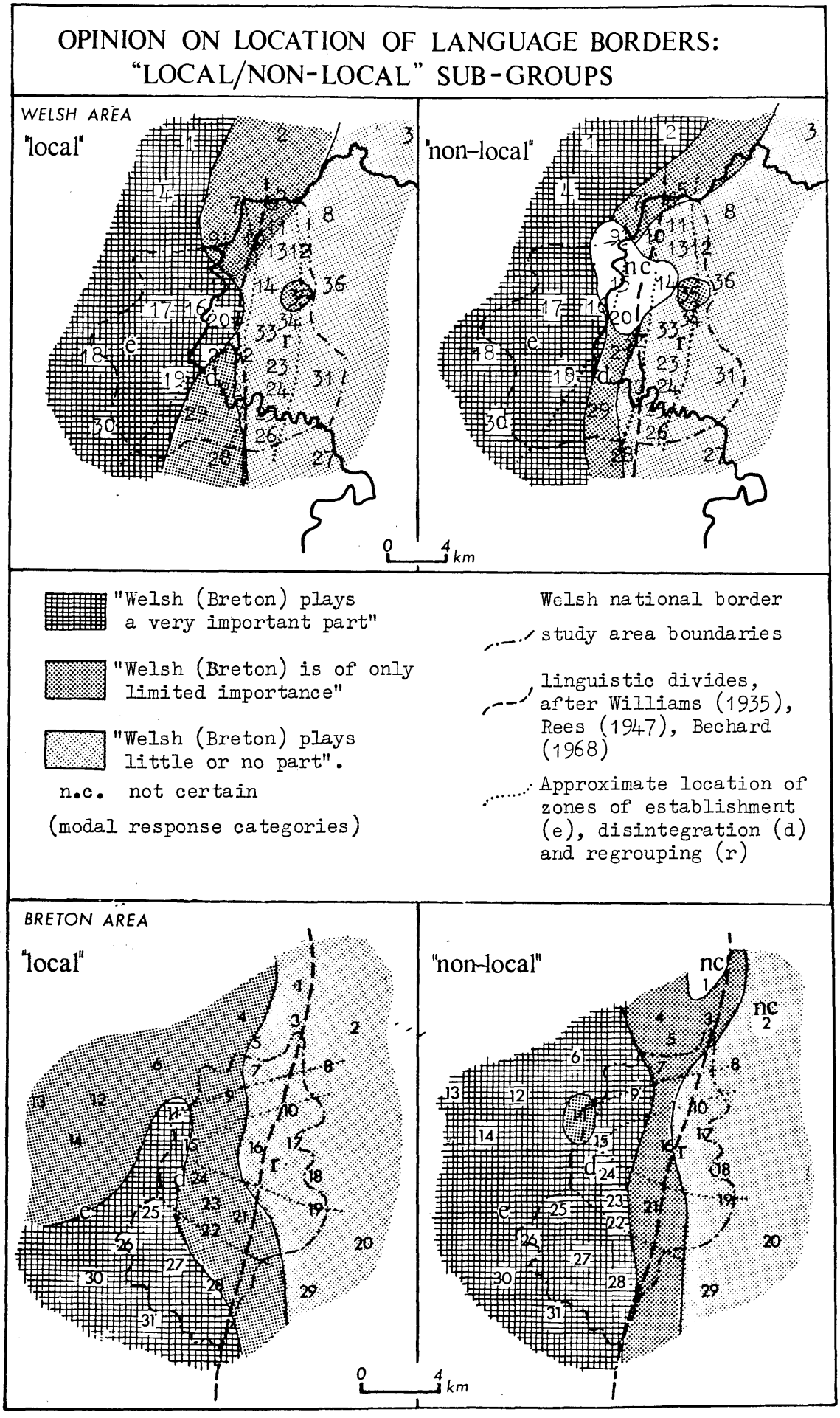
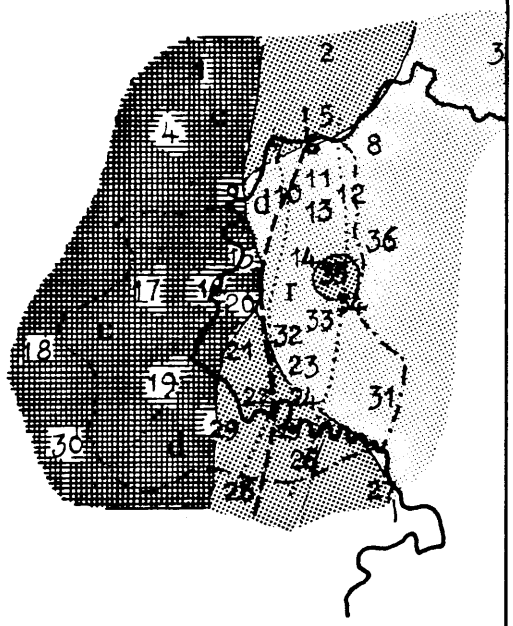

OPINION ON LOCATION OF LANGUAGE BORDERS:
"LOCAL/NON-LOCAL" SUB-GROUPS
WELSH AREA
"local"
"non-local"
nc
e
d
r
0
4 km
"Welsh (Breton) plays a very important part"
"Welsh (Breton) is of only limited importance"
"Welsh (Breton) plays little or no part".
n.c. not certain
(modal response categories)
Welsh national border
study area boundaries
linguistic divides, after Williams (1935), Rees (1947), Bechard (1968)
Approximate location of zones of establishment (e), disintegration (d) and regrouping (r)
BRETON AREA
"local"
"non-local"
nc
nc
0
4 km

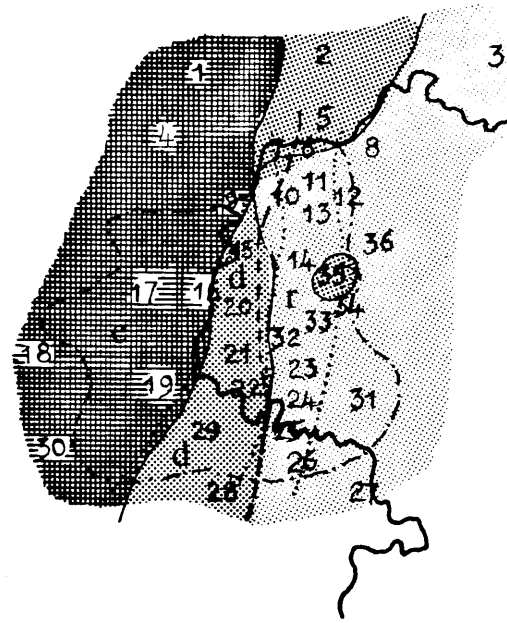
Figure VII.8

OPINION ON LOCATION OF WELSH LANGUAGE BORDER: LANGUAGE SUB-GROUPS

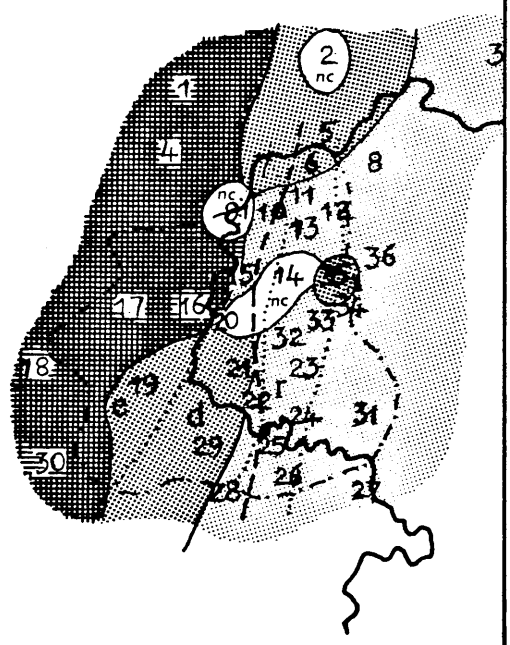
a) speaks no Welsh; no Welsh connection



b) speaks no Welsh; Welsh-speaking connections



c) speaks Welsh



Key

modal response category:

"Welsh plays a very important part"

"Welsh is of only limited importance"

"Welsh plays little or no part"

nc not certain

Welsh national border

boundary of study area

linguistic divide

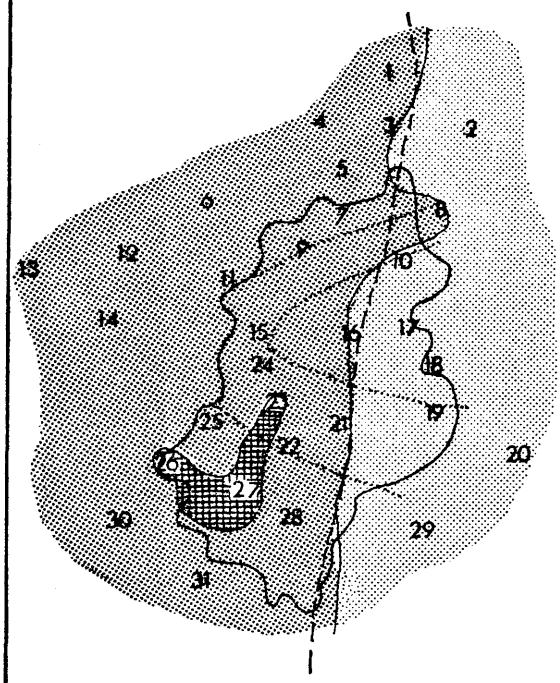
zones of language shift (e - establishment, d - disintegration, r - regrouping)

0 10 km

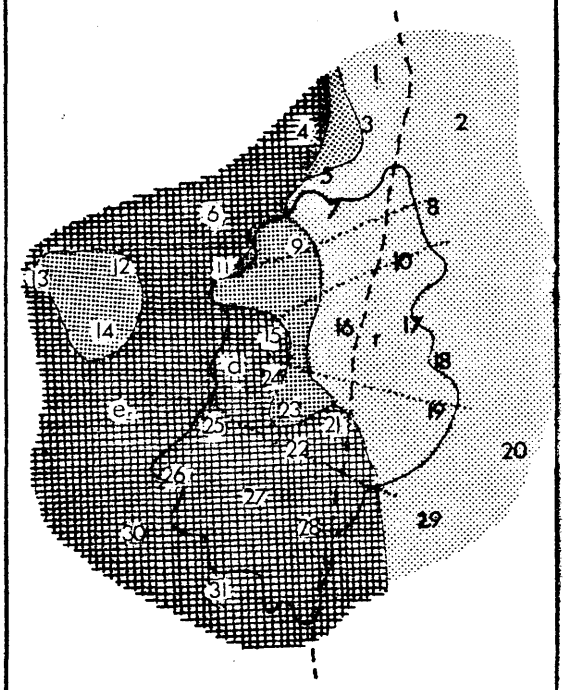
Figure VII.9

OPINION ON LOCATION OF BRETON LANGUAGE BORDER: LANGUAGE SUB-GROUPS

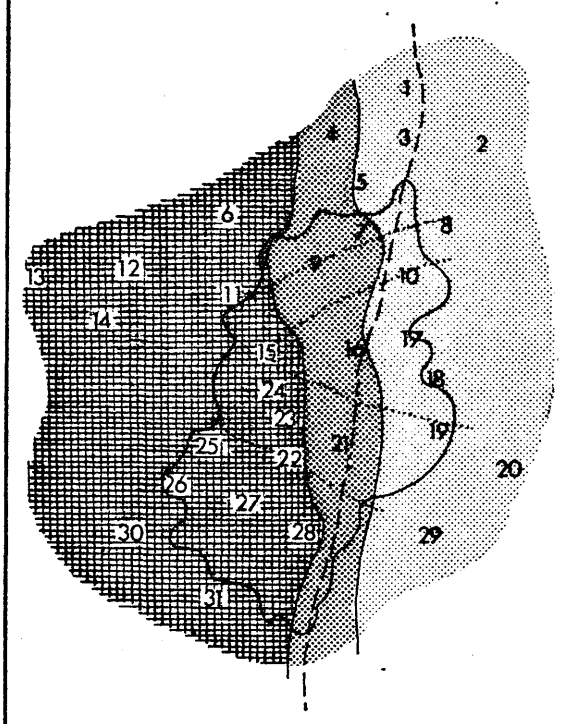
a) speaks no Breton; no Breton connection



b) speaks no Breton; Breton-speaking connections



c) Breton-speaking



Key:

0 — 10 km

modal response category:

"Breton plays a very important part"

"Breton is of only limited importance"

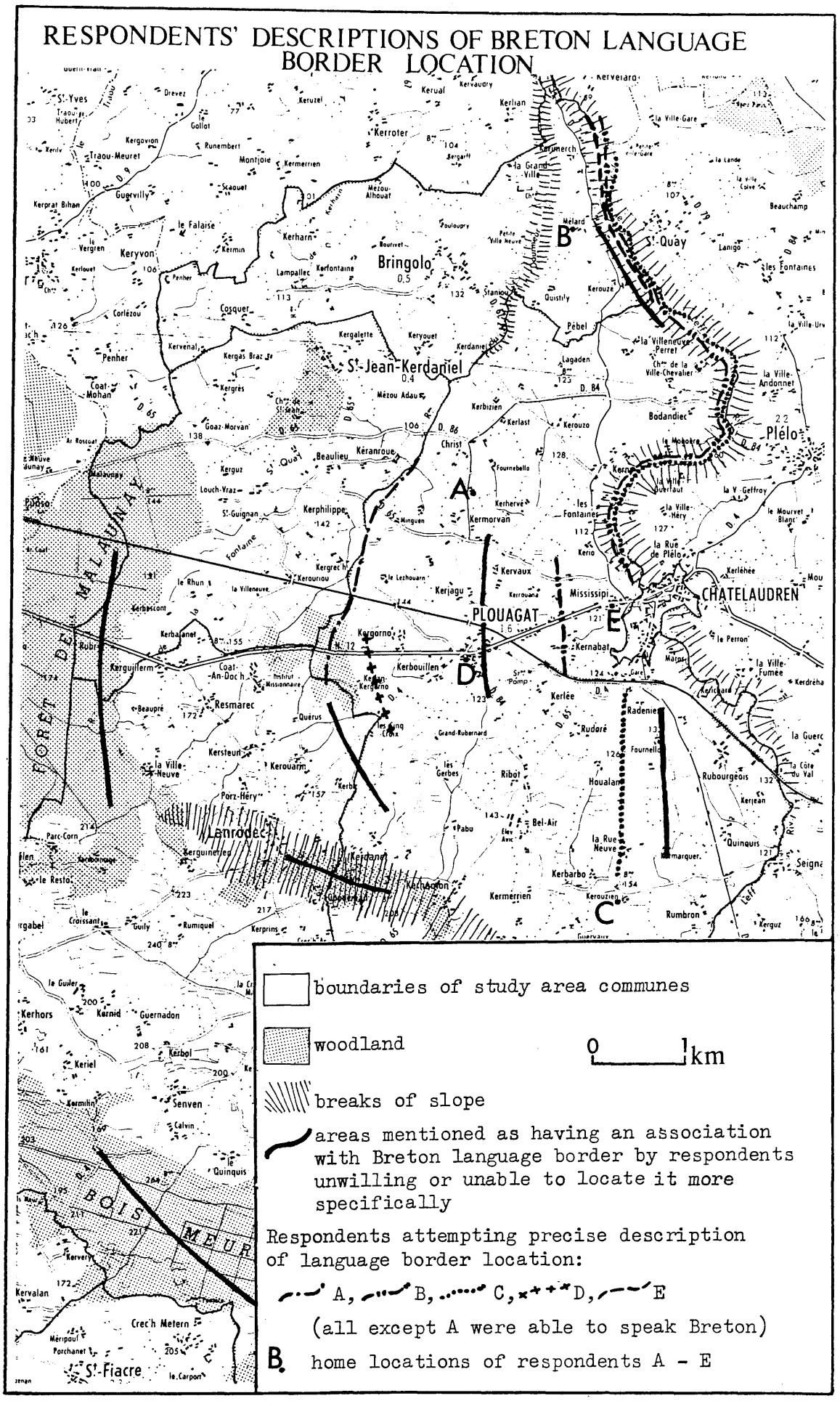
"Breton plays little or no part"

outline of study area

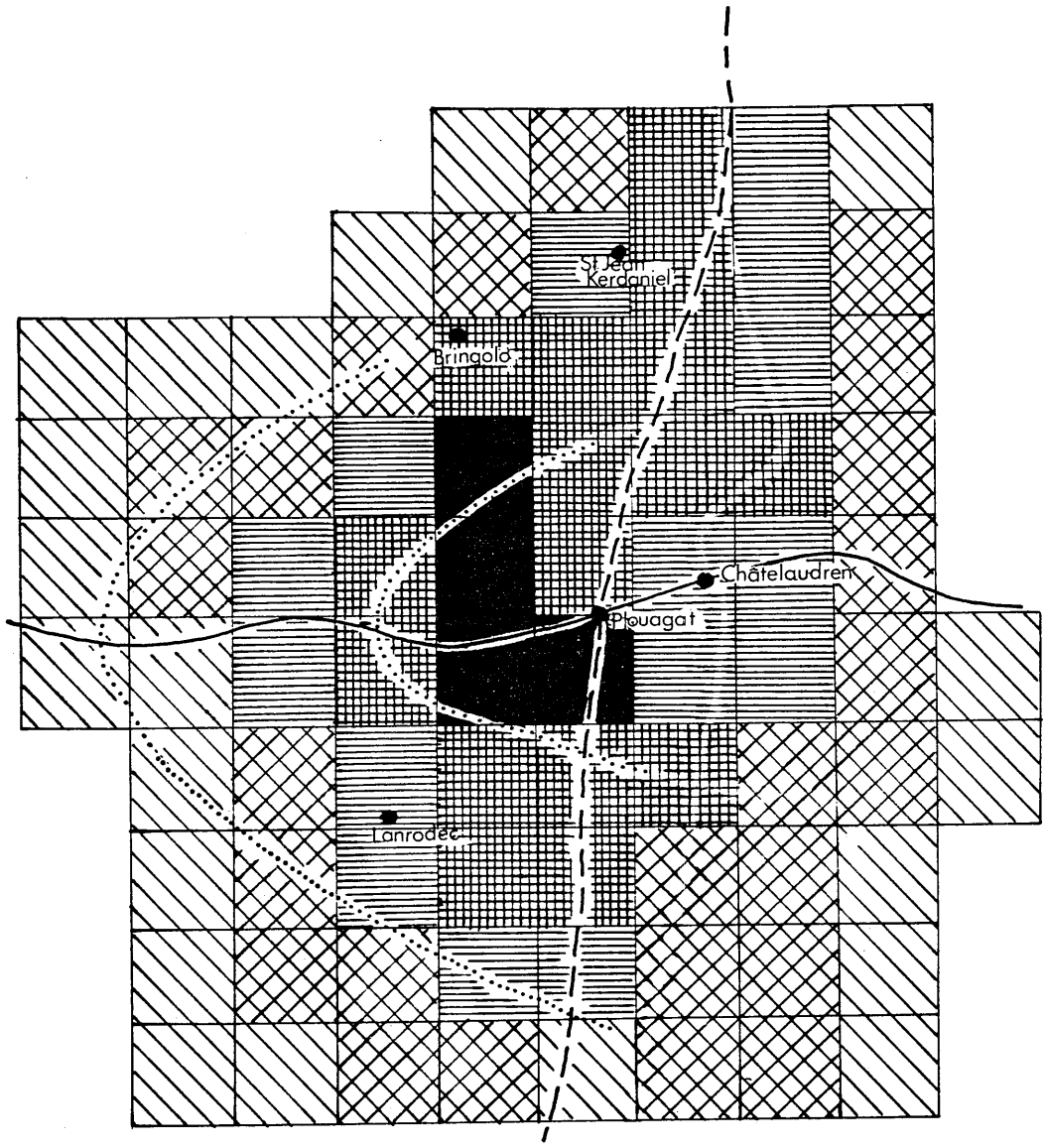
linguistic divide, after Bechard (1968)

approximate location of zones of establishment (e), disintegration (d) and regrouping (r)

Figure VII.10



DISAGREEMENT BETWEEN SUB-GROUPS AND GENERAL SAMPLE ON LOCAL 'IMPORTANCE' OF BRETON



INDEX OF 'DISAGREEMENT'

number of cases where sub-group opinions differ, by 5 per cent or more, from that of the general sample (figure VII.2) on any of the speaking-descriptions

- 0–5
- 6–10
- 11–15
- 16–20
- over 20

- linguistic divide (after Béchard)
- approximate location of "zone of language disintegration"
- course of R.N.12

0 2 km

figure VII.12

WELSH AREA: DISAGREEMENT BETWEEN SUB-GROUPS AND GENERAL SAMPLE ON LOCAL "IMPORTANCE" OF WELSH

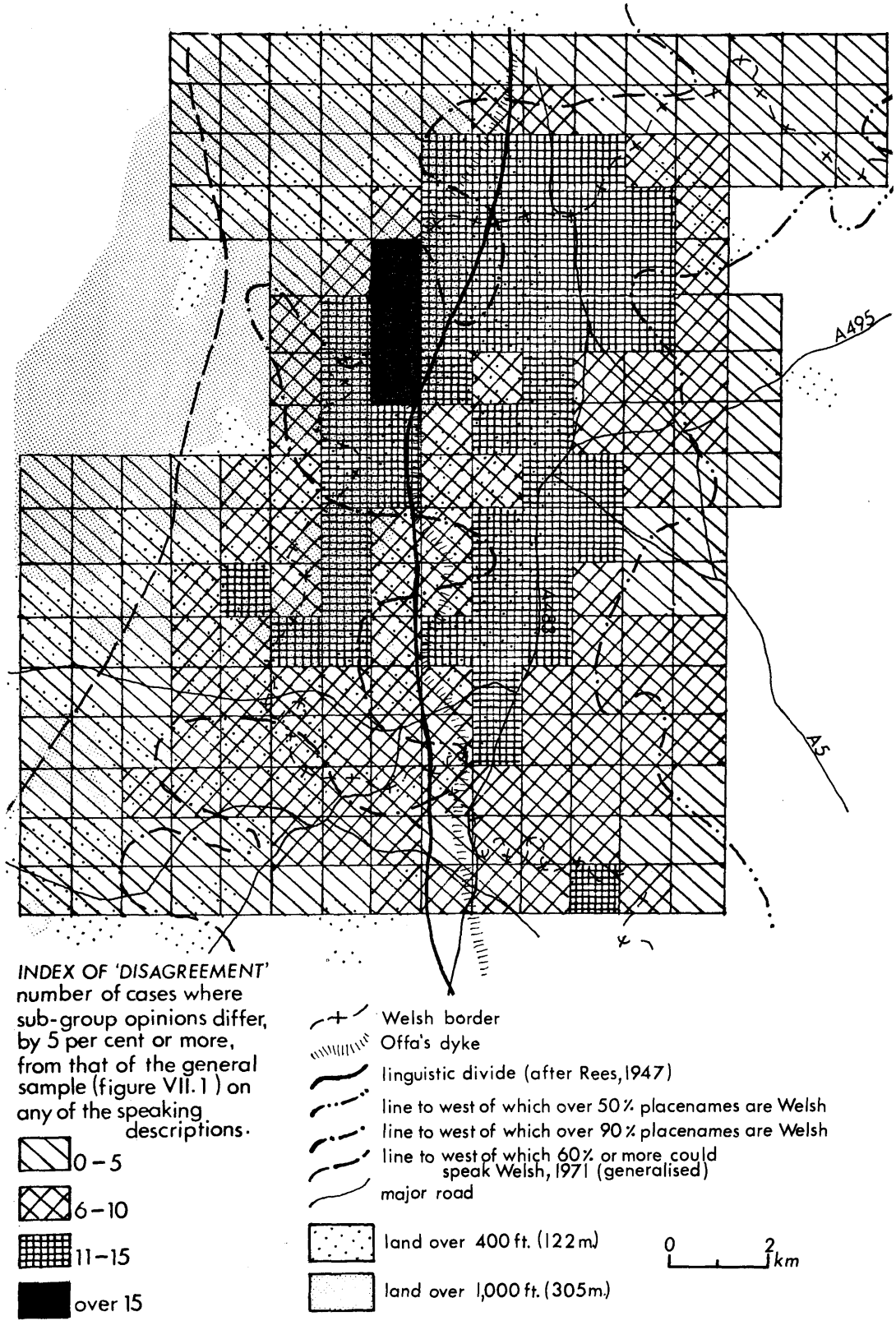
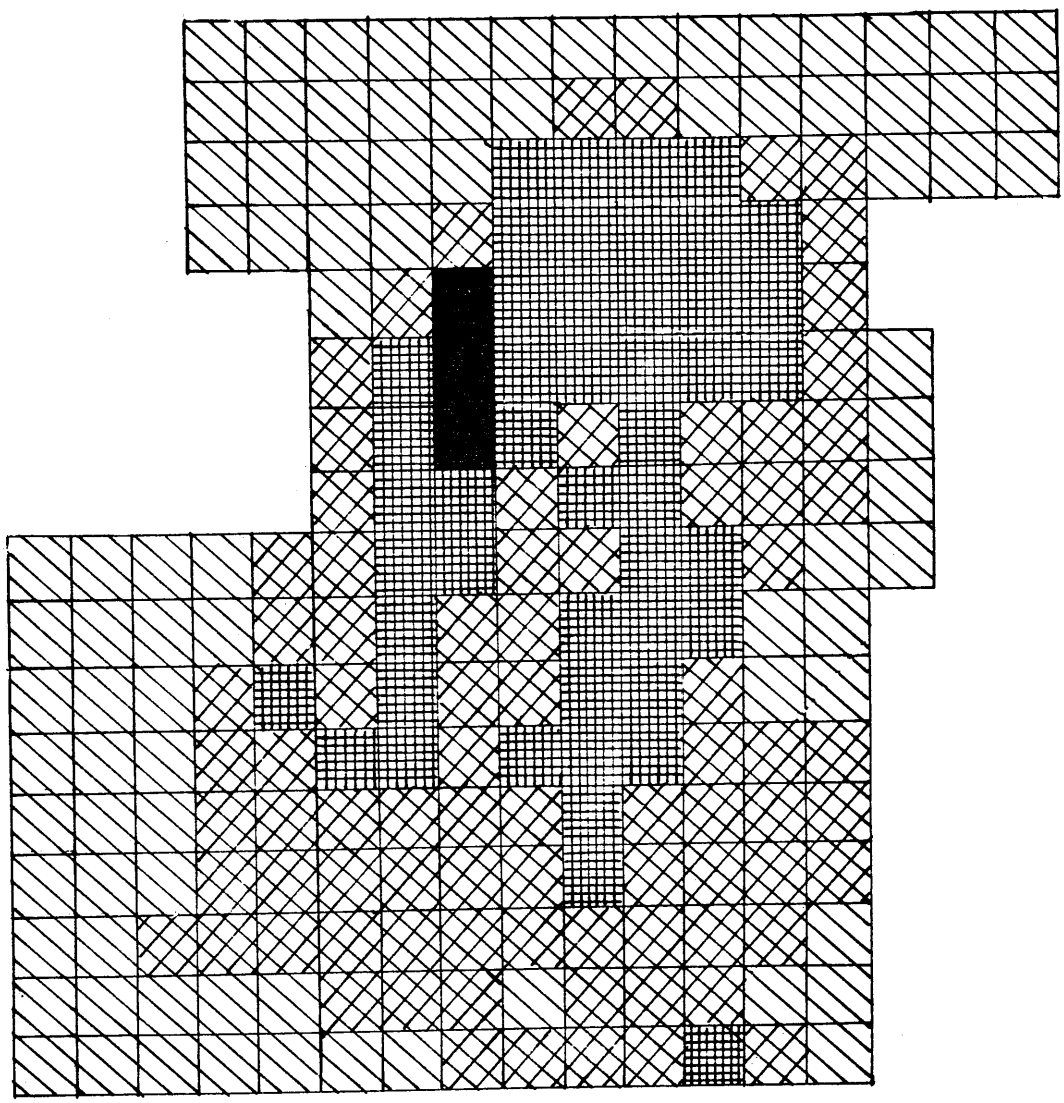


figure VII.12

WELSH AREA: DISAGREEMENT BETWEEN SUB-GROUPS AND GENERAL SAMPLE ON LOCAL "IMPORTANCE" OF WELSH



INDEX OF 'DISAGREEMENT'
number of cases where sub-group opinions differ, by 5 per cent or more, from that of the general sample (figure VII.1) on any of the speaking descriptions.

0 – 5

6 – 10

11 – 15

over 15

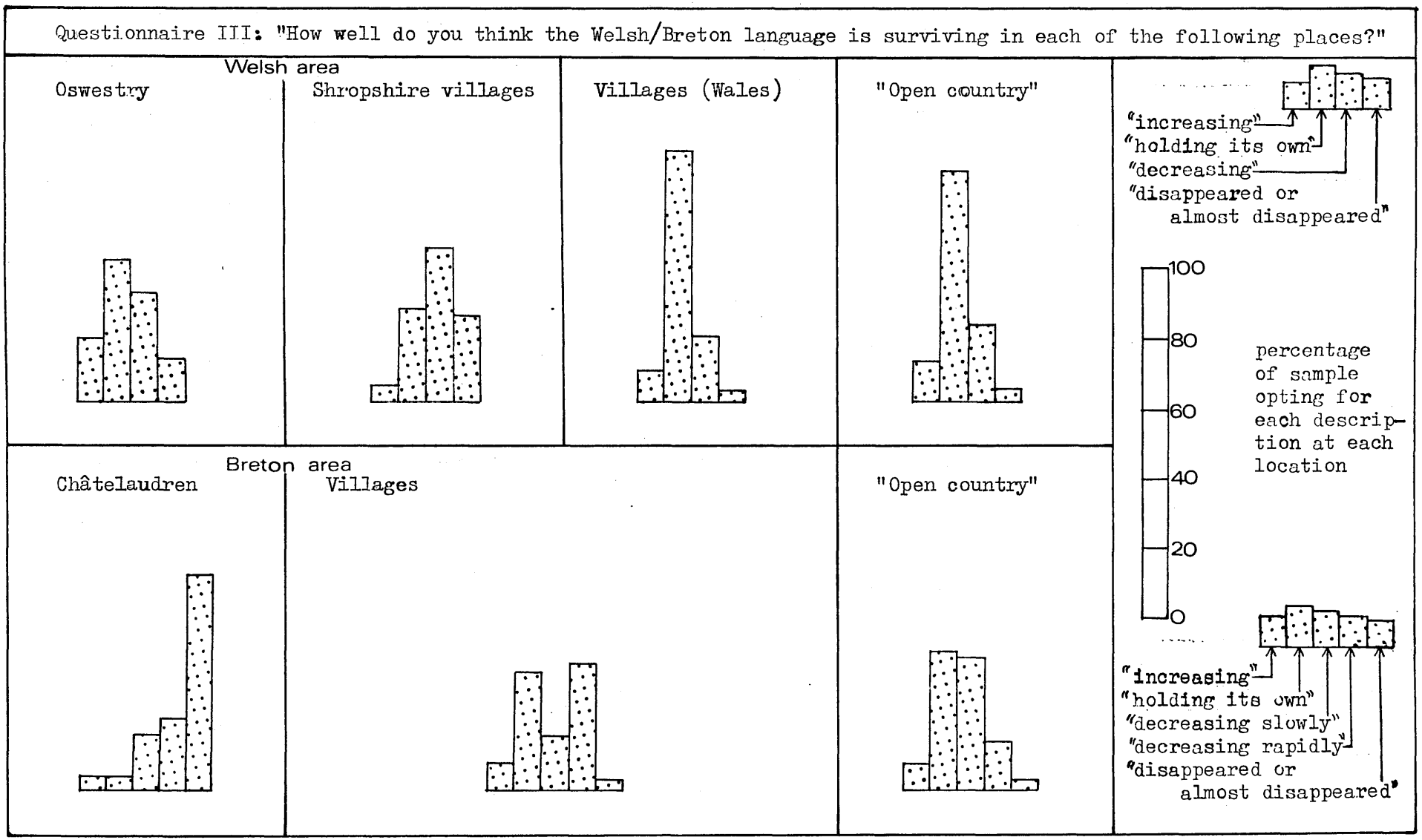
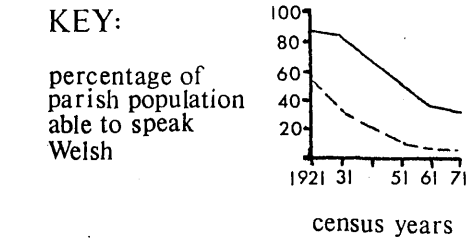


Figure VII.13

APPENDIX 1:

Graphs showing changes in percentages of people able to speak Welsh in the parishes comprising the extended Welsh study area, 1921 - 71 (used as a basis for figures III.6 and III.7).

KEY:

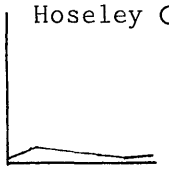


Solid line indicates proportions able to speak Welsh; broken line refers to proportions unable to speak English; symbol refers to category to which the parish has been assigned on figure III.

1.Burton ○

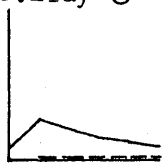
2. Allington ○

3.Marford and Hoseley ○

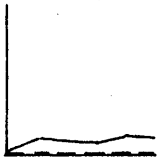


4. Holt ○

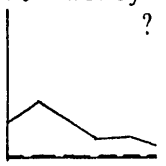
5.Llay ○



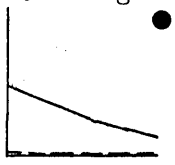
6.Gresford ○



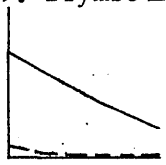
7. Gwersyllt ?



8. Broughton ●

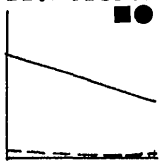


9. Brymbo ■●

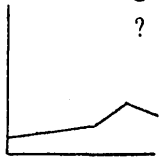


10.Minera ■

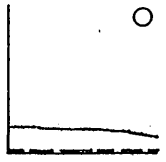
11.Bersham ■●



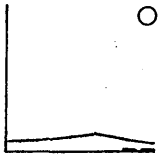
12.Erddig ?



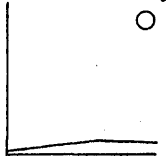
13. Wrexham ○



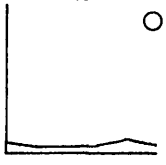
14. Bieston ○



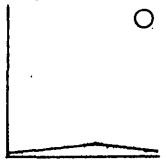
15.Abenbury ○



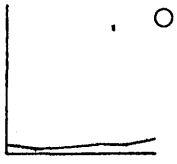
16.Isycoed ○



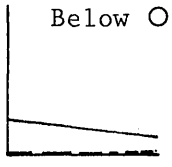
17.Sesswick ○



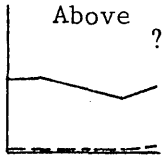
18.Marchwiel ○



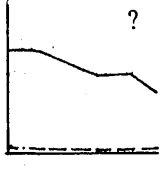
19.Esclusham Below ○



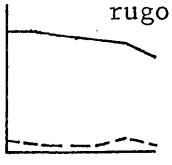
20.Esclusham Above ?



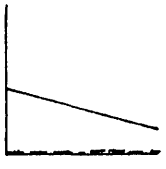
21.Penycae ?



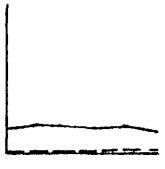
22.Rhosllanerch-rugog □■



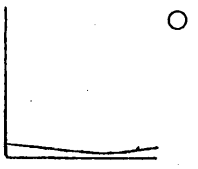
23.Cefn ●



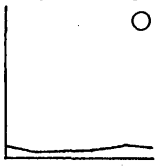
24.Ruabon ○



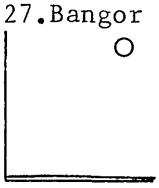
25.Erbistock



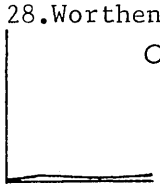
26.Overton



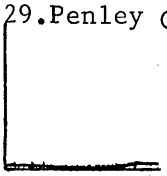
27.Bangor



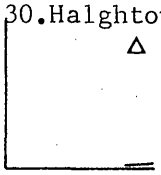
28.Worthenbury



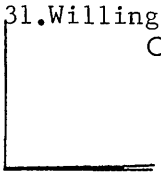
29.Penley



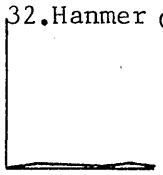
30.Halghton



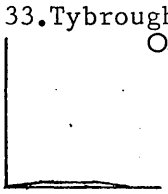
31.Willington



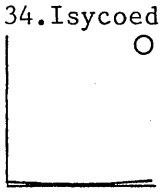
32.Hanmer



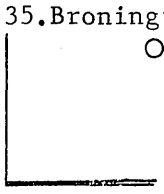
33.Tybroughton



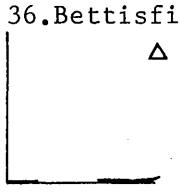
34.Isycoed



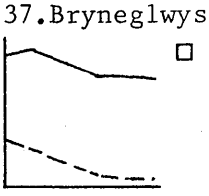
35.Bronington



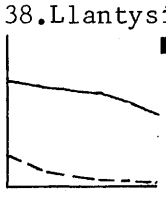
36.Bettisfield



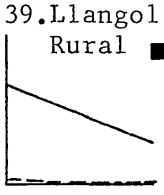
37.Bryneglwys



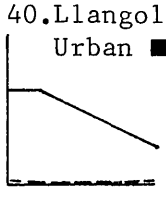
38.Llantysilio



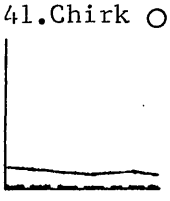
39.Llangollen Rural



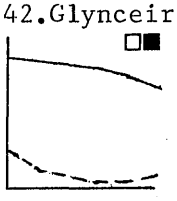
40.Llangollen Urban



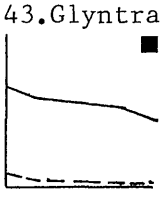
41.Chirk



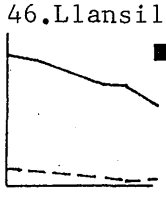
42.Glynceiriog



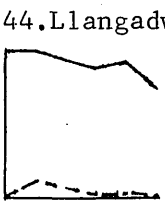
43.Glyntraian



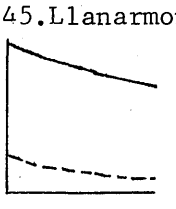
46.Llansilin



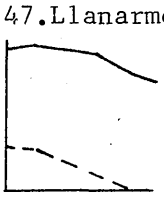
44.Llangadwaladr



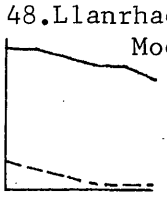
45.Llanarmon D.C.



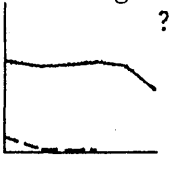
47.Llanarmon M.M.



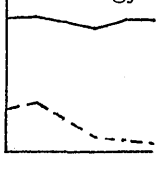
48.Llanrhaeadr yn Mochnant



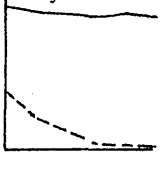
49.Llangedwyn



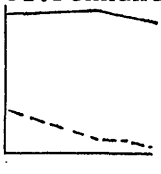
50.Llangynog



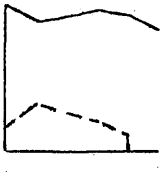
51.Llanrhaeadr-ym-Mochnant



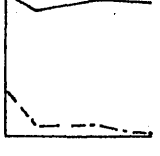
52.Pennant



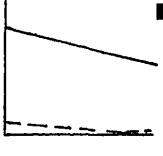
53. Hirnant



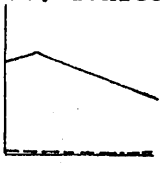
54.Llanwddyn



55. Llanfyllin

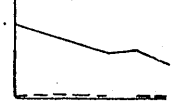


56.Llanfechain



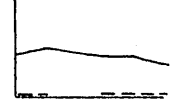
Appendix 1 (continued)

57.Llansantffraid Pool ●

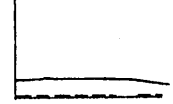


58.Carreghofa ○

59.Llansantffraid Deytheur ?

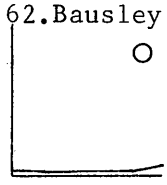


60.Llandysilio ○

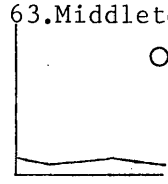


61.Llandrinio ○

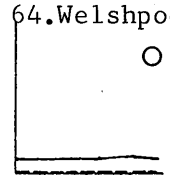
62.Bausley ○



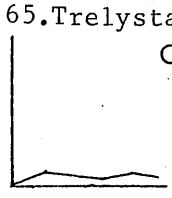
63.Middletown ○



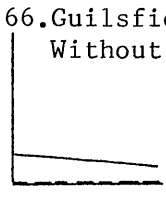
64.Welshpool ○



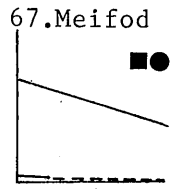
65.Trelystan ○



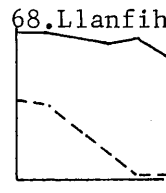
66.Guilsfield Without ○



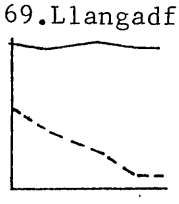
67.Meifod ■●



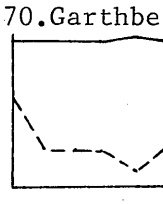
68.Llanfihangel □



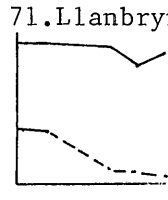
69.Llangadfan □



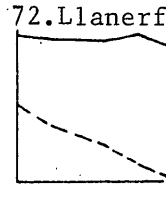
70.Garthbeibio □



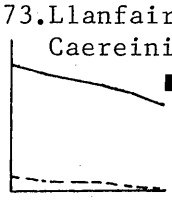
71.Llanbrynmair □



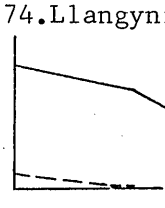
72.Llanerfyl □



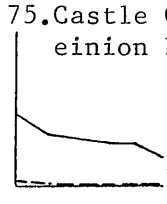
73.Llanfair Caereinion ■



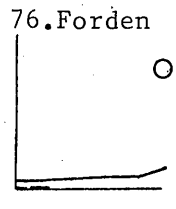
74.Llangyniew ■



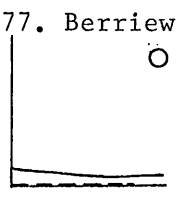
75.Castle Caereinion Rural ●



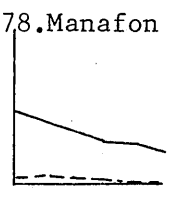
76.Forden ○



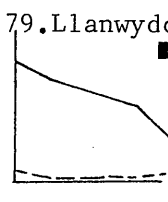
77. Berriew ○



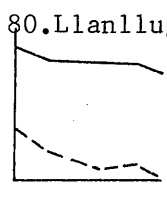
78.Manafon ●



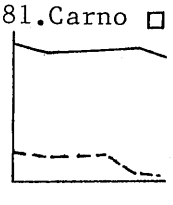
79.Llanwyddelan ■●



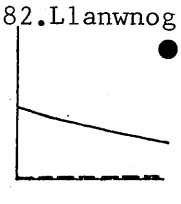
80.Llanllugan □



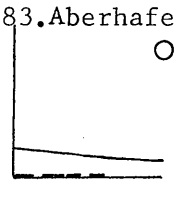
81.Carno □



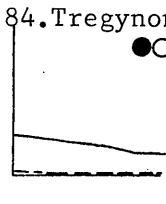
82.Llanwnog ●



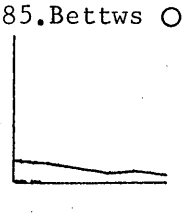
83.Aberhafesp ○



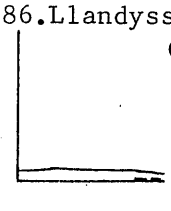
84.Tregynon ●○



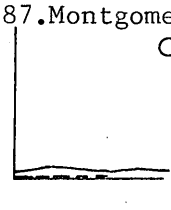
85.Bettws ○



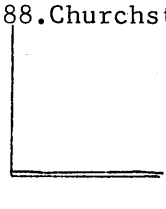
86.Llandyssil ○



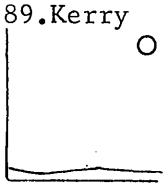
87.Montgomery ○



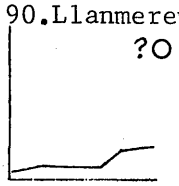
88.Churchstoke ○



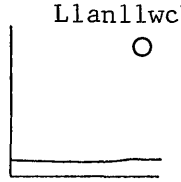
89.Kerry



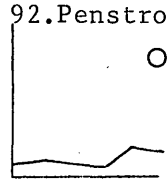
90.Llanmerewig



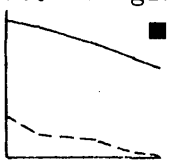
91.Newtown and Llanllwchaiarn



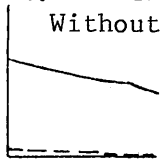
92.Penstrowed



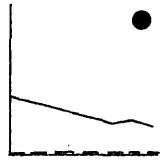
93.Trefeglwys



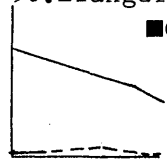
94.Llanidloes Without



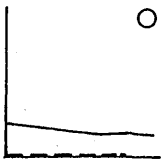
95.Llanidloes



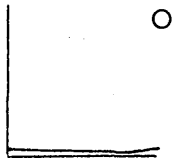
96.Llangurig



97.Llandinam



98.Mochdre



APPENDIX II:

Production of Population Surface maps
by means of a Moving Circle computer programme

(based, with acknowledgements, on Robertson, I.M.L., 1975 (see bibliography)).

MOVING CIRCLE PROGRAMME
USED IN PROCESSING OF DATA
FOR 'POTENTIAL SURFACE' MAPS

```
EGTRAN COMPILER          MARK NO. 302          DATE     05/06/73
C       MORI CIRCLE PROGRAM
        COMMON ROWS,COLS
        INTEGER ROWS,COLS,R,INCR,DIV,DR,DC,A,B,AMIN,AMAX,
       1BMIN,BMAX,RR,I,J,AI,DATA(ROWS,COLS),MAP(ROWS,COLS)
        REAL Z
        CALL INPUT(R,INCR,DIV,DATA)
        CALL OUTPUT(R,1,DIV,DATA,1)
        DO 1 I=1,ROWS,INCR
        DO 1 J =1,COLS,INCR
 1      MAP(I,J)=0
        DR=(ROWS-1)/INCR*INCR+1
        DC=(COLS-1)/INCR*INCR+1
        RR=R*R
        DO8 A=1,ROWS
        DO 8 B=1,COLS
        IF(A-R.LE.1)2
        AMIN=(A-R-1)/INCR*INCR+1
        IF(AMIN.NE.A-R)AMIN=AMIN+INCR
        GOTO 3
 2      AMIN=1
 3      AMAX=(A+R-1)/INCR*INCR+1
        IF(AMAX.GT.DR)AMAX=DR
        IF(AMAX.LT.AMIN)7
        IF(B-R.LE.1)4
        BMIN=(B-R-1)/INCR*INCR+1
        IF(BMIN.NE.B-R)BMIN=BMIN+INCR
        GOTO5
 4      BMIN=1
 5      BMAX=(B+R-1)/INCR*INCR+1
        IF(BMAX.GT.DC)BMAX=DC
        IF(BMAX.LT.BMIN)7
        DO 6 I=AMIN,AMAX,INCR
        AI=(A-I)**2
        DO 6 J=BMIN,BMAX,INCR
 6      IF(AI+(B-J)**2.LE.RR)MAP(I,J)=MAP(I,J)+DATA(A,B)
 7      CONTINUE
 8      CONTINUE
        IF(DIV.EQ.1)10
        DO 9 I=1,ROWS,INCR
        DO 9 J=1,COLS,INCR
        Z=FLOAT(MAP(I,J))/FLOAT(DIV)
        MAP(I,J)=IFIX(Z)
 9      IF(Z-FLOAT(MAP(I,J)).GT.0.5)MAP(I,J)=MAP(I,J)+1
 10     CALL OUTPUT (R,INCR,DIV,MAP,2)
        CALL EXIT
        END
```

Appendix 2 (Continued)... Sample of printout from Moving Circle

RESULTS WITH RADIUS= 2 INCREMENT= 2 DIVISOR= 1

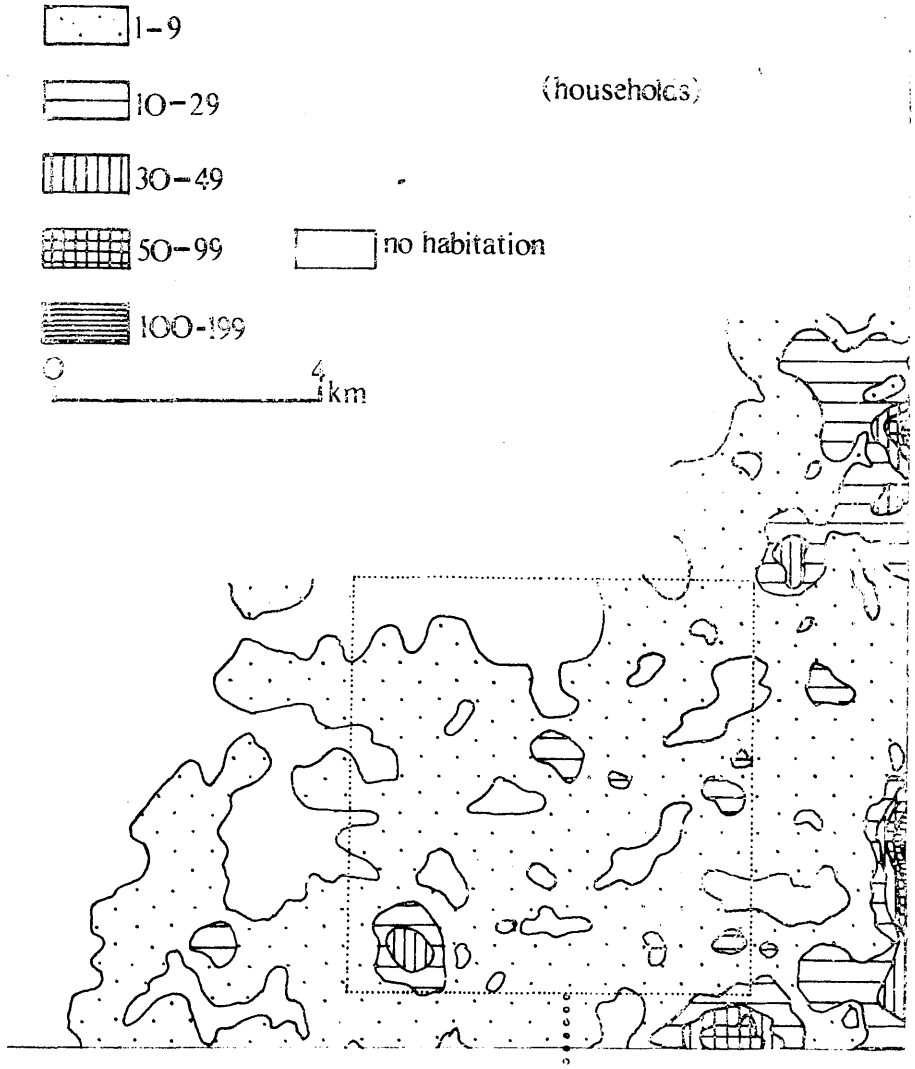
=200 metres

	1	3	5	7	9	11	13	15	17	19	21	23
1	0	0	0	0	0	0	3	3	0	0	0	0
3	0	0	0	0	0	1	1	1	3	4	1	0
5	0	0	0	0	0	1	0	1	8	11	4	0
7	0	0	0	0	0	0	0	1	8	9	5	2
9	0	0	0	0	0	0	1	1	3	4	4	7
11	0	0	0	0	0	0	0	1	0	0	0	1
13	0	0	0	0	0	0	0	0	1	2	2	1
15	0	0	0	0	1	1	1	1	1	1	2	3
17	0	0	0	0	0	0	1	1	1	1	2	7
19	0	0	0	0	0	0	0	0	2	1	2	3
21	0	0	0	2	0	0	0	1	1	1	0	1
23	0	0	3	2	2	0	0	0	0	0	0	0
25	0	2	2	4	0	0	0	0	1	0	0	2
27	0	0	2	1	0	2	0	3	2	1	2	3
29	1	2	1	2	2	3	3	2	5	0	1	3
31	1	1	1	1	1	1	2	6	6	5	3	3
33	0	0	0	0	1	1	5	3	10	3	5	2
35	0	0	0	1	1	3	3	11	24	16	3	0
37	0	0	1	0	1	0	5	13	23	11	3	1

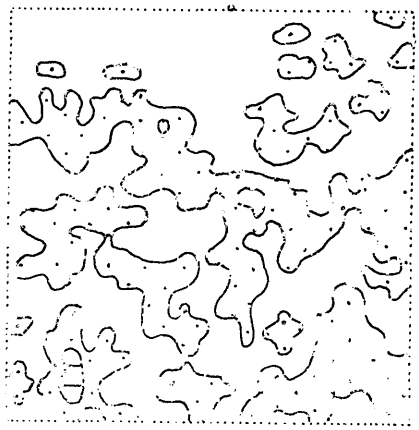
EFFECT OF CHOICE OF RADIUS SIZE ON RESULTANT SURFACE

(see figure IV. 2)

a) at radius 4 (400 metres)



b) at radius 2 (200 metres)



APPENDIX III:

Copies of Questionnaire I, to collect information on "Speaking frequencies" and "Speaking situations", administered in both study areas, and of Questionnaire II (the "Diary experiment"), administered in the Welsh area only.

University of Glasgow

Department of Geography

A STUDY OF WELSH-SPEAKING IN OSWESTRY AND DISTRICT

SECTION 1 : To the head of the household, or any other member who is able to answer on behalf of the household:

(a) How long have you lived at your present address?

- ☐ less than a year
- ☐ one to five years
- ☐ six to ten years
- ☐ more than ten years

(Please put a mark in the appropriate box).

(b) If your household has had any changes of address during the past ten years, please list all of the earlier addresses at which you lived during this time, in the order in which you lived there. (If you do not wish to give a precise address, the name of the town, village or parish will do, in each case).

SECTION 7: To the same person who has filled in the previous sections on behalf of the household:

(a) Please state which member of the household you are (Head, Member 1, Member 2, etc....)

.....

(b) Do you think you have more opportunities or fewer opportunities to speak Welsh in your neighbourhood, these days, than you did ten years ago?

☐ more

☐ the same

☐ fewer

We have thought of some possible reasons for increases or decreases in the amount of Welsh-speaking, and they are set out below. Please place a mark in the box which most nearly applies to your neighbourhood:

(c) Do you find there are more or fewer people in your immediate neighbourhood to whom you can speak Welsh?

☐ more

☐ the same

☐ fewer

(d) Are there more or fewer functions at which Welsh is spoken in the area these days?

☐ more

☐ the same number

☐ fewer

(e) Do you feel that there is more or less need to keep the language going?

☐ more

☐ less

(f) Are there any other reasons which we have not thought of, and which you think are important? If so, could you please mention them briefly below?

.....

. .....

.....

.....

SECTION 8: If you, or anyone else in your house, would be interested in helping with a further stage of the enquiry, we ask you to place a mark in the box below.

(For this second stage, you would be given a simple form which would take two or three minutes to fill in, each day for about a week, and which would involve no intrusion upon your privacy.) ☐

My sincere thanks for your help in filling out this questionnaire.

Enclosed you will find a stamped, addressed envelope, in which to post back the form at your convenience.

John E. Ambrose.

SECTION 2: Below is a table on which you are asked to give some details about the members of your household. You need not state their names, and apart from the head of the household, you need not list the other members of the household in any particular order, but please make sure you use any one line for the same person all the way through the form.
Please place a mark in the appropriate spaces.

	AGE-GROUP					SEX	BRIEF DESCRIPTION OF EMPLOYMENT
	Not yet in school. (Over 2)	In school	Not in school, and aged under 30	30 to 60	Over 60	M or F	(Mention which members of the family are not working, are in school, are housewives, are retired, etc)
Head of household							
Member 2							
Member 3							
Member 4							
Member 5							
Member 6							
Member 7							
Member 8							
Member 9							
Member 10							

SECTION 3: Welsh-speaking and the members of your household.

Please mark whichever square applies to each member of the household:

Speaks no Welsh	Can speak Welsh, but rarely or never does so	Sometimes speaks Welsh	Speaks more Welsh than English	Speaks only Welsh

SECTION 4: When you learnt Welsh; kindly fill in for each member of the household.

Learnt Welsh before English	Learnt Welsh after English	Learnt Welsh and English at the same time

SECTION 5: Where you learnt Welsh.

Learnt in the home	Learnt in school or at evening classes	Other	Please state the name of the town, village or parish where Welsh was first learnt

SECTION 6: Where you speak Welsh at present.

Several of these sections may apply. Please mark all those which apply to each member.

WELSH SPOKEN:

In house	With neighbours	In street or in shops	In chapel or church	In school or at work	Elsewhere (please give exa

SECTI

Département de Géographie
Université de Glasgow
Grande-Bretagne

("Questionnaire I")

ÉTUDE DE LA FRONTIÈRE LINGUISTIQUE DE LA LANGUE BRETONNE DANS LE VOISINAGE DE CHÂTELAUDREN-PLOUAGAT

1ère partie. Au chef de famille, ou à quelqu'un d'autre qui sait répondre au nom de la famille:

1. Quelle est votre adresse?

2. Depuis combien de temps demeurez-vous à cette adresse?

3. Vous avez changé d'adresse depuis 1963?

☐ oui
☐ non

Si vous avez répondu que oui, prière de noter vos adresses antérieures. (Le nom du village ou de la commune suffira.)

2ème partie. Quelques questions générales:

4. S'il y a des membres de votre famille qui savent parler breton, veuillez écrire ici les noms des communes, des villages ou des villes où ils l'ont appris:

5. Trouvez-vous qu'il y a plus ou moins d'occasions où on peut parler breton dans votre voisinage, de nos jours, qu'il y a dix ans?

☐ plus d'occasions
☐ à peu pres le même nombre
☐ moins d'occasions

6. Croyez-vous qu'il y a plus ou moins de gens bretonnants dans votre voisinage immédiat, aujourd'hui, qu'il y a dix ans?

☐ plus de bretonnants
☐ à peu pres le même nombre
☐ moins de bretonnants

7. Vous pensez qu'il y a plus ou moins besoin de conserver la langue bretonne de nos jours?

☐ plus de besoin
☐ indifférent
☐ moins de besoin

Si personne dans votre famille ne parle ou ne comprend la langue bretonne, il n'y a plus de questions. Mais si vous voulez écrire des remarques sur le breton, je les lirai avec intérêt. Je vous remercie de votre assistance.

S'il va a quelqu'un dans votre famille qui parle ou qui comprend breton, je serai très reconnaissant si vous pouvez remplir la page 2 de ce questionnaire.

Utilisez chaque colonne sur cette page pour un des membres de votre ménage. Bien entendu, vous n'aurez pas besoin de toutes les colonnes s'il n'y a pas dix personnes dans la famille!

Prière de faire une marque dans la boîte qui s'applique à chaque membre de la famille. Essayez de garder le même numéro pour chaque personne dans toutes les questions, s.v.p.	membre no. 1	membre no. 2	membre no. 3	membre no. 4	membre no. 5	membre no. 6	membre no. 7	membre no. 8	membre no. 9	membre no. 10
8. Âge:										
Pas encore à l'école										
à l'école										
pas plus à l'école: moins de 30 ans										
30 à 60 ans										
plus de 60 ans										
9. Sexe:										
masculin										
féminin										

10. Emploi: veuillez noter les membres qui sont encore à l'école, ménagères, en retraite, s.v.p.

11. La langue bretonne et les membres de votre famille; veuillez faire une marque dans la boîte qui s'applique le mieux à chaque membre de la famille:

	1	2	3	4	5	6	7	8	9	10
ne parle ni ne comprend breton										
parle très peu de breton; comprend beaucoup										
sait parler breton, mais le parle rarement ou jamais										
parle breton quelquefois										
parle plus de breton que de français										
ne parle que breton										

12. Lorsque les membres de votre famille ont appris le breton. Marquez pour chaque membre, s'il vous plaît:

	1	2	3	4	5	6	7	8	9	10
a appris le breton avant le français										
a appris le breton après le français										
a appris les deux langues en même temps										

13. Où est-ce que le breton est parlé à l'heure actuelle? Quelques-unes de ces boîtes vont peut-être s'appliquer à chaque membre de la famille. Prière de remplir toutes celles que vous pensez appropriées:

	1	2	3	4	5	6	7	8	9	10
parle breton en famille										
parle breton avec d'autres habitants du voisinage immédiat										
parle breton dans la rue, en faisant les emplettes, et caetera										
parle breton à l'école										
parle breton au cours de son travail										
parle breton à l'église										
parle breton ailleurs (précisez, s'il vous plaît)										

.....

14. Vous êtes lequel des membres de la famille? .....

("Questionnaire II")

University of Glasgow

Department of Geography

A STUDY OF WELSH-SPEAKING IN OSWESTRY AND DISTRICT

BEFORE YOU START ...

A few background details:

Your age-group: are you (please tick whichever box applies)

- ☐ in school
- ☐ no longer in school: aged under 30
- ☐ 30 to 60
- ☐ over 60 ?

Sex:

- ☐ male
- ☐ female

Occupation: (please state if you are not working, are retired, or a housewife or have any other sort of non-wage-earning occupation)

Could you please give the approximate address of your place of work (street or village, for example)?

Please state the name of the parish where you first learned Welsh:

Do you think you speak

- ☐ more English than Welsh?
- ☐ about half and half?
- ☐ more Welsh than English?

Day of week..Tuesday..... Day of survey, No. ...3....

(Example of sheet filled in for one day)

In this section you are asked, at the end of each day, to try and remember the occasions during the day when you have spoken Welsh in each of the places listed below.

1) About what proportion of your conversation with other members of your household was in Welsh today?

- [ ] none
- [✓] a little
- [ ] less than half
- [ ] more than half
- [ ] all

For the questions that follow, put in the "BRIEF" column all conversations which consisted of only a few words in Welsh, or Welsh conversations which lasted only two or three minutes. Put in the "LONG" column any Welsh conversations which lasted more than two or three minutes.

	NUMBER OF BRIEF CONVERSATIONS IN WELSH TODAY	NUMBER OF LONG CONVERSATIONS IN WELSH TODAY
2) In your house, but with visitors and callers other than members of your household		1
3) On visits to other houses in the district	1	
4) With your immediate neighbours	2	1
5) In the street and at the shops		1
6) In school or at work		
7) In chapel or church		
8) At Welsh societies, social clubs		
9) At other clubs, societies (not particularly Welsh), sports events, public houses etc.	1	2
10) Outside the Oswestry district, either by travelling outside the district, or by telephoning	3	1
11) Anywhere else, not so far mentioned. (It would be helpful if you could say where, please) .....on bus...(for example!)		2

How accurate do you think today's estimate is?

- [✓] very accurate
- [ ] fairly accurate
- [ ] not very accurate
- [ ] very inaccurate

(Probably, the more conversations you have, the less accurate your estimate will be.)

(Seven "day" sheets included in each form)

Day of week..... Day of survey, No. .....

In this section you are asked, at the end of each day, to try and remember the occasions during the day when you have spoken Welsh in each of the places listed below.

1) About what proportion of your conversation with other members of your household was in Welsh today?

- ☐ none
- ☐ a little
- ☐ less than half
- ☐ more than half
- ☐ all

For the questions that follow, put in the "BRIEF" column all conversations which consisted of only a few words in Welsh, or Welsh conversations which lasted only two or three minutes. Put in the "LONG" column any Welsh conversations which lasted more than two or three minutes.

	NUMBER OF BRIEF CONVERSATIONS IN WELSH TODAY	NUMBER OF LONG CONVERSATIONS IN WELSH TODAY
2) In your house, but with visitors and callers other than members of your household		
3) On visits to other houses in the district		
4) With your immediate neighbours		
5) In the street and at the shops		
6) In school or at work		
7) In chapel or church		
8) At Welsh societies, social clubs		
9) At other clubs, societies (not particularly Welsh), sports events, public houses etc.		
10) Outside the Oswestry district, either by travelling outside the district, or by telephoning		
11) Anywhere else, not so far mentioned, (it would be helpful if you could say where, please)		

How accurate do you think today's estimate is?

- ☐ very accurate
- ☐ fairly accurate
- ☐ not very accurate
- ☐ very inaccurate

AT THE END OF DAY 7 ...

Well, that's almost that!
Just a few general questions, to help sum up :

1) Think of all the conversations you've had with your neighbours over the seven days. What proportion of these conversations, in terms of time, would you say was in Welsh?

- [ ] none
- [ ] a little
- [ ] less than half
- [ ] more than half
- [ ] all

2) Do you find that in your neighbourhood people speak to their neighbours a great deal (whether in Welsh or in English)?

- [ ] never
- [ ] hardly ever
- [ ] sometimes
- [ ] quite often
- [ ] very often

3) Over the seven days, what proportion of your conversation in the street and in the shops do you think was in Welsh?

- [ ] none
- [ ] a little
- [ ] less than half
- [ ] more than half
- [ ] all

4) If you speak Welsh in the streets and the shops of Oswestry, do you find that you tend to speak much more Welsh than usual on market-day?

- [ ] yes
- [ ] no

5) In which chapel(s) or church(es), if any, do you usually speak Welsh?

.....

6) If you've spoken Welsh somewhere outside the Oswestry district during the seven days, could you please give a rough indication of the areas where you've done this?

.....

.....

7) Think back over the seven days when you were filling in this form. Do you think that during this time you spoke more or less Welsh than usual?

- [ ] more Welsh than usual
- [ ] about the same amount of Welsh as usual
- [ ] less Welsh than usual

8) Looking back over the places where you've spoken Welsh during the last seven days, do you think they were fairly typical of the places where you generally speak Welsh?

- [ ] yes
- [ ] no

9) If they were <u>not</u> typical, could you say why you think they were not?

.....

.....

10) If you want to add any comments, rude or otherwise, or any information you think important, please write them in any empty spaces on the questionnaire form.

And that really <u>is</u> that. Thank you again for your help, and I hope the form-filling hasn't caused you too much trouble.

John Ambrose

APPENDIX IV:

Copies of Questionnaire Form III
and data forming the basis of figures VII.1 to VII.9

Notes:

Numbers in brackets following names of response-points refer to locations on maps in chapter VII.

Figures inserted in section 12 of Welsh form and part 3 of the Breton one are percentages of total sample opting for each speaking-description. Figures for sub-groups based on age, locality and language follow the questionnaires.

Two inconsistencies in the sample should be noted:

A total of 159 respondents were interviewed in the Welsh area and 96 in the Breton one, enabling at least twenty complete responses to be obtained for each sub-group, but:

a) In the Welsh area five respondents failed to state an age sub-group and eight a "locality" sub-group; in the Breton area six respondents did not state an age group, eleven a "locality" sub-group and four a language sub-group.

b) In the case of the Welsh area four and in the Breton area eleven respondents did not complete the whole list of response-points or the supplementary questions at the end of the form. Where possible the information which these respondents were able to provide was nonetheless taken into account in the calculation of the percentage responses which follow.

University of Glasgow
Department of Geography

("Questionnaire III")

WELSH-SPEAKING IN OSWESTRY AND DISTRICT

Section 1 : Some preliminaries

1. What is your present address?

2. How long have you lived there?

3. Are you of local origin? ☐ yes ☐ no

   If so, could you name the parts of the locality with which you are most familiar (for example, in which you have lived)?

4. In which age-group are you? ☐ in school ☐ no longer in school; aged under 30 ☐ 30 to 60 ☐ over 60

5. Sex ☐ male ☐ female

6. Your occupation. (Please state if you are retired, not working, are a housewife or are in some other non-wage-earning occupation)

7. Do you speak Welsh? ☐ yes ☐ no

8. If you do speak Welsh, which of the following broad descriptions would you say applies to you?
   ☐ speak very little; understand a lot
   ☐ can speak Welsh, but rarely or never do so
   ☐ speak less Welsh than English
   ☐ speak Welsh and English in about equal proportions
   ☐ speak more Welsh than English

9. If you do not speak Welsh, would you say that your family has any Welsh-speaking connections (e.g. parents or grandparents who speak the language)?
   ☐ yes ☐ no

   If "yes", could you state where, to the best of your information, they learned the language?

Section 2 : Welsh-speaking in your neighbourhood

10. A rather awkward question!
Think of the ten houses nearest to your own.
How many of these, do you estimate, have someone who can speak Welsh?

- ☐ none of them
- ☐ one or two
- ☐ between two and five
- ☐ more than five
- ☐ all of them

11. Now think not just of these ten houses, but of your neighbourhood in general. Taking the neighbourhood as a whole, how important a part would you say the Welsh language plays in its daily life?

- ☐ a very important part; in regular use
- ☐ some part, but of only limited importance
- ☐ little or no part
- ☐ not certain

Those two questions give some idea of how Welsh you think your own locality is. Now the really difficult part! How do other neighbourhoods in your area compare with yours?

Section 3 : Welsh in other parts of the Oswestry district

12. There follows a list of places in the Oswestry district. Could you please go through the names, and say, for each place, whether you think that Welsh-speaking plays a "very important part", a "limited part" or "little or no part"?

Please place a tick in the column you think best describes each place. Try not to use the "not certain" column unless you have absolutely no idea, or don't know where the place is		Welsh plays a very important part	Welsh is of only limited importance	Welsh plays little or no part	Not certain
Llangollen	(1)	69	21	1	9
Cefn	(2)	33	37	11	19
Overton-Bangor-Penley area	(3)	2	26	46	26
Glyn Ceiriog	(4)	88	7	1	4
Chirk	(5)	10	47	35	8
Chirk Bank	(6)	5	36	48	10
Bronygarth	(7)	18	32	38	11
St. Martins	(8)	3	8	80	9
The area of country just above Selattyn (Craignant-Llechryddau)	(9)	37	26	9	29
Selattyn	(10)	18	31	41	11
Weston Rhyn	(11)	7	29	55	9
Gobowen	(12)	1	12	79	8
Hengoed	(13)	3	25	58	14
The country just above Oswestry (Old Racecourse-Brogyntyn-Pant Glâs)	(14)	3	19	41	36
The area around Rhydycroesau	(15)	43	33	6	19
Llansilin district	(16)	79	17	-	4
Moelfre (above Llansilin)	(17)	80	13	-	6
Llanrhaeadr	(18)	97	2	-	1

(please continue ...)	Welsh plays a very important part	Welsh is of only limited importance	Welsh plays little or no part	Not certain
Llangedwyn (19)	51	36	4	9
The area of country above Trefonen (Sychtyn, The Bryns, Craigllwyn) (20)	31	27	13	29
Nantmawr-Cefn Blodwel area (21)	20	40	28	12
Llanyblodwel (22)	17	37	38	7
Porthywaen-Llynclys area (23)	3	29	63	5
Pant (24)	3	14	76	7
Llanymynech-Carreghofa (25)	8	37	44	11
Four Crosses area (26)	6	37	44	12
Llandrinio (27)	8	35	41	15
Deytheur-Sarnau area (28)	17	41	25	17
Llansantffraid (29)	34	45	17	4
Llanfyllin (30)	82	13	-	4
Maesbrook-Knockin area (31)	2	15	76	7
Trefonen-Treflach area (32)	7	30	51	11
Nantycaws-Coedygo district (33)	5	22	52	21
Morda (34)	2	8	79	11
Oswestry (35)	16	54	30	-
Whittington area (36)	1	8	78	13

7

Section 4 : Some final questions

13. How well do you think the Welsh language is surviving in each of the following areas?

	increasing	holding its own	decreasing	almost disappeared
In Oswestry?				
In the Villages just on the Shropshire side of the border (e.g. Weston Rhyn, Gobowen, Trefonen, Llanyblodwel)?				
In the Villages just on the Welsh side of the border (e.g. Chirk, Llansilin, Llangedwyn, Llansantffraid, Four Crosses)?				
In the open country with scattered farms and houses, just around the border?				

14. Do you think it is important to keep the Welsh language going?

☐ yes
☐ no

15. If you said "yes" to question 14, how important do you think it is to preserve the language in the border area?

☐ more important than in the parts of Wales where Welsh is more widely spoken
☐ less important than in the parts of Wales where Welsh is more widely spoken
☐ equally as important as in the more strongly Welsh-speaking area

continued...

16. For the language to keep going in any area, how important would you say it was for Welsh-speakers to have neighbours who also speak the language?

☐ very important ☐ of some importance but not vital ☐ not important ☐ don't know

17. How well do you think the Welsh-speaking and non-Welsh-speaking communities get along with each other in the border areas?

☐ very well ☐ not always well, but usually ☐ usually rather badly ☐ very badly

That's the last question. Thank you very much for your help. If you have any points you would like to make in connection with the questions, please write them in the space below.

ETUDE DE LA LANGUE BRETONNE DANS LA RÉGION
DE CHÂTELAUDREN-PLOUAGAT

("Questionnaire III")

1ère partie. Quelques préliminaires:

1. Quelle est votre adresse?

2. Depuis combien de temps demeurez-vous à cette adresse?

3. Vous êtes originaire de la région de Châtelaudren-Plouagat?
   - ☐ oui
   - ☐ non

4. Votre âge: vous êtes dans quelle catégorie?
   - ☐ à l'école
   - ☐ pas plus à l'école; moins de 30 ans
   - ☐ de 30 à 60 ans
   - ☐ plus de 60 ans

5. Votre sexe:
   - ☐ masculin
   - ☐ féminin

6. Votre emploi. (Veuillez noter si vous êtes en retraite, si vous êtes ménagère, ou si vous poursuivez quelque autre emploi non payé):

7. Êtes-vous bretonnant?
   - ☐ oui
   - ☐ non

8. Si vous parlez breton, laquelle des descriptions suivantes, à votre avis, s'applique le mieux à votre cas?
   - ☐ je sais parler très peu de breton, mais j'encomprends beaucoup
   - ☐ je sais parler breton, mais en pratique je le parle très rarement, ou jamais
   - ☐ je parle moins de breton que de français
   - ☐ je parle breton et français par parts égales
   - ☐ je parle plus de breton que de français

9. Si vous ne parlez pas vous-même breton, est-ce qu'il y a d'autres personnes dans votre famille (par exemple, parents, grands-parents) qui savent ou qui savaient le parler? S'il y en a, savez-vous les noms des villages ou des voisinages où ils l'ont appris?

2eme partie. Le breton dans votre voisinage:

10. Dans votre coin de la région, quelle est votre impression du rôle que joue la langue bretonne dans la vie quotidienne?
   - ☐ un rôle très important; la langue est utilisée régulièrement
   - ☐ le breton joue un rôle, mais d'une importance limitée
   - ☐ le breton ne joue aucun rôle, ou joue un rôle extrêmement limité
   - ☐ pas certain

11.
Maintenant une question plus difficile: quelle est la comparaison entre d'autres voisinages dans la région et celui de chez vous?

3ème partie; prière de faire une marque dans le colonne qui donne, à votre avis, la meilleure description de chacun des voisinages. Utilisez la colonne "pas certain" seulement dans le cas où vous ne connaissez absolument pas le lieu, ou si vous ne savez pas où il se trouve	le breton joue un rôle très important; utilisé régulièrement	le breton joue un rôle mais d'une importance limitée	le breton ne joue aucun rôle, ou joue un rôle extrêmement limité	Pas certain
Tressignaux (1)	-	22	46	32
Tréguidel (2)	-	26	52	22
la Croix-Pierre (3)	6	34	37	22
Goudelin (4)	25	55	11	8
la Grandville (un peu au nord de Bringolo) (5)	11	41	37	11
le Merzer (6)	39	40	16	5
Bringolo (7)	12	42	39	6
St-Quay (8)	2	18	62	18
St-Jean-Kerdaniel (9)	23	41	25	10
Environs de la Villeneuve-Perret et la Ville-Chevalier (entre St-Jean-Kerdaniel et Plélo) (10)	-	21	59	20
Environs de Malaunay, Guern Ar Punso (près de la forêt de Malaunay, St-Agathon) (11)	36	40	16	8
St-Agathon (12)	48	38	7	7
Guingamp (13)	45	41	12	2
Environs de Ploumagoar, Locmaria (14)	46	38	8	7
Environs de Kerguillerm et de Coat-An-Doc'h (sur la R.N.12) (15)	36	40	14	11
Plouagat (16)	4	39	48	9
Châtelaudren (17)	-	14	79	7
la Ville-Fumée, la Guerche et environs (un peu au sud-est de Châtelaudren) (18)	-	10	77	13
Environs de Quinquis, Seignaux (2-3km de Châtelaudren, direction de Boqueho) (19)	-	13	74	13
Plouvara (20)	-	6	79	15
Environs de Kerhamon, Kerdanet (près de Lanrodec) (21)	24	40	27	10
Environs de Goudemail, La Croix des Maisons (à 1 km de Lanrodec, sur la route de Senven, St-Fiacre) (22)	47	29	17	7
Lanrodec (23)	50	34	14	2
Kersteun, Resmarec (entre Lanrodec et la route nationale) (24)	36	38	12	14
Environs du Croissant, le Restol, Kerhuélen (à 2 km de Lanrodec, dans la direction de St-Péver (25)	56	32	5	6
Kerhors, Keriel (un peu plus loin de Lanrodec, dans la même direction) (26)	58	27	5	10

(continuez, s'il vous plaît... !)	le breton joue un rôle très important; utilisé régulièrement	le breton joue un rôle mais d'une importance limitée	le breton ne joue aucun rôle, ou joue un rôle extrêmement limité	Pas certain
Senven (entre Lanrodec et St-Fiacre) (27)	57	33	5	5
Le Quinquis, le Petit Perrien, le Guerglas (à côté de Senven) (28)	51	26	10	12
Boqueho (29)	-	23	61	17
St-Pever (30)	55	30	9	7
St-Fiacre (31)	46	29	12	13

4ème partie. Quelques dernières questions:

12. À ce que vous croyez, quel est l'état de la langue bretonne dans chacun de ces endroits?

	le breton accroît en importance	le breton maintient sa position	le breton décline lentement	le breton décline rapidement	le breton est disparu ou presque disparu
dans le voisinage de Châtelaudren?					
dans les villages comme Bringolo, St-Jean-Kerdaniel, Lanrodec, Senven?					
En pleine campagne, avec fermes et maisons isolées, et dans les hameaux?					

13. Vous pensez qu'il est important de conserver la langue bretonne?

☐ oui
☐ non

14. Si vous avez marqué la réponse "oui" pour la question no. 13, quelle est votre opinion sur l'importance de conserver le breton dans la zone frontalière de la langue?

☐ plus important que dans la contrée où la langue est plus généralement utilisée
☐ moins important que dans la contrée où la langue est plus généralement utilisée
☐ de la même importance que dans les régions où l'usage du breton est plus répandu

15. Pour qu'une famille bretonnante continue de parler la langue, pensez-vous qu'il est important qu'il soit d'autres gens bretonnants dans le voisinage immédiat?

☐ très important ☐ une certaine importance, mais pas essentiel ☐ pas important ☐ pas certain

16. Trouvez-vous que les gens bretonnants et non-bretonnants s'accordent bien les uns avec les autres dans votre région?

☐ très bien ☐ pas toujours bien, mais d'habitude ☐ pas toujours tellement bien ☐ très mal

17. C'est tout! Je vous remercie beaucoup de votre assistance. Si vous voulez écrire des observations sur le breton -- ou sur les questions -- je serai content de les lire.

WELSH AREA - AGE GROUPS

code: a) Under 30; b) 30 - 60; c) Over 60

Response-point number	Response-point name	Respondents' descriptions of language-use at point in question (Figures refer to rounded percentage of age sub-group opting for each description)			
		"Welsh plays a very important part"	"Welsh is of only limited importance"	"Welsh plays little or no part"	"not certain"
1	Llangollen	a) 56 b) 71 c) 75	37 21 8	- 2 -	6 5 17
2	Cefn	a) 12 b) 33 c) 50	44 38 25	31 7 0	12 21 25
3	Overton-Bangor-Penley	a) - b) 2 c) 4	19 26 33	62 50 33	19 21 29
4	Glyn Ceiriog	a) 87 b) 93 c) 83	12 5 4	- - 4	- 2 8
5	Chirk	a) 19 b) - c) 17	25 59 46	56 33 21	- 7 17
6	Chirk Bank	a) 6 b) - c) 12	31 33 42	62 57 29	- 10 17
7	Bronygarth	a) 31 b) 5 c) 29	25 30 42	44 48 17	- 16 12
8	St.Martins	a) - b) - c) 8	6 2 21	94 90 50	- 7 21
9	Craignant-Llechryddau	a) 50 b) 29 c) 37	25 32 17	6 12 8	19 27 37
10	Selattyn	a) 12 b) 21 c) 17	31 24 42	44 45 29	12 10 12
11	Weston Rhyn	a) 6 b) 2 c) 17	25 28 37	69 62 29	- 7 17
12	Gobowen	a) - b) - c) 4	6 7 29	94 85 50	- 7 17
13	Hengoed	a) - b) - c) 8	25 19 37	62 71 33	12 10 21
14	Racecourse-Brogyntyn-Pant Glas	a) 6 b) - c) 5	31 16 13	44 50 26	19 33 55

Appendix IV (cont'd.)

Welsh age-groups (continued)

		"Welsh plays a very important part"	"Welsh is of only limited importance"	"Welsh plays little or no part"	"not certain"
15	Rhydycroesau	a) 56 b) 30 c) 54	12 45 29	12 2 4	19 21 12
16	Llansilin	a) 81 b) 71 c) 87	12 24 12	- - -	6 5 -
17	Moelfre	a) 94 b) 71 c) 83	6 19 12	- - -	- 10 4
18	Llanrhaeadr	a) 100 b) 93 c) 100	- 5 -	- - -	- 2 -
19	Llangedwyn	a) 62 b) 43 c) 52	25 45 35	6 - 4	6 12 9
20	Sychtyn-Bryn-Craigllwyn	a) 44 b) 26 c) 29	19 28 33	19 15 4	19 30 33
21	Nantmawr-Cefn Blodwel	a) 37 b) 12 c) 18	25 38 52	31 38 12	6 12 18
22	Llanyblodwel	a) 31 b) 12 c) 14	31 32 48	31 52 29	6 5 8
23	Porthywaen-Llynclys	a) - b) 5 c) 4	44 19 31	56 69 56	- 7 8
24	Pant	a) - b) 2 c) 8	25 12 13	69 80 69	6 5 9
25	Llanymynech-Carreghofa	a) 12 b) 7 c) 6	41 30 42	41 48 42	6 14 10
26	Four Crosses	a) 19 b) - c) 6	31 45 25	37 43 50	12 12 19
27	Llandrinio	a) 19 b) 6 c) 4	37 33 32	37 40 44	6 19 20
28	Deytheur-Sarnau	a) 25 b) 14 c) 12	62 26 40	6 30 40	6 31 8
29	Llansantffraid	a) 44 b) 24 c) 39	31 50 48	25 19 8	- 7 4
30	Llanfyllin	a) 94 b) 73 c) 87	6 21 8	- - -	- 5 4
31	Maesbrook-Knockin	a) - b) - c) 6	12 14 26	81 80 59	6 5 9

Appendix IV

Welsh age-groups (continued)

		"Welsh plays a very important part"	"Welsh is of only limited importance"	"Welsh plays little or no part"	"not certain"
32	Trefonen-Treflach	a) 19 b) - c) 8	37 28 26	37 59 48	6 14 17
33	Nantycaws-Coedygo	a) 6 b) - c) 13	31 19 17	31 64 53	31 16 17
34	Morda	a) - b) - c) 9	- 10 13	94 80 60	6 10 17
35	Oswestry	a) 12 b) 14 c) 23	37 57 64	50 30 12	- - -
36	Whittington	a) - b) - c) 4	- 10 13	94 85 48	6 5 35

WELSH AREA - LOCALITY GROUPS

code: a) local; b) non-local

Respondents' descriptions of language-use at point in question
(Figures refer to rounded percentage of "local"/"non-local" sub-groups opting for each description)

1	Llangollen	a) 72 b) 65	19 25	- 3	9 8
2	Cefn	a) 35 b) 30	44 27	7 14	14 30
3	Overton-Bangor-Penley	a) - b) 3	26 27	51 46	23 25
4	Glyn Ceiriog	a) 91 b) 87	5 8	2 -	2 5
5	Chirk	a) 12 b) 4	51 48	30 37	7 11
6	Chirk Bank	a) 5 b) 5	33 38	53 47	9 11
7	Bronygarth	a) 16 b) 16	28 36	44 33	12 14
8	St. Martins	a) - b) 5	7 8	84 78	9 8
9	Craignant-Llechryddau	a) 37 b) 28	40 14	07 14	16 43
10	Selattyn	a) 14 b) 22	28 30	51 33	7 16
11	Weston Rhyn	a) 2 b) 11	33 26	56 55	9 8
12	Gobowen	a) - b) 3	9 16	84 70	7 11
13	Hengoed	a) - b) 5	23 27	65 51	12 16

Appendix IV
Welsh locality groups (continued)

		"Welsh plays a very important part"	"Welsh is of only limited importance"	"Welsh plays little or no part"	"not certain"
14	Racecourse-Brogyntyn-Pant Glas	a) 2 b) 5	23 11	47 35	28 50
15	Rhydycroesau	a) 47 b) 33	40 30	7 5	7 33
16	Llansilin	a) 86 b) 68	12 27	- -	2 5
17	Moelfre	a) 88 b) 68	9 22	- -	2 11
18	Llanrhaeadr	a)100 b) 92	- 5	- -	- 3
19	Llangedwyn	a) 52 b) 47	40 33	2 3	5 16
20	Sychtyn-Bryn- Craigllwyn	a) 36 b) 19	31 23	9 14	24 43
21	Nantmawr-Cefn Blodwel	a) 19 b) 19	43 36	29 30	9 14
22	Llanyblodwel	a) 16 b) 16	38 33	38 44	7 5
23	Porthywaen-Llynclys	a) 2 b) 5	27 25	69 62	2 8
24	Pant	a) - b) 5	16 11	79 77	5 5
25	Llanymynech-Carreghofa	a) 7 b) 5	36 33	50 44	7 19
26	Four Crosses	a) 2 b) 8	40 35	53 40	5 17
27	Llandrinio	a) 5 b) 11	42 25	47 38	5 25
28	Deytheur-Sarnau	a) 16 b) 14	40 36	30 22	12 27
29	Llansantffraid	a) 30 b) 35	48 43	16 17	5 5
30	Llanfyllin	a) 81 b) 76	16 15	- 3	2 5
31	Maesbrook-Knockin	a) - b) 3	12 19	83 68	6 11
32	Trefonen-Treflach	a) 7 b) 5	31 28	54 50	7 16
33	Nantycaws-Coedygo	a) 5 b) 5	24 16	62 49	9 31
34	Morda	a) - b) 5	7 11	86 70	7 14

Appendix IV

Welsh locality groups (continued)

			"Welsh plays a very important part"	"Welsh is of only limited importance"	"Welsh plays little or no part"	"not certain"
35	Oswestry	a)	16	57	27	-
		b)	16	56	28	-
36	Whittington	a)	-	7	84	9
		b)	3	11	70	16

WELSH AREA - LANGUAGE GROUPS

a) Speaks no Welsh; no Welsh connection
b) Speaks no Welsh; Welsh connections
c) Welsh-speaking

Respondents' descriptions of language use at point in question
(Figures refer to rounded percentage of language sub-groups opting for each description)

1	Llangollen	a)	79	17	-	4
		b)	76	20	-	5
		c)	58	23	3	15
2	Cefn	a)	37	47	7	9
		b)	35	45	10	10
		c)	30	23	13	33
3	Overton-Bangor-Penley	a)	4	25	54	17
		b)	5	20	55	20
		c)	-	28	41	30
4	Glyn Ceiriog	a)	87	10	-	3
		b)	80	15	-	5
		c)	90	5	-	5
5	Chirk	a)	9	51	33	7
		b)	10	50	35	5
		c)	8	48	33	10
6	Chirk Bank	a)	2	31	57	10
		b)	-	40	45	15
		c)	8	43	38	10
7	Bronygarth	a)	16	32	44	8
		b)	15	30	45	10
		c)	18	33	28	20
8	St. Martins	a)	4	-	91	5
		b)	-	-	90	10
		c)	3	18	64	15
9	Craignant-Llechryddau	a)	56	39	-	4
		b)	32	29	10	29
		c)	24	16	18	42
10	Selattyn	a)	22	30	39	9
		b)	20	25	50	5
		c)	13	35	38	15
11	Weston Rhyn	a)	4	22	74	-
		b)	5	30	55	10
		c)	10	35	42	13
12	Gobowen	a)	-	-	95	5
		b)	-	5	90	5
		c)	3	25	60	13

Welsh language groups (continued)

		"Welsh plays a very important part"	"Welsh is of only limited importance"	"Welsh plays little or no part"	"not certain"
13	Hengoed	a) 4	22	61	13
		b) -	15	75	10
		c) 3	33	48	15
14	Racecourse-Brogyntyn-Pant Glas	a) -	26	56	17
		b) 5	20	45	30
		c) 3	13	28	56
15	Rhydycroesau	a) 48	30	-	22
		b) 30	45	5	20
		c) 44	30	10	15
16	Llansilin	a) 87	13	-	-
		b) 75	20	-	5
		c) 74	20	-	5
17	Moelfre	a) 91	4	-	4
		b) 75	15	-	10
		c) 74	20	-	5
18	Llanrhaeadr	a) 95	-	-	4
		b) 100	-	-	-
		c) 94	6	-	-
19	Llangedwyn	a) 65	26	-	9
		b) 50	45	-	5
		c) 38	43	5	13
20	Sychtyn, Bryn, Craigllwyn	a) 52	22	13	13
		b) 31	37	6	26
		c) 13	25	15	46
21	Nantmawr-Cefn Blodwel	a) 30	35	26	9
		b) 10	55	25	10
		c) 18	33	30	18
22	Llanyblodwel	a) 26	43	22	9
		b) 10	55	30	5
		c) 13	25	53	
23	Porthywaen-Llynclys	a) 9	26	65	-
		b) -	38	57	5
		c) 3	20	67	10
24	Pant	a) 4	13	82	-
		b) 5	5	85	5
		c) 3	20	63	13
25	Llanymynech-Carreghofa	a) 4	52	35	9
		b) 15	25	50	10
		c) 5	35	44	15
26	Four Crosses	a) 9	56	35	-
		b) -	40	50	10
		c) 5	25	46	23
27	Llandrinio	a) 9	48	35	9
		b) 5	35	45	15
		c) 8	25	43	23
28	Deytheur-Sarnau	a) 35	48	9	9
		b) 10	35	30	25
		c) 8	30	36	25

Appendix IV

Welsh language groups (continued)

			"Welsh plays a very important part"	"Welsh is of only limited importance"	"Welsh plays little or no part"	"not certain"
29	Llansantffraid	a)	39	39	17	4
		b)	30	50	15	5
		c)	28	48	18	5
30	Llanfyllin	a)	74	22	-	4
		b)	90	5	-	5
		c)	81	15	-	3
31	Maesbrook-Knockin	a)	4	4	91	-
		b)	-	10	85	5
		c)	-	23	65	13
32	Trefonen-Treflach	a)	4	35	61	-
		b)	5	35	60	-
		c)	8	23	43	25
33	Nantycaws-Coedygo	a)	9	17	61	13
		b)	-	35	45	20
		c)	5	15	56	23
34	Morda	a)	-	9	87	4
		b)	-	-	90	10
		c)	5	13	67	15
35	Oswestry	a)	13	52	35	-
		b)	10	50	40	-
		c)	25	56	18	-
36	Whittington	a)	-	4	92	4
		b)	-	5	90	5
		c)	3	15	58	23

BRETON AREA - AGE GROUPS

code: a) under 30; b) 30 - 60; c) over 60

			"Breton plays a very important part"	"Breton is of only limited importance"	"Breton plays little or no part"	"not certain"
1	Tressignaux	a)	-	12	50	38
		b)	-	19	47	34
		c)	-	17	56	27
2	Tréguidel	a)	-	23	49	28
		b)	-	27	50	23
		c)	-	33	56	11
3	la Croix-Pierre	a)	-	27	40	33
		b)	4	40	33	23
		c)	12	29	40	19
4	Goudelin	a)	23	41	27	9
		b)	24	59	11	6
		c)	22	74	2	2
5	La Grandville	a)	17	20	35	28
		b)	7	46	39	8
		c)	11	40	45	4

Appendix IV

Breton age groups (continued)

Response point number	Response point name or description	Respondents' descriptions of language use at point in question: Breton plays a very important part; in regular use	Breton is of only limited importance	Breton plays little or no part	not certain
6	le Merzer	a) 21	35	33	11
		b) 36	47	11	6
		c) 56	33	11	-
7	Bringolo	a) 8	32	51	9
		b) 9	47	37	7
		c) 11	42	40	7
8	St.-Quay	a) 3	17	49	31
		b) 3	13	59	25
		c) -	10	80	10
9	St. Jean Kerdaniel	a) 7	27	47	19
		b) 23	39	27	11
		c) 21	49	22	8
10	Villeneuve-Perret, Ville-Chevalier	a) -	12	61	27
		b) -	20	60	20
		c) -	28	60	12
11	Malaunay, Guern Ar Punso	a) 23	32	29	16
		b) 43	36	13	8
		c) 53	32	11	4
12	St. Agathon	a) 45	26	24	5
		b) 57	33	5	5
		c) 67	29	-	4
13	Guingamp	a) 47	23	28	2
		b) 59	34	5	2
		c) 70	30	-	-
14	Ploumagoar, Locmaria	a) 43	21	27	9
		b) 54	32	7	7
		c) 68	29	-	3
15	Kerguillerm, Coat-An-Doc'h	a) 21	28	30	21
		b) 38	33	15	14
		c) 62	23	7	8
16	Plouagat	a) -	35	62	3
		b) -	36	47	17
		c) 11	44	35	10
17	Châtelaudren	a) -	5	95	-
		b) -	13	73	13
		c) -	22	73	5
18	La Ville-Fumée, La Guerche	a) -	24	54	22
		b) -	12	71	17
		c) -	2	88	10
19	Quinquis, Seignaux	a) -	17	59	24
		b) -	13	67	20
		c) -	5	89	6

Appendix IV

Breton age groups (continued)

			"Breton plays a very important part"	"Breton is of only limited importance"	"Breton plays little or no part"	"not certain"
20	Plouvara	a)	-	6	76	18
		b)	-	7	80	13
		c)	-	4	83	13
21	Kerhamon-Kerdanet	a)	25	30	27	18
		b)	26	37	30	7
		c)	40	45	11	4
22	Goudemail, Croix des Maisons	a)	48	26	11	15
		b)	64	22	7	7
		c)	67	22	8	3
23	Lanrodec	a)	48	20	26	6
		b)	61	22	17	-
		c)	66	28	6	-
24	Kersteun, Resmarec	a)	22	23	29	26
		b)	50	30	8	12
		c)	56	28	8	8
25	le Croissant, le Restol	a)	32	32	21	15
		b)	65	22	6	7
		c)	71	29	-	-
26	Kerhors, Keriel	a)	49	18	16	17
		b)	69	20	2	9
		c)	70	25	-	5
27	Senven	a)	33	31	21	15
		b)	66	21	6	7
		c)	69	31	-	-
28	Le Quinquis, Petit Perrien	a)	30	29	17	24
		b)	55	20	13	12
		c)	54	37	3	6
29	Boqueho	a)	-	29	43	28
		b)	-	20	67	13
		c)	-	14	71	15
30	St. Pever	a)	45	21	22	12
		b)	60	32	4	4
		c)	67	28	-	5
31	St.Fiacre	a)	32	23	25	20
		b)	47	24	15	14
		c)	60	25	4	11

BRETON AREA - "LOCALITY" GROUPS

code:	a)"local";	b) "non-local"		(percentage of sub-group opting for each description)	
1	Tressignaux	a)	-	30	60	10
		b)	-	27	27	46
2	Tréguidel	a)	-	29	42	29
		b)	-	18	36	46
3	La Croix-Pierre	a)	-	38	50	12
		b)	17	34	17	32

Appendix IV

Breton "locality" groups (continued)

			"Breton plays a very important part"	"Breton is of only limited importance"	"Breton plays little or no part"	"not certain"
4	Goudelin	a)	15	61	10	14
		b)	21	44	14	21
5	la Grandville	a)	5	37	53	5
		b)	18	46	29	9
6	le Merzer	a)	29	48	20	3
		b)	48	35	6	11
7	Bringolo	a)	8	38	52	2
		b)	18	48	32	2
8	St. Quay	a)	-	15	75	10
		b)	8	23	52	17
9	St.-Jean-Kerdaniel	a)	14	49	26	11
		b)	46	36	9	9
10	Villeneuve-Perret, Ville-Chevalier	a)	-	10	85	5
		b)	-	18	55	27
11	Malaunay, Guern Ar Punso	a)	46	34	16	4
		b)	32	51	9	8
12	St. Agathon	a)	45	47	5	3
		b)	50	30	10	10
13	Guingamp	a)	38	52	8	2
		b)	44	44	12	-
14	Ploumagoar, Locmaria	a)	41	46	8	5
		b)	53	34	9	4
15	Kerguillerm, Coat-An-Doc'h	a)	25	50	15	10
		b)	38	36	9	17
16	Plouagat	a)	5	30	60	5
		b)	4	51	36	9
17	Châtelaudren	a)	-	10	90	-
		b)	-	18	73	9
18	Ville Fumée, La Guerche	a)	-	2	93	5
		b)	-	10	82	8
19	Quinquis, Seignaux	a)	-	6	84	10
		b)	-	12	74	14
20	Plouvara	a)	-	5	83	12
		b)	-	10	81	9
21	Kerhamon, Kerdanet	a)	15	43	38	4
		b)	24	40	27	9
22	Goudemail, Croix des Maisons	a)	28	40	30	2
		b)	43	39	10	8
23	Lanrodec	a)	47	45	8	-
		b)	46	36	14	4
24	Kersteun, Resmarec	a)	20	59	15	6
		b)	36	24	19	21

Appendix IV
Breton "locality" groups (continued)

			"Breton plays a very important part"	"Breton is of only limited importance"	"Breton plays little or no part"	"not certain"
25	le Croissant, le Restol	a)	63	31	4	2
		b)	58	29	3	10
26	Kerhors, Keriel	a)	53	30	4	13
		b)	46	30	5	19
27	Senven	a)	61	33	2	4
		b)	61	29	3	7
28	Le Quinquis, Petit Perrien	a)	62	21	10	7
		b)	51	27	9	13
29	Boqueho	a)	-	20	63	17
		b)	-	26	65	9
30	St. Pever	a)	58	24	7	11
		b)	45	41	8	6
31	St. Fiacre	a)	55	26	8	11
		b)	51	25	12	12

BRETON AREA:- LANGUAGE SUB- GROUPS

code: a) speaks no Breton; no Breton speaking connection
b) speaks no Breton; Breton connections
c) speaks Breton

(percentage)

1	Tressignaux	a)	-	36	35	29
		b)	-	13	45	42
		c)	-	21	50	29
2	Tréguidel	a)	-	33	56	11
		b)	-	25	63	12
		c)	-	21	65	14
3	la Croix-Pierre	a)	10	40	40	10
		b)	-	36	36	28
		c)	7	29	43	21
4	Goudelin	a)	22	72	3	3
		b)	44	42	14	-
		c)	31	50	10	9
5	la Grandville	a)	10	60	10	20
		b)	9	38	44	9
		c)	12	37	45	6
6	le Merzer	a)	33	45	20	2
		b)	40	30	20	10
		c)	47	41	6	6
7	Bringolo	a)	22	45	29	4
		b)	9	38	44	9
		c)	11	45	33	11
8	St. Quay	a)	3	45	41	11
		b)	2	12	61	25
		c)	-	6	80	14

Appendix IV

Breton language groups (continued)

			"Breton plays a very important part"	"Breton is of only limited importance"	"Breton plays little or no part"	"not certain"
9	St. Jean Kerdaniel	a)	20	50	26	4
		b)	27	46	18	9
		c)	29	35	24	12
10	Villeneuve-Perret, Ville-Chevalier	a)	-	30	42	28
		b)	-	39	50	11
		c)	-	11	61	28
11	Malaunay, Guern Ar Punso	a)	9	55	27	9
		b)	30	50	10	10
		c)	50	30	10	10
12	St.-Agathon	a)	23	57	9	11
		b)	42	42	8	8
		c)	57	31	-	12
13	Guingamp	a)	11	67	20	2
		b)	34	42	17	7
		c)	60	33	7	-
14	Ploumagoar, Locmaria	a)	25	63	6	6
		b)	30	47	8	15
		c)	58	33	2	7
15	Kerguillerm, Coat-An-Doc'h	a)	21	68	8	3
		b)	22	56	11	11
		c)	58	24	14	4
16	Plouagat	a)	-	46	46	8
		b)	-	30	60	10
		c)	11	38	35	16
17	Châtelaudren	a)	-	24	72	4
		b)	-	13	74	13
		b)	-	11	79	10
18	La Ville-Fumée, La Guerche	a)	-	14	66	20
		b)	-	10	78	12
		c)	-	2	81	17
19	Quinquis, Seignaux	a)	-	30	63	7
		b)	-	13	76	11
		c)	-	7	79	14
20	Plouvara	a)	-	9	82	9
		b)	-	11	67	22
		c)	-	-	78	22
21	Kerhamon, Kerdanet	a)	28	32	32	8
		b)	14	46	30	10
		c)	19	43	19	19
22	Goudemail, Croix des Maisons	a)	31	38	25	6
		b)	42	25	25	8
		c)	55	22	17	6
23	Lanrodec	a)	40	40	18	2
		b)	35	44	14	7
		c)	57	36	7	-
24	Kersteun, Resmarec	a)	12	61	12	15
		b)	40	40	10	10
		c)	57	31	-	12

Appendix IV
Breton language groups (continued)

	"Breton plays a very important part"	"Breton is of only limited importance"	"Breton plays little or no part"	"not certain"
25 Le Croissant, Le Restol	a) 39	53	5	3
	b) 50	35	8	7
	c) 71	22	-	7
26 Kerhors, Keriel	a) 56	36	4	4
	b) 60	29	8	3
	c) 63	25	-	12
27 Senven	a) 46	46	6	2
	b) 55	43	2	-
	c) 68	29	-	3
28 Le Quinquis, Petit Perrien	a) 40	42	4	14
	b) 56	22	11	11
	c) 57	12	19	12
29 Boqueho	a) -	38	52	10
	b) -	33	45	22
	c) -	-	78	22
30 St.-Pever	a) 36	37	19	8
	b) 60	25	12	3
	c) 66	29	1	4
31 St.-Fiacre	a) 29	40	19	12
	b) 41	41	10	8
	c) 50	29	6	15

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Selattyn
Chirk
Weston Rhyn
Llanyblodwel
Llanyblodwel
Llanyblodwel
Llanfechain
LLANFECHAIN
LLANYMYNECH AND PANT
Llanymynech
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Trefonen
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Llynclys
Morton
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OSWESTRY RURAL
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Pentre-uchaf
Pentre-Hafod
Pentre
Pentre Isaf
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Pentre-Llwyn-Iorcyn
Pentre-Llwyn-Owain
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(to accompany Ph.D. thesis by J.E. Ambrose (1978))

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St-Donan

St-Gildas

St-Houarneau

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3 - Guingamp
4 - Plouagat
5 - Bourbriac
6 - St-Nicolas-du-Pélem
7 - Lanvollon
8 - Etables-sur-Mer
9 - Chatelaudren
10 - St-Brieuc-Sud
11 - Quintin

La déclinaison magnétique correspond au centre de la feuille, au 1er Janvier 1968

N. G.

N. M.

4° 56'

4° 35'

La déclinaison magnétique diminue chaque année de 11 minutes centésimales

Les angles numérotés sur les côtés du cadre correspondent au quadrillage kilométrique de la projection Lambert I - zone nord

3° 10' Ouest du Méridien International — Greenwich-Paris 2° 59' 69" — 2° 20' 14" — 3° 5' — 3° — 2° 55'

6° 20' Ouest du Méridien de Paris — 6° 10' — 6° 00' — 5° 90' — 5° 80'

48° 36' — 48° 35' — 48° 30' — 48° 25' 12" — 53° 80' — 53° 90'

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Route de très bonne viabilité
Route ou chemin de bonne viabilité
Chemin de moyenne viabilité
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Routes et chemins bordés d'arbres

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Limite de commune. Limite de camp

Courbes, talus et point coté
Figuré du terrain
Rochers et glaciers
Dans les cuvettes, la flèche est dirigée vers le fond.
Bois
Broussailles
Vergers, Plantations
Vignes

Pont. Passerelle. Gué. Bac. Barrage
Lac, étang permanent. Etang à niveau variable. Etang périodique. Marais
Source. Puits, citerne. Château d'eau. Réservoirs
Canal navigable : écluse, traction mécanique. Canal d'alimentation
Aqueducs : sur le sol, élevé, souterrain
Sables et dunes. Laisse des plus hautes mers
Estran : sables, vases, rochers
Courbes isobathes (tirées des cartes du Service Central Hydrographique)
Phare. Feu. Bateau-feu
Sémaphore. Balise. Bouée. Bouée lumineuse

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Constructions non agglomérées
Eglise. Chapelle. Calvaire. Cimetière
Moulin à eau. Moulin à vent. éolienne. Gazomètre. Réservoir d'hydrocarbure
Points géodésiques. Population en milliers d'habitants
Carrière à ciel ouvert. Carrière souterraine, grotte. Puits de mine. Terril
Habitations troglodytiques. Monuments mégalithiques. Ruines
Ligne d'énergie électrique. Câble transporteur
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