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**Social relations in the Kentish Weald:
a computer aided historical study**

Janet Bagg

Eliot College

**A Thesis Submitted for the Degree of Doctor of Philosophy
University of Kent at Canterbury
September 1989**



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ABSTRACT

This is an historical ethnography undertaken with the aid of computer methods. It focuses on Biddenden, a rural parish in the Weald of Kent, an area of wood-pasture farming and of declining rural manufacture during the period of study, 1566-1660. The theme is the reproduction of social relations, in particular those of inequality.

The sources employed ranged from the highly structured parish registers to narrative accounts in court records. To deal adequately with this a variety of computing methods involving both existing tools and purpose written programs were used. The computer methods have relevance beyond this specific application, to more conventional ethnographic studies.

Death and marriage are examined, focusing on the fragmentation and the creation of relationships. Honour ranking is found in the Weald but, unlike southern Europe, women were evaluated more as wives than as daughters. Affinal relations were important, especially among the elite, but were not closer than those with siblings. The nature of migration to and from Biddenden is also examined and draws attention to themes rarely studied in anthropology.

The parish was controlled by a limited group consisting of wealthier adult men. This elective hegemony was able to use the evaluation of reputation within an ideology of household order to maintain its power. During the years of prosperity they displayed greater competition with one another in the context of limited social mobility. Cloth making allowed greater expansion than the land itself would permit. As decline set in there was a move from partible transmission of land to unequal forms, increased out-migration and greater social differentiation. The wealthier became more secure, while small farmers, who had relied on income from work in cloth making, faced greater uncertainty. The honour of the wealthy was decreasingly challenged by their peers, but middling people became less secure.

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1: Introduction

A few anthropologists would probably agree that, like Tawney, I should begin this work with an apology because the "...subject is historical" [Tawney, 1938, 21]. I believe that the need for such apologies is past. Historical anthropology is now a well established part of the discipline. The other component of my study, the use of computers, is less so. This is due to many factors varying from lack of information about using such objects to romantic dislike of that strange assortment of artefacts popularly known as 'technology'. Two of the themes of this project are methodological; the construction of an historical ethnography and the use of computers in ethnographic work. There are differences between the study of a present day locale through participant observation and researching a past society through documents. I believe that there are enough elements in common, however, to make some of the ideas involving computer use relevant beyond this one application. The third theme is the reproduction of social relations, in particular those of inequality. It is important that a project which seeks to demonstrate the utility of computers in any chosen area does not limit itself to a small set of 'test data'. For this reason, I have attempted a substantive anthropological project, albeit one that could be realised within the time constraints of current doctoral research.

This first chapter situates the study in concerns about the nature of historical research in anthropology, about the relationship between power and ideology and about the use of computers in anthropology. The second chapter examines the sources employed and the use of computer methods. A third chapter gives a general overview of aspects of society in early modern Biddenden. Two further chapters examine death and marriage, focusing on the fragmentation and the creation of social relations within the context of inequality. The final chapter draws together themes of status, power and reputation from earlier chapters and concludes with a discussion of historical ethnography and of the use of computer methods in anthropology.

The possibility of 'historical ethnography'

Later in this chapter I define historical ethnography as a study combining the temporal distance of an historical study with the connectiveness and locational specificity of conventional ethnography. Three projects may be examined as attempting to undertake such a study.

Emmanuel le Roy Ladurie based his now famous study of Montailou on one rich, closely inter-related source [le Roy Ladurie, 1980]. The village contained a small population (about 100 persons) and was studied for a short time period — 1318-25. Although a village study located both in place and time, this

work has similarities to the *évènementielle* type studies of Natalie Z. Davis and Carlo Ginzburg [Davis, 1985; Ginzburg, 1980]. From these works comes the clear message that a rich textual source is needed to understand *mentalités* of the past in any way. For Ladurie and Ginzburg the only external referent for such a source need be the general history of politics, religion and ideas of the period (though with reference to the region). Davis uses a larger and more diverse set of documents, as well as other secondary works, to locate and interpret her main sources.

The research of David Rheubottom concentrates on the elite of the fifteenth century city-state of Ragusa (now Dubrovnik, Yugoslavia). The records of this state are very full and lend themselves to holistic research

Not only are these series very extensive for the mid-fifteenth century, but the fact that there are so many different series about almost all aspects of political and economic life makes it possible to study this community 'as a whole' [Rheubottom, 1987a 126].

The population studied centres on about 400 men forming an easily defined elite and involves about 3000 persons in all. Rheubottom had previously undertaken anthropological fieldwork in the Balkans which provided a general knowledge of social structure for this region. The main focus of the research is on the structure of politics and the place of links through kinship and marriage in building and maintaining this. The richness of the archives also allows examination of the individual life course, of economic factors and marriage processes [Rheubottom, 1988]. As well as structural information (who married who etc.) the sources may also contain information relating to the way the relationship was viewed [*ibid*, 370]. The processes revealed by analysis of this information can be situated in the context of mediterranean ethnography and provide a critique of simplistic monocausal explanation of the type to often found in history. A historical ethnography needs not only structural data, but ideological context. In the process of building one

...we need to account for ideas about patricians and commoners, notions about the disposability of persons and wealth, as well as concepts of hierarchy, honor, and patronage. [*ibid*, 371].

This introduces one of the main characteristics of historical ethnography that distinguishes it from local history; the integration of ideas and structural/processual study. In this way it is linked to the process of fieldwork and the writing of an ethnography of a modern context.

An early statement of the possibility of an historical ethnography, outlining some of methods needed and making a direct comparison with fieldwork, was made by Alan Macfarlane in the early 1970s [Macfarlane, 1976]. He had already undertaken what he described as "An essay in historical anthropology" before this, examining the life, attitudes and relationships of a seventeenth century clergyman from the man's diary, supported by other sources [Macfarlane, 1970]. Having thus explored the possibility, he began a large project involving the study of two populations of reasonable size (Earls Colne, Essex —

1200 persons and Kirby Lonsdale, Lancashire — 2400 persons) over more than three centuries. In comparing the task of historical ethnography with its more conventional, present day counterpart the number of persons studied were discussed. As an historical study would include all people who lived at that location during the time span (at least in theory) the number would clearly be many times greater than with fieldwork [Macfarlane, 1976, 10-11]. He also attempts to indicate that knowledge about historical subjects can be as full as that for people interviewed in fieldwork, and that this amount of information would be the same for their fathers and their sons [*ibid*, 12-13]. Similarly he suggests that historical studies of a thematic topic would produce a greater quantity of information [*ibid*, 13-15].

However, there are problems with this. In fieldwork, it is not normally possible to interview every person to the same degree so that "Most ethnographic research characteristically relies heavily on key-informants..." [Cohen, 1984, 224]. It is equally unlikely that every person in an historical population would have an equal amount of information about them either recorded or surviving. Therefore claims of total coverage in either context can be discounted, while retaining the similarity. On the question of thematic study, this is very dependent on the period/location of research. Macfarlane uses the example of pre-marital pregnancy, finding much English historical data and very little information from fieldwork in Nepal [Macfarlane, 1976, 13-14]. In Fontelas, Portugal this would clearly have been otherwise [O'Neill, 1987]. To be fair, Macfarlane was making out a case for historical anthropology at a time when it was virtually unimagined by most anthropologists and so can be allowed to have over-emphasised the advantages. He sees advantages to both history and anthropology arising from this exercise. Anthropological models are needed to understand the past better, but that past is equally necessary for the building of better models in anthropology. This is not to say that all anthropologists should take on historical study, or that all historians ought to use anthropological explanations. In the first place both disciplines benefit by their diversity, and in the second the relationship is dialectical rather than being a matter of borrowing information or ideas.

Clearly, a number of anthropologists and historians appear to believe that an historical ethnography is possible. There are obvious disadvantages to working solely from archival material. Rather than the confrontation between the anthropologist and 'the other' there is a more complex relationship involving the researcher, the historical subject and all of the intervening persons who wrote the sources, asked the original questions and decided which pieces of paper to keep. Marc Bloch said of documents "...we decide to force them to speak, even against their will..." and called history "...a glorious victory of mind over its material" [Bloch, 1954, 64]. The task is laborious, involving piecing together information from many sources; even the basic data that an anthropologist may gather in her initial census may be scattered through many documents. Sitting in an archive office is not living in the society which produced the documents; that is impossible. By this means one important dimension of anthropology is lost.

Given these constraints, and realising that conventional ethnography is also a matter of interpretation, with living people as obscure and evasive as any historical text, advantages can also be found. Firstly there is the important dimension of time. Secondly the historical situation may be chosen with regard to particular conditions which might be difficult to find in a contemporary context. What distinguishes historical ethnography from local history is that, being essentially holistic, it takes more aspects of life into account, building a more complete view of the society.

Power relations and ideological discourse

During the 1980s, one common theme has emerged in anthropology and history which has to some extent united the attentions of many researchers from both disciplines. This theme is the role of ideology in the reproduction of power relations. Of course this is not a new locus for academic discussion and owes much to the revival of interest in the writings of Max Weber [Weber, 1958] and Antonio Gramsci [Gramsci, 1971] in history. The anthropological interest has its roots in the re-orientation towards symbolic anthropology through the influence of Turner, Leach, Sperber, Geertz and Bourdieu among others (e.g. Bourdieu, 1977; Geertz, 1971; Leach, 1976; Sperber, 1975; Turner, 1967). Three works will be considered here as particularly relevant to the interpretative process of this research project because of their discussion of ideology in relation to process.

David Sabean's study of relations between villagers, church and state in early modern Germany [Sabean, 1984] deals with issues of power and neighbourly relations which are relevant to my research. There are problems however with the way in which ideology is conceptualised. It appears to come from the church and state, to be designed for their uses and is reacted to by villagers. Sabean is particularly concerned with "...the dialogue over the nature of the individual carried on between state officials and rural village inhabitants..." [*ibid*, 199]. He criticises Burke's view of rural culture acting as a filter for ideas from elite culture [Burke, 1978] and allows for innovation by villagers, but the process is seen as a dialectic between the ideological impositions of the state and their interpretation at village level [Sabean, 1984, 214-5]. In discussing the seventeenth century witch craze he says

...a theory was developed by church and state officials and became a matter of everyday practice... [*ibid*, 211].

This view has similarities with that put forward by Wrightson and Levine for Terling and by other historians, in reference to Puritan ideology and power [Wrightson, 1979]. There is conflict between the ideology of an elite (located inside or outside the village) and that of the rest of the people. Sabean attempts to overcome the problem of the nature of the non-elite culture by viewing it as being created through a dialectical relationship with the elite one. However this implies that the villagers had some form of culture of their own from which to argue in the first place, but its nature is unclear. The problem seems to lie in dividing culture between the elite and the masses. Such an idea has similarities to that put

forward in the 1970s which proposed that men and women had separate models of the world, an idea refuted by Strathern and Moore [Moore, 1986; Strathern, 1981]. It is only when ideologies are seen as rooted in everyday life, available to those unequal in power or wealth, that their importance for providing the locus of discourse about power and of the reproduction of power relations can be appreciated [Bledsoe, 1984].

Gerald Sider has also focused on the relationship between ideology and power relations in his study of Newfoundland settlements dependent upon fishing over three centuries [Sider, 1986]. Those with power (the merchants) lived in totally separate settlements from those without (the fishing families) creating a clear division of class. He borrows the term 'hegemony' from Gramsci to express the nature of merchants' power, but questions its status as a concept derivative from class whereby dominance is achieved through control of culture [*ibid*, 119-20]. By culture he means "...values, beliefs, ideologies, and world-view, and the associated rituals, practices and symbols..." but sees it as an active force in social life [*ibid*, 7]. He views class and culture as inextricably linked, "...simply abstractions from the same tissue of social life..." rejecting the determining position given to 'base' by marxism [*ibid*, 6].

In examining how culture is created, Sider refers to ideology which he defines as "...a set of symbols or values..." which explain and at the same time allow discussion of inequality [*ibid*, 153]. Whereas cultures contain contradictions in that they are expressions of social relations *and* the tensions within such relations, "...ideologies have no contradictions..." [*ibid*, 154]. Culture is therefore the point at which ideology and social relations meet. It both makes and is made by this confrontation. In essence, then Sider's argument is similar to that put forward by Sabeen, that culture is made and transformed through confrontation. But for Sider this confrontation takes place between ideology and the social relations of every-day life, rather than between two opposed ideologies.

Henrietta Moore examines the discursive use made of the organisation of space in her ethnography of the Marakwet of Kenya and its relationship to power and change [Moore, 1986]. She uses the image of text to describe the way in which space may be read with differing, conflicting and creative interpretations by those using, making and observing its organisation. She locates ideology in every-day 'common sense' which makes it widely available as a locus of discourse.

Thus, ideology is not just a passive and 'imaginary' representation of social and economic conditions, nor is it some sort of independent illusion; rather, it is a mode of discourse, a way of understanding, which constitutes the way people live out the objective conditions of their existence. [*ibid*, 192].

This is because it "...takes as its ultimate source and referent the material conditions of existence themselves..." [*ibid*]. It is the availability of ideology through its grounding in the conditions of every-day life which makes possible the reproduction of power relations. Because power relations are social relations, they are part of those material conditions. In this way not only the powerful, but also the powerless are

involved in the reproduction of those relations.

Ultimately, the dominated are as involved in the use and maintenance of power as the dominant, because there are no available forms of discourse which do not appeal to the given categories, divisions and values which simultaneously produce and expose the relations of power. [*ibid*, 194].

This does not however involve a direct equation between material conditions and ideological representations. The reference of ideology to such conditions limits and contains the interpretations that may be put forward concerning such representations. However, that differing interpretations can be made, provides one possibility of change and Moore sees this being effected through "...a cumulative shift in interpretations..." [*ibid*, 195]. She also sees change as possibly arising through alterations in material conditions, though this is complex because ideologies do not literally describe every-day life but take their references from it [*ibid*, 153].

Some of the differences in emphasis in these three works are due to the clear differences between the societies examined. Both Sabeian and Sider are concerned with situations where inequality can be seen in terms of class relations. Neither are explicitly concerned with gender relations although these may be implicit, especially in the German case. For the Marakwet, on the other hand, inequalities of wealth are not of great importance, and the major divisions are through age and gender. In the German and Newfoundland cases, power is held by persons outside of the villages studied and those inside are seen as relatively undifferentiated. This may lead to ideological dispute taking more confrontational forms and to the creation of discrete cultures as opposed to the Marakwet case where interpretations are relatively bounded by reference to a common set of conditions. Sider does however share with Moore the location of discourse in the 'every-day' although he sees ideologies as created both within and without the fishing settlements. All three works indicate that there is a relationship between ideology and the reproduction of power relations, but differ as to the nature of this relationship, and therefore as to how change comes about.

Anthropology and History

The beginnings of the ahistorical tendency in British social anthropology lie in a reaction to the conjectural history of the type largely associated with evolutionary theory. The new revolution was connected with the development of the method of long term participant observation advocated principally by Malinowski. Conjectural history involved the arrangement of observations about past, or present-day non-European, societies into a developmental, usually evolutionary, schema. The 'primitive' societies that were the subject of anthropological investigation were seen as being nearer to one end of an evolutionary process and contemporary Western society at the other. The early or distant societies were seen as containing elements that were survivals from an earlier, totally theoretical social order (e.g. McLennan, Morgan). However time does exist, however measured, and the ahistorical anthropology which was to find its fullest expression in Radcliffe-Brown's structural-functionalism had to take account of it even though wishing to ignore it. This led to the view that the societies studied by social anthropologists were in some way *timeless*, the assumption as Gellner has said "...that the past was similar to the present, and hence the view that stability does indeed prevail" [Gellner, 1981, xx]. The reason why these societies had supposedly never changed while others (such as those from which the anthropologists came) most manifestly had, does not seem to have been seriously considered. This may be due to the persistence of an overarching evolutionary model which still placed the observed societies as in some way developmentally inferior to those of the observers. Lévi-Strauss characterised the 'timeless' societies as 'cold', the 'historical' societies such as his own as 'hot' [Lévi-Strauss, 1978, 29].

However, it was becoming apparent that the societies studied *were* changing even as they were being studied. Most of this change was due to colonial and post-colonial interference, introducing new types and methods of farming or industry. The 'Manchester School' were interested in change and undertook research on topics such as migration to towns and industrial work in Africa [Epstein, 1958; Mitchell, 1968]. However, there was still a tendency for change to be viewed as sustaining an otherwise timeless structure. Some other attempts to incorporate change returned to evolutionary models either through ecological mechanisms [Sahlins, 1960] or through marxism [Terry, 1972]. Although both approaches had temporary fashionability, such models were perhaps more important in re-orientating thought towards examination of the relationship between population and resources, and towards inequalities of power and material wealth than for providing any overall scheme of change.

Evans-Pritchard in 1950 called for a re-orientation of anthropology away from Radcliffe-Brown's universalising science towards a humanistic perspective [Evans-Pritchard, 1964]. He saw history and anthropology as similar in many ways though differing in method and encouraged the incorporation of historical information into ethnography. How this might be done was left rather vague. Davis, in

examining mediterranean anthropology, found that in most cases (up to the early 1970s) history only appeared as part of the "...landscape..." setting before the real 'timeless' ethnography begins [Davis, 1977, 242-5]. So even in societies with whose histories anthropologists must have been familiar, in general if not always in detail, no attempt was made to seriously incorporate this knowledge into the analysis. Davis' own ethnography of a southern Italian village did however give greater importance to historical information, examining changes in landholding and inheritance over the past century and a half and relating this to aspects of social relations [Davis, 1973, 73-91]. Since that time studies incorporating historical information have become more common (e.g. Cole, 1974; Douglass, 1975; O'Neill, 1987). At the same time the use of historical information by anthropologists has moved beyond the original mediterranean locus [Peters, 1983; Sablins, 1985].

History and Anthropology

At the same time as anthropologists have started taking an increasing interest in history, historians have begun to show an corresponding interest in anthropology. This partly stems from a growing disenchantment with the way in which social history was being practised with a tendency toward obsessional quantification (see Stone, 1987 32ff for a critique). At the same time there was a desire to examine those people and areas of life which history had previously ignored. The history of what the French call *mentalités*. The most famous early examples were Aries *Centuries of childhood* and Thomas' *Religion and the decline of magic* [Ariès, 1962; Thomas, 1973]. Aries, however, owed little to anthropology but Thomas made a break with the past by attempting to view magic and religion as systems of explanation of equal importance

Religion, astrology and magic all purported to help men with their daily problems by teaching them how to avoid misfortune and how to account for it when it struck [Thomas, 1973, 761].

During the 1970s interest developed in a whole range of neglected issues such as popular culture and inheritance [Burke, 1978; Goody, 1976] but most issues were outweighed by one particular topic: 'the family'. The origin of the concern with family life lies both in the work of Aries and other writers on *mentalités* and also in the growth of historical demography [Wrigley, 1966]. The findings of demographers were beginning to challenge the accepted views on the social past deriving from Parsonian sociology, in particular modernisation theory. The demolition of the conjectural history upon which such theories were based became one of the favourite sports for historians in that decade. Wrigley demonstrated that pre-industrial societies did not have unrestricted fertility [Wrigley, 1966] while Laslett looked at listings of inhabitants from the sixteenth to nineteenth century to show that the early modern household was fairly small and rarely contained relatives beyond the nuclear family [Laslett, 1972]. Others attempted to prove that kin were unimportant in peoples lives at that time [Wrightson, 1979]. So, by 1980 the transition from close knit communities with extended family households and a 'natural' demographic

regime, to socially isolated nuclear families with family planning could no longer be linked with industrialisation and was indeed being questioned in space as well as time. With the overthrow of this outworn theory from sociology some historians began to turn towards more anthropological approaches such as those pioneered by Thomas and Burke while others continued to fight the modernisation demon.

During the 1980s there has been a tendency for historical studies of this type to become more specific, following the earlier trend in anthropology towards detailed, hermeneutical studies characterised by Geertz [Geertz, 1975]. Indeed if the first major influence from anthropology was undoubtedly Evans-Pritchard, Geertz was probably the next. This new development however, must be seen in the broader context of a general dissatisfaction with 'scientific' models (as represented by functionalism and structuralism in anthropology and cliometrics in history) and a move towards a more humanistic research which is linked to various other works such as those of Foucault, Derrida and Bourdieu. There is however a problem with detailed, specific studies (such as the well known one by Ginzburg and the less famous one by Davis [Davis, 1985; Ginzburg, 1980]. While they have a depth and a critical awareness often lacking in more generalising works, there is a need to integrate the findings of this type of study about the production of culture and the ambiguity of discourse into more general considerations of change. The main problem with detailed studies is that they are fixed in time, and so to some degree timeless.

Convergence and Discordance

On the surface there seems to be a convergence of problems. How should history be written now that the superhuman props of progress, modernisation or historical determinism have been kicked away? What is an historical anthropology? Within this convergence lie discordances.

As anthropologists abandoned the search for structure in favour of looking at discourse and strategy, historians began to look for structure within their serially organised material. The move toward 'thick description' has led to powerful detailed studies but without providing an acceptable new way of articulating them into an anthropological or historical whole. Such studies in anthropology are often no more historical than were the structuralisms, while in history they are specific to a time and place, relating with difficulty to other forms of knowledge about the past.

Several types of work combining anthropology and history can be identified.

1. Historical research in the context of a conventional ethnographic study [Davis, 1973; Netting, 1981; O'Neill, 1987]. Such studies are becoming quite common now, especially for Europe but also for other parts of the world. In most cases they are done by anthropologists, for anthropologists.

2. The study of particular, historically situated populations [Bourdieu, 1972; le Roy Ladurie, 1980; Macfarlane, 1981; Rheubottom, 1988]. Such research had long been common in history but was rarely influenced by anthropology. It may be described as a form of 'historical ethnography' undertaken by both anthropologists and historians.
3. The examination by means of 'thick description' of particular events or series of events within a framework of limited time and place [Davis, 1985; Sabeau, 1984]. When located in the past such work has mostly been done by historians.
4. The study of the process by which history is made. This has long been done by historians who have studied one another's work, calling this enterprise historiography [Marwick, 1970; Stone, 1987]. A peculiarly anthropological contribution has sought to examine not so much the creation of professional history but the making of popular history — that which historians might call myth — particularly in relation to ethnicity. This topic was the subject of the annual ASA meeting in 1987.
5. The study of concepts of interest to anthropologists through time. A classic work of this type is that by Goody on marriage in Europe [Goody, 1983]. Such work at its best combines the historically particular into a general theory. It can however be little more than a restatement of old 'conjectural' history [Gough, 1975]. Studies of this type by historians are usually less wide ranging through time [Hobsbawm, 1971; Thomas, 1973].

Historical anthropology clearly takes a number of forms. It must also be seen against a wider historical field which has been of relevance. Demographic history has been of importance to historical anthropology [Netting, 1981; O'Neill, 1987] but has not been greatly influenced by it. Works of conventional history have also been of use to anthropologists both in particular situations and in developing ideas and critique [Braudel, 1972-3; Davis, 1977]. Although among the types of anthropological history noted above one was thematic and generalising, the hallmark of most studies, as with anthropology itself, has been the prominence of locale as a defining characteristic. With the detailed and ethnographic studies this is obvious but it is also true of many studies of the production of history, which are usually set in a national or regional context. Such concern for place puts this type of work very much in a long anthropological tradition for good or ill [Appadurai, 1986].

Historical anthropology and place

The tradition of studying one location in depth through participant observation is integral to the anthropological method. Such research, at least in theory, allows the anthropologist to gain a holistic view of the place, the people and what they do and think. One of the characteristics of such research is that it is somewhat undirected in terms of a definite goal, although the researcher obviously must have some questions in mind in order to gather any information at all. Holy has suggested that this vagueness of direction is what has allowed the preservation of a stable research method despite the changes which have taken place in the orientation of the discipline [Holy, 1984]. The localism which is paramount in anthropological research is by contrast marginal to history (except perhaps in France).

One reason for this is that history was long seen as being about 'important' people (rulers and administrators) and great movements (the reformation, feudalism, grain prices) rather than about the people who lived in towns and villages. Such persons, if considered at all, were viewed *en masse*, affected by and mysteriously shaping greater things. If they were very lucky they might even appear as statistics. Local history was seen as the province of the antiquarian, with no relevance to 'real' history. Through the work of a number of historians such as Hoskins and Spufford, the researches of historical demographers such as Henry and Wrigley and the influence of some aspects of French social history, this view has changed [Goubert, 1960; Henry, 1958; Hoskins, 1957; Spufford, 1974; Wrigley, 1966].

Different traditions have emerged. French historians have often been interested in the 'region' — a geographically and historically defined area which is also seen as having some social and cultural coherence (e.g. le Roy Ladurie, 1974). English and American researchers on the other hand have tended to study individual towns and villages — perhaps owing to the antiquarian traditions of local study [Demos, 1970; Hey, 1974; Wrightson, 1979]. Work at, say county level, has usually been more thematic [Clark, 1977]. Both local and larger scale studies have their advantages and problems. The region has a tendency to resemble the nation state writ small and may lack the depth and holistic coverage possible in a more localised study. The town or village, however, may tend to reify the settlement boundaries, creating an illusion of 'community' and isolating the location from surrounding settlements. This latter problem is also common to ethnographic study. While it is widely recognised that villages

...exist as part of a wider society with links (political, economic and social) with other villages and with the wider locality, the district, even the whole nation-state [Clammer, 1984, 67],

many ethnographers continue to view the locality studied as if it were somehow isolated in space. One solution might be to study a number of settlements, either comparatively [Bell, 1979; Cole, 1974; Spufford, 1974] or as a group [Skipp, 1978]. Such research however requires a great deal of time. Cole, Wolf and Bell did their fieldwork over many years (both studies requiring person-to-person and archival

research). Spufford's study was also the result of many years work, while Skipp's research involved a number of people as well as years. Clearly, such resources are rarely available to the lone ethnographer working within a restricted timescale (especially in these 'cost-conscious' times). The same is true for an archival researcher. Therefore in the majority of cases, the single village or town must still be the locus of research, for practical reasons. In this case, an effort must be made to avoid viewing the locality in isolation, paying attention to links with the wider world and to movement into and out of the settlement.

The problem of time

If the dimension of place is a limiting and limited factor in research, so also is the problem of time. At the simplest level this is a matter of the chronological depth of the study. In other words, over how many years should the chosen location be examined. This may depend on a number of factors. As with place there are of course practical considerations. Time may be limited and access to archives may be difficult and restricted. Some periods may be better documented than others. For instance, in Britain the availability of detailed census returns for the mid to late nineteenth century makes comparison of various factors possible *within* a locality. Such information is only available (in 1989) in *aggregate form* since 1881 due to a hundred year secrecy rule on these documents, so that comparison is only possible *between* localities for many pieces of information and some, such as household composition, cannot be recovered. Certain types of question could be asked of the earlier data which would be impossible for later material. Using this source it would thus be possible to compare modern household composition with 1861 but not with 1901.

When research is carried out in historical anthropology, the chronological span should always be specified. The period over which material is examined does not have to be extremely long. Many ethnographers have found that about one century or a century and a half are adequate to answer their questions, which after all are usually grounded in the present [Davis, 1973; O'Neill, 1987]. The nature of change must however be realised. There is always the danger of constructing an ahistorical 'traditional' past [Netting, 1981; Netting, 1984].

Where a totally historical period is chosen, chronological limits are usually clearly specified much as with conventional history. Although it might be valuable to examine the period before and after this 'time-slice', though in less detail, this should not be carried too far. Macfarlane, in examining the question of peasants in England, limits his detailed discussion to the period 1200-1750 and refuses to push his argument back beyond his evidence [Macfarlane, 1978]. One should always be wary and take note of the wise remarks of Marc Bloch about origins in the sense of beginnings; "for most historical realities the very notion of a starting-point remains singularly elusive" [Bloch, 1954, 29]. In making this point, I am not trying to be excessively positivist. It is a matter of the limits of historical inference. Information may

be interpreted in many ways and silences can convey a great deal. But there must be information of some kind to be subject to such interpretation. Similarly, there should be a great deal of wariness about attempting to bridge too great a gap in time. Something which is evidenced in the fourteenth century cannot be assumed in the eighteenth, though it could be investigated in the later period or compared with it. The limits of such assumption are dependent on what it is that is being assumed.

The purpose of the historical dimension of the study is one of the most important considerations as regards time. Where change is being sought, the nature of the entity or set of entities in which such alteration might occur must be considered. This is because there is no single scale of time. Rather there are many. Important ideas about different types of time can be found in the work of Fernand Braudel [Braudel, 1980]. The *longue durée*, perhaps Braudel's most well known form of time, refers to those sets of relationships between entities which endure for a very long time. He gives the example of "...geographical constraint..." such as "...the favourable conditions wrought by particular coastal configurations" or "...the persistence of trade routes..." [Braudel, 1980, 31]. This stands in particular contrast to *l'histoire événementielle*, the "...explosive..." and ephemeral moment in time [*ibid*, 27]. But on closer examination, Braudel's writings appear more ambiguous.

The long term (or *longue durée*) is seen to be appropriate not only for the constants of geography but for other relationships for which he borrows the word *structure* from anthropology. In fact so many things appear to be swallowed up into the long term that it is difficult to see what remains outside other than the ephemeral event. Because of this the long term is seen as conformable with the ahistorical structuralism of Lévi-Strauss [*ibid*, 43-46]. The structures of the long term are sometimes said to have a familiar stability for "This great structure travels through vast tracts of time without changing" [*ibid*, 75]. However, elsewhere he speaks of "...the diversity of life — the movements, the different time spans, the rifts and variations" [*ibid*, 47]. The ambiguity lies in the plasticity of the concept of the *longue durée*. To be fair to Braudel, the essays contained in the book *On History* were all written at the end of the 1950s, at a time when history was looking to become scientific by establishing relations with an ahistorical social science. Since that time 'scientism' has been called seriously into question in anthropology and history alike. What does emerge from the work of Braudel, is the idea of different types of time, different rates of change but also the need to view these differences as in some complex way interconnected. The caution must be in not attempting to view too many 'structures' as enduring and in questioning what exactly a 'structure' might be.

Braudel is not the only writer to have indicated the possibility of there being more than one type of time. Tamara Hareven attempted to make a distinction between 'historical time' (linear chronological time), 'family time' (the timing of events such as marriages and births) and 'individual time' (the timing of events in an individual life course) [Hareven, 1982, 59]. She views 'family time' as differing between

historical periods and between groups within these periods (for example Irish, French-Canadian and American families). Her discussion of the relationship between these types of time is in terms of roles and transitions between them. Individuals are said to move between roles in families; 'the family' is said to have different roles relating to various historical processes [*ibid*, 58]. The limitations of this view lie both in the concept of role and in that of 'the family'. Role is not defined but seems to be a conflation of the constellation of relationships between one person and others in a family and an ideological construction concerning that situation. By 'the family' she seems to mean both the total sum of such relationships within a family and the ideas surrounding such a grouping (see Gittins, 1985 on the difference between families and 'the family'). 'Family time' therefore appears to refer to both general ideas concerning families and family members and to the specific instances of these persons and groupings. It may not be surprising therefore that 'family time' is discordant with the more concrete concept of historical time. 'Individual time' is also probably of limited use as it conflates ideology and specific cases in the same way. Both are probably more usefully seen as ideological divisions contrasted with historical time.

Two other ways of examining time are worthy of note. Thompson has discussed the effect of the introduction of factory labour on people used to managing their working lives themselves [Thompson, 1968, 337-8]. Hand-loom weavers were hostile to the imposition of strict factory hours which disrupted patterns of work other than weaving (labouring, farming) and also those of social relations. Numerous anthropologists have paid attention to divisions of time, their inter-relation and metaphoric qualities (e.g. Bourdieu, 1977, 143ff) but, due to the limitations of fieldwork, are rarely able to examine the effect that changes (say from farming to factory work) might have. Another method of viewing time is used by Lison-Tolosana to elucidate differences in attitudes in an Aragonese village during the twentieth century [Lison-Tolosana, 1983, 180ff]. He sees attitudes as being related to different generations meaning by the term sets of people sharing a common image of the world, a common set of aspirations and coinciding in time. However, such generations are not co-extensive with those defined by biology (ie. all men born in one year). Lison-Tolosana defines three elements conditioning the attitudes of a generation: the legacy of previous generations, the historical circumstances affecting it, and the contribution of its members in actions and ideas [*ibid*, 181]. This gives the generational model not only the power to divide up historical time but also provides a model of change, and by locating generations in their relationship to power, relates this change to social relations in the village.

By further relating this model of time to one of 'structural' time which locates an individual to a classification in the life-course, the possibility arises of a way to bring together different types of time.

While 'structural time' implies stability, permanence, enduring qualities, 'generational time' is accompanied by innovation and change. [*ibid*, 201].

In this way the longer term (the permanence should not be pushed too far) can be related to *l'histoire événementielle*. The practical problem with this model is that it requires an evenness of information

throughout time, to allow the circumstances of each generation to be understood. It is difficult to achieve this with historical sources, though a rough outline could be attempted.

This discussion of the problem of time indicates that the concept is a complex one and that dealing with it is bounded by difficulties of interpretation and of resources. Because the making of social relations is rarely examined over time in any serious way, it is difficult to know how changes might relate to chronological time and to other aspects of change. This makes it difficult to set a definite time frame over which change might be viewed. Therefore it is only possible to proceed by finding other changes, and examining social relations for any concomitant alteration. This is not ideal, but must be of greater benefit than either assuming stability or assuming a relationship between types of change as with 'modernisation' theory.

Research problems and the research process

The writings of Macfarlane have posed problems in understanding social relations. In his book concerning crime and violence in early modern England, he poses the question as to whether villages at that time were full of hate, malice and violence or fairly peaceful. He reaches the conclusion that they were peaceful and largely self-regulating with a respect for national law and by these characteristics notes them to be different to 'other peasant societies' [Macfarlane, 1981]. In his discussion of individualism, he develops this theme concerning the difference of English society, concluding that social relations were individualistic in England over a long period of time [Macfarlane, 1978]. These works and others, such as Wrightson and Levine on Terling, have put forward a particular model of social relations in early modern England. The relative isolation of households is stressed, the unimportance of kin, the primacy of relationships with neighbours and the lack of envy and hate.

Macfarlane contrasted English society with a theoretical model of a peasantry based on eastern European and Russian evidence [*ibid*]. Differences were clearly apparent, but how does this society compare with present day southern Europe where some people are described by anthropologists by the term 'peasant' [Davis, 1977, 50ff] but do not necessarily fit Macfarlane's model? There will obviously be differences, those of place and those of time. If the new model of early modern social relations in England holds true, then it should be different to mediterranean societies in several ways. Ethnographers have often stressed competition and malice in social relations, between kin and between neighbours [*ibid*, 188 and 221]. Kin relations, whether good or bad are usually seen to be of importance, though they do not structure all social relations [*ibid*, 220]. There is a problem with such comparison from current historical work. Most work on social relations in England for this period has been vague to say the least. For Terling, several 'measures' are given which are supposed to characterise social relations, but there is no clear model of relationships [Wrightson, 1979]. It is difficult to find any clear model of kinship; merely statements that it was not important but nothing as to what it should have been important for or in what way.

Another aspect of the conceptualisation of social relations is that in some circumstances they are viewed as unproblematic; neighbours living harmoniously. On the other hand the inequalities of wealth and power in this society are hard to ignore [Wrightson, 1986]. Many social relations are power relations. Wrightson considers the question as to whether relations between unequals were based on vertical, patronage relationships or on conflicting relations between horizontally identified classes [*ibid*, 192]. Others have considered gender relations [Amussen, 1985] finding links with the problem of order and with inequalities of power and wealth. Ideologies tend to be seen as a matter of imposing social control [Wrightson, 1979] but are clearly more than this.

Out of all this several problems arise. What was the relationship between the groups of harmonious neighbours, and the unequal ranking of persons clearly laid out by Wrightson [Wrightson, 1986, 199]? Power relations involved relationships within the household and family and these were seen as in some way linked to other aspects of social order, but how? Having decided what kinship was not, the question remains as to what it was. Several problems seem to lie in the fact that social relations rarely seem to be conceptualised in the way that anthropologists think about these questions. There is too much emphasis on the realisation that kinship was not an over-arching structure of primary significance and too little examination of the way it was used which might allow comparison with other European societies [Davis, 1977, 220-1]. Again with power relations, there appears to be more interest in what was than in how inequalities were maintained. Macfarlane's work has been very strong on what might be called the 'structural' aspects of society (inheritance, mobility) illustrating what early modern England was not [Macfarlane, 1978]. The picture however lacks those ideas which gave it form and within the context of which it might change or remain the same. Those ideas which Rheubottom sees as an essential part of historical ethnography.

This research project is then an attempt to undertake at least a partial historical ethnography of an early modern English village. My project was limited by two constraints. Firstly there was the matter of time. The Doctoral Programme reduces the amount of research time available to the student by one year. Therefore clear limits would have to be set. Secondly because of the importance of the computing component, constant access to academic computing facilities was necessary. The first constraint imposed both temporal and locational limits. The study would be of one location and cover a reasonable chronological period. The second constraint was geographic, the main archives for studying that location must be within fairly easy access of my academic base. Finding a suitable village in Kent would meet the second requirement and a limit of about one century should provide an adequate time scale.

The area known as the Weald appeared to be well suited to the investigation of the problems that I was interested in. It was an area of small farms and few major gentry or aristocratic landlords. This implied a narrower range of inequality, with social relations unlikely to be dominated by a major landowner. These

factors appeared to make the area more comparable with those described in some southern European ethnographies. Because historical anthropology is interested in change, some clear alteration in circumstances was needed in the place and time chosen. Many Wealden parishes in the sixteenth century were involved in the manufacture of woollen cloth, with clothiers (small entrepreneurs organising the work and acting as middle men) living side-by-side with domestically based workers [Chalklin, 1965, 118-19]. This 'proto-industrial' [Medick, 1976] situation changed during the first part of the seventeenth century due to a serious decline in cloth manufacture [*ibid*, 122]. Sider described this situation as *deindustrialization*, which "...destroys the putting-out system, leaving behind the remnants of a subsistence or market agriculture and widespread pauperization..." [Sider, 1986, 190]. In contrast most studies of villages of the period had focused on places involved in agriculture (e.g. Spufford, 1974; Wrightson, 1979).

Two other factors made this area interesting. The main inheritance custom in Kent was partible division [Chalklin, 1965, 55]. This practice was falling out of favour in the sixteenth century among the major gentry, but the situation among the less wealthy is more uncertain. Partible inheritance is sometimes seen by anthropologists as a potential cause of conflict among kin [Davis, 1977, 179-80]. The Weald itself was a wood-pasture area as well as being a centre of manufacture. Such areas are generally seen by historians as being somewhat disorderly; the people "...had the reputation of being more stubborn and uncivil than the people of corn-growing regions" [Chalklin, 1965, 229]. In the seventeenth century the Weald became a centre of rural non-conformity in religion: "...the receptacle of all schism and rebellion" [*ibid*, 228].

Not only are there interesting factors that might affect social relations in the Weald as well as a major economic dislocation, but also the area has some degree of coherence as a region. The parish of Biddenden was a centre of cloth manufacture but of reasonable size in terms of population (roughly 700-1200 persons) and it is fairly well represented in the types of documentary source that were to be examined. Although he did not study the parish himself, Zell saw Biddenden as a typical Wealden clothing settlement [Zell, 1985, 239]. There was no 'special' source of the type often used in detailed historical studies (e.g. le Roy Ladurie, 1980; Macfarlane, 1970). This accorded well with my methodological interest in working from more typical sources, examining ways to use a computer to help relate pieces of information.

In order to examine social relations, two life events when relationships are important and in some ways change were selected for greater emphasis; marriage and death. In early modern England marriage implied the setting up of a new independent household whereas death meant the end of an old one. The explicitly material aspects of both events were examined at the same time as those which might be viewed as 'symbolic'. Such a division of course is purely analytical. Both death and marriage are viewed as processes rather than 'explosive' events. The main question was 'what does information concerning these

events say about relations within and between households and between people?’

Social relations are seen as those relationships which appear to be important to an individual over time, though not only implying those experienced every day. Within this broad category are relations within households, kinship, relationships with friends and neighbours, with dependants, superiors and equals, both in the village and elsewhere; both relations of what Wrightson calls *identification* (such as friends) and power relations — though this division is itself problematic [Wrightson, 1986, 199]. The relationship between individual and household was seen as and remains problematic. Its ambiguity is I believe very important to understanding social relations in early modern England.

The contemporary definition of household is employed — a whole, partial or complex nuclear family with resident servants and any other dependants [Perkins, 1970]. A partial nuclear family here means those remaining after one spouse has died or left; a complex one is where one spouse has remarried, so that children of more than one set of parents may be present. Neighbours is a term used to refer to persons from different households within the same parish. This appears to accord with early modern usage. As there is no spatial information available, the interesting concept of neighbourhood [Davis, 1973, 66ff] cannot be examined, but the use of the phrase ‘near neighbour’ and other work on early modern settlements [Boyer, 1974, 83] do indicate possibilities. Friend is used in the present day sense of a close associate in my text, but in quotes from documents may also refer to kin. Kinship is seen as bilateral, flexible and optative.

As I worked on these themes, others emerged which had implications for the understanding of the original problems. The importance of migration had been realised from the start in the sense of the fallacy of viewing a location as in any way isolated. But it appeared to have greater implications. Firstly the process of migration was an area in which certain types of social relations seemed to be important, in particular kin relations. Secondly, types of migration appeared to be related to inequalities of wealth and status. Thirdly, much of the migratory behaviour which seemed to be occurring was neither of the rural-urban type, seasonal or circulatory but rural-rural, usually permanent and fairly local. These factors had implications for the use of social relations and for ideas about the local availability of kin. The other emergent theme was the importance which appeared to be given to reputation or ‘credit’. This related my work to one of the traditional concerns of mediterranean anthropology. It also contributed towards understanding social relations and power relations.

Computing and Anthropology

The use of computers in Social Anthropology is not an established field. It is not widespread among practitioners and is in some ways both disparate and specialised. Interest developed in the 1960s and early work is reflected in the volume edited by Hymes [Hymes, 1965]. From this book some idea of the types of applications that were of interest to anthropologists at that time can be gained. There appears to have been much interest in statistical techniques, especially in clustering methods which enjoyed a fashionability at this time but has since evaporated. Simulation also appears to have been an important concern and there was some interest in computer storage of anthropological literature. Other forms of data modelling evoked some interest especially from the French. In general the atmosphere was one of great optimism mixed with a certain amount of trepidation.

After this initial enthusiasm, interest was uneven. A seminar organised at Kent in 1983 indicated some of the problems but also drew attention to areas of potential. In his report Professor Davis commented on the "...enthusiasm and excitement among a restricted category of users..." [Davis, 1984a, 1]. Attention was drawn to the limited communication among anthropologists using computers and a lack of information about how they could be used. The same mixture of interest and uncertainty was evident that had been seen in the 1960s, but this was now tempered by the fact that people were more used to applied computing outside of the natural sciences and mathematics. The development of micro-computers, interactive systems and word-processing also may have influenced a greater acceptance of computers for limited purposes at least.

Some common areas of interest were found, especially using computers during fieldwork, general mathematical modelling and expert systems. Caution, however, was raised about the possible fetishisation of computer-derived information and also in the area of using machines to make judgements. It is difficult to assess what has happened since 1983 because the majority of words, both verbal and printed, have originated from the 'converted'. Personal impressions are that interest is definitely increasing but not at an overwhelming rate. A certain amount of the growth relates to general use of machines common to all studies, such as word-processing, rather than anything directly concerned with the content and practice of research.

The traditional area of general mathematical modelling has continued to be a focus of much interest in computer use as well as in methodological discussion [Hage, 1983]. Expert systems, a much newer field in both anthropology and computing, has also become an important area of work [Fischer, 1986]. They represent in fact a particular form of modelling but to some extent their acceptance suffers from a popular mystique created by wild claims about their abilities to simulate human reasoning. In a guide to researchers in 1984 Davis considered that

Computers are useful for manipulating data, for testing arguments and for writing text [Davis, 1984b, 308]

Within the machine and software constraints of the early 1980s, the advice covers a wide range of possible applications. Of particular interest are the mention of indexing and searching notes and the possibility of using map related information.

Perhaps the most significant recent development is that anthropologists are beginning to take small, portable micro-computers into the field. This opens up new areas of concern as well as possibilities. Firstly, there is the problem of the direct entering of information and its secure physical storage. Secondly, the nature of any software (beyond that for simply entering text) must be considered. Thirdly, practical considerations both as concerns hardware and the legal implications of computer use are raised (see Ellen, 1987; Ellen, 1989 for a useful outline and some references).

Because of the diverse nature of the sources and the explicit nature of model building involved, two of the historical ethnography projects discussed above have made the use of computers a central part of the research process [Harrison, 1970; Rheubottom, 1987b]. Macfarlane's research was closely integrated with the development of an early relational database [King, 1983]. He was clearly enthusiastic about what he perceived to be the possibilities of computer use.

One could envisage a situation where everything that could be discovered about a past society would be placed in a disc pack [Macfarlane, 1976, 8].

The aim was to use the computer to attempt some form of 'total history', a concept associated with the *Annales* historians, in particular Febvre. His statements about what a computer could do were limited by the computing practices and technology of the time.

It can only process information which is at a statistical or behavioural level. Unlike an informant it can make no remarks at the normative level...[*ibid*, 7]

Of course computers are unable to make remarks of any kind, but the information entered into them can include such remarks whether spoken by the living or written down by the dead. The great contribution of this work was however the recognition that multi-source linkage could be realised. For anthropology this indicated that computing could become a more integral part of the research process rather than a special type of further analysis.

The concept of totality used by Rheubottom is different to that of Macfarlane.

The methodological goal was to test the feasibility of using very rich archival sources, and the data processing capabilities of the computer, to 'reconstruct' a total governing class [Rheubottom, 1987b, 1].

The aim is not therefore total history in the sense of Macfarlane or the *Annales* historians but an attempt to identify all members of a particular group at one location during an historical period. In this

way the project has similarities to what is called 'prosopography' in history but goes beyond it because of the idea of studying "...this community 'as a whole'" [*ibid*]. Part of the difference to Macfarlane's study is that the Ragusan archives are more rich and inter-related than those available for English villages. Therefore a more limited population can be examined but a greater degree of connectivity expected. The approach again used the relational model, but this time implemented upon a commercially available micro-computer system. Another difference to Macfarlane's project was that the researcher was also the programmer. It is unlikely that a large number of anthropologists will wish to acquire such skills, but a certain amount of basic knowledge about computing could be a great advantage to using machines successfully. The information in this database has not only been used as ethnographic data but has also provided the basis for further work using the computer in simulation exercises [Rheubottom, 1988].

Other work has been done in historical anthropology, using a computer which does not take the form of historical ethnography. The study of marriage and kinship in Brittany over two hundred and fifty years by Martine Segalen and Philippe Richard is an example of more limited questions being examined using computer methods. The problems investigated by this research relate to questions about the application of ideas concerning marriage rules developed by Lévi-Strauss in 'complex' societies [Lévi-Strauss, 1969; Segalen, 1986]. Unfortunately, little is said about the methods used. Other significant work in historical anthropology has been the large demographic simulations undertaken at Berkeley, investigating the availability of kin in past populations among other questions [Hammel, 1978]. These more general uses of computers parallel interests from more conventional anthropology.

Computing and History

Although computers have not really been used in history any longer than in anthropology, the level of interest appears to have been greater. Much of this is obviously due to the difference in the number of practitioners of each discipline. Other elements are related to movements within the discipline which have seen computing as both necessary to and to some extent symbolic of the type of research that they undertake.

The major influence has been large scale, quantitative history. This enterprise was seen to depend upon the utilisation of computing resources and continues to be an important element in the field. Much attention in this area is paid to the large size of datasets. Ladurie proudly mentions the analysis of 10,000 conscript records of the nineteenth century French army [le Roy Ladurie, 1979]. Another writer thought that "...the computer offers us an inestimable service" in being able to store "...400,000 dead monks..." [Bulst, 1989, 15]. Often the number of cases is wondered at but the purpose of examining them left unstated in the marvel of their existence. Such problems are less likely to occur in anthropology. It is very difficult to imagine studying hundreds of thousands of living people in any depth. Historical anthropology

does raise the possibility of large populations, but this should be seen as a problem rather than an end in itself.

Another important area which has more relevance to anthropology is that of record linkage. This is the method by which different pieces of information concerning an entity, usually an individual, are linked together. Such data may be found in different parts of one source or in a number of sources. Early pioneers of the application of this method to documents from the past were historical demographers, in particular Anthony Wrigley and Roger Schofield [Wrigley, 1973b]. Although working with parish registers, Wrigley saw the potential of applying this method to other forms of document such as tax lists, wills or leases [Wrigley, 1973a].

As well as proving of great interest to historians, this method has also been of use to historical anthropologists [Harrison, 1970; Rheubottom, 1987a]. It has the advantage of being able to provide information about a person, a location or whatever which indicates the inter-relationship of different aspects of data. This ability to relate different types of information is important in its anthropological applications. Although used mainly by people studying the past, there is no reason why it should not have applications in conventional ethnographic research where the sources might equally be documents or the researcher's field notes.

Currently, much work in this area is undertaken by means of purpose written computer programs (for instance those developed for demographic purposes at Cambridge) or through the use of database management systems. There are problems with both approaches. Special programs are usually very closely related to the purpose at hand and are therefore not always appropriate to the needs of other researchers. They are expensive to produce and maintain in terms of time and personnel and require an expertise in their development not usually available to most researchers. Database management systems are more readily available, at least in an academic environment, but are also problematic. The quality of the many products commercially available varies enormously. Some DBMS (Database Management Systems) designed for micro-computers may be well known and widely available, but they may well not perform readily all of the tasks required.

Most database systems are intended for use in situations where they will model a bounded, fairly static and relatively simple universe, as in most administrative situations. Where, as in most academic research, the interest is in exploring the nature of a less clearly bounded universe which is both complex and subject to change, this may cause problems. Thaller has criticised the way in which many historians view the relational model as the only one appropriate for the subject [Thaller, 1989]. He draws attention to the fuzziness of historical information, the relationship of data to particular spatial and temporal contexts. However, much of his argument suggests that the limitations come more often from the available query languages than from the underlying model.

The time dimension inherent in such information is not just a matter of updating, as in a commercial situation, but part and parcel of the interest. It is not enough to maintain 'snapshots' of previous states of the database; instead the database may need to represent multiple states of the data. This problem is not unique to historical research and it is now appreciated that in many commercial database applications it may be necessary to maintain a model of the history of an organisation rather than one which merely reflects its current state [Gadia, 1988].

This may seem a long way from conventional anthropology, but it must be remembered that even there information is acquired over time, may well not fit pre-defined categories and has to be fitted together by some model in order to make any sense. When such information is derived from more than one period of fieldwork, it becomes in many senses historical. As stated above, special software is likely to be of limited application and expensive. Widely available DBMS are however not always ideally suited to the task in hand. Many of the problems outlined above have proved of interest to computer scientists and some attempt is being made to deal with them. There are two main solutions to the problem of linking the record linkage process to the retrieval power of a DBMS. Firstly, interactive software may be written which will allow record linkage to be performed while using a DBMS to organise the resulting sets of information. This is best performed by writing interface software in one of the host languages allowed by the DBMS. Secondly, an expert-systems approach may be used to allow the rules by which links are made to be decided by the user and modified during the process [Carvalho, 1989]. This again involves the building of an interface to a conventional database using a language such as Prolog to build in deductive capabilities. However, the necessary tools for this are not yet widely available.

There has also been interest in using computers for work with texts. Some of this work has been in producing editions of historical texts and is largely concerned with specialised word-processing or typesetting [Reuter, 1987]. Such matters are in many ways common to a large number of academic subjects. Another area of interest has been the extraction of structured information from texts which can then be stored in a DBMS or used by statistical software. The work of Alan Macfarlane and that of the Domesday project are examples of this, though many more may be found [Ayton, 1987; King, 1981]. Attempts to use a computer to aid examination of texts as a whole, in particular those with a narrative quality have been much less common. Some use has been made of lexicometric methods following more traditional lines associated with computing in literary studies, such as determining authorship. Other work has indicated ways of examining narrative texts that do not involve abstraction (either human or automatic) nor simply report statistics [Rowland, 1988]. All of these methods, extractive, metrical and specialised retrieval, have applications in anthropology. As well as retrieving and extracting information from field-notes, and use in historical anthropology there are potential applications with specialised texts such as life-histories, myths and songs.

Models of computing, models for computers

It is a truism that all research involves modelling, but using a computer can make the researcher much more explicitly aware of this process than otherwise might be the case. This does not, however, mean that such modelling must be undertaken in terms of obscure mathematical formulae. Such models may be formal, such as those derived from graph theory [Hage, 1983], database models [Date, 1986; Oxborrow, 1986] or those underlying expert systems [Fischer, 1986]. Other more informal seeming models underlie methods of dividing up text to allow retrieval of particular pieces of information.

Anthropology is fortunate in that it has largely escaped the obsessive quantification which dominated some areas of history and archaeology in the 1960s and 1970s [Herlihy, 1981; Ryan, 1986]. This may be because quantitative studies became unfashionable in anthropology at the same time that computing facilities that would make it realistically achievable became available. In history at this time computing and quantitative analysis were used as largely interchangeable terms. Ladurie stated in 1973 that in the 1980's historians would "...have to be able to programme (*sic*) a computer in order to survive" [Le Roy Ladurie, 1979, 6]. Computers were definitely for counting. This interest in quantification was reinforced by the nature of available hardware and software. The major language for applications was Fortran IV and both programs and information had to be entered by punched cards. Computers retained a certain mystique. Users rarely, if ever, went near the machines. Data entered at one end, was processed and results came out, after some delay, in a more or less understandable form.

By the late 1980s both technology and methodology have changed somewhat. There has been a reaction to the way in which quantification had been used in the 1970s. In some cases this has been constructive, calling for better integration into the discipline (see Read, 1989 for archaeology). In others it has criticised but offered few solutions [Stone, 1987]. Users can enter information interactively, perhaps on a micro, making use of networking facilities. The very important growth of word-processing facilities has helped to erode fear of computers as more and more people do everyday administrative and academic writing in this way. However, a view linking computers to quantification still has currency.

Modelling too is problematic in this way. In a humanistic subject such as anthropology, there is an understandable reaction to formal analysis of problems, especially where this is seen to involve mathematics and to be deterministic. Statistical analysis for certain types of information has long been accepted however.

Most work in anthropology, in contrast to that in history, has used computers in a secondary stage of research. This has often taken the form of simulation involving problems and information encountered while pursuing research by other methods. The difference is probably due to the difficulty of using a

computer in the field, which is where an anthropologist gains information. Historians often have much closer access to sources of information.

Another major difference is the type of information used in the two subjects and the way that it is recorded. Fieldwork usually involves entering information both of a structured and less structured nature into notebooks. These are often supplemented by tape recordings which are later transcribed by hand. Structured information (a census or genealogy) is not always physically separated from less strictly organised information (comments, stories). It may not necessarily be an unmitigated good were it to be so. Ideas and comments by the researcher may also be mixed up with information related by people interviewed.

Historical information can be very much like the anthropological notebook. Early modern account books are an example of this as are court records. Other types of information appear more structured, for instance parish registers and censuses. It is this latter type of material which was the first to be viewed as 'suitable' for using with a computer and more or less easily transformable into a format for statistical analysis. More recently attempts have been made to use computers to examine less highly structured data.

One method used in several projects allows pieces of information to be extracted from less structured texts by inserting special markers to denote particular types of information. It is geared towards the breaking down of such texts into small components suitable for a database management system. The method is more suitable for texts with a standard format and repeating items of data (for instance wills and leases). It is less suited to unique, narrative texts (many court records, stories).

A further method is to use facilities developed for use with narrative texts. These include information retrieval techniques and building concordances. The making of concordances is certainly not new in computing terms and Hymes notes their possible value to anthropologists [Hymes, 1965]. More sophisticated forms of text retrieval have been developed but are not yet widely used [Ashford, 1988].

Historians working with computers tend to examine a major 'source' backed up with more general information exterior to the computing task (e.g. Overton, 1987). The more holistic approach of anthropology and the importance of being able to inter-relate many different types of information, may lead to different requirements. 'Structural' information and narrative text are not so separable. There is not a single solution to computing problems in anthropology but many. A combination of methods may be needed for one research project. The words of Hymes in 1965 are still true

What is essential is a conception of the use of the computer in anthropology which is flexible enough to start from where anthropology, its data and analyses, now are... [Hymes, 1965, 18]

This project uses historical sources but attempts to investigate ways of using computers that might be more widely applicable in anthropology. More clearly structured information is used alongside less

structured material. A combination of existing tools and new, specialised software has been used. No attempt has been made to fully integrate all aspects of computer use, but the possibility, and advisability, of doing so has been considered. In the next chapter the sources and computing methods used in this project are introduced.

2: The Sources and the Computer

This chapter is concerned with the use of computing facilities in the research and the documentary sources examined. Because of the close connection between the computing and the use of sources these two aspects of the research must be considered together. However, this does not mean that the approaches used are extremely particularistic. A variety of methods are explored and a number of different types of sources examined. Each of these have similarities to information acquired in fieldwork, and the approaches used are viewed as capable of being generalised.

In the first place parish registers in England are discussed in a general sense and their use by researchers of different kinds examined. The registers of Biddenden are then looked at in detail noting the structure of information and the deficiencies of the source. A model building program written for use with this and similar information, but with applications beyond documentary sources, is described. A discussion follows of the use of a database approach and problems and future developments envisaged with this program. Some other ways of exploring the information within this model are then examined.

Less structured sources are examined next. These are wills and probate inventories. The problems of using documents which at the same time involve elements of structured information but are also useful as texts to some degree, are discussed. My reasons for limiting the amount of information used from these sources are stated and the database implementations described. A set of documents in which narrative text predominates, the records of the church courts are then examined. The way in which this source was viewed and its increasing importance as research progressed are explained. Methods used to examine the texts and the benefits derived from using a portable computer to enter the information directly in the archives are examined. Finally other minor sources used in this research are described along with the degree to which they were and could be integrated into the existing computer models.

Parish Registers

The practice of keeping registers of baptisms, marriages and burials by local churches in England was initiated by Thomas Cromwell, statesman and viceregent to King Henry VIII in spiritual matters, in 1538. Few registers survive from so early a date, and given that the injunction to keep such records was frequently re-issued, some may have been slow in starting. Opinions differ as to the intended purpose of the records, Cox thinking that an associated tax may have been envisaged and Maitland that the purposes were to provide statistical information. Other uses may have been to help keep a check on marriages within the prohibited degrees, a problem much in the political limelight at this time, and to provide a general source of reference information for a population containing an increasingly large literate minority. An example of the uses of registers in Biddenden is the reference in the churchwardens accounts to "...searching the Register for the name of the wyfe of Stringer" [KAO:P26/5/1].

In 1597 an order was made by the higher clergy that registers were to be henceforth kept on parchment, and that former registers, usually kept on paper, were to be copied over to them. Copies of the years entries were also to be sent to the episcopal registry each year and stored in the archives there. These 'Bishops Transcripts' had been made in some dioceses, such as Canterbury, for some time before this new order, though survival for most dioceses is poor.

A small number of registers survive starting in 1538 or within five years, a further number begin at the start of the reign of Elizabeth 1558-9, but a greater number date from the 1597 injunctions, with no earlier entries having been copied in.

The amount of detail given for each entry varies considerably both through time and between different parishes. For long periods merely the name of the person baptised or buried was recorded along with the date. Fuller entries may give the names of one or both parents at baptism or the burial of a child, the name of the husband at the burial of a wife or some individuating marker attached to the name of an adult male, such as main occupation, status or abode. Marriages give the names of both parties as minimal information but may also give further detail such as their parish of origin or the name of one or both parents. Sometimes much more detail is given, such as the names of godparents at baptism, date or time of birth or approximate age at death, though this is usually only for short periods of time or for particular entries, such as local gentry, the parsons family or people considered to be particularly old when they died. Occasional entries may have a few words by the parish clerk or parson appended commenting on the character of a deceased person. The baptism records of illegitimate children may give the name of the reputed father, especially in the last decades of the sixteenth and early decades of the seventeenth century. This information had uses in any attempt to make a father pay towards the keeping of the child.

As well as the variation in the way individual entries were recorded, there is great unevenness in the coverage of the records. Sometimes gaps, from a few months to several years, are found in registers. These may reflect illness on the part of the record keeper, poor record keeping or sometimes the loss of pages from a book through decay, fire, vermin or cutting out. Where records are kept for any year they may not be an accurate reflection of the life events taking place in the parish. In some cases a proportion of the events may never have reached the registers due to lapses of memory, but most under-registration is probably due to events taking place outside of the normal jurisdiction of the local church.

Members of early nonconformist sects which challenged the established church monopoly on life event rites, such as Quakers, or the form of these rites, such as Baptists, might not appear in the parish registers. These groups may have performed their own rites and kept their own records, but these do not always survive from an early date, (early nonconformist groups generally begin to appear in the mid seventeenth century). Alongside this there may have been people other than members of other religious groups who for one reason or another did not bring their children to be baptised. Marriages too may not always have been recorded. From the mid-seventeenth century there seem to have been an increasing number of clandestine marriages, performed by unbeneficed clergy outside normal church jurisdiction for couples wishing their union to be kept secret from kin or neighbours [Houlbrooke, 1984].

Beyond this, the exact nature of marriage was a matter of dispute during this period. Many cases before the church courts for bridal pregnancy and breach of promise, hinge on whether a marriage was constituted by the church ceremony or by a private promise to marry (usually called a 'pre-contract'. Some people may have considered the pre-contract sufficient, and never gone to church. All in all, the most accurate records are likely to be those of burial, as there was little alternative at this period to interment in the churchyard. Even here the burial of unbaptised children is often poorly recorded, or not registered at all.

In chronological terms, registration is generally considered to have been fairly good in terms of coverage for the sixteenth and early seventeenth centuries. Deterioration sets in during the mid seventeenth century, due to increasingly organised nonconformist activity, clandestine marriage and the confusion brought about by changes in registration practise during the Commonwealth. In 1653 it was ordered that laymen should be elected in each parish to act as *register* and to keep the books, whereas before the responsibility, if not the practise, had lain with the clergy. Marriages were also to be performed by civil ceremony, before a justice of the peace. The period is notorious among researchers using parish registers for poor registration, in many cases records ceasing altogether for a decade or more. Further problems were created by the many changes that took place in some parishes of ministers, as some were deprived, others appointed, leading to uncertainty, disputes and very poor pastoral care. Such disruptions may contribute to the general poor quality of registration from the mid to late 1640s to early 1660s. An example of how bad things might be is given by a statement in an episcopal survey concerning the parish of

Cranbrook (adjacent to Biddenden) in 1663, where there are said to be "500 unbaptised" [Lambeth ms 1126].

Use of Parish Registers

Although parish registers have been used in some forms of research for centuries, their use in mainstream historical, demographic and anthropological studies has been relatively recent. A certain amount of use of these sources was made by antiquaries and genealogists from the seventeenth century for checking the dates of vital events in aristocratic and gentry families. From the later nineteenth century, and particularly in recent years there has been a considerable growth in popular family history, 'tracing your ancestors', which has led to frequent usage of the records and has encouraged the transcription and indexing of registers by local people. The employment of these sources in academic studies has come about for a number of reasons. Firstly there are the changes in the nature of the disciplines themselves. History was no longer confined to the recounting of the deeds of the powerful or constitutional studies, but expanding to include local studies and understanding aspects of the lives of the less powerful and powerless. Demographers found interest in looking at the behaviours of populations over time, and in local and regional variations in patterns.

More recently anthropology has abandoned the temporal restrictions of its former paradigms, and increased its scope to take in historical studies, one form of these having some similarities to local studies in academic history. Along with these changes in emphasis have of course come methodological changes. The most significant one involving parish registers being the method of family reconstitution developed by demographer Louis Henry [Henry, 1958]. Advances in automatic and computer aided record linkage, have made Henry's method more practicable. Local studies in historical demography are now commonplace and form an essential part of many other forms of investigation.

Other uses, such as investigating marriage patterns, can open up new ways of using the same type of records. Not least important for the increased use of registers is their greater availability to researchers. Before the large scale bureaucratisation and centralisation of historical archives, most parish registers were kept by local clergy. This made it difficult to gain access to them, especially for large volume studies, and could lead to physical deterioration of the documents which might be stored in less than ideal conditions. Most registers are now easily accessible to researchers in local archive offices and often in transcript or on microfilm.

The Parish Registers of Biddenden

The registers of Biddenden start in September 1538, and are therefore among the small group of such records in England dating approximately from the time of the original injunction. The earliest book was made of paper and contains events up to the order to keep records in a parchment book in 1597. The second register has a copy of events from 1558 until 1597 made from the old register and then continues until the end of 1687 (old style year).

In both registers baptism, burial and marriage records are set down in chronological order, but not separated according to event type. Each type of event is distinguished by a letter, C for christening or baptism, B for burial and M for marriage, placed before the text and also by the wording of the entry. The pattern can be seen from a brief extract from the Bishop's Transcript of the Biddenden registers for June 1600

B George Leeds Houskeeper buried the 8th day

M John Horden & Dororthie Barr married the 9th day

M John Wacher & Ruth Swane married the 10th day

C Thomasyn the daughter of William Stokes baptised the 15th day

It is unclear whether this 'mixed' system would have enabled more accurate record keeping or not, but it is probably more difficult for the researcher to use than a register with separate sections for each type of entry. A great deal of care must be taken to ensure that each entry is transcribed as the correct type of event, and more thorough checking must be done.

Baptisms invariably give the child's forename. In addition they generally give the father's name, but between early 1542 and late 1546, and again between the end of 1548 and mid 1552, the name of a parent is rarely given. From the end of March 1634 mother's names are usually set down as well as father's until the beginning of March 1644 from when most entries again give only the paternal name, the maternal identity reappearing early in 1661 for almost all cases. This final situation persists to the end of the second register. Occasionally the father's occupation or status may be specified though this is far less common than the use of such qualifiers for persons mentioned in burial records. Illegitimate children are usually noted as such and the mother's name given, often with that of the reputed father.

Most burial records give at least first name and surname of the deceased. Burials always give the name of the husband in the case of a wife's burial, though not always her first name, and the father's name for the burial of a child still under parental jurisdiction. A young person in their twenties who is unmarried,

but whose father is alive may be buried as 'son of' or 'daughter of'. If the father is dead his name may still be attached to that of the child, though sometimes qualified as 'deceased'. The names of adult males are not given any relationship qualifier, but the person may be described as 'Householder' or 'House-keeper' and sometimes by an occupation or status marker such as 'clothier', 'gent' or 'poor'. Where more than one adult male of the same name exists at the same time, they will usually be distinguished by their relative ages as 'senior' and 'junior', or by an occupational marker.

Single adult women likewise do not receive a relationship qualifier, but may be distinguished by the marker 'singlewoman', the female counterpart of 'bachelor' sometimes used for unmarried adult males. In the case of widows, usually the woman's surname plus the marker 'widow' is used, sometimes qualified by age markers as for adult males where more than one widow is alive in the same family, but in some cases the name of the late husband is set down. A small number of names are qualified by a relationship of service, 'servant to' or 'apprentice to' with the master's or mistress' (for widowed women) name. Kin relationships beyond the family of procreation are very rarely used. A small number of burials are those of persons passing through Biddenden for some reason, often poor homeless people or ex-soldiers on their way home from continental Europe. In such cases full names are rarely given, but a short description may be written, and perhaps a first name or surname.

As with baptisms, the amount of detail given in burial entries is very variable from 1538 until in this case the end of 1553. Frequently a person is marked as 'son of' etc but the name of the related person has not been set down. During July, August and most of September 1551, no relationships are given at all, the record keeping perhaps thrown into disarray by the very high mortality evident from the 37 burials between 17th and 22nd of July of that year. As with baptisms, the name of the mother of a buried child is recorded along with that of the father in most cases from May 1634 until July 1636 but is only rarely set down thereafter. Burials of illegitimate children sometimes give the name of the reputed father. From November 1682 until the end of the second register in early 1688 entries become increasingly less likely to give a relationship but are marked by a description such as 'a child' or 'a young maid'.

One advantage of the Biddenden registers is the regularity for a considerable length of time, with which the burials of unbaptised children are recorded. No name is usually recorded for the infant, as this was not officially conferred until baptism, but the name of the father and in some cases the sex of the child are set down.

Marriage records follow a fairly consistent pattern from 1538 until 1653, and from 1681 onwards, with no information beyond the names of the two parties given in most cases. Occasionally a woman is noted as being a widow, or (in fewer cases) a man as a widower, and a number of marriages are noted as being 'by licence.' The noting of these details is not consistent. Parish of origin of either party is rarely given, though it is slightly more frequent in 1612-1621 and 1663-1680, and only common in 1654-1657. The

latter is part of an exceptional period for marriage recording from 1653 until 1657, corresponding to the introduction of the civil ceremony and new orders for record keeping. The Biddenden register however gives less consistently full information at this period than do others in nearby parishes (for instance Cranbrook). Parish of origin is recorded for both parties in almost all cases from March 1654 until November 1657, but occupation, marital status and name of a parent are set down in only a few cases. The Biddenden registers alone can therefore provide little usable information on the geography of marriage.

Having detailed the type of information given for entries, it is also very important to consider the consistency and chronological coverage of the registers. Some years produce more events than others for demographic or perhaps other reasons, which makes it difficult to determine whether an individual year or part of a year may suffer under-recording. There are however a few short periods when no events were written down in the registers:

Baptisms

August 1558 to March 1559
September 1562 to early May 1563
late March 1564 to late May 1565
end of December 1565 to early June 1566
November to December 1662

Marriages

Mid October 1557 to early April 1559
late January 1562 to September 1562
end of September 1562 to July 1563
mid January 1564 to May 1565
mid January 1566 to May 1566
January 1658 to April 1659
February 1662 to April 1663

Burials

end of June 1558 to early March 1559
end of September 1562 to mid May 1563
end of April 1564 to end of May 1565
early December 1565 to late April 1566
end of October 1661 to May 1662
August 1662 to early January 1663

From this list it is clear that there were two main periods at which record keeping was defective, a long one from 1557 until 1566 and a brief one around 1662. The effect seems to have varied according to the type of event and may mean that a real dearth of some types of event may have occurred while others continued, or that temporary records for a single type of event may have been lost before writing up in the register. The absence of marriages in the late 1650s may be genuine as baptism and burials continue as normal and this was a period of great uncertainty concerning marriage.

Some gaps may be explained by mortality crises, such as the national one of 1558 [Wrigley, 1981], which may have resulted in the loss of recording personnel and a situation too uncertain to appoint a new recorder. Poor parochial administration and weak control by the clergy may also be to blame for some gaps. Because the early defective period overlaps with the earliest transcripts of entries kept in the diocesan archives, it is possible to make good some of the missing entries for 1563, 1564 and 1565. This is not the case for 1557-9, 1562 and early 1566, as no transcripts exist for those periods. Although there are transcripts covering the period of the 1662 gap, it is also found in those documents. This implies that some of the earlier gaps in the register may be due to loss of notes of events before making the register copy, but after making the copy for the diocesan archives. A further implication is that at this time entries were written up in the register several months at a time, though this would be difficult to ascertain for other periods when there are no gaps.

Because of the *lacunae* in entries from 1557 until 1566 I decided to commence my period of study at the resumption of register entries in 1566. The choice of 1660 as a terminal date was more arbitrary.

Using structured sources: the model building program

The parish registers provided a basis from which a population for the study could be defined. The data needed to be organised in a way that would allow a model of the relationships between the persons indicated by the sources to be built. I needed a model which would link identified individuals through their relationships to other individuals, and the primary kin relations given in the parish registers would form a start and an ideal proving ground. The model would provide a means of tracing the relationships of any person within the population. It is important to have a model of genealogy constructed from social parentage with which to compare information contained in other sources such as wills. Two principal uses are the examination of ego centered kin networks and the resolution of ambiguity in kinship terminology.

Baptism entries gave the relationship between a child and its father, and in a few cases its mother. Burial entries might give similar details, or describe a person as the wife of another, or just give a name. Marriage entries generally give only the names of the couple, with no further relationships. In a small number of cases other relationships may be stated such as 'x mother in law of y'. The model would be based on two entities, individual persons, and relationships. Individuals would be linked to one another by relationships in the conceptual form of a graph. Although initially to be built according to the life-event data, this model is also appropriate to other types of relationship, such as tenancy or obligations

Obviously there is no direct relationship between a register entry and a person. An entry may provide information on more than one previously unknown person or may add further details to already identified individuals. In many cases a single entry might provide both types of information. Essentially, model building consists of locating unique individuals and their relationships to others. Each person is given a unique identity number together with date and place of baptism and burial — attributes that can have at most one value per person. Typically this information is derived from at least two distinct register entries. Each relationship may be constructed as the identity numbers of the two related persons together with the type of the relationship (mother, son, etc). A single register entry might provide several instances of relationships, and the set of known relationships of an individual person may be derived from a large number of different register entries.

Marriages create a special problem as they refer to both relationships and events. A person may have several marriages so the marriage date and place cannot be recorded as attributes of the person. One solution (fig 2.1) to this problem is simply to add these two attributes to the relationship entity, but to leave them blank in all cases other than husband, wife or spouse relationships. This simplifies the model at the possible expense of storage space and processing time. Such problems would be at their worst with fixed length records and sequential file storage, but can be minimised by the use of variable length records and/or indexes. An alternative solution, more suited to a database approach, is shown in fig 2.2. Here, a

marriage event entity, linked to the corresponding relationship by the identifiers of the partners, is used to record this additional information. Using this approach the number of empty or null fields would be minimised.

Marginal notes and information on a person's occupations may be derived from many different register entries. A given person may have many such notes, although many have none. If a variable length field is used for the notes, then this may be added to the attributes of the person entity. As further notes for the same person are found in the registers they are simply appended to the existing text. Alternatively, this information may be recorded as instances of a separate note entity, linked to the person by the latter's identity number. In this case the date and source of the note are added as further attributes of the note entity rather than being entered as part of the text field. In a more general case it might be necessary to have some form of notes associated with the marriage event, but this has not been needed in this project.

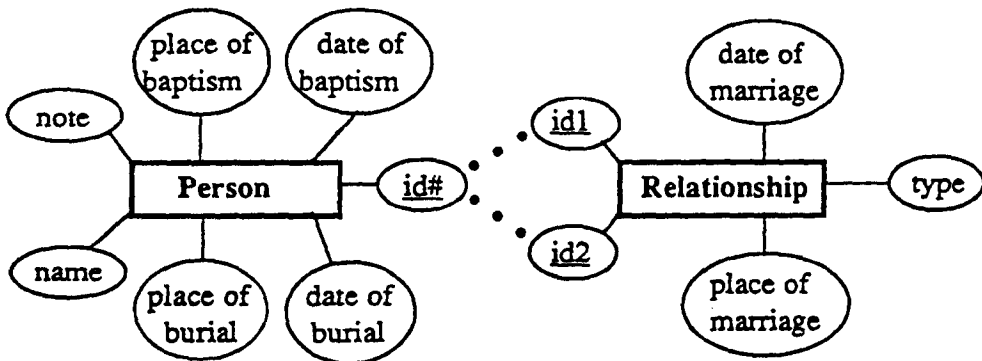


Figure 2.1: Basic data structure of the person/relationship model. This model is suited to processing using indexed files with variable length records.

Central to the model building process is 'record linkage', the identification and linkage of separate records referring to the same individual. This is an area of concern beyond its applications to historical, demographic and anthropological research. Indeed much of the work on record linkage has been carried out in

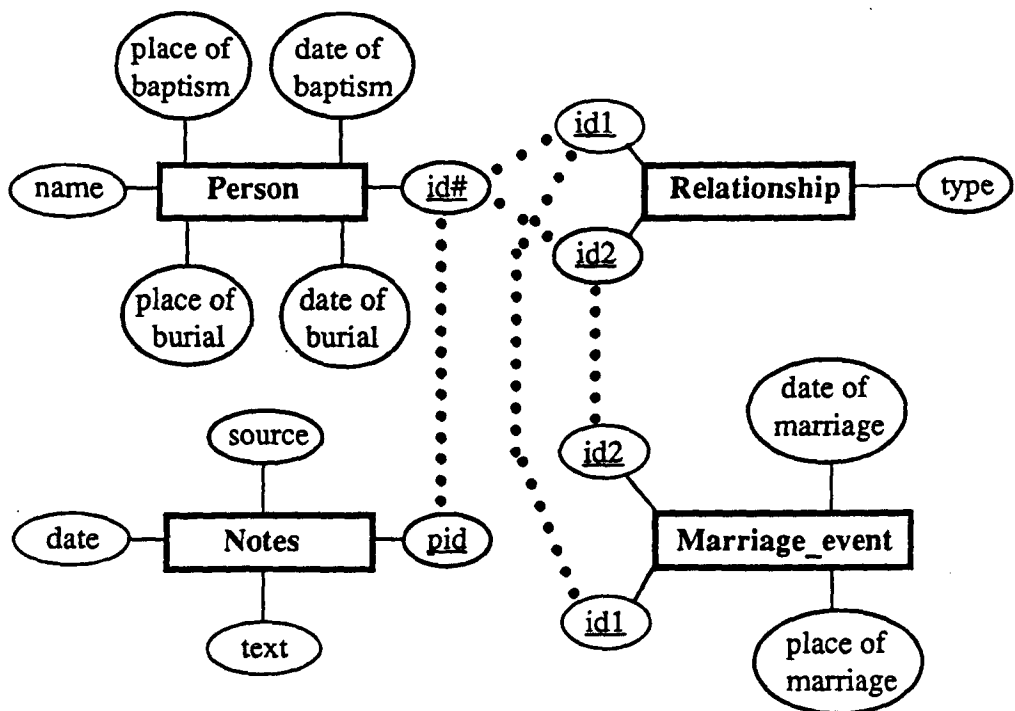


Figure 2.2: Alternative data structure of the person/relationship model. This model is suited to use with a relational DBMS or conventional processing using fixed length records.

connection with health services and other aspects of public administration (for a review of techniques and select bibliography, see Newcombe, 1988). The problems are similar, but often more extreme in historical contexts where there is often greater variance in name spelling and considerable uncertainty about the dating of many vital events.

The application of methods of automated record-linkage to historical demography were pioneered by Wrigley and Schofield [Wrigley, 1973] with significant epistemological contributions by Winchester [Winchester, 1973a; Winchester, 1973b]. These methods were derived from the manual approach introduced by Louis Henry [Henry, 1956]. The refinement of these techniques has been the subject of considerable activity in this area (e.g. Boot, 1983; Desjardins, 1978). However, most of this work has been towards specifically demographic needs. Most of the methods and programs developed have been designed specifically for family reconstitution. This entails building the group of parents and offspring, known to demographers as the 'Conjugal Family Unit' or CFU. These techniques would not be suitable for the much broader model of relationships envisaged in this research.

Most previous systems have concentrated on building this minimal unit by automatically assigning children to parents on the bases of probability scoring. The initial event is taken to be a marriage and the family built from there. However, I wished to build a model of relationships that went beyond the demographer's CFU, linking between generations and through multiple marriages. Persons appearing as parents may also be children of the previous generation, therefore indicating a further set of identifications to be made. Taking into consideration the experiences of those working on problems more like my own, such as the Laredo project [Schwartz, 1984], and also wishing to incorporate contemporary practices in computing rather than the batch oriented philosophy behind Wrigleys program, I opted to use a semi-automated, interactive approach.

In the process of reconstitution the computer based record linkage has typically been viewed as one stage of a linear research process. First the data is entered into the machine in some form. This is followed by the linkage stage and the production of printed lists, indexes and tables of statistical data which are to be used in the subsequent research. Rather than adopting this batch oriented method, I decided to incorporate the computing into an iterative research process. In this way, although the model grew in size as data was collected it was possible at any time to ask questions of the data and thus influence the progress of the research. Of course the analysis discussed here has been based on the final form of the model, but the continuous interaction with the data during the earlier phases ensured a greater familiarity than would be possible using the 'batch' approach.

A prototype for the program had already been developed in my end of first year project called 'rels'. This was an interactive model building program for recording relationship information. It was designed for anthropological use in the field and did not attempt to incorporate calendar time or to provide a means of adding notes. It was therefore much simpler and more limited in concept than the requirements of this research. The program was my first major exercise in the C language which I have adopted for all subsequent original programs associated with this project.

This program requested the user to enter the name of one person in the relationship and then searched the database built so far for persons with matching names. These were presented to the user as possibilities for identification, along with information on any relationships already known for that individual. If one were chosen, the user was requested to enter the type of relationship to be represented and the name of the second person. This name was searched for as above, and if successfully identified to a person, a relationship record was created linking the person records in both directions, eg. A mother B, B son A. By this means two files were created. One consisted of records with information about each person identified, each record having a unique identity number. The other was made up of pairs of identity numbers linked by a relationship type. Output was in the form of lists the relationships for each person. The data files could also be used as the basis for input to a graphical display program being developed at Kent [Ryan,

1988].

This general approach was retained in the program for building the initial model from the registers. However the new program was completely redesigned in the light of experience with the intention of increasing its generality. There would be two files for people and relationship data using the simpler of the two data models discussed above (fig 2.1), and the user would identify individuals through possible choices presented on the screen. There were two main problems to be dealt with initially that differed from the problem tackled by the 'rels' program. These were the incorporation of date information, with its associated uses and implications, and also the problem of dealing with names from a written source created by a society that did not use standardised spelling.

With date information available it was possible to introduce further selection criteria for individuals, beyond the name matching used previously. A set of simple demographic rules was developed which would remove totally unsuitable candidates before they were presented on the screen. These were

1. No person to marry or have a child before the age of fifteen.
2. No person to be presented as a candidate for linkage more than ten years after their recorded burial.

The second rule may seem curious but had to allow baptismal records of posthumous children to be assigned to a father. The selection of the time period of ten years was arbitrary and experience has shown that this could be reduced with no harmful effect.

In order to build as full a model as possible children would be assigned to a father regardless of whether he had been previously recorded as married. 'Dummy' spouses would not be created where there was no evidence for them. Because baptism would be used in the project to approximate birth, children known to die unbaptised were given a baptismal date equivalent to their burial date but were noted as unbaptised.

The problem of spelling variation in early modern documents was clearly going to present some problems. A simple test program was implemented to code names on the basis of Knuth's description of Soundex coding [Knuth, 1973, 391-2]. I selected thirty common surnames from the parish register, each name being represented by at least one alternative spelling. The result was not promising, and it was clear that either a different technique or a modified version of the coding system would be needed. Although a small sample, these names were typical of the spellings variations found in the early stages of data collection. These findings were not unexpected; several previous studies using the Soundex method on historical sources have mentioned the need for manual intervention to correct the often large number of failures and other mis-matches (e.g. Ayton, 1987, 24-5; Schurer, 1987, 36; Schwartz, 1984, 124).

Much work has been done on string matching and the related problem of spelling correction. Most of the techniques that have been developed rely on either a simplifying coding such as that used in the Soundex code, or on calculating some measure of similarity between two strings. The latter range from simply summing the differences between the numeric representations of successive characters, to information theoretic techniques based on weighting of letters according to their frequency in samples of names [Bickel, 1987]. Of course variations in the frequencies of use of letters in different languages determines the exact nature of the coding or weighting system used. Each technique has strengths and weaknesses in dealing with different common types of *mis-spelling* found in modern languages, but the problems of spelling *variations* found in early modern English are not all the result of simple transposition or omission of letters. Indeed similar problems arise, though less frequently, in attempting to match modern name spellings. Knuth mentions the failure of Soundex to discriminate between "...a few related names like Rogers and Rodgers, or Sinclair and St. Clair, of Tchebysheff and Chebyshev..." [Knuth, 1973, 392]. These examples are more typical of the types of variation found in early modern spellings.

Techniques based on on similarity measures have been used in historical demographic research with variable results. Some success was claimed in the case of a French-Canadian example [Desjardins, 1978] whereas a study of a Mexican-American town reported little success with a wide variety of methods when applied to Spanish names written down by English speakers [Schwartz, 1984, 124]. Despite the impression that neither approach has been found particularly suited to historical sources it must be remembered that most of these reports refer to attempts at *automatic* record linkage where manual intervention was seen as an unwelcome chore. In contrast, my approach has been based on the view that such intervention is desirable, if not necessary, to such a process. In many cases linkages can only be resolved using the researcher's hopefully extensive contextual knowledge of the problem area; the necessary information is often external to the database. The desire to fully automate the process may be understandable when the sole purpose is to extract tables of numbers for statistical analysis, but such an approach is wholly unsuited to anthropological or historical research where an intimate familiarity with the data is fundamental.

Many of the variations that the Soundex coding had not been able to deal with could be accommodated by minor modifications and the addition of a few specialised rules to the basic Soundex algorithm. A similar approach could also be taken with other matching techniques, but as the modified Soundex was to give adequate results these have not been tried.

Soundex retains the first letter of the name and assigns a numeric code to the remaining letters as follows:

b, f, p, v	1
c, g, j, k, q, s, x, z	2

d, t	3
l	4
m, n	5
r	6

All other non-initial letters are ignored. Double letters and multiple occurrences of those with the same code are reduced to a single coded digit. The result is padded with zeros or truncated as necessary to produce a letter followed by three digits.

It was decided that rather than use an alphanumeric code, a fully numeric system would be preferable, allowing the initial letter of each name to vary. This was needed because the sample suggested that *Ph*, *F* and *V* were liable to be interchanged, for instance with *Filpot* and *Philpot*, or *Ferrel* and *Verrel*. Similar problems applied to *C*, *K*, and *S*, for instance *Cadwell* and *Kadwell*, or *Ceelis* and *Seelis*. Also initial vowels might vary as in *Allen* and *Ellen* and that an initial *H* may sometimes be acquired or dropped as in *Osman* and *Hosman*. Further problems were posed by the occasional use of terminating *s*, by the commutation of pairs of consonants to one letter, e.g. *ng* to *n* and *nd* to *n* or *m*, and by the use of letters for unspoken sounds such as *gh* which may be omitted in some spellings.

It was clear that not only was the sound of an individual letter relevant in coding but also its position in the word and its relation to other letters. More exhaustive analysis might have produced a more elegant solution, but incorporating extra rules to accommodate these problems produced a modified form of Soundex that gave 95% success in name matching with the test sample.

In the revised coding the numeric coding is the same as in Soundex except that

1. the following extra codes are used for initial letters:

A, E, I, O, U, Y	7
B	17
N	57
S	9
W	8

2. *gh* is ignored;
3. *gn* is reduced to *n*. *dg* and *tg* are reduced to *g*. *ld* or *lt*, and *nd* or *nt* when occurring in the final three letters are reduced to *l* and *n*;
4. *s* at the end of a word and following a consonant is ignored.

The coding function was then incorporated into the main program. Because of the more limited range, forenames, although also subject to coding, were generally entered in a standardised way, often as abbreviations. The problems presented by English forenames seem to be of a different nature to the spelling problem with surnames. Firstly they are drawn from a far smaller set of names, secondly there is comparatively little variation in spelling, and thirdly there is the problem of interchangeability of quite different names such as Henry and Harry. Because of the use of 'nicknames', shortened forms of names not always very like the original and differently coded names being used interchangeably, special checks were put into the program for some common names e.g. Ann and Agnes. A similar solution was also used to overcome the problem of retrieving different common names with similar codes. This would be better implemented as a lookup table which could be updated when a problem was found. A further modification encoded the persons sex along with the name, as an extra digit. This further limited the number of candidates retrieved.

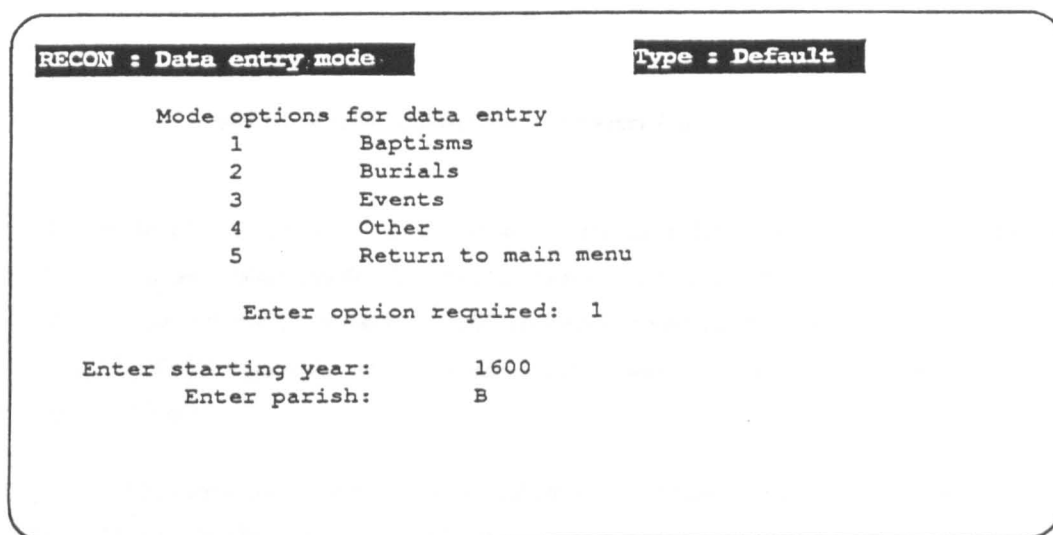


Figure 2.3: Model building program mode selection menu screen.

The program was designed to run in four modes, reflecting different types of envisaged input and requesting appropriate types of information; baptisms, burials, marriages and general. The mode is selected from an initial menu (fig 2.3), and the data entered by filling in an on-screen form (fig 2.4). The

```
RECON : Data entry mode                               Type : Baptisms

                                     child

First name:           Geo
Second name:         Ramsden
Sex:                  m

Search for Geo Ramsden ?   y
```

Figure 2.4: Model building program baptism mode data entry form.

general mode differs from the rest in that it does not require date information and retrieves all candidates regardless of any date considerations. This was intended to maintain the capabilities of the original simple program within the context of the larger one. By means of entering the data in the appropriate mode and ascribing it to identified individuals, a model of people and relationships can be built up complete with date information.

When using the date oriented modes the user is asked to set a starting year before the data entry form is presented. This acts as the default year for all subsequent entries until a new value is entered on the form. This reduces the amount of data that must be entered when dealing with a sequential series of records such as those in the parish registers. Once the details of a person have been entered on the form, the program retrieves and displays all possibly matching individuals in the model together with information on their known relationships to others (fig 2.5). From these candidates the user attempts to select the matching individual employing any contextual knowledge that is not available to the program. If one is found new records can be created for the relationships. If no satisfactory match is found a new person record can be created. These operations, and the addition of further information such as notes and dates, are performed through interaction with further forms (fig 2.6).

```

RECON : Data entry mode                                Type : Baptisms
1 Geo Ramsden Id: 10    Sex: m    Desig: yeoman
  Note: HH
  Bapt: 0 0 0    at *
  Bur : 30 4 1594 at B

husband of Joan Moyse      Id 1474  Bur:2 1 1586  Mar:25 6 1554 at B (g)
husband of Mgt Igulden    Id  882  Bur:5 4 1599  Mar: 5 9 1586 at B (g)
father of Mgt Ramsden     Id   15  Bapt:17 3 1558 (g)
father of Stv Ramsden     Id 1152  Bapt: 9 1 1557  Age:31 (g)
brother of Jarvis Ramsden Id  445  Bapt:0 0 0 (g)
master of Cath Paine      Id 2953  Bapt:0 0 0 (g)
MORE

```

Figure 2.5: Information retrieval screen showing a candidate together with relationships.

The program uses two index files as well as the data files. The first is an inverted index of person records, using the name codes as keys and the unique identity numbers as terms. The identity numbers needed for a given name can then be accessed through this index. The appropriate records are then located in a sequential index using identity numbers as keys, and the offset of the record in bytes from the start of the data file as terms. Relationship records are ordered in the data file by the first identity number. This allows the offset for the first relationship record for each identity number to be stored in the index as a second term.

Person and relationship data is read as required, all known direct relationships (and the persons involved) being accessed for each person in a search. Typically a maximum of ten candidates plus relationships and related persons are involved in any one search; usually the figure is much less, one to five candidates being found. Any new persons or relationships added to the database during one run of the program are held in memory and searched before the indexes. At the end of a run, any new data is written to temporary files which are then merged with the main data files by a separate program that also deals with re-indexing.

RECON : Data entry mode		Type : Baptisms	
Child			
Geo Ramsden	7999		
Desig:			
Note:	*		
Parish of Baptism:	*		
Date of Baptism	Day:	10	
	Month:	10	
	Year:	1600	

Figure 2.6: Data entry form for entering details of a baptised child.

Once the system described so far had been thoroughly tested in use, the opportunity was taken to generalise the system so that it would be of potential use beyond the specific needs of this project. Initially the set of relationships used had been 'hard-wired' into the program and consisted of English kinship terms. This was changed so that the user could define types of relationships by specifying them and information about them in a separate file, as a table. This table consisted of the relationship term and its opposites. For example the opposite of son may be father, mother or parent depending on whether the related person is a male, female or of unknown gender. Added to this was a sort code on which relationships might be ordered in the record file so that they were always accessed in a given sequence, say parents, spouses, children, siblings, etc, and also a code specifying whether or not the relationship should have a date associated with it, e.g. for a marriage. This has allowed the program to be used outside of the realm of kin relations, for instance in building a model of 'prising' (putting money values to items) of probate inventories.

Beyond its direct application to this research project, the program has also been used to build a model of the genealogy of the royal house of Saudi Arabia and to create a small set of teaching material using 19th century parish registers. The Saudi example demonstrated the value of retrieving known

relationships for an individual when selecting from candidates. In this case there was a very limited set of names and the information on relations, particularly that to the father, was essential in identifying an individual.

Using a database approach

Given the alternative relational form of the data model (fig 2.2), it would seem logical that the program might be implemented using a relational database management system. The program described here could then provide an interactive 'front end' to the database, using an embedded database query language to retrieve information. As the majority of the program is not concerned with file manipulation this would probably be better than attempting to recreate it using some form of data manipulation language or 4GL system. The stand-alone program is fast in terms of information retrieval but time consuming in the batch processes of updating and re-indexing. These tasks could more effectively be left to the DBMS.

At an early stage of the research an attempt was made to implement a small subset of the facilities of the model building program with the VAX/VMS database RDB¹. Using the program with RDB on a moderately loaded VAX 8800 system gave totally unsatisfactory retrieval performance for interactive use. In retrospect it is clear that careful attention to physical storage structures and indexing would certainly have improved this. However, as most of the computing aspects of the research were based on the use of UNIX² tools, this option did not seem worth pursuing at the time. At this stage of the research no adequate DBMS was available on these machines and extensive use of such a system was not envisaged. In part this was influenced by a desire that it should eventually be possible to replicate most, if not all, of the computing on microcomputers so that similar work might be undertaken in the field (be that the traditional 'field' or archives).

Subsequently, the Ingres³ DBMS became available on VMS, Sun⁴ workstations and IBM⁵ PCs, but by that stage most of the parish register data entry and model building had been completed. As a result the database implementation of this program is once more seen as a desirable development, but one of relatively low priority. The DBMS has, however, been used in other aspects of the research undertaken subsequently and described later.

1. VAX, VMS and RDB are registered trademarks of Digital Equipment Corporation.

2. UNIX is a trademark of AT&T Bell Laboratories.

3. Ingres is a trademark of Relational Technology Inc.

4. Sun is a trademark of Sun Microsystems, Inc.

5. IBM, IBM PC XT and IBM PC AT are registered trademarks of International Business Machines Corporation.

Using appropriate physical storage structures, Ingres would probably give adequate performance on a single user Sun workstation, but retrieval would probably still not be as fast as with the stand-alone program. However much of this might be masked by the user's thinking time in examining information after the first candidates for matching have been retrieved. Using Ingres, there would no longer be the batch updating delays, but as these are not part of the interactive system and can be run as a background process while the user is involved in other tasks, these benefits might not be as great as first appear. The major benefits from this approach would be in terms of data integrity and in the additional data manipulation facilities provided by the DBMS.

One major benefit of using an Ingres based system, is that it would allow the data in the person and relationship files to be more closely integrated with other material that is currently held in the database (see below). As things stand, copies of the data in those files exist as tables within the database, though re-organised into four tables: persons, relationships, events and notes. This is currently a potential source of integrity problems, as updates have to be carried out on both sets of data.

Because the major programming problems have been solved, it would be trivial to convert the current program to use an embedded database query language. While a full database implementation might be desirable, the program was intended to have wider applicability than residence on university based machines. The use of the software in a fieldwork situation would entail implementation on a portable micro-computer. While such machines are available with hard disks capable of using systems such as Ingres, they are by no means commonplace and usually outside the limited budgets available to social anthropologists. In any case, Ingres or similar systems are not available at every institution and may well not be available to many users outside of an academic environment. The situation as regards the current system of academic site licenses for products such as Ingres stretching to include portable machines used in the field is unclear.

A major part of the stand-alone model building program has been implemented on an Atari ST and, as a result, no serious problems are envisaged in converting the software to run on an IBM PC AT or similar. It is however uncertain whether performance on an IBM PC XT or similar would be acceptable, particularly if a hard disk were not available. A DBMS based version might be more problematic. One route might be to use a popular DBMS available for these machines such as dBase III+⁶. Unfortunately the program cannot easily be implemented on this product as the central relationship person-relation-person cannot be implemented directly in a way that would achieve satisfactory interactive performance. Also the use of such a system would require total recoding of the program using its idiosyncratic non-structured data manipulation language. As the program was designed to make extensive use of dynamic memory and

6. dBase III+ is a trademark of Ashton Tate.

to take advantage of the ease of pointer manipulation provided in C, this recoding would not be a trivial exercise. Nor would the result be expected to give adequate performance for interactive use. However, the appearance on microcomputers of Ingres and other DBMS that originated on mainframe systems holds the promise that efficient systems using embedded query languages will become more widely available on the smaller machines.

Problems and future development of the model building program

In addition to the possibility of re-implementation of the model building program using a DBMS with an embedded query language there are several areas in which further improvements might be made.

An inbuilt editor for the program was designed but not implemented. Most elements in the design were straightforward but certain features of the program created complexity. A facility to edit person records by changing the content of fields was a fairly simple step. Little more was required in deleting such records, though this involved deleting associated relationship records, in both directions, as well. Similarly edits on the fields of a relationship record required that the same alterations be transferred to the opposite matching record, and deletion of such a record must be in both directions. What caused the problem in editing was the way in which relationships were recorded in both directions. While this was a great benefit as far as speed of access was concerned, on the other hand it duplicated information and caused great complexities for an editor. The worst case was the need to merge two person records. It was a straightforward task to allow the user to specify which version of the contents of each field should be retained, or where appropriate added. But then the relationships for each person had to be found in both directions, marked for deletion, and then new copies created for the new person record, making sure that there was no duplication. Although the task has been specified, the editor was eventually abandoned as too time consuming a project to implement. The updating facilities offered by a good DBMS would allow this facility to be implemented more easily.

I have yet to deal with the problem of aliases and changed names. This is one of the chief problems in using English historical life event data because on marriage, women generally change their surname to that of the husband. Given the fairly high incidence of multiple sequential marriage in the early modern period, (see chapter 5) a woman may have several different surnames during her life course. Less frequently occurring are the cases where a person or family has two alternative surnames — the chief example in the current project being the Cook alias Gather family. Currently the married women's names problem is being dealt with by manual intervention, women identified to a baptism being known by their family of origin name. Better solutions have been considered, such as being able to record several alternative surnames for a person, using a special separation character within the name field. When a woman marries, the new husband's surname could be added to her list of alternative names and she could be searched

under all of these. This could be implemented as an option as it would not always be appropriate (e.g. with Spanish data). Such a facility could also allow retrieval by alternative names or aliases. Alternatively, in the relational model, the names attributes could be removed from the person entity and multiple names recorded in a separate name table.

The next stage, apart from dealing with the problems noted above, would be to further generalise the program. Various elements currently hard wired for the purposes of development, need to be user defined options. These are the demographic selection rules, the soundex based coding system and the use of date information (not always relevant in a fieldwork situation).

The program was designed from the outset to work interactively. This was based on two philosophical points relating to the practise of computer-aided research. The first is that information should be entered, if not by the actual researcher, then by a person or persons familiar with the type of data and with the purpose and nature of the research. Given that all data is created, in that it is selected and only has purpose in relation to the research for which it has been selected, the data entry process can also be one in which the model within which it will exist is created. This last point is already inherent in relational database usage where tables and relationships are designed to fit together in a pre-defined model. The difference between the usual practise of databases, and the program described here is that the searching and identifying procedures make the process of data *creation* much more explicit than is usually the case. It could be viewed as adding a set of complex procedural integrity constraints, with the user as final arbiter.

The process of manual data entry is tedious and the selection process of the model building is time consuming. There are many instances, perhaps the majority, when only one candidate meets the requirements for selection. It is proposed that the program should be modified to undertake automatic linkage in such cases and only consult the users opinion where more complex decisions are involved. In this way many of the benefits to the researcher of close interaction with the data would be retained, together with the ability to deal rapidly with non problematic data found in a conventional automated record linkage system.

Models of Life Course and Families

The model building program described above creates a simple structure with individuals linked to other individuals by relationships. Its use is limited to the construction of the model and to resolving links between individuals. As such it has proved well suited to the stated purposes, but a further stage has been used in order to provide time oriented information on each individual and those relationships which could be described as immediate family.

This second program provides a means of extracting various forms of information of use for demographic purposes. The development of this program was a relatively straightforward process as it was possible to re-use many of the functions and data structures written for the model building program. A selected individual may be linked to both parents, to all marriages arranged sequentially, and to all children arranged in baptismal order. The children are also linked to the relevant marriage where possible. For some persons, some or all of this information may not exist. The result approximates to the minimal recorded experience of an individual and his or her nuclear families through time.

At present, three basic options are provided. Information can be generated in the form of demographic statistics, as reports of a set of demographic events during an individuals life, or as data on an individuals period 'in observation' in the study. The first option produces information relating to an individual, known parents, marriages, children assigned to each marriage, and number of siblings where possible. This data may be retrieved for the whole database or for individuals specified by identity number. The output is organised so that although calculated for each individual, it is possible to extract sets using simple UNIX tools. For instance, marriage data for wives only, or data on all first children of marriages. Using such techniques I can examine birth intervals, age at marriage, age at death, age at parental death, and so on, using simple statistical programs such as those in the UNIXISTAT collection. Measures are only calculated, however, for those situations meeting the requirements of standard rules for historical demographic data as outlined by Wrigley [Wrigley, 1966; Wrigley, 1968].

The second option produces a formatted A4 report sheet with similar information to that calculated for the statistical output, but organised in a standard way for each individual (fig 2.7). Such sheets provide a quick reference to the demographic structure of a persons life against which other actions can be examined. For instance, it has been possible to ascertain that most persons holding the office of parish churchwarden during this period were male, aged between 30 and 40 years, and usually married with children still being born. The content of this report is similar to the demographer's Conjugal Family Unit, except that a single report includes the details of all of a person's marriages rather than separating each marriage into a separate CFU.

John Pattenson		m		yeoman					
		30	1	1587	31	8	1660	74	
		<i>bapt</i>		<i>bur</i>		<i>age</i>	<i>age ego</i>		
Father	1408 Roger Pattenson	0	0	0	12	11	1638	x	52
Mother	984 Julian Crottall	25	3	1565	7	3	1634	69	47
Wife	6514 Susan Reader	0	0	0	10	10	1642	x	
		marriage			10	2	1608	Age	Ego 21
		end of marr			10	10	1642	Age	Ego 56
									Sp x
									Sp x
<i>Child</i>		<i>bapt</i>		<i>age ego</i>	<i>age sp</i>	<i>Bint</i>	<i>bur</i>	<i>age</i>	
	3585 John Pattenson	22	4	1610	23	x	26m	16	5
	6046 Josias Pattenson	27	3	1614	27	x	47m	6	12
	4084 Sml Pattenson	4	8	1616	29	x	28m	12	8
	4701 Rbt Pattenson	28	9	1623	37	x	86m	0	0
									0
									40
									43
									x
Wife	6780 nk Pattenson	0	0	0	24	4	1647	x	
		marriage			dom nk				
		end of marr			24	4	1647	Age	Ego 60
									Sp x

Notes

Figure 2.7: The immediate family of John Pattenson, an example of the formatted report sheet on an individual.

The third option deals with period in observation using a simple set of rules to give the approximate period during which a person can reasonably be said to be resident in the parish. The rules are based for childhood on those used by Wrigley [Wrigley, 1968] in calculating infant mortality and can be used for this purpose. I have added further rules to cover adulthood. The rules are:

An individual may enter observation

1. At baptism
2. At parents marriage
3. At youngest siblings baptism
4. At earliest marriage or end of marriage date
5. At earliest baptism of a child (if earlier than date for 4)
6. At burial

and may leave observation

1. At burial
2. At latest marriage or end of marriage date
3. At latest baptism of a child (if later than date for 2)
4. At eldest siblings baptism
5. At latest burial of a parent.
6. At baptism

Gnet

Another way to explore this data is using *gnet*, a general purpose network or graph browser developed by Nick Ryan. This program may be used both for information retrieval and to create diagrams. The form of the diagrams can be configured to suit a number of applications including a close approximation to the anthropological form of genealogical diagram. It allows the examination of the models through a graphic medium as well as the production of files of relationship sets for individuals which can be analysed against the larger population. Several diagrams produced using this program appear as illustrations in later chapters. This research was the first major project for which *gnet* has been used and experience gained from this use has contributed to further development of the program and to an understanding of some of the limitations of using such graphical tools with large, highly interconnected, sets of data [Bagg, 1988].

Wills

Wills are potentially very useful documents in a study of this kind, giving *inter alia* information on relations with kin and non-kin, on strategies for ensuring the future of spouse and children, patterns of at least post-mortem inheritance and perhaps something of the beliefs of the willmaker. Margaret Spufford describes wills as

...the most personal of all records, and often the only personal record any individual villager ever left behind him [Spufford, 1974, 55-6].

Although they represent a personal document, they are also in many ways a public one. Many people who made wills would have had them written by one of the few local people with the level of literacy to write a long, complex and legally correct text from dictation. Over a number of years many of the wills from a parish would be written by the same person. From the evidence of depositions made by witnesses to willmaking in testamentary disputes and from phrases contained within the text of the wills, it is clear that most people made their wills on their deathbeds. They would call in friends and neighbours to be witnesses and seem to have dictated the text to one writer surrounded by a small group of people including immediate family members. The bequests in many wills involve a wider circle of persons than those usually present at the making of the document and may be seen as having implications for social relations as well as in some ways reflecting them.

The wills of people dying as inhabitants of Biddenden are generally located either in the diocesan archives or at the Public Record Office. The former houses those falling within the jurisdiction of the Archdeaconry and Consistory (or Bishop's) branches of the diocesan courts. As regards probate, the division was made on geographic grounds. If the testator's parish was one of those regarded as coming under Consistory business (which Biddenden was not) or the property left in the will was located in more than one diocese, then the Consistory dealt with the probate. Otherwise the Archdeaconry courts were used. The wills at the Public Record Office are those whose probate was dealt with by the Prerogative Court of Canterbury, the Archbishop's own court. Wills were in theory proved at this court if the testator had left property in both Canterbury and York provinces. The court was however believed to deal more rapidly with probate business than diocesan courts. This, plus certain status related reasons, led to a number of wills being proved in this higher court, despite the journey to London involved, though lacking any property related cause for choosing this method of probate. During the 1650s local diocesan courts were closed, and more wills than usual were proved at the Prerogative Court. Of the 248 wills used in this study, the breakdown for each jurisdiction is as follows:

Archdeaconry	182	73%
Consistory	23	9%
Prerogative	43	17%
Total	248	100%

Apart from these jurisdictions, some wills might be located in other sets of documents. For instance, the will of John Taylor of Biddenden (d. 1560) is transcribed in the Register of Archbishop Parker. Other wills might exist within solicitors papers or other private collections. This is because not all wills were formally proved in the courts, but may, if not disputed, have been dealt with locally. A number of wills have probably become lost or destroyed. No will has been so far located relating to Biddenden within the period of study, outside of the three main jurisdictions, though cases from outside the date range, such as John Taylor's will, indicate that a more exhaustive search than has been possible for this project might find a few.

The status of makers of wills is clearly biased in favour of the wealthier people, while in gender terms, men far outnumber women. Children were unable to make a will before the ages of 14 (males) or 12 (females), though some young people in their later teens and twenties did make one. Many poorer people probably did not make any form of will, having little to dispose of, though not all will makers were wealthy. The decision to make a will might also depend on the life-course situation of the prospective testator and any particular wishes or foreseen problems as regards the disposal of the estate.

A man leaving a wife and small children might wish to make some provision for their future however meagre, while a rich man with no wife and only one son might see no need to spell out a simple inheritance. Others might make all necessary inheritance arrangements pre-mortem and have nothing left to give away. Some might be so deeply indebted that this was all the legacy they could leave. It should not therefore be too surprising that a rich man such as Roger Pattenson does not appear to have left a will, but James Swan, a labourer, did. Pattenson was an old man when he died, his children grown, married and in some cases dead as parents themselves before their father. Swan however left two small daughters and a dependant widow. The gender bias apparent in the identities of will makers, largely reflects the legal position of married women, whose property was, in most circumstances regarded as belonging to their husbands. No married woman could make a will without the consent of her husband before the Married Woman's Property Act of 1882. All of the Biddenden wills made by women are therefore those of single women and widows.

Where no will was made, administration would be given to the next-of-kin of the deceased, or the principal creditor if deeply in debt. The freehold land of those not making a will was apportioned to heirs

according to the principles of the common law. In Kent this meant *gavelkind*, equally partible inheritance among sons, or failing sons among daughters [Chalklin, 1965]. Provision for a widow existed in terms of *freebench*, which allowed her to hold half of her husband's lands, besides any dower lands that she retained, provided she did not remarry or bear an illegitimate child as a widow. She was also entitled to half of her husband's personal estate, reduced to a third if there were surviving children [Lansberry,]. These customary practices not only operated in cases of intestacy, but also had some influence on the disposition of goods in wills.

Spufford laments the lack of use of wills made by historians, who see them as "...the province of the genealogist" [Spufford, 1974, 56]. This has changed somewhat with the changing nature of the scope of history, but is still, to some extent, true.

The sources used consist of English text entered by probate court clerks into very large registers, with a brief Latin note of probate at the end. The text is usually composed of standard legal phrases with some elements which may display individual free expression. There are standard sections, firstly name, description and date and a phrase indicating the writer was sound of mind; then a religious preamble dedicating the soul to God etc and the body to the earth; next the bequests of movable goods (money, household items, livestock, etc); then bequests of land and houses (if any); and finally the mark or signature of the deceased with the names of witnesses. Within the two sections of bequests may appear any directions concerning arrangements for the care of dependant children and well-being of a widow. Also in these parts one or more executors should be named, who will carry out the instructions in the will, and optionally overseers who will supervise the executor's work.

Wills may also be divided into those made in writing and *nuncupative* wills, which were made verbally by the deceased before witnesses who would repeat the provisions to the court and swear to their veracity. Written wills, although usually copied down by another person from the dictation of the testator, would afterwards be read back to the maker who would affix his or her signature or mark if satisfied. Witnesses would also sign the document, usually made on one or more sheets of paper, after hearing it read aloud along with the testator. Freehold land, however had to be devised by a written will and a *nuncupative* will could not override the provisions of one on paper. Most people in Biddenden appear to have made written wills (90%).

As with many documents, not every person known in the person file created from the parish registers made a will, and the sample is biased toward the wealthier. The model of inheritance which may be constructed using wills is also complicated by the fact that this is obviously only post-mortem inheritance and that anything given earlier in the testators life will not appear, although occasional indirect references occur to such practices.

Using less structured sources

Whereas parish registers can be seen as, and treated as, fairly well structured sources of information, wills and probate inventories are somewhat less so. Although both contain certain patterning of constituent elements, they are far more complex than the registers and are quite different one from the other in their patterning. Both contain information of different types that could be useful in a project such as this. The wills contain textual religious preambles, kin and non-kin relationships, information on bequests and the names of witnesses. Inventories contain lists of objects in a variety of forms, lists of debtors with amounts and perhaps the reason for the debt, and the names of those making the inventory, the 'prisers'.

One approach would be to simply transcribe the documents (as far as possible) onto a computer as text, perhaps adding syntactic markers or tags to aid retrieval, or to enable the extraction of structured data suitable for processing using a DBMS or other programs. This method has been used by several projects using historical sources (e.g. Jardine, 1978; King, 1981; Palmer, 1987), and provided the main source of data for an early investigation of the use of a relational database on historical material [King, 1983]. It has the major benefit that the transcript of the original text can remain available as a machine readable resource which can be re-used either as text or, by adding or re-arranging the syntactic markers, for extracting more structured data for quite different purposes to that for which it was first intended. A minor disadvantage is that it becomes increasingly difficult to read and understand text as these additional symbols are added. Although it would be trivial to produce a filter program to remove these there would still be difficulties in using many conventional tools such as editors.

Ideally, specialised text retrieval software is needed to adequately deal with sources in this form. The method also requires transcripts of the documents and either a scanner or considerable secretarial assistance. None of these were available. Transcripts would be needed as a scanner cannot be used to read sixteenth and seventeenth century documents. Even using a scanner extensive proof reading would still be needed [Ashford, 1988, 29]. Without these costly methods, use of full text of more than a minimal number of documents is out of the question in any small scale research project.

Therefore it was necessary to determine clearly in advance the types of information that would be required from these documents. This could then be extracted at the data recording stage and structured to form a database. The methods used for wills and inventories differed because of the different structure and uses of the two types of document.

Using the *Biddenden* wills

A will is a very complex document. Each one is tailored to the needs of the maker within a broadly similar shell. Perhaps this is the reason why I have found them the most problematic source to deal with. When I began working with these documents, no portable computer was available to me and when one became available the work was too far advanced to make using one worthwhile. As I was not studying legal forms of the period, there would not have been a great deal of point in copying out large amounts of standard phrasing, so I have abstracted only the information which I see as relevant to my work. The purpose was to create a research database, *not* an archive. The abstracts are however, often quite lengthy and the data contained within them very complex and not conforming to easily identifiable standard patterns. From these hand-written abstracts a subset of structured information relevant to my immediate research needs was selected for storage in the database. Were the full abstracts to be available on computer, the ability to search for occurrences of particular phrases and topics would be of great benefit.

The main use of wills has been in examining the questions surrounding bequests and the types of relationships between recipients and willmaker. Obligations stated within wills such as executorships, overseeing and paying portions at a future date, have also been examined. To achieve the first goal I have extracted certain types of information in order to attempt to model bequest giving at a simple level. That is attempting to answer the question 'what types of goods are bequeathed to persons standing in different relationships to the deceased?'

The set of relationships given within the will have also been extracted to allow mapping onto the generalised genealogies in graphical form to examine relationship recognition and the flow of goods. A more complex model would be needed to more fully represent the pattern of inheritance. Because of the possibility that the inheritor might not live very long, die with no legal heirs or fail to fulfil an order on which the bequest is conditional, alternative plans of inheritance are sometimes given. This is particularly true with land and larger amounts of money. One possibility would be to examine this aspect of inheritance using a sample of the full set of wills and build a more complex model. For each will where such information is available I have examined the relationships between the willmaker and both executors and overseers. Other, more disparate obligations were noted along with bequests.

A further use of wills has been to clarify the constructed genealogy built from register data. As most wills allow a small set of kin to be identified from bequests, these can be examined together with the main person/relationship data from the parish registers and can often clarify uncertain links or suggest new ones, such as identifying a wife's family of origin. Comparison of family from the will and as constructed from registers can also help identify a will and burial date to one among several candidates. While performing these tasks, it soon became obvious that although kinship terms used were the same

words as are currently in use in England, the meaning was not always the same. The term 'in-law', now used to refer to a spouse's nuclear family of origin, was at that time also used to refer to kin acquired through remarriage, so that father's second wife (where ego is a child of the first marriage) could be referred to as mother-in-law.

Database of Wills

The wills have been entered into the database using two tables, one consisting of information relating to the will as a whole, and the other with details of the type of bequests given to persons standing in a particular relationship to the deceased. At this stage no attempt was made to fully integrate these tables into the existing conceptual model of persons and relationships. This was partly due to lack of time, but mainly because I wished to gain more familiarity with the structure of wills and the nature of the information contained in them before designing a more integrated data model.

The main purpose of these tables was to act as a summary of information about the recorded wills, rather than as a resource from which many different summaries were to be derived. The simple structure used here made data entry a straightforward process using Ingres QBF, a forms based database query and update system.

The first table contains data about the will and consists of fields for:

will number

archive reference

forename, surname, sex, description and marital status of will maker

identity number of will maker (if existing in person table)

inventory number (if an associated inventory was known)

number of children mentioned in will

rough age-class (child, adult, both) of children

full ages for males and females (ages at which inheritance received)

type of charitable bequests if any

whether willmaker signed will

Each will is given a unique identity number in addition to the archive reference code. This is followed by basic details about the will maker as recorded in the will and other items of summary information. In some cases the personal data may duplicate information already held in the person table derived from the parish registers. This should not be seen as needless data redundancy for there may be differences in descriptions of status or occupation, marital status or even of names between these two data sources. In a

production database these might be seen as errors in the data, but here in the research context they represent potential additional information. For this reason, avoidance of apparent redundancy need not be seen as a high ranking initial priority.

The second table contains summaries of types of bequests found in the will. The records do not necessarily represent individual bequests. Similar bequests to people in the same relationship to the willmaker are grouped into a single entry; for example, bequests of money to daughters. The following is recorded:

- will number
- relationship type
- class of bequest (money, goods, land, etc)
- type of bequest
- amount of bequest (if money)
- sex of relative type
- class of relationship

Wills are probably more complicated to represent in a database than the inventories described below. They often contain not only simple bequests, but also patterns for the future disposition of the gifts, in case the persons inheriting die before receiving the legacy, and orders to heirs to perform certain tasks in the future relating to other bequests, such as paying annuities. There were two options here. Either to build a complex database with detailed information on each bequest plus its future possibilities and obligations. Or to build a simple model, as I have described above, and then to examine those cases where more complex patterns, such as land, annuities and obligations, occur in more detail.

The more complex approach would allow better examination of the structural/processual information contained in wills, such as the continuation of immediate family relationships into the future. The increased complexity of the model would, however, make simple quantification more difficult. Because of time constraints, the simple model has been chosen, allowing more detailed investigation of areas of particular interest, but not costing an excessive amount of time. To aid this further investigation, a text file was created giving a brief summary of the nature of inheritance, small bequests and obligations for each will. Each point of interest was marked with a keyword which allowed the extraction of relevant wills for different themes using standard text retrieval methods (see below).

Probate Inventories

There is little information in the records referring to Biddenden, or those who lived there, which sheds much light on those aspects of life usually referred to as the economic. One source however can be used to shed light on the ways in which some people made a living. Probate inventories list and value the items which a deceased person owned at the time of death. They were compiled so that if the debts of the deceased and bequests made in the will were to exceed ready means to pay them, some of the listed items could be sold to provide the means. Such lists contain details of many types of item, livestock, crops, dishes, linen, manufactured goods, tools, debts owed to the deceased.

They are, however, problematic to analyse in several ways. Firstly, the information in these documents is not organised in a standard form. Items may be individually valued, or lumped together by location and given a total value, or combined in other ways. Examples from the inventory of Simon Russell, weaver 1612 give an indication of the varying forms that can be encountered

Item in the chamber over the halle to playne bedstedles to flock bedes to flock bouldsters to payer off shetes one payer of blankyts to koverlyts iii chystes to bockes to pyllowes one ould paynyd hangyn pryse £iii xs

and from that of John Igulden, yeoman 1613:

In the Kytchen

<i>Itm 1 table without frame, 1 forme, 3 ioyned stooles, 1 old cupbord with a dornix cloath</i>	<i>16s</i>
<i>Itm 4 fleeches of bacon</i>	<i>18s</i>
<i>Itm 5 brasse kettles, 3 skillets, 8 candlsticks, 1 warming pan 1 skummer, 1 ladle, 1 chafing dish</i>	<i>40s</i>

Different terms are used to refer to items, such that while one inventory gives *cattle* another would be more detailed, giving *a cow and two steers*. Secondly, as with any single measure of this type, the items listed and the total value only refer to that particular moment in time. In a largely agricultural society seasonal factors may account for certain disparities of wealth and item representation. Size of farming or manufacturing operation may also vary according to the age and life course situation of the deceased. An older man may have passed on some of his stock to an adult son, a young servant may have little but had he died five years later would perhaps appear as a farmer of moderate means.

The sample given by such documents is small in relation to the total population and clearly biased in particular directions. Married women are hardly ever represented (for the reasons given under wills), and there are only a small number of widows. There is also a bias toward the middle ranks of wealth. The most wealthy people had their probate dealt with at the Prerogative Court for which inventories are missing in this period, and the poor are generally under represented.

The existence of an inventory usually means that a Probate action took place in the ecclesiastical courts concerning the estate of the deceased. It does not necessarily indicate that a will was made, nor does it imply that the estate was of any great size. The size of the estate might only be a matter of a few shillings. The items listed are not necessarily all that the deceased owned, for much wealth may lie in uncropped lands, or lands let for rent, neither of which are listed.

Using the Biddenden inventories

As with the wills, to enter all of the information given in these documents would have been a very sizable task. I have limited my interests to those items associated with the activities broadly defined as making a living. Obviously this includes crops, livestock, trade goods, tools etc, but is taken also to include domestic work such as cooking, baking, brewing, dairying. It is then possible to examine which persons belonged to households practising different combinations of activity. For instance most tradesmen, blacksmiths, weavers, carpenters also had small farms. Total values can give an idea of the range of wealth represented. Clothiers are clearly in a totally different band from weavers, yeomen from labourers.

To this end, the items recorded were limited to those which were useful in answering questions relating to work and status. The amount of crops of different types both in store and in the fields were recorded along with types and numbers of animals and details of farming equipment. This would give an impression of both the size and type of farming operations. Manufactured items, tools and raw materials were noted to allow a picture of trading enterprises and domestic manufacture to be built. Items relating to domestic production associated with women were recorded in two different ways. Spinning and carding equipment were recorded in the same way as other discrete items. Others were recorded simply as the presence of cooking, baking, brewing, dairying and salting equipment. Although it might have been better to have followed the former approach for all of these items, this approach was taken because it was not intended to examine the variation in the very wide range of types of implement in any detail. Additional items have been noted where they may be used as an index of wealth or status (for instance plate of gold or silver) or other attributes (such as the possession of books).

Rooms mentioned in the documents were also recorded with a view to integrating analysis of the type undertaken by several historical archaeologists in regard to the social implications of the use of space [Johnson, 1986; Priestley, 1982]. Although at an early stage this work seemed possible, it later became clear that time constraints would not permit such an analysis. Therefore locational information was limited to crops in order to distinguish growing from store and different types of storage.

The information was arranged in three tables of a relational database. As with the wills a simple structure was chosen to contain all items of information of interest to the research questions. The first table contains general information about the inventory and details of the deceased person:

inventory number
archive reference
date of inventory
total value and sum of debts
forename, surname, age, sex, description and marital status of deceased
identity number (if known in person table)
number of surviving children of deceased

The second table contains the details of items recorded in the inventory. The problem of varying amounts of detail, particularly found with animals, might be overcome by using a hierarchical coding system. Such a system might for example have a code for animals, say *AN*, a subcode for cattle, say *ct*, and a further subcode for types of cattle, say *1* for oxen. So 'oxen' would become *ANct1*. However, highly coded data is confusing to the user. It requires long and complex coding tables, is difficult to check and not immediately understandable or memorable. Therefore three descriptive fields have been used; class, an overall grouping, type, a more specific description, and subtype, a further description relating to this particular entry. For the example above class would be 'cattle', type would be 'oxen' and no further detail would be needed. This solution is easily comprehensible to the user. Neither system is able to cope well with the situation where only one count is given for more than one type of item, such as 'a cow and 2 calves'. A similar problem is posed by several items of different types being given the same value, as in 'a cow, 2 horses £12'. Where number or value cannot be attached to items, or groups of items, distinct at the type level, neither attribute has been recorded. This is by no means a perfect solution, but the task of finding an ideal method of representing this type of data is an extremely complex one [Overton, 1987], and solutions might vary considerably according to the needs of the research. As inventory data is not the primary source of information in this project, a simple solution suited to the needs of likely queries was thought best.

The fields in the items table were as follows:

- inventory number
- class of item (eg. cattle, crops, wool)
- type of item (eg. oxen, wheat, trestle)
- subtype of item (extra description)
- location number for item (in house, barn, fields, etc)
- quantity of item
- unit of measurement (eg. acres, bushels)
- value of item

The third table is used to hold details of the locations of items referred to in the inventory:

- inventory number
- name of location
- location number
- number of beds in location
- number of hearths in location

Ecclesiastical Court Records

There are several types of record relating to the business of the ecclesiastical courts. The most useful for the purposes of this project would be the *Detecta and Comperta*, which deal with presentments for various offences (a little like criminal prosecutions), the *general court Act Books* covering instance judgements (covering cases similar to those in *Detecta* books and also others more like common law suits), and finally *Deposition Books* which contain statements made by witnesses, usually in slander, testamentary and marriage disputes. Due to time constraints it was decided that only the first of these types of source would be thoroughly examined. The *Detecta* books are perhaps the most legible and most easily understood of a class of documents that are generally seen as difficult to use. A few depositions were also transcribed separately.

Throughout most of the period (until 1638) the Archdeaconry Court of Canterbury diocese had jurisdiction over the inhabitants of Biddenden and most of the surrounding parishes as regarded certain religious and moral offences laid down in articles of enquiry. These articles were questions concerning the parish, its church, its incumbent and the behaviour of its inhabitants. Copies of the current articles were sent out to the two parish churchwardens for the year who were then supposed to present at six monthly courts, the names of those who had offended against these articles. The accusations could be made to the

churchwardens by other parishioners and could be based on observation or on rumour, gossip and suspicion. Most common are those involving non-attendance at church or communion service and sexual misdemeanours. Others often found are drunkenness, swearing, scolding, unconfoming behaviour in church, working on Sunday and playing during service time. Occasionally more serious crimes such as sedition and witchcraft might be dealt with, sometimes then progressing to the civil courts.

Punishments meted out by these courts were excommunication and penance. The former was general for non-appearance of the defendants, perhaps more a state of being than a punishment *per se*. The latter meant public admission of one's sin in church on Sunday or in the street, asking forgiveness of God and one's neighbours wearing only a white sheet. This was punishment by public shaming, a shame which some, at least, felt enough to ask to have it commuted to a fine if possible, claiming that it would destroy their credit and so lead to ruin.

The courts were, perhaps understandably, not popular with some of the persons presented. William Kettle of Biddenden in 1598 said "...that he would not be brought unto this baudie courte..." [EcCX.4.3, f 101]. The term 'bawdy court' is frequently found as an derogatory term for these courts throughout England at this time and refers to the high percentage of cases dealing with moral offences particularly of a sexual nature. Other denigrations of the courts were more specific and targeted religious attitudes and, most commonly, financial aspects. Francis Fawcett of Smarden in 1607 called the Canterbury court "...a Courte of all abomination..." where "...they can Curse and blesse for money..." and also accused the court of "papistrie" [EcCX4.11, f 143].

The punishments available to the courts were not comparable to the physical sanctions of the civil courts but the public shame of penance and fines levied to avoid it made them unpopular. There may also have been a different evaluation of the offences by those presented which also would provoke hostility. Some historians have used the type of punishment available and the way that excommunication was sometimes ignored for long periods to argue that the courts were weak [Wrightson, 1982]. This however, is linked to a view that the courts were used only to impose godly discipline and that ceremonies of shaming have little social importance.

It has been intended that this type of information would be used in the research to provide context for the interpretation of other results. It is not enough to know what people did, uniquely or in general, without some attempt to explain the concepts and attitudes that provide the subtext of such actions. In order to enlarge the scope of this type of data, all cases involving Biddenden people were abstracted, plus cases illuminating certain topics such as age, behaviour towards kin or neighbours, marriage, religious attitudes, work practices, migration and womens' lives generally, which originated in the surrounding parishes making up the local Deanery.

Using the court records

There are many problems surrounding the use of this type of information. These have however, often been exaggerated due to particular conceptions of the nature of historical investigation. Ecclesiastical records were hardly used at all until fairly recently, except for providing references to church practices in the study of the reformation. Their main subject matters were not the stuff of mainstream history. They were not about national politics and were not easily quantified. More recently with the development of interest in *mentalités* and in anthropologically oriented historical research, such records have been examined more frequently. Their use is still however not common.

One criticism is that as a source they are believed not to be objective. This as Carlo Ginzburg has pointed out is hardly unique among documents

The fact that a source is not "objective" (for that matter, neither is an inventory) does not mean that it is useless [Ginzburg, 1980, xvii].

The purpose of using such a source is not related to whether what is said did actually happen to certain people on a certain day, and so forth. It is, rather, concerned with the way that things are said and the way that situations are viewed. Presentments for an offence are not the same as committing an offence but they do reflect a social process; accusation and the grounds of accusation. Allegation or defence might be a pack of lies but presumably they were constructed so as to be believable by those to whom they were addressed.

A further criticism is the 'anecdotal' nature of such sources. This did not fit well with the quantitative zeal of many historians at the time when court records began to be used. When he wrote his famous work on magic and religion in early modern England, Keith Thomas apologised for the way in which he had used information, much of which derives from church court records. He looked forward to a time when "...judicial records of the time will one day be systematically quantified..." allowing a "...genuinely scientific method of measuring changes in the thinking of past generations.." [Thomas, 1973, x]. Since that time it has been increasingly recognised that measurement, even of those things that can be measured, is not a panacea for all ills. Though some degree of quantitative investigation using court archives is productive, this must be done alongside research of a more hermeneutic nature. What are being sought from these documents are ideas and attitudes which articulate with those seen elsewhere, either through similarity or through contradiction. These are not just found in one case but through examining several as the form of these records

...involves concrete language of symbolic content, which constantly reiterates central aspects of social relationships [Burke, 1986, 3].

The most relevant problem with court records is that they were not the creation of the people who are accusing or defending. Statements are often the words of public notaries and court officials, written down by clerks. As Sabean notes

Whatever sources there are for studying peasant culture implicate in one way or another those who to some extent exercised domination over the peasant [ibid, 2].

The presentments, however, may relate more closely to the original documents prepared by local churchwardens who were, at least in Biddenden, for the most part men of moderate literacy. The gap between the ideas of the parish and those of the court officials can often be exaggerated in any case. In many cases as much difference in interpretation may have existed between presenters and those being presented as between both these groups and officials. Sabean sees the situation as one where a remote elite is trying to impose its views upon an unwilling peasantry. In the Weald, parish elites appear to have taken an active part in accusing fellow residents, including each other, using the courts rather than being in perpetual conflict with and subjection to them. This suggests that enough common ground in terms of ideology could exist to allow such movement between identification and conflict. The texts of the courts are composites, the needs of the accusers and accused, presented through appropriate language for the situation, but in terms acceptable to all parties.

The records of cases brought before the ecclesiastical courts were transcribed directly onto a portable computer at the archives office. In the absence of any sophisticated full text retrieval system, I have used various UNIX tools to examine the information in these text files (one per manuscript volume). One such useful program is *sfind*, part of the humanities toolkit *hum*, which can search for sentences, paragraphs, or other separated blocks of text containing a specified string of characters or regular expression. This may contain wildcards or special characters standing for other ordinary letters or numbers, helping to overcome the fact that the text is mostly in the English of the period. A great deal can be done with such simple programs, although more complex operations such as logical combinations of strings are more difficult. Although similar tasks can be achieved using standard UNIX utilities such as *awk*, and to a much lesser extent, *grep*, *sfind* is particularly suitable for this task as it is simple to use and was designed specifically for use with text.

I have found it convenient to add keywords of my own, clearly distinguished from the original text, which may help with retrieval by topic. A case may concern marriage but not contain the term, while retrieval on wife or husband may in some contexts find too much non relevant material, so addition of the keyword 'marriage' would help to find relevant items. Keywords in English are also useful where the text is in Latin. Such a method is not totally ideal, but as retrieval with this simple tool is on any pattern of characters in the file, it operates on both words in the text and keywords. The perceived use of the information here is to provide examples which I might use to explore age and gender relations, working, relations with kin, neighbours and those in authority.

To further enhance this aspect of the court records, a concordance was made of the transcriptions using the Oxford Concordance Program (OCP). Although the *hum* package includes a concordance generator with similar basic capabilities, this program failed to handle large (greater than about 200KB) files. Common English and Latin words as well as first names of persons were excluded, but the task was made more than usually problematic by the variations in contemporary spelling. The concordance has proved useful in examining the ways in which terms are used and as an index from which *sfind* queries can be made.

One disadvantage of the version of OCP used is that the facility available in previous versions allowing the length in characters of a context to be specified, has been dropped. It is now only possible to specify a context by means of punctuation or other marking characters. This is definitely a step backward as 'widowed' words on the last line of a paragraph appear with no context in the concordance. Also, words beginning a sentence at the end of a line, or ending a sentence at the start of a line appear with part of the previous or following sentence, rather than in the context of the sentence in which they occur.

A further use of the information from these courts would be to examine the appearances of individuals in the context of other information known about them. Questions possible here include how selective do churchwardens appear to be about who was reported, what sort of people failed to go to church or committed sexual 'incontinence' and whether they are definable as a group in any other way; whether accusations represent attempts to suppress popular disorder or did they provide an arena in which quarrels might be pursued. An index to the cases relating to Biddenden and Biddenden people was constructed. Each case was given a unique identity number and the rough date of the case (this is not always easy to determine), the nature of the offence and the names of all persons involved was recorded. Each record (one per line) contained one of the above pieces of information about a case, preceded by the case number and a marker identifying the type of information. The identifiers were D for date, C for offence, A for accused person, P for person standing as purgator, I for a person directly involved but not accused, E for a person otherwise associated and X for a named informant. This was used to examine the frequency of types of cases over time and who was involved in which cases, when, in what capacity, with whom and how often individuals and names occurred.

During the later stages of research, the importance of this source became very apparent. I had seriously underestimated this. Far from just providing 'context' for other information, it was the court material that was adding most towards understanding relations in the early modern Weald and suggesting some of the more interesting questions and possible interpretations. Had this been known at an earlier stage of the research, this type of information would have been given a more central place in the research.

Other sources

A number of documents other than those detailed above were consulted during this research. In particular the *libri clerici*, another set of church court records, and the Biddenden churchwardens' accounts [KAO:P26/5/1] have proved useful. The former give the names of clergy and parish officers at each of the bi-annual visitations at which presentments were made. The accounts give the names of churchwardens, details of parish expenditure and the names of the persons who passed the accounts each year. Both sources together allow a list of parish churchwardens to be built up from 1566 to 1660 with very few gaps. A complete list of constables for the local hundred (see chapter 3) and a less complete list of sidesmen could also be made. Through comparison of lists of parish officers, the names of those signing accounts and other information about these individuals from the sources mentioned above, the existence and character of a local elite could be understood. As the accounts detailed parish expenditure, the amount of patronage which churchwardens might exercise could be examined. Accounts made for probate administrators, detailing the debts which the deceased owed and sometimes the distribution of the surplus of the value of the inventory were consulted on a few occasions.

Lists made for national taxation were also examined but proved to be of little value (see chapter 3). Published information from marriage licences was incorporated into the database of persons and relationships at a later stage but has been excluded from demographic analysis [Cowper, 1894]. The place of marriage attribute was used to denote that this information was not from the Biddenden registers. Similarly the exhaustive work of Dr. de Launay on other Wealden parish registers before 1601 has been incorporated for the purposes of examining migration and life histories, though not for demographic purposes [de Launay, 1986].

Because a portable computer was not available for much of this project, sources such as the churchwarden's accounts and probate administrators' accounts were not entered onto a computer. They have, however, been useful in providing specific extra information in some areas. Were the texts to be available as computer files, more could probably have been done with them. Insights from de Launay's edition of life events from local registers suggested possibilities for further work looking at smaller groups over several parishes.

Summary

Three types of document were used in the computer aided study. The parish registers represent a fairly well structured source. The information existed in a roughly tabular form and was easily adapted to approaches based on indexed files or a relational database management system. It therefore has similarities with information such as censuses and genealogies which might be recorded in a fieldwork situation. Wills and the probate inventories are more complex. The original documents take the form of text. Inventories may look tabulated but the reality is not so clear. Several approaches may be taken. The machine extraction method would have been wasteful with wills, as much of the text involves long legal formulae to express a fairly simple point. Such a method may have worked better with inventories but as I was only interested in certain types of information and was not able to transcribe the sources directly onto a computer, was not suitable in this case. Extraction of information by manual methods was therefore chosen. Two simple databases were built to serve the needs of this project.

The court records were used as a purely textual source, even though they are in some ways structured (e.g. dates, persons involved). An index of persons, dates and types of offences was compiled for the Bid-denden cases and a concordance made to help with identifying themes and finding information for all cases. The use of very simple text retrieval tools, such as *sfnd* proved to be very valuable.

The central piece of software was the model building program, used mainly with parish register data but also with prisers of inventories and other data sets. Retrieval of information with this program proved to be very fast, and was useful not only in terms of building a model of people and relationships but in *ad hoc* queries using that model. Various modifications and improvements are needed to the software but it has worked well during the project and has proved invaluable. The program for building more complex models, which re-uses much of the code from the other software, has also been of great use. With this I was able to extract demographic statistics, comparable with other studies, and to have easily accessible descriptions of a persons demographic life course to provide context for other information.

The use of a graphical medium, such as that provided by *gnet*, for the examination of certain types of structured data does appear to have great potential for exploring structure as well as for producing illustrations. Because much of the development of the current version ran concurrently with this research (which itself provided one of several testbeds), I have not exploited the capabilities of *gnet* to its full present capacity.

The database of wills and inventories has been adequate for the purposes of this research, but further investigation would require a different approach especially with wills. A more complex model would, however, require more time to implement because the detail recorded for each will would be much

greater.

The direct transcription of the text of the court records onto a portable micro- computer proved of great benefit. Such a method would also be advantageous with wills, although here abstracts would be advisable rather than complete transcription because of the nature of the source. Other documents which were consulted but did not form a major resource for this project, could also be transcribed or abstracted in this way with benefit. The concordance was useful in many cases as an index and for providing insights into the use of words, but the form of the OCP output was unsatisfactory. From experience, *kwic* in the *hum* toolkit provided more useful results, but could not manage the large quantity of text involved. The person, date and case summary indicated that examination of the structural aspects of court records could also prove useful.

The less well structured records gave indications of the type of approaches which might be useful for dealing with field notes. Information retrieval by means of word searches, especially if keywords can be added to text, is one way in which such information can be accessed in a productive manner. Extractive methods may also be of benefit, but those involving insertion of markers could make text unreadable for the type of retrieval described above. Were such an approach to be used, it would not be very difficult to devise a system whereby markers could be filtered out where desired.

3: Biddenden

Biddenden was an ecclesiastical parish of about 2880 hectares in south central Kent, England in a formerly wooded area known as the Weald. Today it is a rural civil parish centered on a village and part of a wealthy outer commuter belt for London. In the early modern period, it was a centre of cloth making in the district. This manufacture was carried out alongside subsistence agriculture and raising livestock for sale. Settlement is and was partly concentrated in a village near to the church and partly in outlying farms and hamlets.

This chapter examines a number of aspects of Biddenden society during the later sixteenth and seventeenth centuries. Firstly the sparse information regarding population levels is examined and then demographic history is looked at in terms of general movements and particular measures. Changes and differences related to status and occupations are discussed. Secondly the nature of farming, manufacture, work and landholding are examined along with power relations and status. A brief discussion of religion in the parish and the Weald follows. Finally the issue of staying in the parish and migrating is looked at. The geography and timing of movements are examined and the different types of migration found are discussed with reference to anthropological work in this area. Staying in Biddenden is examined along with an attempt to understand how far the concept of belonging might be relevant.

Population estimates

There are no exact figures for the population of Biddenden for this period, the earliest being that of 1151 persons in 214 families recorded in the 1801 census. By this time, however, such great changes had taken place in the parish as to make it totally uncomparable. Therefore only estimates can be used, based on counts of 'families' and communicants in various documents.

The ecclesiastical census of 1569 gives the figures of 180 *domicilia* (households) and 545 communicants. Communicants means those persons capable of receiving communion, which meant those of 16 years and above. It is usually estimated that between 60% and 65% of the population in early modern England would be of this age. Using the number of communicants for 1569 this would give a population of between 838 and 910 persons. Dividing these figures by the number of 'families', 180, would give a mean size of between 4.65 and 5.06 persons for a 'family' and using the raw figures 3.03 communicants per 'family'. Assuming that what is meant by the term *domicilia* is persons living under the authority of a head of household including all resident servants, the figures are similar to Laslett's mean for the period 1564-1649 of 5.07 [Laslett, 1972]. It must be noted however that Laslett's mean was calculated from only



five listings of households (two rural and three urban), the averages for each case ranging from 4.05 to 5.62. The Biddenden figures are somewhat lower than the mean of 5.3 calculated for the nearby parish of Staplehurst, from a 1563 listing of communicants, by Michael Zell [Zell, 1985a]. Calculations using a low estimate of the 1569 population of several Wealden parishes (communicants = 65%), indicate that a wide range of household size might be expected (table 3.1). Such elements as concentration of settlement, the existence of a large major gentry household and differences in economic activity may explain such differences. Examining a Cranbrook communicants list of 1608, Zell finds that the 'town' had a smaller number of communicants per household than the hamlets and farms [Zell, 1985a].

For most of the Wealden parishes in the Diocese of Canterbury earlier estimates of communicants, and in some cases *familie* are given in the Archbishops visitation book of 1557 [Sharp, 1950]. The term *familie* probably translates to roughly the same as *domicilia* — households. The figures appear to be more rounded than those given for 1569 and are therefore perhaps more likely to be rough estimates. The apparent accuracy of the 1569 figures may however be deceptive. Zell prefers the 1557 estimates to those made in a further census of 1563 [Zell, 1983]. The Biddenden figure for 1557 is 600 communicants in 160 households. This would mean between 925 and 1000 persons, giving the household size between 5.78 and 6.25. These figures would appear very large even in comparison to the high end of Laslett's range. The proportion of households to communicants is equally large for all parishes where figures are given in 1557. This could be due to vague estimates, a different basis of estimation, or perhaps to the effects of periods of high mortality in the Weald in the intervening years (in particular 1557-9 from burial evidence). Because of the discrepancy of the figures, estimates of population have been calculated for 1557 and, where possible, 1569 for Biddenden and nearby Wealden parishes using scaling factors of both 60% and 65%. The lowest and highest figures obtained along with the mean for all totals are given here. Household sizes have been calculated, where possible, using the lower figures for each date.

	No of Communicants		No of Households		Estimated Population			Min HH size	
	1557	1569	1557	1569	Low	High	Mean	1557	1569
	Biddenden	600	545	160	180	840	1000	919	5.8
Benenden	600	547	-	148	840	1000	919	-	5.7
Bethersden	400	352	110	116	540	650	598	5.5	4.7
Cranbrook	1500	1908	-	384	2300	3180	2728	-	7.6
Frittenden	240	256	-	67	370	430	398	-	5.8
Goudhurst	900	759	-	205	1170	1500	1331	-	5.7
Halden	260	226	60	63	380	430	390	6.7	5.6
Hawkhurst	800	680	-	190	1050	1330	1185	-	5.5
Headcorn	400	352	110	109	540	650	598	5.5	4.9
Marden	500	420	-	126	650	830	738	-	5.2
Rolvenden	-	360	550	-	103	600	575	-	5.3
Smarden	400	305	470	-	66	650	495	-	7.1
Staplehurst	400	440	-	120	610	730	668	-	5.7
Tenterden	800	586	200	194	900	1330	1110	6.2	4.6

Table 3.1: Number of communicants, population estimates and mean household size for Biddenden and 13 other Wealden parishes based on the 1557 and 1569 counts. Number of households is not given for all parishes in 1557.

At the end of the period studied a figure of 120 'families' is given in the 1663 description of parishes in the Diocese of Canterbury, although no figure is given for number of communicants. Using the two mean family size figures calculated above for 1569 this would give between 558 and 608 persons as the population of the parish. A considerable decrease in population seems to be indicated, something in the region of two-thirds as many families as in 1569. Even with a somewhat higher number of persons per family this would still represent a decrease. Although the 1569 figure may be more trustworthy as coming from a census rather than being an estimate, the later figure probably does indicate some decrease (see below).

Further figures are available from a petition made by "...the inhabitants of Biddenden" to parliament in 1641 [Larking, 1862, 181-2] and from the *Compton Census*, a counting of communicants, papists and other non-conformists in 1674 [Whiteman, 1986]. These however are very suspect. The first gives "...about 1200..." communicants, probably a deliberate overestimate to support the case for a new minister being appointed to the parish. The figure may more closely reflect total population levels some years earlier.

The second, although from an official ecclesiastical count, is clearly a very rough guess from the wording of the original return by the rector, Moses Lee. He states "...for the number of inhabitants in the parish aforesaid I conceive there cannot be lesse then 7 hundred..." [CCL:H/Z/26]. This is taken by Whiteman as an example of "...what appear to be casual estimates..." and to be done "...in a slipshod or feckless way" [Whiteman, 1986, 6, 13]. Hasted, the Kent historian [Hasted, 1778-99] gives a figure of 400 communicant in 1640 but from what source is not known. Using the same two scaling factors as above, this would indicate between 615 and 667 as a population and is more in line with other mid-seventeenth century estimates than the petition figure.

Other sources often used for population estimates in England are problematic for Kent. These are the earlier sixteenth century taxation records from the reign of Henry VIII and the Hearth Tax assessments (starting in 1662). The Henrican taxations were on land, goods or wages and therefore probably allow an estimate of adult males. The Hearth Tax at best gives a list of all householders and the number of hearths for which they were assessed, including those who were determined to be non-chargeable because of poverty, and so may be used for an estimate of number of households. For most parts of England the listings for these taxes are by parish, within hundreds (the next larger administrative division) but in Kent hundreds are divided into 'boroughs' rather than parishes and there is no direct correspondence between the two small divisions. Biddenden parish for the most part corresponds to the hundred of Barkley, but a part of it is in the borough of Smithsditch in Cranbrook hundred and Barkley Hundred does contain small parts of other parishes. Because of this change may be measured between the two taxes and variation within them examined, but there is no clear comparability with the figures from ecclesiastical sources given above. Therefore they are of limited use in estimating parish populations in Kent.

Aggregate analysis of register data

It was mentioned above that the population of Biddenden probably increased after the 1560s before falling again to the 550-700 persons of the mid-seventeenth century. This indication is derived from a comparison of the movements of baptisms and fertility rates. The average number of baptisms per year in the decade following 1566 is 32, whereas that for the decade 1601-1610 is 39.8. Because as Schofield has stated a constant birth rate cannot be assumed [Schofield, 1970] population cannot be derived from raw baptisms. However, the fertility rate 1595-1609 was lower (275 births per 1000 women years) than that of 1566-75 (310 births) indicating that those baptisms would have come from a larger number of mothers which suggests a larger number of reproducing households as almost all of these children were legitimate. But it is unlikely that the population of Biddenden increased to the same extent as did that of Kent as a whole (probably by 52%, Zell, 1985a).

Zell estimates that any increase in population in the Weald during the late sixteenth century was less than might be expected from natural increase as seen in baptisms less burials. Natural increase in Biddenden from 1570-1600 was +360 which would be between 40% and 43% of the 1569 population estimates. This would result in a population of between 1200 and 1270 approximating to about 250 households. It is however unlikely that all of the people indicated by this natural increase would have stayed in Biddenden.

Overall the number of baptisms recorded increased through the 1570s and 1580s to again reach the levels of the 1540s and early 1550s. A further increase took place from just before 1620 lasting until the early 1630s. After this there is a steady decline which is probably increasingly exacerbated by under-registration during the 1640s and 1650s (fig 3.1). However the baptisms remain fairly steady at the 1650s level until the end of the century. It is probable (see below) that much of the decline was due to continued under-registration by separatists rather than any real population change.

Burials of course are much more erratic than baptisms. In general there are more baptisms than burials before 1610 and more burials than baptisms thereafter (fig 3.1). The mortality crisis of the early 1550s, was probably due to a severe influenza epidemic [Clark, 1977]. This seems to have been followed by further high death rates in 1557-8, seen elsewhere in the Weald, but masked in Biddenden by, possibly connected, poor registration. After this there are no clear periods of high mortality until 1586 and 1588 when monthly burials more than doubled in February and March. Wrigley and Schofield attribute this crisis to poor harvests but indicate that the south-east, including the Weald, seem to have been little affected in general [Wrigley, 1981].

Biddenden saw higher mortality again in late 1591 and in 1592 but this appears to have been less severe than in the 1580s. In general Biddenden seems to have been relatively unaffected by crises in the

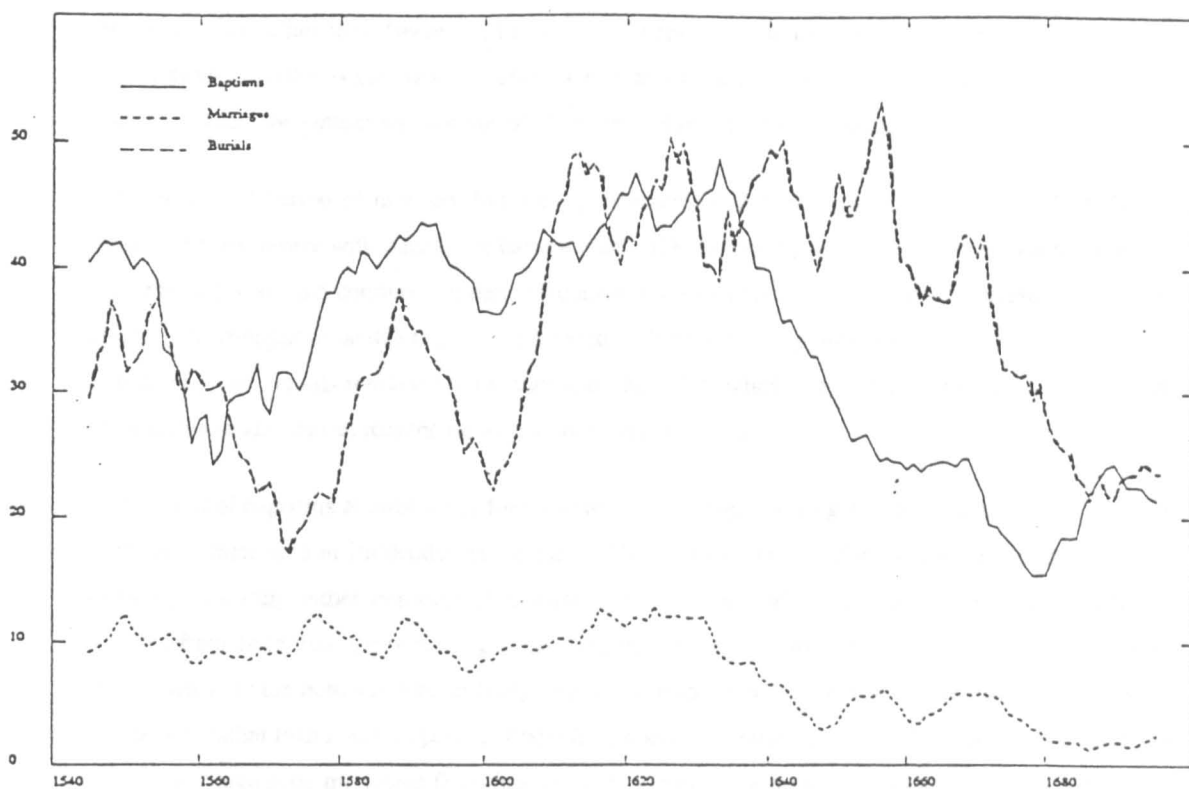


Figure 3.1: Biddenden baptisms, marriages and burials: nine year moving averages by harvest year 1541-1699. Baptisms are expressed as conceptions by harvest year.

mid 1590s in contrast to the national trend. The literal decimation of Cranbrook by plague in 1597-8 was not repeated in Biddenden [Zell, 1985a]. The national crises of this period are usually said to have been caused by poor harvests leading to malnutrition and so to a high risk of infection. Clark quotes a contemporary ballad about the efforts of a poor woman of the Weald to save herself and her children from starvation [Clark, 1977]. This was printed in 1594 and probably refers to the 1591-2 crisis which seems to have hit several places in the Weald harder than the later dearth [Zell, 1985a]. The 1590s were still clearly hard times however.

The worst years for Biddenden were yet to come. From 1611 the number of burials increased. The annual harvest year average for the decade 1610-19 was 42% higher than that for the previous decade. Previously high mortality had been the result of short crises but from 1609 until 1616 burials exceeded

baptisms for all but two years when the difference was very small. The number of baptisms fell slightly. According to national data presented by Wrigley and Schofield there was no general crisis at this time [Wrigley, 1981] other than January 1616. After this baptisms rose and burials fell for a short period but further high mortality began again in 1624 lasting this time until 1628, with burials always exceeding baptisms. Again the pattern was not one of short term crises but of sustained higher burials.

Another brief period of recovery followed, punctuated by the crisis harvest year 1630-31. A further crisis, this time severe with burials for harvest year 1638-39 totaling more than half the normal average. Baptisms fell again and continued in deficit for most of the century. From this point it becomes difficult to separate under-registration due to growing separatism from actual population decline. Both were probably contributory, but burials remained quite high until the 1670s which may indicate that much of the short-fall was due to ideological reasons rather than demographic ones.

The trend of baptisms at most times followed that of marriages, as might be expected (fig 3.1). The low numbers of marriages in Biddenden in the early 1580s and mid to late 1590s are greater than any fall in baptisms indicating either delaying of marriage or emigration of young persons. Few marriages are recorded from 1645 until the beginning of civil registration in 1653 and a further decline takes place after 1657. Thereafter the numbers remain fairly steady. As with baptisms the reasons are probably connected with beliefs rather than a lack of people. Apart from non-conformism, this period also saw a growth in the number of clandestine marriages [Houlbrooke, 1984], creating a number of alternatives to church marriage.

The seasonal pattern of baptisms for most of the period follows that found in Wrigley and Schofield's national data and common throughout north-west Europe at this time. The highest number of baptisms tend to occur February to April indicating summer conceptions. The lowest are June to August (conception in autumn and early winter). This may appear to relate to the agricultural cycle but similar patterns have been found in London [Wrigley, 1981] and the Biddenden data follows the national pattern despite the late Wealden harvest (late August). It has been pointed out that although few summer births may have been related to women's harvest work, summer conceptions led to birth in a cold, damp season creating a greater health risk. The March high seems to back up the English tradition (found in literature and popular songs) which relates haymaking to sexual activity, as this implies June conceptions.

As with baptisms a high proportion of burials also fall in the spring and this pattern again is common to England and north-west Europe [Wrigley, 1981]. That this period is one of low mortality in Mediterranean Europe which seems to have a summer high shows the relationship of climate to disease. The low is usually in summer, particularly July, but before 1610 there is also another low in September or October which appears to be the converse of the national picture. Such variation may be due to local variations in climate. Nutrition is probably not important in short term variation. The dearth related mortality of the

1590s is reflected in a greater spread of the high number of deaths than the crises of 1586 and 1588 which show an upsurge of deaths in February and are probably due to epidemics.

Marriages also show seasonal variation. Pre-Reformation ecclesiastical prohibitions for Lent, Rogation and Advent seem to have become part of secular culture as these periods are marked by a low number of weddings, though to different degrees. Lent avoidance was the strongest with only one couple marrying in March between 1540 and 1600. From 1600 until 1654 a further nine marriages took place in March, a small proportion of weddings and these for the most part took place before Ash Wednesday or after an early Easter. At this point, with civil ceremonies, March became one of the most popular months, possibly in a symbolic act of defiance to practices associated with the established church. March marriages were however avoided in the 1660s and 1670s. The Rogation ban centering on May, was not strictly adhered to and May was one of the most popular months for weddings from 1540 onwards. December was mostly avoided, only small numbers of weddings taking place then through the period, but was more popular than March. A further, wholly secular, low occurred in summer, particularly in August, presumably because harvest time was too busy workwise for weddings.

The timing of weddings was also connected to the times of year at which servants renewed annual contracts [Wrigley, 1981]. This was because servants would have to work out their year before marrying. Renewal took place at hiring fairs (Mayday, Michaelmas and Martinmas [Kussmaul, 1981]) and Wrigley and Schofield have discussed the marriage peaks occurring at these times. The Biddenden data, although having many marriages in early summer, tends towards an October peak. The pattern observed matches that given by the above authors for wood-pasture farming areas in general, 44% April-July, 52% October-November. This may have meant that servants in such areas were hired at two different times.

To study population movement further, several demographic rates must be examined in more detail. These will be considered in the light of similar studies and an attempt to build a rough model of demographic trends will be made.

Demography

Crenshaw and others have stated that age at first marriage is one of the most significant indicators of demographic trends given a fertility level not greatly affected by contraception [Crenshaw, 1989]. A woman who marries at age 20 will have 5 years more of her reproductive period within her married life than a woman marrying at 25. She therefore has the potential to produce more children than the latter woman, (were they both to live throughout their reproductive years). The figure may also indicate at what age it was possible for most people to marry, given the need to inherit, to learn skills and to accumulate capital, as well as cultural expectations. Much attention has been drawn to the connection between lower ages of marriage and the spread of rural manufacturing [Levine, 1976]. In Biddenden cloth manufacture was already well established by the time parochial registration began and the period observed was one in which stagnation and decline, took place.

The mean age at first marriage for the whole period is 24 for women and 27 for men. The male age is roughly comparable with Wrigley's figure for Colyton during a similar period, but the Biddenden figure for women is much lower, even if the very high figure for the 1650s in Colyton are ignored. The Biddenden figures are also lower for women than Wrigley and Schofield's sample of twelve English parishes 1600-49 (26) but more comparable for men (28). Levine gives a mean age for women of 24.5 for Terling, Essex 1550-1624, a place which he describes as showing "...precocious modernity..." in economic structure [Levine, 1977, 120], while 28.5 for Shepsbed, Leics in the early seventeenth century is said to belong to "...the classic English peasant society" [Levine, 1987, 76]. Biddenden figures clearly place it much closer to Terling, although the economic aspects of life were different in the two places. Terling contained a high proportion of labourers and is seen by Levine as more 'proletarian' than Shepsbed, and so more 'modern' [*ibid*].

Biddenden contained few agricultural labourers due to pastoral farming but a large proportion of the population would have gained much of their livelihood through work associated with cloth manufacture. Many of these could be seen as proto-industrial and general labourers, but a clear definition in such terms is inadequate to describe the complex work practices (see below). The Terling figure for men in the same period is 25.9 years, lower than for Biddenden.

In Biddenden mean age at first marriage for women before 1610 is 23 rising to 25 after that date. For men the mean ages are 26 and 27.5 respectively. Marriages were taking place somewhat later on average as time went on. Figures for Biddenden women are higher than those given by Flandrin for French parishes throughout the sixteenth and early seventeenth centuries although the average age of sixteenth century Biddenden brides was low by English standards [Flandrin, 1979]. Zell gives means for the sixteenth century for Brenchley and Horsmonden of women 23.7 and men 25.3, and for Staplehurst, women 23.5

and men 26.3. These are roughly comparable with Biddenden and come from nearby parishes with similar economic practises.

Examination by fifteen year cohorts confirms the trend seen between the sixteenth and seventeenth centuries but allows the change to be more precisely located.

COHORT	Men (no)	Women (no)
1566-1579	24.9 (25)	22.5 (18)
1580-1594	26.1 (22)	21.6 (38)
1595-1609	26.8 (35)	24.0 (37)
1610-1624	26.9 (50)	25.0 (54)
1625-1639	27.6 (28)	26.2 (61)
1640-1655	28.7 (20)	23.6 (20)

Table 3.2: Mean age at first marriage for men and women by marriage cohort.

The sixteenth century ages are lowered somewhat by 'edge effect' as marriages of persons aged over 30 years are less likely to be known in the 1560s, 1570s and 1580s due to the nature of the sample. However an attempt has been made to trace all partners in earlier marriages back to a baptism between 1540 and 1566, thereby reducing this problem. To compensate for this, percentages for the 'missing years' were calculated for the 1595-1609 cohort and the earlier figures adjusted accordingly. This gave 27.0 for the 1566 cohort and 26.9 for the 1580 cohort for males, suggesting no real change from 1566 until 1625. For women the adjusted figures are 24.2 for the 1566 cohort and 22.0 for the 1580 cohort so that the early marriages of women in the later sixteenth century are still clear. Womens' ages rise during the thirty years 1610-1639, a period noted above as one of high mortality implying difficult times, and then fall back again. Male ages rise also but not until 1625-39 and then continue to rise in contrast to the women. This implies that the crises of the 1610s and 1620s had some impact on marriage formation, but that the effect differed for men and women.

Despite adjustment, the 1580 cohort continues to indicate that women married early at this time. From decadal cohort figures for the 1580s and 1590s for women marrying under 25 years, the proportion marrying under 20 was higher (65%) in the 1580s than in the 1590s (32%) which more closely mirrored the 1570s (23%). Although 'edge effect' cannot be discounted, its significance is less for women below 25 at this time as most will have been traced to a baptism. Therefore the drop seems to be located in the 1580s,

a fairly prosperous period, again indicating that marriage age was related to economic factors but that men and women were differently affected. Levine points to similar differences between changes in marriage age for men and women in seventeenth century Colyton, relating this to alteration in the opportunities for women in manufacturing [Levine, 1977]. Expansion in cloth manufacture would create more work in spinning for women.

As well as early or late marriage, another important component of early-modern population movement was fertility. It was once thought that before the nineteenth century, fertility was 'natural', that is unchecked by any practice that might limit the number of children born to a woman during her fertile years [Crenshaw, 1989]. Initial work by Louis Henry in France and Anthony Wrigley in England did much to demolish this idea [Henry, 1958; Wrigley, 1966] and it is now recognised that the combination of marriage age and fertility are the major factors in population change, and of far greater importance than mortality. From this a tendency has come about to refer to the situation as one of 'homeostasis', the adjustment of the causal factors to maintain but not increase population levels. There is a clear element of writing history backwards. Smith bolsters this type of argument by imagining the early modern European village as "...an isolated-enough environment to maintain idiosyncratic demographic norms" [Smith, 1978, 33]. The sins of functionalism, repented by anthropology, are in danger of being visited upon history. To be fair to Smith, however, he does suggest that homeostasis may be an empirical pattern rather than an explanation.

There is little analysis of the reasons behind restricted fertility in the original paper by Wrigley, but Levine has re-examined the Colyton data and suggested possibilities. Levine relates changes in fertility and marriage patterns to the nature of production in four villages and argues for the importance of the demand for labour [Levine, 1977]. Skipp, in an ecological study of the Forest of Arden in the late sixteenth and seventeenth centuries shows the difference in behaviour of wealthier and poor families [Skipp, 1978] and the relationship of population trends to resources which were or could be made available. Both suggest interpretations which are useful in regard to the situation in Biddenden (see below).

Two measures of fertility have been calculated for the Biddenden data. The numbers of cases which can be used are fewer than with marriage calculations because the criteria for selection are more rigorous. The methods are those outlined by Wrigley [Wrigley, 1966].

The intervals between births of children to the same mother are one measure of fertility. The mean interval between births one to four is generally given as it shows the frequency of births in the early and middle years of childbearing but leaves out the more erratic first birth. A rise in the final birth interval has been used to indicate the practising of family limitation [*ibid.*].

Biddenden	<i>1566</i>	<i>1580</i>	<i>1595</i>	<i>1610</i>	<i>1625</i>
<i>no of cases</i>	<i>(17)</i>	<i>(26)</i>	<i>(21)</i>	<i>(22)</i>	<i>(24)</i>
<i>birth 1-4</i>	<i>28.4</i>	<i>29.1</i>	<i>28.3</i>	<i>25.3</i>	<i>24.7</i>
<i>final birth</i>	<i>34.0</i>	<i>30.0</i>	<i>39.7</i>	<i>36.8</i>	<i>27.1</i>
Arden	<i>1575-99</i>	<i>1600-24</i>		<i>1625-49</i>	
<i>birth 1-4</i>	<i>31.9</i>	<i>27.7</i>		<i>27.8</i>	

Table 3.3: Comparative birth interval data (months) for Biddenden and Arden.

The cohort 1640-1654 was not examined due to the very small size of the sample and uncertainties due to under-registration of baptisms. There is no large increase in final birth intervals indicating that deliberate family limitation within marriage was not being practised. As with marriages the main change in earlier births seems to occur in the 1610 cohort, the period covering the first prolonged crisis with the mean interval falling from 28 to 25 months which indicates that children were being born more frequently in this period. A reduction in mean birth interval is also found by Skipp during the Arden crisis years 1600-24 [Skipp, 1978]. As the main reason for the length of birth intervals was the contraceptive effects of breast-feeding, the death of infants would halt this allowing normal fertility to be resumed more rapidly. Agnes, wife of John Goddard bore ten children in the thirteen years between marriage in 1625 and her death in 1638. Her seventh to ninth children all died very soon after birth and the two birth intervals were only fourteen months, twelve months and fifteen months. Similarly rapid replacement is found among the numerous children of Elizabeth and John Fuller (married 1627).

A second measure is age specific marital fertility, which can only be calculated where the mothers age is known, thereby excluding many of the families used for birth interval data. Results are presented by age group of mother for two periods, before and after 1610 and give the number of children born per 1000 women years lived married in that age band. The small numbers involved resulted in erratic figures when examined in the fifteen year cohorts used above. The rate is followed by the total number of years at risk in that age group.

Age group	1566-1609		1610-1639	
15-24	352	(233)	381	(226)
25-29	336	(256)	374	(262)
30-34	306	(242)	268	(254)
35-39	250	(208)	208	(212)
40-44	171	(175)	108	(167)

Table 3.2: Age specific marital fertility. Figures in brackets give total number of years at risk for the age group.

Women below 30 had lower fertility in the pre-crisis period than after 1610. The reverse is true for older women. When plotted as a graph (fig 3.2) the pre-1610 figures produce a convex curve which is generally thought to indicate more or less natural fertility [Skipp, 1978]. The later figures however give a more concave curve which Wrigley considered might indicate family limitation. Skipp, however, has argued that poorly-nourished women may exhibit low fertility and so produce a similar curve [Wrigley, 1966]. The Biddenden birth intervals do not indicate deliberate family limitation and therefore the Skipp hypothesis seems more likely. Between 1580 and 1625 the mean size of closed families (where the burial of at least one partner is recorded) was in the range 3.6 - 3.8 children but after 1625 it fell to 3.0 children. Mean child-bearing span was 12 years in 1595-1609 and rose to 13 years 1610-1624 but fell to only 9 years in 1625-39. The indications are that for some reason the prolonged crisis of the late 1620s had more severe effects than its precursor of 1609-16.

As fertility appears to have been affected by the period of prolonged crises, particularly after 1625, mortality should also be examined. Wrigley has noted the difficulty of estimating adult mortality from parish register data. Because of migration it is very difficult to gain any idea of the numbers of adults in any age group at risk of dying [Wrigley, 1968]. However some idea of general mortality can be gained by calculating infant and child mortality. Wrigley devised fairly simple rules for estimating the number of children from a cohort who remain "in observation" as time progresses and these rules have allowed mortality rates for children aged 0 - 1, 1 - 5 and 5 - 10 to be calculated for Biddenden. Survivors from 1000 births have been given to aid comparison with standard life-tables.

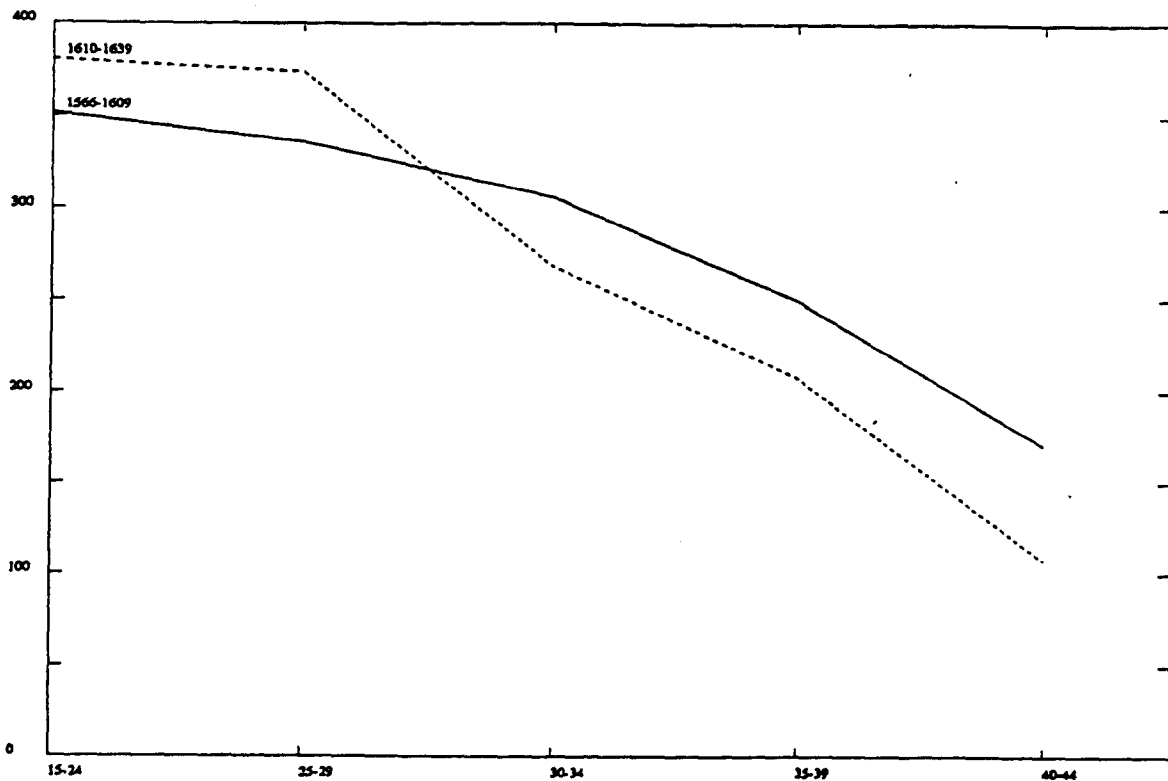


Figure 3.2: Age specific marital fertility 1566-1609 and 1610-1639.

	1566	in obs	buried	rate/1000	survivors
0-1	433	55	127.0	1000	
1-5	373	34	91.2	8730	
5-10	296	12	40.5	7818	
				7413	
1580					
0-1	603	108	179.1	1000	
1-5	484	45	93.0	8209	
5-10	381	12	31.5	7279	

				6964
1595				
0-1	593	105	177.1	1000
1-5	476	31	65.1	8229
5-10	390	20	51.3	7578
				7065
1610				
0-1	631	110	174.3	1000
1-5	507	65	128.2	8257
5-10	381	31	81.4	6975
				6161
1625				
0-1	620	104	167.7	1000
0-5	504	76	150.8	8323
5-10	355	19	53.5	6815
				6280
1640				
0-1	406	37	91.9	1000
1-5	363	51	140.5	9081
5-10	259	11	42.5	7676
				7251

Table 3.5: Child mortality - 15 year cohorts

The two crisis periods yet again stand out, having the lowest child survival rates at age ten although infant mortality is less severe in 1625-1639 than it was in the 1580s. The crisis periods suffer by the combination of high infant mortality matched by high rates at ages 1 to 5, and for the 1610 cohort at ages 5 to 10 also. The very low figure after 1640 for infant mortality is suspect and may be due to poor recording.

The existence of prolonged crises in the 1610s and 1620s is therefore indicated not only by excesses of burials over baptisms but also by reduced fertility among women over 30, high child mortality and closer birth intervals perhaps due to loss of infants. One obvious question is why did older women appear to suffer reduced fertility at this time when younger ones were more fertile?

So far no attempt has been made to discriminate by status or occupation. To allow this, mean age at first marriage was calculated for couples where the husband was given one of four status/occupation descriptions during his life. These four are yeoman, clothier, husbandman and weaver. The figures are given for these groups before and after 1610, the later period corresponding to period of crises.

	Before 1610	
	male	wife
Yeoman	26.4 (14)	19.3 (7)
Clothier	24.6 (16)	20.3 (9)
Weaver	23.4 (7)	22.7 (6)
Husbandman	28.5 (6)	25.2 (6)

	After 1610	
Yeoman	27.4 (14)	23.5 (10)
Clothier	27.5 (18)	23.2 (14)
Weaver	25.6 (7)	23.2 (6)
Husbandman	27.1 (11)	25.0 (8)

Table 3.6: Age at first marriage by occupation and period for men and wives. Number of cases in brackets.

Before 1610, husbandmen appear to have married at a higher age than both the overall mean and those in the other groups. After this date the figure is close to the overall mean and to that of the yeomen and clothiers. In both periods, husbandmen's wives were substantially older than those in the other groups. Like their husbands they were older than the mean before 1610 and close to the mean in the later period. The ages of yeomen and clothier's wives before and after 1610, and those of the weavers in the later period are all lower than the overall means. These low female ages indicate that those not included in the table, such as trades and craftsmen (other than weavers) and labourers, may, like the husbandmen, have married older women.

Apart from weavers, figures for males are all remarkably similar after 1610, with ages close to the overall mean. Weavers are the earliest marrying men in both periods, indicating that such work provided enough income to enable marriage. Before 1610 the greater variation is between both groups in cloth manufacture, who married early, and the farmers who married late. The main change is in the clothing

groups where the age rises about 3 years after 1610. Most men appear to have married women some 2-4 years their junior, resembling the overall pattern.

If the men outside of these groups, probably mostly of lower status, did like husbandmen marry older females here perhaps is the first clue to the explanation of reduced fertility in older women. Poorer men married older women who were then most likely to be under-nourished in periods of hardship. Weavers however continued to marry quite young women. Those described as weavers were probably the men who could continue to carry out their trade despite depressions in cloth manufacture. They may also have been a group likely to marry women who could gain an income spinning wool. In times of hardship those who may have gained by-employment from cloth manufacture to supplement their small farming operations or labouring would have been hit hardest.

Further indication of this is found in other measures. Because of the small numbers which meet the requirements for these calculations the groups were combined in two ways. Yeomen and clothiers together represent the wealthier men in Biddenden. Weavers and husbandmen can be considered a poorer group who might be at a disadvantage in hard times, although as suggested above there may be variation between them. Clothiers and weavers are combined to represent families for whom cloth manufacture was an important source of income and yeomen and husbandmen to form a group largely involved in farming.

	yeo/cloth	weav/husb	clothing	farming
closed family				
before 1610	3.7	3.4	3.7	3.2
after 1610	5.2	2.8	3.7	3.5
marriage span	23.7	18.1	20.0	21.2

Table 3.7: Closed family size by period and mean marriage span by status/occupation.

Wealthier men tended to have larger families than poorer ones after 1610. This would indicate either higher mortality of poorer wives (which would fit with the marriage duration figure) or lower fertility and perhaps resulted from a combination of these factors. Others, such as Skipp, have noted the tendency for poorer people to have smaller families [Skipp, 1978] especially when conditions were difficult. These figures are far from conclusive. There are problems with the status and occupation designations and the samples are small especially for age at first marriage. But they suggest a possible explanation of the fertility curve and therefore of the effects of the crises.

Despite the high child mortality rates, which indicate that just over 60% of children born would reach age 10 and despite the reduced fertility of older women, the potential for continued population increase existed, though not at sixteenth century rates. But it appears that there were fewer households and people in Biddenden by 1660 than there had been in 1570. The explanation is obviously that the surplus people were leaving and that in-migration was not making up the shortfall. As noted above, the natural increase shown by the Weald in the sixteenth century does not appear to have resulted in the same proportion of growth. Further understanding of these phenomena requires some explanation of the way in which the people of Biddenden and the Weald made a living.

Farming

Although other means of making a living were important in Biddenden, most people gained at least some of their income or subsistence from farming. The size of enterprises varied, though none were very large. Some people describe themselves or are described by others as yeoman or husbandman. These are terms applied to persons running a farm, depending on the size and wealth of the establishment. Others though described as clothiers or craftsmen also ran farms. Some had no farm as such but kept a few milk cows and pigs. These could be described as cottagers, though they are usually known by their trade.

Soils in part of the Weald where Biddenden lies are heavy clays, difficult to plough and not particularly fertile without constant marling. Farming was therefore mainly pastoral, particularly concentrating on the raising of beef cattle. Arable acreages tend to be small, even on fairly wealthy farms. The main crops were wheat and oats, the latter providing animal feed as well as being consumed by humans. Fields were small and usually enclosed with hedges, shaws or post and rail fences. There had never been open fields of the classic medieval type in this area. The history of woodland intake and the nature of the land and its exploitation meant a patchwork of small fields with a fair amount of uncleared woodland remaining. Wood was also a crop, some being coppiced and managed, but some also being felled. Probably about one quarter to one third of the land in the parish was woodland.

	cattle	invs	sheep	invs
All	6.0	(108)	27.6	(76)
Before 1610	6.1	(64)	24.1	(38)
From 1610	6.0	(44)	31.0	(38)

Table 3.8: Average number of beef cattle and sheep per farm where kept. Number of inventories in brackets.

Some cattle were locally bred, although there does not seem to be a very high number of bulls in inventories, but many were bought from drovers having been bred in Wales, Scotland or the north. This is clear from inventories and probate accounts, with references to deals with Welshmen for cattle and the use of such terms as *Northerns* and *Country* for cattle. Although some cattle were kept for at least part of the year in the parish, some substantial farmers owned or leased land down on Romney Marsh and fattened their cattle on the rich pastures there. The cattle could be sold and slaughtered locally, for meat and a few clearly were, but others would be driven to the towns for sale and most would go to the large and ever expanding market of London. Although the number of beef cattle on farms raising them does not change

before and after 1610, there appears to be a decrease in the number of farms keeping them.

Most people leaving probate inventories kept one or more milk cattle for domestic consumption and production. Widows are sometimes left 'kine' in wills by their husbands. This may have been because the processing of milk products in the dairy, and possibly the marketing of butter and cheese was a female specialisation. The keeping of the animals is however sometimes to be carried out by a son, though this may reflect the age of the widow rather than her gender. A few farms have bulls, though as stated above breeding cattle was probably much less significant than fattening. A fair number of farms had oxen, usually in pairs and often described by 'couple'. These were primarily kept for ploughing, as the thick, heavy clay was not suitable for horse ploughs. Indeed it was reported in the nineteenth century that several couple of oxen might be needed to draw a plough in the Weald, and these animals were used until the twentieth century for this purpose [Chalklin, 1965].

Sheep were also raised in the parish and on the Marsh, both for meat and for wool. Only a few farmers had large flocks of sheep and this form of stock raising seems to have been less important than cattle, especially in the sixteenth century. The number of sheep kept does rise slightly by the seventeenth century. There was a ready market for wool locally because of cloth manufacture. Dealing in sheep seems to have taken place with Downland farmers as well as local ones, from the description of Thomas Woolsey's trip to Chilham fair [KAO:QM/SB156]. Sheep, like cattle might be classified by age and sex but fewer terms were used. There is no evidence of sheep being milked. One inventory contains references to sheep which were 'put out to halves'. This appears to have been a form of animal sharecropping, where one person provides the animals and the other keeps and breeds from them, the increase being divided half to each. As the flocks of Wealden farmer were not usually large, this may have allowed larger flocks to have been gathered for pasturing at certain times.

Many people kept a small number of horses. These would have been for riding, pack-horses and some for drawing carts. Because of the poor state of Wealden roads, the pack-horse was a major method of carrying goods, particularly wool and cloth. Although some carts were horse drawn, others as with ploughs may have used oxen, especially for drawing timber. Given numerous references to colts, horses seem to have been mainly bred by their owners.

Pigs were kept by many of those with inventories, including those with no significant farming activity. It appears to have been quite important in subsistence terms to keep at least one pig. Inventories and a census type list indicate that even in a town like Canterbury this was true. Pigs provided bacon, which could be salted and smoked to give meat for at least some meals throughout the year. Poultry also appear to have been widely kept, and wills use the phrase 'about the house' indicating that they were not divided in terms of space from humans, which does seem to be true of other livestock. Ducks and geese are found in some inventories, Wealden farms and hamlets often having a pond. A few inventories and wills refer to

bees and honey but these may not have been common.

Crops were mainly wheat and oats, many farmers having a few acres of each. Average acreages of wheat and oats on farms growing these crops were as follows, the number of inventories in each case is given in brackets:

	Oats	invs	Wheat	invs
All	3.9	(29)	3.1	(36)
Before 1610	3.2	(17)	2.7	(22)
From 1610	4.8	(12)	3.6	(14)

Oats were generally valued at approximately two thirds as much as wheat in inventories, this probably reflecting the general ratio of prices. Wheat was probably the preferred human food corn, but the staple was probably mixed wheat and oat flour, known as 'maslin', from which bread could be made. A certain amount of the oat crop would be malted as many inventories contain references to 'oaten malt' in storage. Barley and rye were grown but much more rarely as were beans and peas. Fruit was grown in orchards but may have been for domestic consumption and cider, unlike the marketing oriented fruit growing of north Kent. A few inventories contain references to hops or hop growing equipment. This crop was certainly expanding in the Weald but nowhere near its importance in later centuries.

Zell's study of inventories for the eastern Weald in the sixteenth century, indicate that Biddenden had about the same percentage of land devoted to wheat growing (48%) as the other twelve parishes, but more than average given over to oats (52%) [Zell, 1983]. Average summer sown acreages seem to be smaller than most of the other parishes but winter ones were similar. He estimates that at least twice as much land would have been pasture as was used for growing arable crops in most of the sample parishes, including Biddenden. My own figures are in rough agreement with Zells for before 1610, but indicate higher mean acreages for both crops after 1610, (probably on fewer farms), with a slight trend towards more oats. This may indicate fewer, larger farms and a slight shift from subsistence crop growing (wheat).

The arable crops would have been grown mainly for home consumption and local marketing, especially sales to landless households. Oats may however have been traded further afield [Chalklin, 1965, 174]. It is likely that some of Biddenden's wheat would have been imported from the large arable farming area of the downs. Little can be clearly said about buying and selling corn other than on a local basis from the available sources. The organisation of arable cultivation would have required few people beyond household labour, except perhaps at harvest. Therefore there would have been considerably less demand for agricultural wage labourers than in other areas [Chalklin, 1965]. Not all farms seem to have possessed ploughs or ploughteams (oxen) according to inventory evidence. Those which did so tended to be the

larger, more prosperous establishments, and it is likely that both equipment and animals would have been hired out to farms lacking these resources. Whether the hiring would have included specialist labour is uncertain. Most farms do appear to have had one or two harrows and many people possessed handtools that could be used for small scale cultivation and gardens as well as for labouring work.

Cloth manufacture

With agriculture, work involved in cloth making was probably the main source of livelihood for most households in Biddenden. The work was of several types and was organised by a division of labour based on capital, sex and to some extent age.

Clothiers organised the production and sold the finished product. In many cases they also owned all of the raw materials for production. They required a substantial amount of capital to buy large quantities of wool and dyeing stuffs. Other expenses were payments to those carrying out the various manufacturing processes and carriage to point of sale (usually London). The scale of operations seems to have varied, although evidence is uncertain and not simply comparable. The total values given to clothiers inventories varied between £918 and £13, with a mean of £153 and most being under £100. Some of this variation probably reflects the state of the individual operation at time of death rather than any real difference in size. However, several of the most wealthy persons operating as clothiers are not represented by inventories, as they used the Prerogative Court of Canterbury for which none survive.

Most clothiers had a 'workhouse' where wool and cloth could be dyed and a 'tenter', a set of hurdles for drying and stretching cloth. Wool could be bought from local farmers, from Downland farms, from Romney Marsh farms and from urban dealers. Dyes were mainly bought in London, although local sources may have supplied some of the less exotic materials such as woad and copperas. A further expense would have been wood fuel for heating the vats, but a certain amount may have been obtained from the clothier's own woodland.

The organisation of weaving is not always clear from the sources. Most weavers certainly owned their looms, sometimes more than one, some leaving them in wills. From debt information, some weavers worked with wool owned by a clothier, while others appear to have purchased their own raw materials and sold the woven cloth to a clothier. Looms were a relatively expensive item for most of their owners, and were often set up in a separate room known as the 'shop'. All Biddenden weavers appear to have been male, but the system of training and age at which a boy or youth might start to weave is not known. As a number of clothiers also did some weaving, it is difficult to draw a clear distinction in some cases, and a few people calling themselves weavers may have been small-scale clothiers.

Spinning wool was generally a female skill and seems to have been carried out in many households, including those with no other involvement in cloth manufacture. Like weavers, many spinners worked on wool supplied by a clothier, but others seem to have bought raw fleece wool themselves. Most households with spinning wheels also had cards and stockards. These were blocks of wood with metal spikes used for combing out fleece wool before spinning. Carding, as the process was known, might be performed by the spinner, but seems to have been a task particularly associated with children. A slight tendency for these activities to be associated with poverty may reflect the probability that such work was the chief livelihood of many widows and their children.

Other skills needed or associated with cloth manufacture were cardmaking and shearing cloth. There seem to have been a number of cardmakers in Biddenden, along with the necessary wire drawers who made the metal wire for the cards. Some woolcards and stockards would have been sold locally, though others appear to have been sold at local fairs. It is interesting that a series of disturbances appear to have taken place among cardmakers in Biddenden in 1597. Perhaps this may have been due to an overabundance of people working at the trade, although this was a period of prosperity for cloth making. The trade seems to have been of fairly low status, and may have required little skill or capital and given little income. The quantities that cards were produced in seems staggering and it must be assumed that they were both disposable and cheap. Sheremen seem to have been fewer in number. They were one of the skilled trades involved in the processes of 'finishing' the cloth. Sometimes shearing may have been carried out in the clothier's workhouse. The fulling of cloth seems not to have been carried out in Biddenden at this period, but cloth was taken to mills elsewhere, such as the western weald or Medway valley for this process. Cloth is sometimes referred to as 'thicked' or fullled, and occasionally is said to be at the fullers.

In general, cloth manufacture was a domestic industry, few if any clothiers containing all processes in their own premises, and most organising production on a 'putting out' basis. The relationship of weavers and spinners to clothiers seems to have been important and maintained through time. Clothiers sometimes leave bequests to their spinners, weavers and workmen in wills. It was said that every cloth produced provided work for about 45 people, indicating the numbers who might derive part of their living from the manufacture [Chalklin, 1965, 120]. Another source maintains that each cloth gave 50s to the poor in income [Furley, 1874, 481]. The poor in this case includes spinners, weavers and thickers. The same document also indicates how dependent many people in this area were upon cloth manufacture for a living in this area of poor agriculture and dense population.

Item, the said places in the said county where clothing is commonly used, is so populous, that the soil thereof is not able by any increase thereof to maintain and find the one-half of the inhabitants, except clothing be maintained [*ibid*, 481-2].

It was said "...decay the clothing, and the people decay" and that because of depression "...daily idleness and poverty greatly increaseth" [*ibid*]. Of course such statements made in support of protectionist

legislation by clothiers or those representing their interests, are liable to be exaggerated. The relationship between population and resources was probably fairly accurate. The high population could never be sustained by their small tenements and farms on poor soil.

Cloth manufacture probably began in the Weald in the fourteenth century, some early clothiers and weavers may have been migrants from the continent (some local names such as Allard and Ricard may reflect French origins). It was well established by the sixteenth century, and is generally seen as one of the main reasons for the relatively high population density of the area. Trade in cloth was subject to numerous disruptions and difficult periods. Recovery from an earlier depression had been made by the 1560s and things continued well with manufacture probably at its height 1600-1630 [Chalklin, 1965]. There were however two periods of depression during this time. In 1614-16 when Alderman Cockayne's project to reorganise London's export trade failed and led to much cloth lying unsold in the capital's warehouses. It is said that up to 2000 clothworkers may have left Kent to work on the continent as a result of this slump.

A further depression occurred in 1622. More problematic however was the slump of 1630-1, from which the manufacture may never have really recovered. There were said to be problems selling cloth in the 1630s [Chalklin, 1965]. Reasons for this were most likely a combination of increased local production and rising import tariffs in the main overseas markets, combined with political turmoil and conflict at home and wars in Europe in the 1640s and 1650s. Decline may have also been partly due to the decreasing demand for heavy broadcloth, and high labour costs, the latter perhaps exacerbated by decline in the number of skilled workers due to migration and emigration. The manufacture continued on a reduced scale throughout the seventeenth century in Biddenden and the Weald. By 1724 Defoe could say that the trade was "...quite decayed and scarce ten clothiers left in all the county" [Defoe, 1971, 132]. In 1683 the rector of Biddenden had said that the parish was "...not so populous now as formerly when the clothing trade there flourished" [Woodruff, 1895, 184]. At Benenden in 1673 there was said to be "...great and general poverty in respect of the decay of the trade of clothmaking within the said parish..." [Chalklin, 1965, 120].

The periods of depression in the early seventeenth century roughly correspond with the demographic crises noted above. Although demand for cloth often recovered, the process of out-migration following a slump would have reduced the skilled population available locally, making full recovery more difficult. A combination of poor harvests leading to food shortage, epidemics and reduced opportunities of work for both men and women could combine to create very hard conditions. Zell sees landless families being particularly badly hit as "... only the combination of farming with manufacturing or a trade could guarantee economic survival for many Wealden families." [Zell, 1983, 217-8].

Iron

During the sixteenth century the Weald became an important centre for the manufacture of iron. The blast furnace was introduced into Sussex and several furnaces and forges were set up in the Weald of Sussex, Surrey and Kent, with the narrow valleys being dammed to provide water power for furnace bellows and forge hammers. Usually a furnace and forge were built separately but not too far apart. The woodland provided wood for charcoal and iron ore was found easily on the High Weald. The Weald manufacture was most prosperous in the late sixteenth century, with the demand for armaments for wars and the majority of English ironworks were located there until the mid seventeenth century when South Wales and the Midlands took over [Chalklin, 1965].

A forge was set up in Biddenden, close to the boundary with Cranbrook parish, at the cost and instigation of the Baker family of nearby Sissinghurst. The forge was probably built in the 1580s or early 1590s. Several traces of the establishment remain and have been partially excavated. At some time a furnace seems to have been built nearby.

Setting up a furnace took considerable capital, and running costs could be high as ore and charcoal were expensive. On the other hand profits were often very high as well. Few people needed to be employed, it is generally thought that a furnace and forge would need about seven skilled men. Just before the turn of the seventeenth century, Elias Bluatt, a hammerman moved to Biddenden with his large family. He came from Hawkhurst where the Bakers had another ironworks, and Bluatt probably had previously been employed there. A decade or so later Anthony Pullen also came from Hawkhurst to work at the hammer, along with Bluatt, marrying one of the latter's daughters. Bluatts' son Steven also worked at the Biddenden forge when he grew up. Although apparently closely connected by kinship, the ironworkers also married into other local families engaged in cloth making and farming. From their inventories the hammer workers appear to have had a reasonable standard of living, comparable with more prosperous husbandmen and other skilled trades. The Bakers appear to have leased the enterprise and by the mid seventeenth century it was in the hands of a group of local small gentry.

Landholding

Land in Biddenden, as in most of the Weald was held largely in small freehold farms. A proportion of the land belonged to the estates of gentry families, in particular the Maynes (formerly of Biddenden, later of Lynton), the Bakers of Sissinghurst in Cranbrook, and in the seventeenth century the Henden family who had a residence in the parish but were often absent. Zell estimates that the Mayne family owned about 8% of the land in Biddenden in the late sixteenth century leasing to a number of tenants [Zell, 1985b]. There was clearly no major landlord.

Although it is clear that most landowners were not in the same league as those aforementioned, it is difficult to calculate the size of their properties. Most of Mayne's 18 tenants leased small farms of between 20 and 40 acres [PRO:C142/693 No26]. Only two tenants, Josias Selyard and John Bridge were renting substantial amounts (100 acres each); both were men of some means, owning land themselves and probably involved in sub-leasing. As the enterprises were small, none left estate records as might be found for a larger landowning family. The main evidence on landholding comes from wills, which rarely give the size of a property bequeathed. Zell estimates average farm sizes from a combination of crop acreage and number of livestock in probate inventories [*ibid*]. For Biddenden this approximates to an average farm of 32.4 acres.

From the wills it is clear that among the yeomen and small gentry living in Biddenden, it was common to find land owned in a number of small estates in more than one parish. Some owned no land in Biddenden at all, but had farms elsewhere which they leased out. Most however seem to have had a 'capital messuage' or main estate which they farmed themselves. Other land would be leased to other farmers, both in Biddenden and elsewhere. It seems however that a farmer might well not own all of the land that he farmed, but rent part of it from someone else. Those with all of their lands outside of Biddenden, would rent a farm within the parish. Land was also owned or rented in Romney Marsh by yeomen/graziers for cattle rearing.

Some farmers were tenants only, not owning any land in the parish or elsewhere and even wealthy Barnard Randolph rented his main estate at Birchley [PRC28/14/530]. Most small craftworkers and labourers would have rented a cottage and perhaps a close or two, for crops and a cow. The poorest might live in one of the parish 'poor houses', individual dwellings rather than the more recent style workhouse, and there was probably a certain amount of 'squatting' (see chapter 5, housing).

Why was the landholding situation in Biddenden and the Kent Weald in general so complex? The reasons seem to come from several strands in the history of the area. Firstly, the prevalent custom of inheritance was gavelkind. This was a form of partible inheritance where land was divided between sons, or

failing sons, between the sons of daughters. Although the greater landowners in Kent were ceasing to use this pattern of property transmission by this period, it was general among the smaller freeholders into the seventeenth century. Wills could be used to modify the pattern of inheritance, but the tendency was for more than one son to inherit land, if not all sons. This would mean over time, that farms might be divided and redivided into smaller and smaller units and eventually become unworkable. While cloth manufacture provided extra work, this situation may have been feasible. Such work not only allowed landless people to make a living in the parish, but also the land poor. There is no evidence of farms being jointly worked, or profits shared by siblings when one worked the land, though Chalklin has evidence of joint ownership elsewhere in Kent [Chalklin, 1965].

Other solutions, relate to the second relevant historical practise, the land market. Some of the inheriting siblings could sell their land to people other than a brother, using the profit to set up in business or buy other land. Such buyers may not be resident in the same place as the land lay. Conversely to this scattering of landowning at inheritance, land might also be gathered by one landowner for children to inherit. Wishing to leave farms to several children, a man might purchase extra estates during his lifetime, in order to leave one to each of them at his death. These would be purchased from other landowners, local or otherwise, some perhaps selling off their own landed inheritance.

Further reasons for the complexity of landholding can be sought in the nature of farming and the history of settlement in the Weald. The area was late in being cleared and settled. It was still thick forest during the late Roman Empire (C3-4 AD) and clearance probably did not really get under way until the early medieval period. Some of the cleared areas, locally known as 'dens' were considered part of manors located outside of the Weald, and may have originated in pannage rights for manorial swine in the forest. Others were individual entrepreneurial clearances, carving out small freehold farms for occupation or leasing. The manorial intakes were probably similar in character if different in tenure, small farms let for profit or given to younger sons. Because of the nature of the soil, farming was chiefly pastoral, which meant small, enclosed fields, little need for extra labour and a tendency for small farms. This would lead to a situation where there was little need to develop large contiguous tracts of farmland as an estate, as was important in crop raising areas. One person could quite easily own several of these farms, working one and leasing the others.

To all this must be added the effects over time of inheritance by and through daughters, taking land into other families, often not local, as heiresses, as mothers of heirs and through dowries and settlements. The small pastoral farms, through affinal inheritance or sale, might be held by persons resident elsewhere, and those living in Biddenden might hold land in other places.

Despite various mechanisms whereby it might be avoided, land was at times divided into small parcels below the size of a viable farm. Biddenden farmers might have to rent extra land locally to make up a

viable unit. Other reasons for leasing might be because a larger farm was thought to be necessary, to obtain particular types of land, soil or situation, or because the farmer held his land elsewhere but had other reasons for wishing to reside in Biddenden. Another effect of the land being held in small parcels was that a wholly tenant farmer might rent from more than one landlord. This was rarely the case with labourers and cottagers whose tenement would be very small.

Work

It is rarely possible to talk of people having single occupations in Biddenden. The majority of inhabitants would have gained their livelihood by exploiting a range of skills and resources. Work was organised for the most part on a household basis, with divisions of labour by gender and age. Sources tend to be organised on the basis of, and give most information about, the householder, usually a married male, occasionally a widow, on a few occasions a never married adult.

Adult male householders in Biddenden, were occupied for the most part in farming and cloth manufacture. A few worked at general trades such as blacksmithing or carpentry, or at the iron forge but these usually farmed as well, though sometimes on a very small scale. Some householders were fully occupied in farming, but most clothiers had some farming interests as well as their manufacturing concerns. They are often better described as yeomen/clothiers. For these people the farms were worked for profit as well as subsistence, and a man describing himself as a clothier can be seen dealing in timber, corn and cattle. Some other tradesmen had sizable farms (on the local scale) besides their craft manufacture or retail outlet but many had smaller establishments, more comparable to those calling themselves 'husbandman' if mainly a farmer. In many cases it is difficult to say which was the more important activity in terms of time and capital.

Some farms were very small and unlikely to have provided subsistence for a household. These were not all run alongside craft manufacture, and the householders supplemented their incomes with casual labour. Such a person was John Day, described in his will as 'husbandman' yet appearing in the churchwardens accounts working as a casual handyman and labourer for the parish. No extra skills would be needed for this kind of work; mending fences and buildings, ditching and digging were all part and parcel of a small farmers workload. A few men gained most or all of their livelihood by day labour. These were termed 'labourer' in the sources and held very little if any land, perhaps enough for a cow, poultry and a pig plus perhaps a garden for vegetables. In times of hardship small farmers may have no longer been able to rent land. This would explain why some men appear as 'husbandman' in one source and 'labourer' in another. A number of people would have had nothing but their trade or labour to live by. It was these latter groups, labourers, the landless and the land poor who had most to fear in times of depression, shortages and trade slumps. They were also worst affected by life course fluctuations in ability to cope, such as periods with

many small children or old age. Although unemployment certainly existed, it was probably less of a problem than underemployment.

Most adult women performed a combination of housework, domestic production, childcare and those farming jobs seen as suitable for females. General housework consisted of cleaning, cooking, washing utensils and clothes, and somewhat shaded into the area of domestic production. Baking might be done for home consumption, but may also have involved production for sale. The same was true of dairy work (cheese and butter making) and brewing, and perhaps also salting bacon. Probate inventories for ever-married males have implements for baking in about 50% of cases, for dairying in 44% of cases and for brewing in 27% of cases. Such items are much less likely to be found in the inventories of widows and may indicate that older women were less likely to undertake these types of work, perhaps giving implements away.

Spinning%	wool	linen	invs
All	38	15	(285)
Before 1610	44	6	(117)
From 1610	32	23	(118)

Table 3.9: Percentages of inventories of ever-married males with spinning tools

Other areas of production were more clearly aimed at goods for sale or produced on an outwork basis. As stated above, wool was spun by women, and most households contain one or more treadles for spinning wool. Some also worked at spinning linen as well as or instead of wool, though this activity seems to have been limited to more prosperous households whereas wool spinning was very widespread. During the period wool spinning does appear to have declined. Linen spinning is first found in inventories of 1580 and was much more common in the seventeenth century, though subject to the status bias noted above. Wool spinners also did, or organised the carding of the wool they spun, probably having their small children or servants do this less pleasant task.

Women probably also had some agricultural work assigned to them, especially that taking place near the house such as feeding livestock in the close or outbuildings, and gardening. In more substantial households women also prepared cordials and medicines by means of a still. It is not known how far the wives of tradesmen and craftsmen worked with their husbands at aspects of their trades. Alongside all this, women were also responsible for the care of small children, as well as doing other work to produce articles for home use such as sewing linen and some clothes and embroidery. The overriding element to

women's work was that it was based around the house, although women were in no way enclosed as in Islamic societies.

Young men and women, most of whom would have been servants, probably did similar work to their elders, but often the less skilled and more laborious elements. They were in training to become farmers, tradesmen and housewives (a term implying a wider range of work than in modern Western society) and had to learn the appropriate skills. It is likely that children worked at home or occasionally in service from an early age, perhaps five years old. Though some received at least rudimentary training in reading, this would not have taken up a great deal of time and there were many household tasks which a child could usefully perform (see discussion of childrens work and service in [Macfarlane, 1970]).

So far work has been discussed as if it all took place within the parish, if not within the house and farm. Many adults would have travelled to local markets regularly, to buy and to sell. This would have involved both men and women as both had products to sell (corn, cattle, butter, cheese) and to buy (other agricultural goods, manufactured goods). Clothiers would have gone to London occasionally to sell cloth and to buy dyestuffs. Some men worked outside the parish as well as locally. In particular, men in the building trades, carpenters, masons, bricklayers, would travel to the building site to work, staying in that area if to distant to return home easily. Tradesmen might also travel to sell their goods, such as the Tenterden shoemaker who had found a market for shoes in Biddenden after church on Sunday [EcCX5.9,f 51]. For some people, work might involve much longer term migration, sometimes with the result that couples were forced to live apart. More detail can be found concerning such problems in the section entitled 'Migration' below.

Status and Wealth

It is difficult, perhaps impossible, to disentangle status and wealth in early modern society. The range of both can be seen, from beggars to aristocrats, from nothing to great wealth. Biddenden had no major landlord and for most of the period no resident major gentry. The Mayne family, previously resident, seem to have left in the late 1560s and no other county gentry family became permanently established until the Hends moved to Biddenden in the late 1620s. The Hends seem to have played only a limited part in parish society, at least before 1660, so that the range of wealth and status found in Biddenden was narrow in comparison to those localities with a resident aristocratic or major gentry landlord.

Biddenden's gentry rarely operated outside of the parochial level, a few having urban interests and pursuing status there, but none holding county level office. Those styling themselves "gentleman" on some occasions, were on others referred to as "yeoman" or "clothier". Claims to gentry status were made by wealthier men in the parish, distinguishing themselves thereby from other farmers or clothiers. They might be from families who had lived in Biddenden for many years such as Robert Drayner, or

newcomers such as Thomas Milles. Exactly what these claims consisted of is uncertain, beyond self-description and encouraging others to apply the descriptor. A few of these men used genealogy to aid their claims, gaining an entry in heralds' pedigree lists for the county. The boundary between local gentry and other wealthy men does not appear to have been too distinct. In any case a man's status was to some extent relative to that of whoever viewed him. In a religious survey of 1663, referred to Sir John Henden as "...the only person of quality in the parish..." [Lambeth MS1126]. The view from Lambeth might differ considerably from that of the Randolphins, Drayners and Seliards in Biddenden.

Yeoman was a term that implied two things, major occupation and status. It was used by and for wealthier farmers, some of whom may at times have operated as clothiers as well. Smaller farmers were styled "husbandman" but there is no clear division between the two terms. On average, however, yeomen are wealthier than husbandmen. Uncertainty would be more likely among the less wealthy of those describing themselves as yeomen and more prosperous husbandmen. As wealth might vary during the life-course, so might designation; Thomas Hall of Wye, who married Biddenden yeoman's daughter Margaret Ramsden was styled "husbandman" when he married and "gentleman" in later life (from marriage licences of Hall and his children).

Trade descriptions were often used but probably have little status significance in themselves. They could be applied to persons of a range of wealth. Fairly prosperous Jervis Ramsden [PRC10/11/1] and poor Henry Lynsey of Tenterden [EcCX2.2, f405] were both described as shoemakers. Clothiers could be wealthy, like Steven Igulden [PRC28/12/201] or little better off than weavers [PRC10/25/332], although most were of at least moderate means. Some trades, such as weaving, generally implied little wealth or status. The ancillary trades of cloth manufacture, such as shearing and cardmaking were of similar status. Significant wealth depended on land, either owned or leased and land was the best form of security in difficult times when a trade like weaving would be subject to declining demand. Because wealth and status were related, land could provide the basis of a higher status for a tradesman than might have been possible by a trade alone.

The division between husbandman and labourer was as blurred as that between yeoman and husbandman, but for different reasons. A labourer was a man who worked for another for wages, usually by the day. During slack seasons or in difficult times, a small farmer might contract as a labourer. Others however might have little land to cultivate and therefore live mostly by hiring out their labour. When times were very hard, small farmers and tradesmen might fall below subsistence and become part of "the poor".

The poor are difficult to define as a group. They include elderly people (other than those with wealth), orphaned children, the sick and disabled and widows with no or insufficient means to live. Such people claimed relief from the parish, usually for extended periods. When clothmaking suffered one of its

frequent depressions or prices were high, others — poor farmers, tradesmen and labourers — might have to ask for help. The wealthier could survive financial difficulty when the poorer might be tipped into poverty. For some the situation may have become more desperate still. John Foster had a son baptised at Biddenden in 1594; the register describes him as “...late of Frittenden & now vagrant...” [Bidd PR 1594].

Women usually took their status from men - fathers, husbands, brothers. Whereas a man might be identified by a status or occupational description, married women are generally known as “wife of” plus their husband’s name and descriptor. Pre-adult persons are usually identified as “son” or “daughter” of their father (often even if he is dead) or as “servant of” their master. In most cases, then status reflected household power relations. Two groups of women maintained a separate identity. These were unmarried adult women, particularly those whose father was dead, who were often styled “singlewoman”, and widows.

Social mobility was possible but only within limits. No complete scale of wealth can be given because of the nature of available documents. But examining the position of certain persons among the elite relative to others in surviving tax assessments indicates some change over time. Roger Pattenson, a young in-migrant was relatively less wealthy in 1598, than he and his son were in 1628 [PRO:E179/127/516 and 128/608]. Pattenson, like several others, probably had a farm but made his wealth from operating as a clothier. Such entrepreneurs would have started with some means in order to set up with a reasonable farm and have resources to organise cloth making and sale. Labourers never became yeomen or clothiers but clothiers of moderate means could become wealthy ones. As has been said above, for husbandmen the process could operate in the reverse direction in times of hardship, forcing them to rely on day labouring.

The degree of inequality within a parish may vary. Terling appears to have been more sharply divided than Biddenden [Wrightson, 1979]. There were yeoman farmers and tradesmen, but many “proletarianised” wage earners whereas in Biddenden those totally dependent on wages appear to have been fewer. However, Biddenden cannot be constructed as an egalitarian society such as anthropologists claim to have found in Spanish villages [Adams, 1971; Brandes, 1975; Freeman, 1970]. Neither do its institutions appear to have been egalitarian [Davis, 1977]. The parish was riven with inequalities, as were others in the Weald, but the relations involved were complex and groups ill-defined. The elite who controlled parish office and most local resources could be constructed as a class in opposition to those who could not exercise such power. This group however can only be seen as united in certain aspects of life, in other respects they were divided and at times in conflict. The expectations and probably the aspirations of members of the elite group differed. The Randolphs had urban interests as well as rural ones and their males attended university, while the horizons of the Beales were more local.

Interests among the wealthier and poorer might relate to their occupations as much as to divisions of status. For instance, there is more variation in male ages at first marriage in the sixteenth century between

those involved in clothmaking and in farming than between wealthier and poorer groups.

It is therefore important to recognise the complexity of relations of wealth and status at this period. Wrightson points out that "... it becomes difficult to describe English society in this period as either a vertically aligned hierarchy or a class society." [Wrightson, 1986, 198]. The importance of inequality in Biddenden and the Weald, or for that matter in England in general is, however, clear. Contemporaries regarded it as one of the basic structuring factors of everyday life, whether they supported or opposed it [Perkins, 1970; Winstanly, 1973].

Power

Power rested on age, gender, wealth and status. Within the household the father had authority over his wife, all children and all servants. His wife had power over children and servants but was still subject to the authority of her husband. A widow was not under the authority of her husband and so had a degree of autonomy denied to both married and single women. Women appear to have remained in a dependant position *vis a vis* heads of household (men and widows) if they did not marry. Men on the other hand could attain the status of household head even if they never married. In most cases servanthood was a temporary and transitional phase, the final period of childhood and continuing to resemble it.

Outside of the household, power resided partly in control of resources to which other might need access. Such power relations were those of landlord and tenant, employer and worker, creditor and debtor. These were relations of a contractual nature in part, though there are indications that to see them in wholly material terms would be too simplistic (see chapter 4, willmaking). Such power relations were premised on one of the parties having access to the required resources and therefore usually, though not always, involved inequality of wealth. It is unlikely, however, that all power relations involving material resources would be one way. Employers or middle-men, such as clothiers, needed people to perform tasks for them as much as the workers needed the employment. Because of in-migration workers might be replaced, but Chalklin sees one of the reasons for the decline in cloth manufacturing in the Weald as being shortage of skilled labour due to out-migration [Chalklin, 1965]. There may have been some freedom as to which person such workers contracted themselves to.

A further location of power was in local office-holding. The most important parish offices were at all times in the hands of a fairly small elite group. This group consisted of householders, usually married and aged over 30 years, who largely overlapped in personnel with the group controlling material resources. The three most important offices were those of churchwarden, constable of the hundred (almost but not quite coterminous with the parish) and overseer of the poor. Two churchwardens and two overseers served each year and one constable. Churchwardens at least were said to be elected or chosen by 'the parishioners' but by what method is uncertain.

Every year at Easter, when the next pair of churchwardens (one new and one sitting) took up office, the former office-holders would present a written account of the parish finances for the past year in a special book [KAO: P26/5/1]. This account was examined and passed by other parishioners who then signed or made their mark at the end. Those becoming churchwarden at some time in their lives and those signing the accounts are the same people. Levine and Wrightson refer to the establishment in Terling, Essex of a "select vestry", an elite group who controlled formal parochial power, during the seventeenth century [Levine, 1979]. At Biddenden such a group had no formal existence, so far as can be known, during this

period but existed all the same in an informal manner and had done since the late sixteenth century, if not earlier. All churchwardens and constables were chosen from this group, and all of those overseers of the poor whose names are known.

Churchwardens were supposed to be responsible for the fabric and upkeep of the church. Part of their power seems to have rested in their ability to give small contracts to craftsmen and labourers in the parish to undertake this work. Beyond this however, they were also responsible for 'presenting' a list of offenders to the church courts, twice a year. They therefore stood between the gossip and rumour of parishioners and the exposure of misdemeanours through presentment to the court and public penance. In doing this, they can be seen as providing a gate between two types of knowledge, informal rumour and formal 'proven' offence. In the reverse direction they could be viewed as providing one channel through which the changing ideologies of state religion were made apparent to the majority of people. The church in turn may have seen them as 'spies' on the behaviour of parishioners. The importance given to these aspects depends upon whether the church courts are viewed as essentially regulatory or as arenas for the pursuit of local disagreements.

The office of constable seems to have been much more the case of acting as a local representative of state power. Constables collected county rates and national taxes, and were responsible for bringing wrongdoers to the county sessions and gaol. This appears to have been done on the initiative of justices and county officials, a situation contrasting to the church courts.

Overseers of the poor controlled the distribution of parish relief, collected by means of a rate, to those in need either in the long term or through temporary problems. Long term recipients included poor widows, elderly people and the permanently disabled [KAO:Ovs a/cs]. Other people might find themselves in need of help due to sickness or injury, and Wales has shown the relationship of relief to the life-course of poorer families [Wales, 1984]. The overseers also controlled the apprenticing of poor children, the letting of parish poor houses and the granting of permission to poor people to settle in the parish. Therefore they not only had power over a sizable number of people living in Biddenden, but also over who might or might not live there.

All of these offices allowed holders to exercise particular types of power over other parishioners. They were clearly open to abuse by their holders, as in the case of Roger Pattenson as constable [KAO:QM/SI/1602/44/1] and John Taylor, churchwarden [EcCX5.9, f55]. They were equally open to challenge as well as verbal and physical abuse from non-holders [EcCX4.5, f39; X9.9, f126; X6.7, f236; KAO:QM/SB/227]. Some researchers, writing of local power in this period, have identified groups of 'godly' people who tried to impose their views about behaviour upon their neighbours through use of such institutions as the church courts. If such a group existed at Biddenden, it was contained within the overall structure of power rather than forming it or challenging it.

One parish office open to a wider cross-section of men in Biddenden than those discussed above, was that of sidesman. The four sidesmen for each year acted as deputies for the churchwardens. All were adult men and seem to have been chosen, two from the elite group, two from among other, lower status, parishioners. They would undertake some of the less pleasant, possibly dangerous, aspects of parish work such as searching alehouses for those absent from church [EcCX4.3, f97]. They also seem to have had some part in presenting offenders to the church courts [EcCX4.3, f98], but were probably less significant in this than churchwardens. Although many sidesmen were of lower status than the parish elite, they were drawn from the middle ranks of parishioners and never from the lowest status and poorest.

The minister in some ways had considerable power, not only in a spiritual, but in a secular sense. He could present offenders to the church courts, certify their conformity to its regulations, write in support of parishioners and also had the potential to influence beliefs and ideas through his ministry and preaching. The office was however double edged. Although ministers were automatically powerful people in a parish, they do not seem to have always been considered full members of the local elite in all respects. Their actions had in some ways to be guarded. Many of those chosen to value goods for a probate inventory were from the elite group but John Whetcombe minister noted on one inventory that although he had written it he "...do never meddle with any prizinge" [PRC10/41/81]. Ministers could themselves be the subjects of presentments to the church courts for alleged infringements of correct ritual such as not wearing a surplice or saying the wrong words at a ceremony [EcCX2.2, f54; X2.4, f49]. They and their wives were also popular targets for abuse [EcCX9.9, f45]. These instances illustrate the ambiguous position of the minister, powerful but subject to sanctions, of but yet not part of the local elite.

All of the types of power outlined above, from relations within the household to parish office-holding had a formal quality, supported by legislation and other ideological statement. There were however areas of informal power. One such area was the evaluation of reputation. This operated at many levels, through gossip and rumour, through verbal and symbolic statements and through the formal operations of the church courts. Several practices shall be examined in respect to their connection with reputation and shall be drawn together in a discussion of reputation, power and status in the final chapter. Therefore no more shall be said here on this subject.

Religion

A great deal had been written about religion in early modern England. It was after all the period in which Protestantism triumphed, Puritanism emerged and exhorted, and non-conformism took root. Much interest has been shown in 'the Godly', small groups, usually forming a local elite, who tried by influence or imposition to change the behaviour of their neighbours. Levine and Wrightson at Terling found such a group, Josselin speaks of himself as a member of one and Collinson has identified one at Cranbrook, near Biddenden [Collinson, 1983; Levine, 1979; Macfarlane, 1970]. Clark identifies Biddenden as one of the centres of Wealden non-conformity by 1583 but the evidence is slender [Clark, 1977]. The minister at that time, John Whetcombe did not incline strongly towards Puritanism. He was presented several times in the 1580s for not wearing the surplice and also failing to catechise [eg EcCX2.4, f49 and f326]. He complained that "...parents and masters would not send children to catabchism..." and the churchwardens found that he did not "...either weareth the surples nor yet refuseth the yt..." [EcCX2.4, f326 and f422]. He was a pluralist, holding the benefice of nearby Sandhurst from 1583 which was served by a curate. His very individualistic will preamble mentions the "...adopted and chosen children in that holye and spirituall Jerusalem" [PRC17/59/190]. Whetcombe seems to have walked the same careful line in religion that he did in his social relations (see above). His will may be somewhat misleading, it was probably written by his Puritan curate, Nathaniel Ely.

Whetcombe was succeeded as rector by Dr John Bancroft, later Bishop of Oxford, an absentee who appears to have visited the parish infrequently, perhaps once each year at Easter. Nathaniel Ely, schoolmaster, preacher and son of the late Puritan vicar of Tenterden continued as curate until he died in 1615. He was the first in a succession of curates which lasted until the appointment of George Wilde as rector in 1641. At this time a petition to parliament was sent by "...the parishioners..." asking for the removal of the new minister (George Wilde) and blaming recent out-migration on "...scandalous and offensive curates..." [Larking, 1862, 181-2]. Wilde was removed in 1645 and later ministered to a Royalist congregation in London before being made Bishop of Derry at the restoration [Matthews, 1948]. His political and religious adherences are clear. However, with his replacement the pendulum swung too far the other way. William Horner, rector during the commonwealth period appears to have been very unpopular.

From 1605 until 1613, presentments were made (presumably by the churchwardens) complaining about the distribution of bread, cheese and beer at Easter in the parish church (e.g. EcCX4.8, f150]. Both Whetcombe and Bancroft were presented because of this ceremony. Both the ceremony itself and the "disorder" were complained of, though nothing appears to have been done by the courts. In 1641 the lands which supported the "Bread and Cheese" charity were leased by the parish (in other words the elite group) to George Wilde [KAO:P26/5/1]. During the tenure of his unpopular successor, William Horner,

these lands became one of several points of dispute between the parish and the rector. Horner tried to claim them as his right, along with the glebe, but the parish disputed this claim [P26/5/1]. Horner took his case to the Committee of Kent in 1647, but they found in favour of the parish. He then tried the "Committee of Plundered Ministers" in 1648 and 1649, apparently with little success. The "Bread and Cheese Lands" invaded by Horner and damaged in 1647, were refenced at parish expense. The churchwardens' accounts detail the process and also the purchases and baking for the charitable dole. The once criticised ceremony had been taken under the auspices of the parish elite and was now seen as a cherished custom.

A certain number of presentments were made to the church courts concerning drunkenness and sabbath-breaking, as well as those mentioned concerning church ritual and ceremonies, but there does not appear to be an identifiable group of 'godly' people as at Cranbrook [Collinson, 1983]. These concerns may be characteristic of certain aspects of contemporary culture, adopted into a repertoire of offences which could be used against individuals. This is not to imply that persons of strong Puritan sentiment did not exist in Biddenden, but that ideas concerning the regulation of personal behaviour could provide ammunition for accusations for a much wider public. Spufford has criticised the conflation of Puritan beliefs with the regulation of behaviour, demonstrating that similar types of accusations were made in the thirteenth century to some of those seen as evidence of 'godly' movements [Spufford, 1985].

Biddenden, like the rest of the Weald could be described as strongly Protestant, with a tradition of dissent going back to the early sixteenth century and before [Clark, 1977]. The weakness of the church in Biddenden, especially after Whetcombe's death in 1609, may have contributed to the establishment of more radical forms of religion than Presbyterianism. Manorial authority was weak in the Weald and radicalism appears to have been stronger in wood-pasture areas such as the Weald, particularly where there was manufacturing on a large scale. Chalklin quotes the Weald being seen as "...the receptacle of all schism and rebellion" [Chalklin, 1965, 228]. He sees the frequent contacts of clothiers with London as important for the spread of radical ideas. Everitt stresses the importance of the scattered pattern of settlement and the size of parishes [Everitt, 1970].

A further factor could have been the higher than average level of literacy that might be found among small tradesmen such as weavers and clothworkers. It is difficult to judge educational standards from the signing of names as has often been done. Reading may have been considered more important than writing by many people. As it was the earliest literacy skill acquired many may have left school to work before learning to write [Wrightson, 1982]. These probably included the children of middle and lower status who attended what Clark calls "petty schools" such as that kept by widow Mary Chalker in Biddenden before 1628 [Clark, 1977; PRC17/67/222]. Few weavers signed their wills but six weavers, and a number of poorer tradesmen owned bibles or testaments. There was an idea, popular amongst religious radicals, that each person should read and interpret the bible personally [Hill, 1975]. Such a concept may have

motivated Ambrose Igulden when he walked out of Biddenden church as the Litany was read "...and sate in the churchyard turning his bible" [EcCX6.8, f202].

Schools not only taught literacy skills, but on occasions may have provided vehicles for the dissemination of religious ideas contrary to those of the established church. In 1637 Richard Warren, master of Biddenden grammar school (where the sons of wealthier men were educated) was suspended by Archbishop Laud for expounding "the more controversial tracts of Puritan theology" rather than grammar [Clark, 1977]. Two years earlier a "Thomas Thomasius dictionary" had been purchased which Warren "would not suffer in his schole alleging that it was a blasphemus booke, for the names of heathen gods were in it" [KAO:Ch28/A1]. Warren's tenure was brief and he may have made only a limited impact. His history was typical of the Laudian years, which seem to have provoked local opposition to the established church as then was. Several families with Puritan connections emigrated to the American colonies at this time, in part motivated by the religious situation. Churchwarden Henry Knight secured Warren's release from Maidstone gaol and the school feoffees helped his family [KAO:Ch28/A1].

Radical religion seems to have become increasingly popular in the commonwealth period. Previously there had been few instances of dissident thought revealed in church court records compared to other nearby parishes. Spufford, however, warns against interpreting a lack of presentments on religious dissent as implying that no such opinions were held in that parish [Spufford, 1974]. Parish officers may have agreed with such views and therefore failed to bring them to the notice of the authorities. In neighbouring parishes dissent was well established. Thomas Morlen of Headcorn in 1625 was said to be "...one of Turners consorts of Towne Sutton..." who were "...glad to be excommunicated out of the church, in regard they never had any zeale to it..." [EcCX6.7, f148]. Thomas Johnson of Tenterden in 1631 thought that the established church had "...an unlawfull Worship..." containing things "...repugnant to the word of God..." while in 1635 William Gennings of Bethersden was "...somewhat schismatically affected...affirming our Church to bee noe church but a house of stone dedicated to superstition..." [EcCX6.8, f129 and f268]. Simon Henden, a Ranter, lived at Benenden, was related to one of the leading families of Tenterden and conducted a pamphlet war with Presbyterians at home and in New England in the 1650s [Chalklin, 1965; Haslewood, 1889]. Henry Beane of Wittersham, south of Biddenden, "...went about with a Peticion against Monarchy...", probably at or before the restoration [Lambeth MS1126]. Such opinions, along with those of the Ashford Brownists [EcCZ3.16, f11] were accessible for Biddenden people. By the 1640s even the local elite could sanction non-clergymen expounding scripture. Because the cure was "unprovided" the churchwardens paid William Barrow, a victualler 4s to preach at Biddenden church on two occasions in 1645 [KAO:P26/5/1].

By the Compton Census of 1676 an estimated 11 to 13% of the population were said to be "Anabap-tists most Brownists" [CCL:HZZ6, Whiteman, 1986]. A later rector thought that "...all the vulgar sects

about London..." were to be found in the parish and "...there are alsoe remaining some Brownists...". He saw the dissent as caused by "...the ignorance and error of their education..." rather than "...by their own choice..." [Woodruff, 1895].

The number of dissenters was probably greater in the 1640s and 1650s than by 1676. In a religious survey of 1663 two-thirds of Biddenden's 120 households were said to be "Schismatiques & Fanaticks" [Lambeth MS1126]. Four radical preachers were named, all men of middling status by their trades and hearth tax assessments [KAO:Q/RTh]. One, a farmer called James Blackmore also preached at Benenden. Biddenden tailor George Hammond was thought to be the most influential of these men, preaching in many Wealden parishes and the downland scarp and referred to in the survey as "...the great Seducer..." and "...the great poyson of these parts." At Lenham it was said he "...comes there sometymes preaching and endeavours to drawe aside the weaker people, as weomen, etc." If the leaders were of middling status, the nature of their followers is unsure. Contemporary critics stressed ignorance and low status when talking about such people and indeed many radicals identified with the poor, even if they were not from their ranks themselves [Hill, 1975].

Disaffection from the church might have many causes. Women appear to have composed part of Hammond's audience. For them the old established church and the new Presbyterian one offered little, but they may have found both a more active part and a chance to make a symbolic protest in adherence to radical sects. The poor may have been attracted to a less hierarchical religion which was also disassociated from the hegemony of the parish elite. Not all of Hammond's followers were female and/or poor however. Clothier Edward Young left him £10 in his will [PROB11/301/259]. Young's father had been churchwarden and constable. Clearly inequalities of wealth and status do not explain all. It is possible that generational difference, such as that found by Lison-Tolosana in twentieth century Aragon, may have had some importance [Lison-Tolosana, 1983]. Hammond and Young were in their 20s and 30s during the interregnum, and it is probable that Blackmore and Moore (another preacher) were of a similar age. Another dissenter, weaver William Knight, who left money to "the poore of the Church whereof I am a member" was also in this age group [PROB11/243/18]. None of these explanations, status, gender and generation can provide the sole motivation and others are possible.

The religious situation was complex and constantly changing. It is difficult to disentangle Puritanism from the use of ideas in general popular discourse, radical protests from general anti-clericalism. There does not seem to be a concerted 'godly' movement, as at Cranbrook, although individual connections to that group are known. The church courts do not reveal the same level of radicalism in Biddenden before 1638, that is seen elsewhere in the Weald, but silence cannot be interpreted as a clear negative. A small number of wills written by the scrivener Henry Page in the first decade of the seventeenth century show marked Calvinist tendencies and emigration in the 1630s may point in the same direction. Wilde was

unpopular, at least with some, but so also was his replacement, Horner. Wealthy old clothier Henry Allard supported the king [PRC27/12/46] but a younger clothier supported George Hammond. It is clear that throughout the period, a number of competing ideologies were on offer and many factors may have affected which one was chosen. Three, status, gender and generation have been highlighted. A distinction should be made between the promotion of religious ideas and the use of those ideas in popular discourse. Moves against immoral conduct can be linked with Puritan concepts but could also be used as tools in the contests played out in the church courts because of their reference to much more deeply rooted concepts of social order.

Stayers and Leavers

Measuring Migration

The population of Biddenden, like those of most early modern English parishes was far from static. In his classic study of Clayworth and Cogenhoe, Peter Laslett noted the high rates of population turnover for the two parishes [Laslett, 1963]. In the ten years between 1618 and 1628 in Cogenhoe, one quarter of the households initially resident had left by the end of the period and almost a third of the later households consisted of new in-migrants. 45% of those individuals resident in 1618 had left by 1628 and 36% of the 1628 population were newcomers. Zell found that only 70% of households appearing in a communicants listing of 1608 for Cranbrook, west of Biddenden, were present in a similar list made four years later [Zell, 1985]. He, like Laslett, found the highest mobility among servants and non-householders (probably young people). As these calculations are based upon census type listings of households, comparable statistics are not available for Biddenden; other measures must be used.

One frequently used method is to look at 'reproducing surnames.' The number of new surnames appearing in each decade is expressed as a percentage of the total unique surnames for that period.

Names	1570	1580	1590	1600	1610	1620	1630	1640	1650
All names	136	154	168	160	164	173	164	146	110
New names	-	72	65	44	51	48	48	24	23
% New names	-	47	39	28	31	28	29	16	21
surviving	-	82	103	116	113	125	116	122	87
% surviving	-	60	67	69	70	76	67	74	60

Table 3.10: Reproducing surnames from baptisms

The high 'new' figures for the first decades are probably the result of an 'edge effect'. This is because, taking a generation to be 25-30 years, the parents having their first child baptised in the 1580s would be considered 'new' whether or not they had been born in the parish as their baptisms would fall before the starting date. The 1590s must be similarly affected but to a less degree. The first four decades of the seventeenth century show remarkable stability in the proportion of new names. The later decades show a clear decline both in the overall number of names and the proportion of new ones. This is probably due to under-registration. As the drop in the proportion of new names in the 1640s is much sharper than that in the total number of names recorded, this may indicate that incoming families were less likely to have their children baptised. If the surname figures could be taken to roughly equate to families, the steady 28-31% for much of the early seventeenth century is similar to the rates of appearance for households given for Cogenhoe (1618-1628) by Laslett. They are however lower than those for new surnames given by Zell (average 36%) from 1568 to 1608 for Staplehurst, a parish within five miles of Biddenden, with a similar mix of farming and manufacture [Zell, 1985].

Caution must be used however, surnames do not equate to families and indicate only migration of those either related (staying or leaving) or unrelated (arriving) through the male line as surnames pass in England from father to children. Another measure, which indicates willingness to settle in a parish is an examination of the date of baptism of the earliest child in a family. For this purpose only 'persisting' families - those with three or more children - have been analysed and the sample further restricted by looking at the first child of a father, irrespective of how many marriages he had. Such a measure should reflect the setting up of new households better than marriages as many of those married in a parish did not

live there subsequently and many others came to a parish after marriage.

	%bapt	n	%incomers
1570	18	26	-
1575	20	39	-
1580	17	32	-
1585	15	32	-
1590	17	37	68
1595	13	23	78
1600	17	33	70
1605	20	45	49
1610	15	29	38
1615	22	50	60
1620	17	39	51
1625	18	39	69
1630	14	35	66
1635	17	34	62
1640	17	31	58
1645	12	20	30
1650	13	17	59
1655	10	13	69

Table 3.11: First births in five year bands. The second column gives the number of first births to 'persisting' fathers and the first expresses this as a percentage of all baptisms for that five year band. The third column is the percentage of the fathers represented who were not born in Biddenden. This figure is only given from 1590 as earlier fathers are much less likely to have been traced to a baptism.

Low figures for first births as a percentage of all births indicate that fewer new households were being established at this time. Such seems to have been the case in the five years after 1585, 1595, 1610 and 1630. Higher figures would indicate a greater willingness to settle in Biddenden. However the percentages are at no time very high. The decrease from 1645 is probably due to under-registration. Only some of the crises recognised above from population studies appear to have had much affect on the establishment of new households. The general hard times of the 1590s can be seen, as can the 1609-1616 and 1630-1 crises but the 1620s show an average percentage of first births. This period, coming after the difficulties of the

1610s may have seen the establishment of new households replacing many lost through death and out-migration. Because it is at present impossible to build any picture which represents those leaving the parish, only a very partial view can be given.

Males born outside of Biddenden appear to have composed between 50 and 70% of those settling at most times, with notable decreases after 1605 and again after 1645, and increases after 1615, 1625 and 1650. The 1615 and 1625 rises may be due to replacement after probable out-migration whereas the low figures for 1605-15 would indicate unwillingness to in-migrate in a time of difficulty.

Such figures can only give a very rough idea of geographic mobility. With no census it is not really possible to have clear, quantifiable information. It is probable that crises associated with dearth, disease and trade slumps had two types of influence on migration. Some existing households, plus many people who might otherwise have settled in the parish would be likely to leave or to die. Such migration however might leave vacant housing and a demand for workers which would increase when trade improved.

The Geography and Timing of Mobility

One potential source of information concerning geographical mobility can be found in the church court depositions of evidence [EcCX10 and X11, several volumes]. At the head of each testimony, a brief sketch of the life history of the witness is given in the form of a list of places where the person has lived and for how long, along with their approximate age. This information must be treated with caution as the ages and lengths of residence are approximate, not all movements may be recorded especially for older people and those living most of their lives in their place of birth, and the sample is clearly biased towards men and also against poor people. Of 37 cases where a description is given for persons who at some time in their lives lived in Biddenden, only 6 are women and 16 are males described as clothiers or gentlemen plus a minister and grammar school teacher. A further problem is that the witnesses were of different ages when they gave evidence and so later movements of younger persons are not known. This is less of a problem as I am interested in their arrival in and departure from a single place. A further restriction is that only persons living in the diocese of Canterbury would be likely to be called before its courts to bear witness. Those moving outside of this area, for instance to London, or to other parts of Britain or overseas, would perforce be excluded.

Bearing these limitations in mind, something can still be deduced from these records of the geographical mobility of a tiny proportion of those who lived in Biddenden between 1562 and 1670. By subtracting the periods of residence from the given ages, a very rough indication can be gained of when these people moved to or from the parish. The six recorded women were all aged between 15 and 29 years when they left Biddenden, but only 40% of the men fell into this age bracket. Seven of the 15 male leavers were aged above 30 years. The rough age at arrival in Biddenden can be calculated for only three women and

all fall into the same age group as the leavers. Of male arrivers, 10 out of 16 were between 15 and 30 years.

The women recorded as moving did so in their late teens and twenties, probably indicating that their migrations were associated with service and marriage. It is likely, however that the older men in the sample would have had wives and perhaps daughters who moved with them, but no later life migrant wives are recorded, perhaps due to the small number of women included. Men seem most likely to have moved between 15 and 30 years (45%) but about a third of males were older than this when they migrated to or from the parish. A smaller number of males moved before they were 15 years old. These probably migrated with parents, were fostered in some way or went into service early. Assuming that the migration of older men indicates the movement of their families (which cannot be assumed in all cases but is probably safe for most), most migration seems to have taken place when young people were in their late teens and twenties, the period of service and establishment of households by marriage, with a smaller number moving later in life (probably having also moved in the earlier phase) and a few moving as children.

Given that the majority of movement seems to have taken place when people were in their teens and twenties and that there is greater detail of the movements of younger people, the number of times that people moved may perhaps be more easily seen from their records. Of the 21 witnesses aged less than 35, 43% are said to have moved only once, 38% twice and 14% more than twice. Only one of these persons is said to have remained in the parish of his birth. This was George Holland, an widowed husbandman of about 30 years old who lived with his old widowed aunt. George is recorded again later in life, at the age of 63, when he is living in the neighbouring parish of Halden where he had moved some 13 years earlier [EcCX10.18, f156 and X11.12, f80]. He remarried two years after the first deposition and was married to this wife and had three children under 15 years when he left. Only one person in the complete sample, John Igulden, a clothier of over 40 years of age in 1606 is said to have lived in Biddenden where he was born all of his life, the description noting that he was *educatus* there, probably meaning school and apprenticeship [EcCX11.9, f138-9]. It is clear that most people probably lived in more than one place during their lives, with this movement taking place for most at service and marriage.

Where did these people come from and go to? There are 14 different birthplaces other than Biddenden mentioned in these records, over one quarter of which are within 5 miles of the village. Of the rest, 4 are within Kent and three in the eastern part of Sussex. The other 3 are in Devon, Suffolk and Staffordshire. Of these two are a minister of Biddenden and a schoolmaster, both graduates. Other than birthplaces, it is difficult to speak of origins and destinations, as several people moved more than once and some would probably migrate again after the date of the deposition. In all of the cases, 41 places are mentioned at least once as a former or current place of residence. Of these 17% are within five miles of the village and 50% are within 10 miles. For those born in Biddenden, 17 other places of residence are recorded, three of

which (18%) are within five miles of the village and 7 within 10 miles (41%). Obviously, because of the context in which it was made, there is hardly any out-migration beyond the diocese of Canterbury visible. The most popular single place of residence for those in the sample (other than Biddenden) was Canterbury where six persons lived at some time, although only 3 of the 28 non-natal places are sizable towns, the others being Dover (2 persons) and Faversham (1 person).

Some of these moves took place after a very short period of residence, Elizabeth Snode lived only three weeks at Charing before moving to Little Chart and described a narrow parallelogram of moves from her birthplace at Pluckley to Little Chart covering about 30 miles total in the space of six years [EcCX11.19, f130]. Her furthest destinations were within ten miles of her birthplace and Little Chart was little more than a mile away. These moves were made during her twenties, and by the end of them she had married a tanner. They are similar to the types of migration which Ann Kussmaul found among life-cycle servants and probably reflect the same process [Kussmaul, 1981]. John Downe, a contemporary of Elizabeth, and of a similar age, seems to have moved less. He left Biddenden, his birthplace for Woodchurch at about 18 years old, probably as a servant, and was still living there twelve years later as a farmer [EcCX11.16, f251-2].

Two thirds of those resident for a known time at a location other than that of birth or at the time of their court appearance lived in that location for less than five years and three quarters for less than ten years. Only half of these people had lived at their present place of residence for less than ten years and one quarter had lived there for more than twenty years. This highlights the nature of migration during a persons servant years, short term residence often in a number of places, as compared to an adult pattern of longer stays but not always in one place.

This sample is small and biased in several ways, but serves to indicate something about the timing and locations of geographical mobility. Many, if not most people would move at least once in their lives, the majority of such migration taking place in their late teens and twenties, the period of servanthood and marriage. Many would then settle for a longer period in one of these locations or at another place, perhaps returning to their birthplace. Some would make further migrations later in life, probably with their families. A small proportion of people would move from distant parts of England, but the majority of those who lived at any time in Biddenden would originate from Kent (79% of this sample) and many from the parish itself (50% of sample). Nothing can be learned from this data about migration out of the diocese but it is clear that most of the observed movement was fairly local in character.

After this general examination of the nature of movement to and from Biddenden, several aspects should be examined in more detail.

Service Migration

Becoming a servant or apprentice meant moving to a household where the young person would be employed in this capacity for an agreed period, usually between one and several years. For many of these people this would entail moving from the parish of childhood residence and perhaps birth and for some several moves over a number of years would be entailed (as in the case of Elizabeth Snode above). Some would undertake part or perhaps all of their service in their home parish. Francis Allard, clothier, mentions two servants and three apprentices by name in his will [PROB11/79/9]. The male servant, Simon Moyse, is a 24 year old local man but the female servant, Ellen Soen, appears not to be local. Of the apprentices Amos Spencer may be local, John Heneker is not but settles as a clothier in Biddenden for the rest of his life while Richard Stonard is probably from a Biddenden family. As can be seen in the case of John Heneker, this type of migration, although often temporary, could lead to longer term settlement in the new place of residence. Women servants might also settle in their place of service, as did Ann Norman, servant to the carrier Richard Drayner in 1603 (will of John Carpenter, PRC32/39/49), who married Thomas Stedman, blacksmith, three years later and lived in Biddenden until her death in 1653.

Most migration for service was probably within ten miles of the person's former home but some, especially to towns was over a longer distance. In some cases longer distance movement may have worked through a form of chain migration. This point cannot be proved, but several cases indicate possibilities in this direction. Two men William Collins and Thomas Foster, moved from Burrish, Sussex to Benenden as servants to Thomas Ersden, Foster the elder of the two arriving two years after Collins [EcCX.10.12, f114-5]. After a few years both men moved to Biddenden at roughly the same time. It is not known whether or not they were kin and the 'chain' may be due to friendship. William appears to have married his former master's daughter, Joan, many years later but did not stay long in Biddenden after this, while Thomas Foster lived the rest of his life in the parish and was followed by two sons, one daughter plus grandchildren who stayed in Biddenden to establish families. Another instance, again more suggestive than conclusive, is the employment of a servant named Edmund Brattle by John Beale whose mother, Elizabeth Brattle shared the same surname and may have been kin. The Stowe brothers, Thomas and Zachary, moved to Canterbury to serve apprenticeships within a few years of one another, both later settling there as tradesmen [EcCX11.14, f10 and X5.5, f38].

Marriage Migration

Although it was the custom in the early modern period, as today, to marry in the bride's parish, the location of the new home would in most cases be the choice of the husband. Because of this many Biddenden daughters left the parish after marriage and many wives were born elsewhere. Of 2163 daughters from Biddenden, the marriages of 384 are known (18%). Such a figure seems very small, but 25 - 35% of the daughters would have died during infancy and so never reached an age at which they might consider marriage. On this basis between 27 and 30% of surviving daughters can be located to a marriage. Of the 384, only 30% are known to have married men born in Biddenden. Not all of these women stayed, in fact only 261 daughters are known to have become mothers and are therefore the maximum number of married stayers (68% of married daughters). More of the 'staying' daughters married locally born men (36%). Further detail can be added by examining the 384 daughters as to marriage choice and migration.

stayers	marry insiders	94	25%
	marry outsiders	167	43%
leavers	marry insiders	20	5%
	marry outsiders	103	27%
		384	100%

Table 3.12: Marriages of daughters analysed by origins of husband and future residence.

Clearly there was a preference for husbands born outside of Biddenden, even by women who stayed. Although the outsider figure may be artificially inflated due to men born pre-register or not recorded during one of the poor registration periods of the 1550s and 1560s, the figure is still large when allowance is made for these. After 1600 there would be a declining number of 'unregistered' men. So if 'staying' daughters marrying between 1600 and 1639 are examined, 58% are still found to marry outsiders. That a significant number of women married men who had come to settle in Biddenden says something about male migration and marriage. Not being born in Biddenden does not mean that a person came to the parish as a young adult, after service. He or she could have come to the parish with an in-migrating parent as did Hugh Higgins the younger or Rowland Brushwood's numerous offspring. Others may have arrived as a widow or widower like Anthony Pullen the hammerman or Joyce Reader who became Roger Pattenson's second wife. But many of these incoming men did arrive at or after service (see story of Thomas Foster above). Marriage to a local daughter may have been helpful in getting themselves established.

Marriage in a bilateral system creates kinship. Kinship can be used for contacts and obligations. A classic case is probably the marriages of three of William Boddenden's daughters. Joan, the second surviving daughter married the son of a wealthy local clothier when aged 17 in 1568. Judith the next youngest daughter married an immigrant yeoman-clothier aged about 26 years in 1573 when she was 21 years old. The youngest daughter Jane married another incomer, clothier Barnard Randolph in 1587 at age 16 years. The early ages of marriage for the women are typical of daughters from wealthy families in Biddenden in the sixteenth century (see above and chapter 5). Boddenden died in 1579 and his son soon left the parish, but these three daughters lived out long married lives in Biddenden, two of them dying there. Randolph took over the lease of Boddenden's main estate at Barkley or Birchley and founded the most prestigious local gentry family in the parish. The marriages automatically gave the incomers an influential set of affines and may have helped establish them among the local elite.

Because of the custom was of marrying in the brides parish, the number of females born and married in Biddenden, who then stay to have two or more children, or die there is probably a rough reflection of the number of female married 'stayers'. Those leaving Biddenden after baptism with no further record, probably married from a parish where they were a servant. There are exceptions but these are probably few.

Some women might leave Biddenden by one marriage and return through a later union. Mary Chantler, daughter of Walter, married Richard Leeds who lived in Tenterden but returned to Biddenden with her second marriage to Philp Homewood. Others could make a series of migrations through multiple marriages. As marriage for a woman usually followed soon after service, moving to live with a new husband can be seen as one of a series of migrations taking place between childhood and married adulthood.

Seasonal and Temporary Migration

Not all migration involved movement for extended periods. Some might take place over weeks or a few months. This type of movement is mainly observable in the records of the church courts where people are presented for not attending their parish church or living apart from a spouse.

One particular type of seasonal migration involved men going from one part of Kent to another to work at harvesting. Brent, examining agriculture and work in Sussex between 1550 and 1640, notes that the wheat harvest on the downland used labour from the Weald to make up for local shortages [Brent, 1976]. The earliest harvest was in Thanet, which might allow people to work there before moving on to the downland farms and then return to the Weald for the harvest which was later [Chalklin, 1965]. John Howat of Hawkhurst claims that his neighbours presented him for co-habiting with his intended wife "...because he was absent in harvest from hawkehurst..." [EcCX2.4, f352]. Another summer migration might have been associated with the keeping of cattle in Romney Marsh by Wealden yeoman-graziers. Such cattle would have required short distance drovers and persons to watch over them while they were

away known, locally as 'lookers' [Chalklin, 1965].

Short term migration might also be a consequence of some trades. Richard Newman of Smarden stated that he was absent from his parish church because he was "...a common woad setter & so he must of necessitye travayle from place to place..." [EcCX2.4, f228]. Richard Periden of Headcorn was presented for a similar reason and said "...that he is a tynker by hys occupacion..." and "...he gaynethe his lyvinge by travayling abrode..." [EcCX2.4, f308]. A chapman and a shoemaker from Tenterden claimed that "...to make parte of a poore lyving is the cawse of their absence..." [EcCX2.4, f405]. Another trade where such movement was often necessary was that of a carpenter, who might travel to other places to build houses and other structures. David Walchin of Biddenden was at Ticehurst, Sussex, about eighteen miles south-west of his home in 1613. He said that he "...beeing by his trade a Carpinter went into Sussex to doe a peece of worke there abowte which worke hee was there some 7 or 8 weeks..." [EcCX5.5, f164].

One further type of temporary migration would be the visits made by clothiers to London to sell cloth and buy dyestuffs. Clothier Henry Allard was in London "...havinge due occasion of businesse..." there when he visited the sick Edmund Gibbon, probably an affinal relative [EcCX11.12, f188]. Women too might work away from home for short periods. A Frittenden wife had "...ben this halfe year at Sir Rowland Haywards howse onelye to accompany my Ladie..." who "...lyeth in a child bed..." [EcCX2.2, f142].

It is clear that even when people had their main residence in a parish, they might not spend all of their time there. Seasonal and short term migration was a necessity for many poorer persons in order to make ends meet. For wealthier people business interests, and sometimes legal disputes, might entail protracted absence from home. Not only did a continuous stream of people settle in and leave Biddenden, but numbers of persons would be absent for short periods especially in summer when travel was easier and certain seasonal work could be undertaken.

Local Rural Migration

As noted above, much migration was local in character, involving moves to places no more than ten miles away. Because it is difficult to trace people through the various sources available from one location to another with the consistency required to make clear statements about how many people went where and when, the evidence is perforce anecdotal. Short-term migration, women leaving at marriage and servants have already been discussed. The following examples are all of persons who came to or left Biddenden, either permanently or for a number of years.

One group who seem to have followed this type of pattern are those involved with iron manufacture. Biddenden was the furthest east of the Wealden forges and hammers. Most of this type of manufacturing

activity was located west of Cranbrook. Few men were needed for this type of work, but specialised skills were required. Michael Haytowe, forgerman, who died in 1611 seems to have been an in-migrant but few details are known. Elias Bluatt was a hammerman and came from Hawkhurst with his wife and ten children in the early seventeenth century. His son Steven followed his father's trade but may have left the parish soon after his marriage in the 1620s. Another hammerman, Anthony Pullen a widower also from Hawkhurst married one of Elias Bluatt's daughters and established his family in Biddenden where he later died. Two later forgermen Charles Cocks and Lawrence Lenward both had fathers in the same trade who lived in the Sussex Weald [Cranbrook PR, KAO:TR/1042/5]. There was clearly a tendency for persons in the iron manufacture to be incomers and not to work in the same place as their fathers if they followed the same trade. This may have been due to the limited demand for labour, forcing men to move to where work was available. This is in contrast to some of the blacksmiths of Biddenden, such as the three generations of Chalkers and Stedmans who kept the trade in the same family and the same place over time.

As well as tradesmen, some persons who were entirely farmers migrated to and from Biddenden. One reason for this might be the inheritance of a local estate. Micaiah Hall seems to have come to Biddenden in the 1620s, marrying a daughter of local clothier Ambrose Drayner. Hall possibly inherited lands from his maternal grandfather, yeoman George Ramsden whose only son had predeceased him. Ambrose Drayner himself was an in-migrant from Staplehurst and married Elizabeth Twisden of the same parish. Over twenty years later, Elizabeth's uncle's son Peter Twisden settled in Biddenden, the offspring of a Twisden male and a Drayner female. The reason for clothiers and yeomen migrating between Wealden, and sometimes more distant parishes is at present unclear. Possible answers include the recognition of better opportunities, the outcomes of partible inheritance and perhaps some form of chain migration associated with inheritance and kin marriage at the extra-parochial level.

Some people went away for a few years and then returned to the parish while others used Biddenden as a home for a few years, making similar moves but in the opposite directions. James Bateman, yeoman-clothier, seems to have lived in Sutton Valance, eight miles north-west of Biddenden. Bateman's daughter Priscilla had married Giles Bishop, a clothier of Sutton Valance in 1592. By 1596 James is described in a church court presentment as "...late of Biddenden and nowe of Sutton..." [EcCX4.3, f28] and in 1601 is renting an orchard there from his son-in-law [KAO:Q/SRg/13/1]. When Bateman's widow is examined by the church courts about her late husband's will in 1611, she is said to have been born in Biddenden and to have lived there for ten years. This would indicate an absence at some time before about 1601 [EcCX11.12, f63-4]. Bateman does not sign the churchwardens accounts between 1597 and 1602 [KAO:P26/5/1]. All of this seems to indicate that Bateman and his wife were absent for some years from Biddenden at the turn of the seventeenth century and that they appear to have moved to Sutton Vallance near to their daughter and her husband. Bateman was presented to the church courts at the time of his probable departure on a number of charges [EcCX4.3, f28 and f98]. It is possible that he wished to leave

what seems a hostile atmosphere. Giles Bishop was one of a group of religious radicals in Sutton [Acheson, 1983] and it may be that his wife's parents shared his views, which appear to have been less common in sixteenth century Biddenden at this time. If these premises are true then possible radicalism may be linked to the local hostility. Some form of religious commitment may be behind the choice of Henry Page, "...a Comon scrivener..." to write his will. Page's small number of wills all have a similar preamble with a Calvinistic stress on the elect [PRC32/42/87].

Migration to Towns

In anthropology the main focus of migration studies has been on movement from rural areas to towns and cities. Eades shows how migration studies in the social sciences during the later nineteenth and early twentieth centuries were closely linked to interests in the 'problems' of a negatively evaluated urbanisation [Eades, 1987]. Since then interest has shifted more towards examination of the nature and processes of rural-urban migration and the relationship between cities and rural areas. Other studies have examined long distance migration, across national boundaries such as Turkish *gastarbeiten* in Germany [Magnarella, 1977], European migrants to the United States [Douglass, 1984] or Pakistani migrants to Britain [Ballard, 1987]. Very little attention at all has been paid to migration between rural areas although this is not unknown in the present or the past. It can take the form of betterment migration, such as the migration of people from Britain to establish farms in the Americas (seventeenth to nineteenth centuries), or on the other hand subsistence labour migration such as that from Mexico to the United States for harvest work. This lack of interest is due to urban migrants being viewed as 'problems', whereas rural migrants are less likely to have the attentions of the state forced upon them in the same way.

The result is that there appears to be very little in the way of studies comparable with the majority of migration found in Biddenden and the Weald. However, some of the ideas put forward by anthropologists and others in different contexts should be examined in order to assess their relevance for the types of migration encountered in this study.

In contrast to the anthropological interest in migration to urban contexts, there is no indication that this made up a substantial component of movement from Biddenden and the Weald. Chalklin indicates that the majority of urban bound migrants in seventeenth century Kent came from within ten miles of the town and that studies of apprenticeships have indicated that most were born in the same towns [Chalklin, 1965]. This may have changed somewhat after mid-century when the Weald suffered economically while the towns and ports prospered. There may also have been a similar exodus at times when the cloth manufacture was in one of its frequent depressions. But there is no evidence that migration was mainly to urban centres or that it was seen that way.

There are three main types of rural-urban migration from the Weald during this period. The first was betterment migration through learning and practising a trade in a town. The second involved those people who could establish interests in rural and urban centres and exploit both at the same time. The third was subsistence migration, poor people seeking labouring or trade occupations in urban centres. These three types of migration appear to be largely specific to certain status groups though not entirely.

Betterment migration achieved through an urban apprenticeship is seen in the case of two brothers from the Stowe family, Thomas and Zachary. They were the middle two of the four surviving sons of John Stowe, innholder and shopkeeper who died in 1601 leaving a widow with six children ranging from Joan (26) to William (12). Zachary and Thomas appear to have been in Biddenden at this time aged 16 and 15 years probably either in service or at school. Stowe was comfortably off and left each child a portion of £10. The eldest son John married in 1608 and began to raise a family in Biddenden and the daughters were probably both married by this time. Thomas had left Biddenden for Canterbury about one year after his father's death and become apprenticed to a barber [EcCX11.14, f10]. His elder brother Zachary had migrated to Canterbury by 1612 and was apprenticed to a clothworker [EcCX5.5, f38]. Both remained in Canterbury to practise their trades. This is betterment migration in the sense that it would be unlikely that four brothers could have settled in Biddenden given population pressure and limited opportunities. A further advantage might be the material standards of living in a town which were probably higher than in the Weald. Their apprenticeships also conferred on them the prestige of being freemen of the city [Corpe, 1982]. William Flete, a man of wealthier origins a lawyer at Gray's Inn in London in 1572, probably a more lucrative practice than one in the Kent towns or the Weald [PROB11/54/40]. The Fletes had other London connections, William's brother Thomas had married the daughter of a London man. The type of occupation and their known status in Biddenden mark out the Fletes as different to the Stowes. Richard Lulham, a grocer left Biddenden about 1612 with his family to settle in Dover after a few years in Sussex. The opportunities for this type of trade may well have been better in an urban context.

There is little evidence of the migration of Biddenden daughters to London or other towns culminating in their marriage to a local man and settlement there. Vivien Brodsky Elliott discusses this type of migration to London. Young girls left home all over England to go to London and work as servants or live with kin [Elliott, 1981]. She contrasts the upwardly mobile men who came to London as apprentices with the downward mobility of girls migrating to work as servants. Higher status females were more likely to stay with kin and through this the importance of kinship networks in securing a good match can be seen. As will be discussed later, kinship had a part to play in certain types of rural-urban contacts for the higher status inhabitants of Biddenden as well, for both male and females. From the evidence of licences, no person outside of the wealthiest families in Biddenden married anyone from the towns of the diocese except John Buckhurst, husbandman who married the widow of a Canterbury innholder in 1624. Elliott notes the financial advantages for a bachelor of modest means like Buckhurst marrying an urban widow. As no

children are recorded for the couple, they may have settled in Canterbury. Most betterment migration probably involved people of moderate status and wealth, husbandman and tradesmen, like the Stowe brothers and John Buckhurst.

Another form of country-town movement is the exploitation of resources and contacts in both rural and urban areas by wealthy Wealden families such as the Allards and Randolphins. Richard Allard was a wealthy Biddenden clothier but when he died the parish register and his own memorial brass proudly proclaim that he was also an Alderman of Rochester. Although his land and his family appear to have been in Biddenden, he was clearly very proud of his urban associations. In order to hold his office, Richard must have spent at least some of his time in Rochester and may have lived part of the time in the town and part in the country. The division of his wealth between rural and urban interests is not known. His urban contacts went beyond Rochester however. He was related by two marriages to the equally wealthy Maplesden family of Rolvenden and Benenden who had interests in Maidstone and in London. One of these kin, described as his "...Brother in God..." by Allard's youngest son Francis in his will was "...Citizen and Grocer of London..." [PROB11/109/11].

The Randolph family were linked to the Masters family of Canterbury by two marriages between Randolph sons and Masters daughters. The sons lived partly in Canterbury and partly in Biddenden, one practising as a doctor in both places. Edward Master, brother of the two wives, also had a rural estate in Woodchurch [PRC31/125/370]. In the next generation, a Randolph daughter married the son of another Masters daughter who had married a wealthy Canterbury man [Thomas, 1954]. Clearly personal networks of kin were important in maintaining rural-urban links. They appear to have in some cases been strengthened and remade over time. Such links might allow a wealthy man to exploit both a rural and urban niche, using the solid wealth of landed property along with rural manufacturing to enable him to gain the potentially greater prestige available in a city.

Not all migration to towns was of dual residence parish gentry and less affluent people in search of opportunities in trade or marriage. Town also attracted poorer people, seeking labouring work or practising lower status trades. Wiredrawer John Shaw left with his new wife Priscilla for London soon after their wedding in 1609 [EcCX9.9, f111] but they had returned to Biddenden by the time his wife died one year later. In some circumstances poverty and migration could force a couple to live apart. Robert Bowlden and his wife

...beeing poore and not haveing the wherewithall to hire them a howse & furnishe the same hee...worckethe upon his trade in the pariahe of Bethersden as a servaunte and his wyffe hireth a Chamber in the pariahe of St Pawles, where shoo livethe & lie & hee see often as [he] cometh upp to Canterbury, which hee dothe manie tymes doe live & lie & eate & drincke together as mann & wyffe shold doe... [EcCX6.7, f7].

A similar situation seems to have existed for Daniel Loph of Ashford whose wife was living at Battle, Sussex. He claimed “...hee is not able to live soe well in Battell as hee now liveth in Ashford...” but that he visits his wife at least twice each year and on those occasions will “...carry her mony...” [EcCX6.8, f183]. Thomas Starr had “...a shopp and house...” in Ashford where he lived most of the week and “...a house and familie...” in the nearby village of Kennington, where he returned to spend Saturday and sometimes Sunday night with his wife and son [EcCX6.7, f257].

The last example may refer to persons of moderate substance as Starr is said to have a house in both Ashford and Kennington. But all three cases indicate that for various reasons people may have lived individually in one location while other family members lived elsewhere. Bowlden’s wife may have been able to obtain some form of work in the city which would not be available to her in a rural location. He himself was tied to his master’s residence. The two Ashford examples indicate that prospects in towns might be seen as better than those in rural areas but that it was probably cheaper to keep dependants in the country, perhaps because between a cottage garden and any common rights they could provide much of their own subsistence. This situation with divided families is in some ways similar to patterns of migration described in southern Africa [Guyer, 1981; Izzard, 1985]. The anthropological studies have led to a critique of former analyses by household [Spiegel, 1987] and indicate that such units should not be assumed uncritically in an historical situation.

National Migration

Most migration examined so far has been within or near to Kent. In some cases however, people might move between the Weald and more distant parts of England. Such movement could be in both directions. Roger Pattenson, according to the Kent historian Hasted "...came out of Yorkshire..." to settle in Biddenden, where some of his descendants stayed for centuries [Hasted, 1778-99, 136]. He was a yeoman-clothier and may have come from the Yorkshire cloth making district. Why he made such a long migration and how he came to settle in Biddenden is not certain, but he may have been an apprentice there as was John Heneker, another incoming clothier. John Nevell, also a clothier, was born in Eccleshall, Staffordshire [EcCX11.7, f129]. Migration could also work in the opposite direction, scattering Biddenden or Wealden people to other parts of England. William Neale left Biddenden in 1577, moving to nearby Halden where he then stayed "...a yeare or there abowte before he went out of Kent..." to "...Fodryng-ham...", Lincolnshire [EcCX2.2, f44]. One way in which such movement might take place is for one person to make a speculative move and then send back for other family members or kin once established. A man in Smarden in 1627 said

...he hath a wife in Suffolke, from whence he lately Came, and he saith he is providing a house in Smarden, and then he will fetch his wife... [EcCX6.7, f270].

Such chain movement has similarities to the way in which overseas migration could be organised (see below) and may have been common, at least for older people with families.

For many, becoming a clergyman meant going to live far from their native area. This was true of most of the ministers of Biddenden. John Whetcombe came from Devon, after having already ministered in Bristol, and from his will has two groups of distant relatives, in Lyme Regis, Dorset and in Essex. His situation in some ways reflects that of the famous Ralph Josselin, minister of Earls Colne in Essex, establishing himself in a strange parish [Macfarlane, 1970]. However, Whetcombe, unlike Josselin, brought or was followed by a number of kin. Apart from his wife and children, his aged father, his brother and probably two sisters also came. His son acquired an estate in the next parish and was styled gentleman, while the more humble son of his brother became parish clerk at Biddenden.

The extent of the small kindred moving to Biddenden with the parson, might be unusual in its size, but was not unique in terms of practice. Other clergy, such as the young and somewhat isolated curate Watts Jones and the hated minister William Horner, had no local kin or immediate family. Some clergy did settle locally however. Biddenden schoolmaster and curate Nathaniel Ely was the son of the vicar of neighbouring Tenterden, George Ely and had other local clerical kin. One of the sons of Biddenden yeoman-clothier Josias Selyard, Richard, succeeded George Ely at Tenterden. A few families formed small clerical dynasties such as the mid-sixteenth century curate at Biddenden, Richard Horsmonden, who moved on to

a benefice at Goudherst which his son Daniel also held later on. Wrightson notes the importance of such groups of clerical kin in furthering the careers of members [Wrightson, 1982]. The Whetcombes indicate a similar type of chain migration to others noted above.

Migration Overseas

As well as moving to and from other parts of England, people from Biddenden and the Weald also moved overseas, particularly to Ireland, the Low Countries and the American colonies. All of these destinations had strong links with a more radical form of Protestant religion than was officially recognised in England at this time. Mathew Taylor, a clothworker was described in Biddenden parish register as "...an inhabitant in Ireland..." when he was buried aged 29 years in 1616. He may have returned with his family before his death, and had probably only lived in Ireland for a few years. He had married the daughter of a Biddenden clothier in 1611 and produced two children who died soon after birth within two years of this. Therefore he most likely emigrated aged about 26 years in around 1613. John Beale, a clothier claimed to be in "...feare of arrest..." in 1626 as he was unable to repay debts accumulated by his deceased brother Richard three years before [EcCX6.7, £214]. This was because

...some of them which owed the same went over into Ireland and others that owed [him] mony went over into the Low Cuntries... [ibid].

but John said that he expected to receive the amounts. According to Chalklin two thousand clothworkers are said to have left the Weald for the Continent in 1616 and others in the 1630s [Chalklin, 1965]. The main reason appears to have been depressions in the cloth trade adversely affecting the manufacture. Beale's creditors were probably among the earlier group. Steven Ricard's namesake and kinsman was overseas in 1606 as he was left a bequest of £10 if he "...shall ever happen to returne & come home out of the Lowe Cuntries..." [PRC17/54/323]. This earlier case of migration to the Continent may be related the cloth manufacture (the migrants brother was a clothier) although this was a period of prosperity in the trade.

A popular destination for long distance migrants was the American colonies, in particular Massachusetts. Several families emigrating from Biddenden can be identified. Isaac Stedman, a weaver aged 30 years, left England in April 1635 with his wife and two small children [Banks, 1937]. They settled in Scituate, Massachusetts, joined the church soon afterwards and had at least three more children ([Savage, 1853], other details of emigrants in New England are from this source and Banks). He moved to Boston in 1650 and was described as a merchant when he died in 1678. Clearly the move had had both spiritual and economic rewards for Stedman. Richard Seelis, yeoman (54), also settled in Scituate in 1635 with his two unmarried daughters aged 15 and 19 years. The daughters married a few years later with two other migrants. Stedman and Seelis were distant kin, but whether this or their being from the same place in England may have influenced their decision to settle in the same colonial town is uncertain. Other

migrants show closer kinship connections.

John Stowe, elder brother of Thomas and Zachary, mentioned above as urban bound migrants, left England in 1634 and settled in Roxbury, Massachusetts. He was 52 years old and had been parish clerk of Biddenden for many years. He appears to have been joined in 1635 by his wife Elizabeth and six children (5 to 19 years old). His wife was the sister of Patience Foster (40) who came to Dorchester, Massachusetts in 1635 with her son Hopestill (14) and her widowed mother Rachel Bigge (66). Richard Foster, husband of Patience had probably emigrated a year earlier, perhaps with John Stowe. Thomas Besbych was Richard Foster's half-brother by the same mother. Foster was the son of a clothier and Besbych of a wealthy yeoman. He sailed on the *Hercules* from Sandwich, Kent in 1635 with his two daughters, four children named Igulden (a Wealden family) and three servants (one male, two female). The children other than his own daughters may have been entrusted to his care while emigrating to join their own family or kin. Besbych settled at Scituate where he became a church deacon but later moved to Duxbury where he became representative to the General Court in 1643. He was 44 years old when he emigrated and recently widowed. Though born in Biddenden, he had lived mostly in Frittenden where he had inherited an estate from his father. The Stowe/Foster/Besbych migration seems to indicate chain migration through kin, starting with John Stowe and Richard Foster, who then brought their families and probably influenced Thomas Besbych to move.

Smallhope Bigge, a wealthy clothier of Cranbrook, brother to Elizabeth Stowe and Patience Foster, left several bequests to kin and friends in New England totaling £1516 in all (fig 3.3). The Stowes alone received £900 between them [PRC32/51/115]. He seems to have kept in close contact with his emigrant kin since they left three to four years earlier. He had lent his sisters money "...since their going to New England..." and John Stowe owed Smallhope for "...money laid out to him for wares sent to him..." [ibid]. Bigge himself may have been contemplating joining his kin as he makes allowance if Stowe "...has bought any lands for me in New England..." [ibid]. Besides those kin previously mentioned Bigge notes three others who have emigrated, one of whom, Clement Bate formerly lived in Biddenden. Cressy discusses the importance of kin links in securing help in the emigration process and maintaining contacts with England [Cressy, 1987]. Smallhope Bigge showed a great interest in the colony, giving large bequests to his kin their, having land bought for him there and giving much help to migrants. Edward Post, another clothier, left £50 in his will in 1638 to be sent "...to New England with all convenient speed..." for John Stow and Thomas Ruck "...to the benefit of the plantation there..." [PRC17/70/614]. As far as can be ascertained, neither man was kin to Post, but the religious feelings made clear by the many bequests to preachers "...of God's Word..." indicate that interest in the colony may have had a spiritual as well as a family dimension.

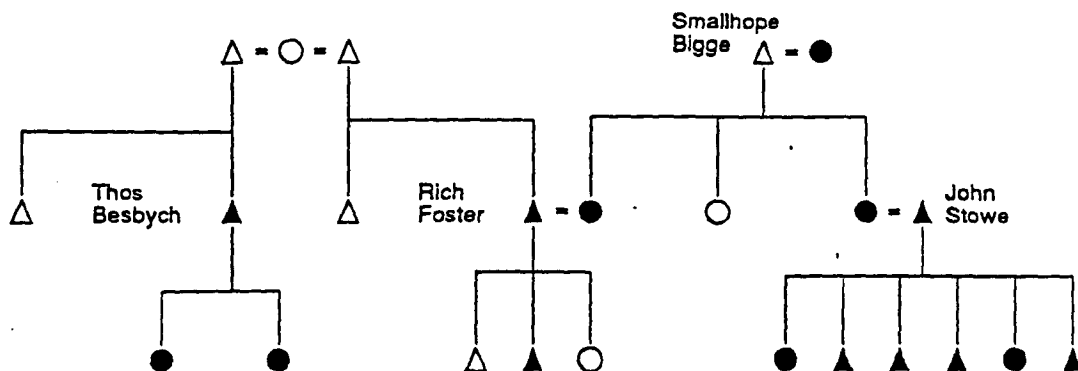


Figure 3.3: Relatives of Smallhope Bigge who emigrated to New England in the mid-1630's. Emigrants shown by filled symbols.

The reasons for taking the massive step of migrating over such a great distance are very complex as is made clear by Cressy. Certainly there was an element of betterment migration for many of those who went from Biddenden. Isaac Stedman could be called a merchant when he died, which implies a degree of social mobility not available in England to a humble weaver. The most successful of the migrants was probably Thomas Besbych, on the evidence of his office holding in the colony. He was a man of some means when he left, but could possibly achieve greater status in Massachusetts than he could in Kent. Overall there was probably a degree of betterment for most, if not all, but relative to the resources available to them when they left and through contacts at home. The spiritual aspect was also important. Bequests to ministers in wills, names such as Smallhope, Hopestill and Thankfull and ready membership of the churches in the colony indicate that many of these people were of a godly persuasion. The religious climate in England promoted by Archbishop Laud may have been a strong influence on the timing of the migration. Isaac Stedman had been brought before the church courts in 1633 (two years before migrating) as he "...in the administring [of the communion] refused to kneele and departed without it" [EcCX6.8, f202]. John Stowe had been presented the same year for not having received the communion [EcCX6.8, f179].

The chance of betterment, the wish for greater freedom of religious practice and the worsening situation in the Wealden cloth manufacture may all have played their part in decisions to leave. Links through kin and neighbours were also very important. Peter Clark found that the protestants and puritans of early modern Kent were connected by many links of kinship [Clark, 1977]. It was however their ability and willingness to use such relationships that mattered. Chain migration has frequently been dealt with by anthropologists. The long distance movements have some similarities to Pakistani migration to Britain in this respect (although in other aspects very different) [Ballard, 1987]. The mixed religious and betterment motives however suggest possible similarities to Jewish migration to Israel.

Staying in Biddenden

In recent years the question of identification with place has become a theme of some importance in anthropology, particularly in relation to ethnography in Britain [Cohen, 1982; Strathern, 1981]. This has not only arisen through the visualisation of contemporary populations as more mobile, something which has been increasingly questioned, but also to the abandonment of the concept of an historical transition from a world of immobile persons in rural communities to one of peripatetic town dwellers [Macfarlane, 1978]. Given the obvious inability to interview long dead subjects on their attitudes to place an argument of the type put forward by Strathern for Elmdon is out of the question for Biddenden. There is no way at present to know whether or not those families whose descendents stayed in the parish for several generations would under any circumstances be regarded as belonging any more than others. There is a dangerous tendency in centering a study on one place that that location can begin to take on an importance in the lives of its residents which is entirely the creation of the researcher. This interpretative problem must be borne in mind when considering staying and migrating.

The fact that a population might show a fairly high degree of geographical mobility does not in itself preclude any identification with place or people living in a place. In the Weald such identification went far enough that a man could slander the women of a neighbouring village collectively (a practice somewhat reminiscent of inter-village evaluations in Andalusia [Pitt-Rivers, 1954]). In a defamation case William Stedman said that "...he meant all the wyves in Smarden and none particularly..." [EcCX10.19, f189]. Other forms of competition existed between villages such as the bell-ringing match at Kennington, near Ashford "...betweene the parishioners of the same parrish and some of ann other parrishe..." [EcCX5.9, f121]. It may be that identification with a specific place was only used in certain circumstances however. Some cases indicate greater ambiguity such as Anthony Jemmett, described as of Headcorn but attending church at Ulcombe which is nearer to his house, where much of his land is and where he was born [EcCX1.9, f66]. Similarly James Bateman was accused of "...living as a fugitive person..." who "...will not acknowledge himselfe as a parishioner in anie certaine parishe..." [EcCX4.3, f98].

In some senses belonging to a parish was connected with taking part in communal activities such as church attendance and seems to have contained elements of adscription and choice. Sabeau discusses the complex relationship of individual, community and the communion in sixteenth century Wurtemberg [Sabeau, 1984]. He does not problematise the concept of belonging to the village in the way that I have tried to do; this may have been less appropriate in the German context. There are similarities in Sabeau's case study, however, to some remarks made by Wealden people about belonging. Anthony Tesdall had lived in Biddenden for over twelve months and was described as "...a stranger within the parishe..." [EcCX4.3, f99]. Other in-migrants are not described as strangers such as William and John Cooper who had lived there eight months [EcCX2.2, f236]. There appears to be a degree of uncertainty about who did belong and who ought to belong. That there seems to be some connection between place and behaviour is indicated by Richard White who said "...he would be hanged first..." before he did penance in church and "...that an other towne was as good for him as Biddenden..." [EcCX4.3, f213]. This again relates to Sabeau's work on community and communion. The parish church, before neighbours was the place of both communicating and penance. An idea appears to have existed that a person "...out of Charity..." with neighbours should not take communion [EcCX4.11, f207]. Penance was couched in terms of reconciliation but was also a very public shaming and a more 'private' penance before the minister and a few parishioners was preferred by those sentenced [EcCX2.2, f68].

From the sources used in this study, it is difficult to study migration, although it was clearly happening. This is particularly true of leaving as it is not certain what constitutes migrating from a parish. First occurrences can be documented, though their correspondence to arrival is not always clear, but last occurrences are more problematic. If a father's burial is not recorded he may have left at any time after the last event involving him such as the birth of a child or the death of a wife. Some people such as John Woolage lived at Biddenden but died while outside the parish (in this case at Wittersham, a marsh edge parish some 8 miles south-east, perhaps while involved in seasonal migrant labour). A set of rules have been used to calculate infant mortality but these do not necessarily reflect real migration. From the reconstructed networks of relationships built up from the parish registers it is however possible to examine some aspects of staying in Biddenden.

An attempt has been made to identify all men who had grandchildren born in Biddenden, both by sons and by daughters. This is one of several measures of the numbers staying in a parish, others being examined above. The reason why only men at the first generation level were examined is connected with problems created by the patrilineal slant of the parish registers which mean that motherhood is usually a complex calculation and would require extra software to produce the information (see chapter 2). As men born in later decades are unlikely to have had third generation descendants before 1660, three early cohorts were examined covering the period 1570-1599 for first generation baptisms.

cohort	bapt	survived>11	fathers	% of 1st gen	grandfathers
1570	178	132	35	38	14
1580	222	153	57	37	25
1590	199	137	41	30	16
	599	422	133	32	55

Table 3.13: Three baptismal cohorts (males) indicating numbers becoming fathers and grandfathers (at least 2 children at 3rd generation). Figures for survivors at age 11 are based on infant mortality rates for cohorts.

Only 13% of men would be represented by descendants in Biddenden at the third generation. But about 40% of those represented by a second generation (i.e. who became fathers) would be represented by a third. The figures for this vary for sons and daughters at the second generation. Of the 133 fathers, 30% had sons who then had children themselves and 16% had daughters who became mothers in Biddenden. This would indicate that sons were more likely to stay than daughters, but that a significant proportion of daughters did stay in the parish. Likelihood of staying decreases over time, which might be expected from other information concerning the periods of adulthood of these cohorts and their offspring.

If the occupational/status designation of these 'ancestors' is examined as a proportion of that for all fathers in the same category, it may be possible to put forward tentative conclusions about some of the characteristics of stayers. Two things must be born in mind. Firstly the problems with using such designations and secondly the fact that 70% of fathers have no designation of this type known whereas this figure is 50% for the 'ancestor' group. This would seem plausible, the longer somebody stays in a place the more likely that more detail concerning that person will be written down in documents. It seems that the groups representing most of those with wealth and high status (yeomen, clothiers and local gentry) were less likely to be represented by sons staying to have children (33%) than poorer groups such as weavers, husbandmen and labourers (44%). The sons of craftsmen and tradesmen seem much less likely to stay than either of these two groups (25%). Looking at daughters having children, there is much less variation between groups with 24% for the wealthier, 23% for the poorer group and 20% for the tradesmen.

Wrightson and Levine using different methods of examining turnover of population found the greatest mobility among the wealthier farmers and poor labourers [Levine, 1979]. As their classification of groups was of a different nature, using different sources, comparison can only be in very rough terms. The most

notable difference is that in Biddenden, labourers and poor tradesmen seem as likely to have stayed as small farmers. The distinction between these groups may have been much more blurred in the Weald, due to the nature of its economy, than in agricultural Essex.

When examining migration of the children of families, anthropologists often look at the effects of birth order on who stays and who leaves [Cole, 1974; Douglass, 1975; O'Neill, 1987]. In the Biddenden sample staying is related to birth order and to the number of same sex children of the same father. Sons and daughters have been considered separately, only those having more than two children themselves have been classified as stayers and children known to have died before 25 years or marriage are excluded. In the sample for sons there are 159 fathers having 370 sons in all (2.3 per father). Of these sons 203 are stayers (55%). For daughters there are 119 fathers with a total of 289 daughters (2.4 per father), and 144 stayers (50%).

	fathers	Birth order					%stay
		1	2	3	4	5+	
Sons							
1	49	49	-	-	-	-	100
2	49	35	28	-	-	-	64
3	29	15	15	9	-	-	45
4	24	12	12	8	8	-	42
5+	8	3	1	2	5	1	30
Daughters							
1	31	31	-	-	-	-	100
2	39	25	23	-	-	-	62
3	25	10	15	7	-	-	43
4	15	6	6	5	1	-	30
5+	9	1	4	6	1	3	33

Table 3.14: Staying and birth order - sons and daughters

In situations where there is more than one son the eldest is likely to stay in 59% of cases and the youngest in 42%. With daughters the eldest is likely to stay in 48% of cases and the youngest in 39%. With two sons the eldest is more likely to stay but with two daughters either is equally likely although in both cases just over 60% of children stay. Among smaller numbers of same sex siblings there is a

tendency for the first or first two children to stay, but large sibling sets show more erratic behaviour.

One of the difficulties in comparing this data with that given by anthropological studies, such as those noted above, is that ethnographers have tended to concentrate on the question of who stays on the parental farm. This data is not available consistently for Biddenden where such a farm may exist and because many households did not own land, would probably not be appropriate for a large number of cases. In the Tyrol, a farm was in most cases a requirement for staying in the village [Cole, 1974] with one sibling able to inherit and marry while the others migrated, married a landowner or stayed celibate. A similar situation prevailed in the Basque villages studied by Douglass and Fontelas, Portugal [Douglass, 1975; O'Neill, 1987]. The importance of independent households and the possibility of subsisting on little or no land by means of working at a trade, allowed more children to stay in Biddenden than the one heir per household found elsewhere. The possibility of staying was not however constant through time. Cloth manufacture, the major non-farming source of work was subject to swings of fortune and eventual decline. The major alternative economic activities, raising beef cattle and wood management required little labour.

Alongside of this picture of periods of expansion and contraction, it must be taken into account that even though more than one child might stay from any family, the overall picture is that almost 60% of families (as represented by a single father) failed to reproduce themselves at all (taking the 1570-99 figures as representative). In terms of population this shortfall was made up for by in-migration of persons born elsewhere to start or continue families in Biddenden.

That such migration into the parish occurred seems to contradict the movement out of Biddenden by those born there. In a society where there is a strong preference for each new couple to form an independent household, the timing of each of the hundreds of such decisions that have to be made over time does not necessarily coincide with an opportunity to set up the new establishment in a particular place. The requirements and wishes of those involved have to be balanced against the resources and openings available to them. It is possible to isolate the material factors that formed part of such decisions — land, work and housing. Other factors were also important. The examination of different types of migration have indicated some of these. One was the perceived opportunity for betterment at a particular location, another might be spiritual and intellectual reasons such as those partly lying behind trans-Atlantic movement and a further might be a wish to be near or as far as possible from acquaintances and kin. It was noted above that in a study which is centered on a single location, as most ethnographies are, there is a tendency to privilege that place in the way in which subjects are believed to construct their world. It may be, as Richard White said, that "...an other towne was as good...as Biddenden..."

Migration and Integration

Given that migration was very common and only a proportion of people would stay in the place where they were born, how did incoming people become integrated into villages or parishes when they moved there, if at all? It might be thought that this would not be a problem in a highly mobile society, but indications from studies of migration are that it is still significant.

Firstly, many people did not move very far. Most marriage migrations of brides were within 20 miles. Many other people went no further than a parish or two, or a local town. The majority of those whose origins are known, who came to live in Biddenden are from Kent, usually from within 15 miles of the parish. The clergy and schoolmasters are a notable exception.

People coming in from nearby parishes would therefore go to live among people who they knew reasonably well. They may have been servants in their new parish, or have visited it occasionally. There was frequent activity across parish boundaries from the evidence of the church courts in cases of drinking and sexual misdemeanours. Migration to local destinations would also keep the leaver within easy access to and by his or her siblings and other local kin. When Venice Carpenter lay sick, her married daughter living at Staplehurst (5 miles) came to stay with her and visited her.

Secondly, relationships with neighbours, which were very important on a day to day basis as well as in crises, could be strengthened by converting them into kinship. It is uncertain how far godparenthood could be used to do this, as this is an important means in many societies of creating strong bonds. Another method, noted above, could be to marry locally in the new parish.

Summary

Although the figures produced for examining migration have been of necessity only very rough estimates, the general impression is of a high turnover of population. Staying and migrating into the parish can be roughly related to the crises periods outlined above. The common pattern of migration seems to be one or more moves for service and marriage, followed by a more stable adulthood. Only a small proportion of people are likely to have grandchildren in the parish although a few families do persist for several generations. Most movement was probably fairly short distance and frequently rural-rural rather than being migration to towns.

The tendency towards village exogamy seen in marriage was probably encouraged by movement at service, which was the period of life when people were choosing partners. On the other hand, a certain number of local daughters married incoming men and settled in the parish, indicating that it may have

been helpful to establish affinal ties locally. Kin links were important in longer distance migration, in some cases creating chain movement. Reasons for leaving, types of migration and even to some extent destinations appear to be status related. Prospects for betterment and subsistence motives probably predominated although emotive factors were clearly important.

Although certain aspects of migration to and from Biddenden do have something in common with anthropological studies, there are clear differences. The relationship of migration to life-course, status and kin relations has been examined in many studies. Rural locations with a high turnover of population are much less rarely examined and permanent migration within a rural area is equally unusual in such studies.

The general movement of population appears to be growth during the sixteenth and early seventeenth century followed by decline until mid-century. The fall was in part due to demographic crises but mainly because of an imbalance in migration as the area became less attractive with the decline of cloth making. The demographic history can be related in some periods to national trends, such as population increase and harvest related crises. Local depressions in cloth manufacture seem, however, to have been equally important, sometimes magnifying the effect of more general problems. When cloth was in demand, the work of men and women could supplement subsistence and income from relatively small farms. This was not possible in more difficult times.

Migration was not however related solely to economic misfortune. Most people moved at some time in their lives, usually between 15 and 30 years of age due to service and marriage. Adulthood was more likely to involve stable residence. Most movement was local, involving other Wealden rural parishes but some people migrated to towns, to other parts of England or overseas. Kin links seem to have been mobilised in some cases of migration and incomers might establish local affinal ties. Types of migration and to some extent, destinations appear to have been related to status. Movement for the poor would usually be a matter of subsistence and might prevent married couples cohabiting. This type of migration may be linked to the relative instability of marriages among the poor (see chapter 5). For the middling and wealthier, migration would more likely involve betterment in economic or status terms. Such improvement in circumstances would however be relative to the person's resources when leaving.

Status is difficult to define with elements of both vertical alignment and also of class-like divisions. Three broad categories can be defined, poor, middling and wealthy. Although the range of wealth was not great, inequality in the distribution of resources is clear. Social mobility was possible but only within a small range of wealth and status. Power was linked to both inequality of wealth and to age and gender. A local elite, drawn from those with wealth and high status, dominated parish offices and were able to exercise both formal and informal power. The poor on the other hand could express opposition but could not effectively challenge the elite.

Most of this chapter has been descriptive, explaining the background against which later discussions should be viewed. Many areas therefore have received only brief treatment. Migration, however, has been singled out for more special attention because elements were found which were unusual in comparison to anthropological studies of the subject. Little interest has been shown by anthropologists in rural-rural migration, especially fairly local movement such as moving to settle within ten miles. Equally unusual are both studies of migration in historical periods (especially pre-nineteenth century) and examining rural locations with a high turnover of population resulting from movement both to and from. Some aspects of the migration studied are similar to anthropological findings, such as chain migration, subsistence and seasonal migration. Others, however, may indicate different patterns.

That some relationship existed between inequality and several aspects of society examined here is clear. Demography, power, types of work and migration appear to be experienced differently by those of unequal wealth and status. This theme of inequality will be pursued in the next two chapters which examine the social relations of death and marriage. Both death and marriage as events involve a process of fragmentation and renegotiation in terms of social relations. Death will be examined in terms of the use of the will to transmit both property and relationships and also in terms of burial practices. Marriage will be looked at primarily in terms of its making and the ability to marry, but certain aspects of married life will also be examined.

4: Willmaking, death and social relations

In most studies using wills it is their use as methods of controlling the future rights in property that is stressed [Goody, 1976a]. But wills are more than ways of transmitting property. They are also methods of laying down plans for future social relations. These are embedded in property relations and also in obligations. Such obligations are premised on kinship, friendship and relations of inequality between non-kin. In some cases such obligations may be clearly stated, in others they are an assumption made on the basis of symbolic bequests.

This chapter examines the way in which the dying might attempt to transfer and transform both property and social relations. The first part discusses the transmission of property. Firstly the transmission of land is examined, and the way that it changed during the period studied. The cash or goods bequeathed to children, referred to at the time as portions are then looked at in terms of equality. A further section looks at equality in transmission of property to other kin. The nature of provision for widows is examined in terms of the maintenance of previous living standards and restrictions on remarriage.

A second section examines the use of continuing obligations, laid out in wills and embedded in property, and of small bequests to affect future social relations and make manifest present status. In the first place, potential disruptions to relations within the willmaker's family created by the process of transmission are examined. The next section discusses ways in which obligations might be used to reproduce relationships and the way in which this continued inequalities of power. Small bequests are examined in relation to godchildren, dependant non-kin, the poor and the special case of mourning rings. The way in which they were used to maintain and reproduce existing relationships is discussed as well as their use in terms of displaying status and reputation.

Finally some of the practices associated with burial are examined. The funeral is looked at in terms of its relation to social relations, in particular those of inequality. Similar themes are discussed in relation to place of burial.

Transmission

The first part of this chapter examines the transmission of landed property and significant portions in cash or kind (relative to the wealth of the willmaker). The majority of such bequests were to the willmaker's immediate family and questions of equality between siblings, both male and female will be addressed.

Portions - land

Because no document giving a clear picture of landholding in Biddenden at this period survives, and few, other than wills, that give any information on this subject, a note of caution must be made before discussing bequests of land. Land given in wills is obviously bequeathed post-mortem. There is very little information about any transmission of landed property pre-mortem. Such absence of information is not equivalent to absence of action. This does not however mean that nothing can be said about the transmission of land at all by using only the evidence of wills. The case must be made that the wills mentioning bequests of land are a reasonable sample from which to draw conclusions about the transmission of land.

In 65% of the 79 wills where land is bequeathed to one or more of the willmaker's children, all or most of these children are of a young age and unlikely to have received pre-mortem gifts of land. Of the remaining 28 wills, where all children are adults, 61% have more than one son in consideration for land but partible inheritance is practised in only 32% of them. Of the 10 wills where sons are excluded from land bequests in the will, only one indicates probable pre-mortem inheritance of such property. This is the will of John Igulden, yeoman, made in 1613 [PRC17/61/118]. Igulden leaves two acres of land to his eldest son John, 50 years old and the residue of his household goods including farming tools plus the greater part of his cattle to his younger son William. These bequests are fairly small for a older man describing himself as yeoman and may be the result of the father divesting himself of his remaining property, the rest having been given away before. This is made more likely by the fact that the son John makes his will shortly after his father and has a greater amount of land to bequeath than is contained within the paternal will [PRC17/66/35]. Presumably this is at least part of a pre-mortem bequest.

Of course, pre-mortem bequests may have taken place in the other cases but compensation to other sons in the form of annuities and portions makes this unlikely. One will which does show clear evidence of pre-mortem transmission is that of Barnard Randolph made in 1628. He stated in his will that he had already "...conveyed and assured"... landed property to his four sons by means of "...several conveyances..." [PROB11/153/50]. It is also probable that Roger Pattenson, a wealthy clothier, had also given his lands to his offspring pre-mortem as he does not appear to have made a will but died after all of his sons were of age and had established families of their own. The wills of his son Thomas [PRC16/234/108] and grandson Josias [PROB11/242/482] indicate that there was land in the family. In some wills, there may be indications of pre-mortem bequests but there is no land in question.

Some land would have been given pre-mortem in wills which make no mention of this type of property. This must be taken into consideration in the following examination of transmission. The law in Kent for cases of intestacy was partible division known as 'gavelkind'. The use of wills to maintain or depart from this ideal can be examined. This is possible for two reasons. Firstly, most of the wills with

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young and married when he made his will, he made allowance for any future male child to have an equal share of this property with his brothers. The three daughters are to receive their portions in goods and in money from an equal division of the proceeds of selling the timber on the estate when it should next be felled [PROB 11/52/30].

Partible inheritance was clearly the preferred practice. Of the 34 cases where a single heir inherits, in 10 there is no other child in consideration (29%) and in 18 there is no other son (53%). In the 43 cases where more than one son was considered, the majority (72%) divided the landed property between more than one heir. The situation does appear to be changing however.

	before 1610	from 1610	
single heir	8	16	24
partible	21	15	36

Table 4.1: Type of land inheritance by period (all cases with more than 1 child)

Times were harder in the Weald in the seventeenth century. The sixteenth century population boom and the decline of cloth manufacturing may have made it more difficult or perhaps less advisable to treat children equally in regard to land. Beyond local fortunes, there was a movement among the gentry towards unigeniture at a national level in the seventeenth century [Thirsk, 1976]. Thirsk does not see this affecting those below gentry status until the next century but this may not have been so in all places.

Partible inheritance, however, does not necessarily equate to equal inheritance. In practice not all sons may receive equal shares where there is land.

1. Not all may receive land. Some may get land, others money (either lump sum or income) alone. Some get both.
2. Estates given may not be equal in size or value.
3. Estates may differ in other ways. Some may form a coherent farm, others consist of small, separated blocks of land. The land may be of differing quality.

It is difficult, with the available evidence, to compare bequests of land. Any attempt to measure the 'equality' of land bequests between siblings can only be very approximate. The third category of inequality defined above cannot be even roughly assessed in most Biddenden cases and has been stated more as a theoretical possibility than something which can be seen in practice. The following figures are therefore

based only on the first two definitions of inequality in partible inheritance.

	Sons+daus	Sons	Daus	total
Equal shares	2	15	1	18
Unequal	4	10	1	15
Not known	0	3	0	3

Table 4.2: Unequal partible inheritance (land)

There appears to be a slight preference for equality in shares to sons. Most cases of equal partible inheritance are found before 1610, which indicates, with the trend towards single heir inheritance, increasing inequality in the treatment of children. This may reflect the more difficult times of the period after 1610, but may also shadow the national trend toward unequal inheritance among the gentry at this time.

	before 1610	from 1610	total
equal	13	5	18
unequal	6	9	15
not known	2	1	3

Table 4.3: Unequal partible inheritance (land) by period

An example of the preferment of some sons above others can be seen in the will of Steven Igulden, clothier, made in 1606. Steven was aged about 54 years and had five sons and two daughters living when he made his will. The two eldest sons John (26) and Steven (24) were left a farm each, the main farm (that occupied by Steven senior) going to John. The third son, James (19), seems already to have received some land as he is asked to release his interest in it and only receives £50 as a portion. The two youngest sons, Richard (17) and baby Joseph (1) were to have £100 each while their sisters Dennice (5) and Margaret (3) would get £80 each. Although Steven senior was in middle age, his wife, being his third marriage, was young enough that he considered the possibility of a further child and allowed it a portion of £50 whether male or female [PRC32/39/343]. Clearly birth order was of much importance in this distribution of property although other considerations, such as other inheritances played their part. That differential inheritance might affect the futures of children is indicated by the fact that of the five brothers it is only the eldest two (who shared their father's lands) who remain in the parish to establish their own families.

The will of Ambrose Drayner, also a clothier but probably somewhat wealthier than Igulden, made in 1619 indicates inequality in the estates given to children. At the time of his will, Ambrose had two sons, Robert (18) and Ambrose (16), as well as three daughters, Elizabeth, Ann and Mary (aged 13, 8 and 3

years). He bequeathed his main farm and clothier's workhouse to his eldest son, along with a further small property and 45 acres of land. His younger son was given another farm and also a small property. The estate given to Robert was probably larger than that of his brother but young Ambrose had a larger portion, £200 as compared to his brother's £100. All three daughters received no land but had portions of £200 each [PRC32/45/178].

All of the children stayed in the parish, though Ambrose junior and his own family are not evidenced after 1641. Robert became one of the wealthiest men in Biddenden, and styled himself gent. Young Ambrose seems never to have achieved the same status or wealth. The two eldest daughters married incoming men of substance and lived locally, the third appears to have lived in Biddenden and died unmarried. Although both sons stayed to set up their own families in the parish, their respective positions reflected their unequal land inheritance. Robert could rise in status, Ambrose remained about the same as his father. The larger portion given to the younger son may not have offset the value of the land, or perhaps it was merely that Robert had greater personal abilities. A clear instance of the way in which portions might be seen to differ is given by the will of Josias Pattenson, yeoman, in 1653. He left all his landed property to be equally divided between his three sons (then 13, 7 and 4 years) when they are older, but stated that if his eldest son took the main farm in the division then he would have to compensate his brothers by paying them portions of £100 each [PROB11/242/482].

The inheritance of land was a practice largely restricted to males and was mostly carried out by division among more than one son though the choice of a single heir, or the favouring of some children above others seems to have been more common later in the period. It must be remembered though that inequality between heirs may be more apparent than real. Those who received no land, or less than their siblings, may have been compensated by bequests of money or in kind (household goods, tools, stock). This was particularly so for daughters who very rarely received land.

Implications of Land Inheritance

If the ideal of inheritance was equal division among sons, this could in theory lead to the fragmentation of holdings into estates which were not economically viable, in a situation of increasing population. Different societies have made a variety of attempts to overcome the partible dilemma.

1. Unequal inheritance. All get something but one or some get a better inheritance, or one or some get land the rest money.
2. Marriage strategies. Attempts to agglomerate adjacent holdings by selective marriages. This may take several generations to achieve. It is more practicable where property goes to both sons and daughters as a rule.

3. Siblings sell out to one of their number who gets the land. The others take the money and leave.
4. The parents attempt to acquire enough land to set up as many of their offspring as possible with viable holdings.
5. Siblings have shared rights in one estate.

Of these options, Biddenden people mostly seem to have practised the first and the fourth, but may also have used the third method to some degree. The methods might also be combined. In societies where property is individual rather than rights being held by a corporate group such as a clan, the fifth option generally leads to inequality or reconsolidation through one of the other four methods.

Unequal Inheritance

Although unequal inheritance has been dealt with above, it should be examined in comparison to similar practices in the ethnographic literature. O'Neill in his historical ethnography of a Portuguese rural hamlet finds ostensibly partible inheritance but "...little if any diffusion of wealth..." in comparison to studies of Alpine situations [O'Neill, 1987, 203].

In general there appears to be a rough maintenance of status in Biddenden between the older generation and at least some of the next. The practice of children staying in the parental home after marriage to form their own families is found by O'Neill but is contrary to both ideal and normal behaviour in early modern England. The household process in Fontelas, Portugal encourages only one or two siblings to marry and bring in a spouse, the others remaining celibate. In Biddenden marriage does not seem to have been proscribed for any member of a set of children. This would be facilitated by the English rule of one couple per household but were equal partition to be practised, would require at least a farm for each marrying child. O'Neill finds "...an informal preference for one heir and one line of property transmission..." in Fontelas [*ibid*, 207], but in Biddenden this is found only in 40% of the cases where more than one child is considered for inheritance. Landed property is divided among siblings of both sexes in Fontelas, but in Biddenden is generally given only to male offspring and where more than one son was under consideration 72% of cases indicate partible inheritance. The inequality found in Biddenden was not due to the choice of a single heir, but to only giving land to some potential heirs and to unequal amounts of land being given to each heir. Unlike Fontelas with its households containing celibate siblings with legal but no practical rights to land, in Biddenden some of those remaining unmarried were those who received landed property such as John Flete [PROB1150/11], Jeremy Vinall [PRC17/54/257] or John Brissenden [PRC16/263/1295].

Buying Land

The ideal method was probably to buy enough land to be able to give each son a viable farm. The land market appears to have been very active and it seems to have been little problem for anyone with the available capital or credit to buy land. Such an option was only open to the wealthy however. Clothier Steven Bateman [PROB11/56/22] had bought most of the numerous small estates which he gave to his two sons and daughter in 1574. Some were bought from earlier Biddenden heirs, such as John, younger son of Robert Brickenden who been left 14 acres of land by his father in 1564 [PRC17/37/137] but did not stay in Biddenden unlike his brother (the main heir) Walter. Other land was purchased from William Fishcock, a ageing man with no heirs to provide for.

Only a small number of wills have details of purchases but some patterns emerge. Wealthy men, like Bateman, Richard Allard [PROB11/82/55] or Steven Igulden [PRC32/39/343] who had more than one son to provide for, and who might wish to leave those sons more than one farm each, had purchased much of the land they bequeathed, in some cases including their main estate. Such action entailed a father spending his active life acquiring the wherewithal to buy estates for his sons to inherit. Some land might have come through his marriages by way of a wife's own inheritance as well as from his own personal inheritance. In some cases land was bought from heirs who left Biddenden such as the Moyse brothers, John and Simon junior [PROB11/62/30 and PRC32/39/343] who sold land to Steven Igulden towards the end of the sixteenth century. Steven Bateman's son Steven also sold land to a number of people. He had married an heiress and went to live near Faversham on her estate. Those with only one son or no children at all to provide for were less likely to have bought the land that they bequeathed. Thomas Wells the younger had the same land when he made his will in 1629 [PRC17/68/403] that he had inherited from his father in 1603 [PRC17/58/219]. He was childless and left the lands to his uncle. William Boon [PRC17/47/254] had not acquired lands beyond those received in his father's will fourteen years earlier [PRC17/42/81] but they provided a comfortable inheritance for his only son.

Although most of the available information on purchasing land relates to wealthy men, the practice was not confined to this group. Joseph Downe had bought all of the more modest property that appears in his will [PRC17/59/86]. Davis [Davis, 1973, 116] points to the probable importance of the sale of land in a society with partible inheritance causing fragmentation. The evidence for Biddenden is very incomplete but does indicate that this was one of the main ways by which property rights were transmitted. For any person, purchasing land would require surplus money to be available and capital would also be needed to provide portions for daughters and landless sons. Biddenden people had four main methods of acquiring capital.

1. Farming. Particularly stock raising and wood management.
2. Trade and manufacture. Particularly clothmaking.
3. Leasing land and tenements for rent, or lending money on interest.
4. Borrowing money on trust, bonds or mortgages.

As Biddenden people had fairly small farms, not a great deal of profit could be made in this way by most people although some of the wealthier inhabitants did practise stock rearing in quite a large way and managed tracts of woodland, both of which could generate a good income. One benefit of acquiring land was that those parcels or estates not being directly farmed by the owner could be rented out to someone else. The profit could then be used to acquire more land or pay of any debts incurred to buy land. Capital sums could also be lent at a small profit. Borrowing money was a widespread practise, but was only a temporary solution to the problem of acquiring money as debts had to be (at least in theory) repaid. It is probably therefore better seen as a form of financial management in a society with no banking than a method of money acquisition.

One important way of generating extra capital was through trade and manufacture. In Biddenden this meant predominantly clothmaking. 'Wood pasture' areas such as the Weald have often been seen as developing manufactures due to the low amount of permanent labour needed on farms, the seasonality of such work and the small size of holdings [Skipp, 1978; Thirsk, 1961; Zell, 1985]. All have been said to allow the surplus labour and time to be devoted to manufacturing which also might supplement the meagre income of small farms. This is all clearly true of Biddenden. But it may be that the need to acquire capital for partible inheritance was an extra incentive to develop manufacturing.

Other Methods

One way of dealing with the problems of partibility is for divided land to be sold to one sibling after inheritance in order to re-make the paternal estate. In other situations all may continue to hold rights in land worked effectively as one farm. Both methods are found to a varying degree in the Tyrolean village of Tret where partible inheritance is the ideal [Cole, 1974]. Co-heirs who have left the village or who have married someone holding a farm are likely to wish to sell their rights to the family land to the sibling who continues to work that farm. Where more than one child remains to live on and work the farm, only one will marry and that one will be the main heir. Over time most siblings will leave the holding to marry or migrate. As seen in Fontelas, Portugal those who remain, unmarried are likely to be regarded as subordinate to the main, married heir. The main problem with not consolidating a holding, which Cole and Wolf describe is that of further fission at the next generation, perhaps among persons who are geographically remote from the village. This is because migration does not automatically exclude a person from rights to land.

There is little evidence in Biddenden for siblings selling out their rights to one of their number or for one heir to work a farm with adult siblings staying in a dependant role. There are perhaps two reasons for this. Firstly many of the wills with bequests of land relate to the more wealthy or those deciding strategies clearly in advance. The need to reconsolidate holdings would be more urgent when the father had only one farm and this was itself divided. This may have occurred more often in cases of intestacy but the information obviously would be lacking. Chalklin cites cases of joint ownership of property from other places in Kent but thinks that it was more common for co-heirs to sell their rights to one of their number [Chalklin, 1965]. He states that physical division of farms may have been common in the Weald in the sixteenth century but was rare in the next century. The second reason for the lack of evidence for siblings selling rights or staying on a farm unmarried is the general situation as regards landed property in the Weald at this period. There is a tendency for anthropologists to study villages or areas where either all or at least the vast majority of households own small farms or those where only a very small number of persons, perhaps only one, own all the land and lease it out in some way or work it with hired labour. In Biddenden there were landless people, some with small estates, others with several farms (both local and distant) and some non-resident landowners. Those not inheriting land could lease a farm and those with little of their own could lease more. Sales of land were probably as likely to have been made to persons other than a sibling co-heir. As noted above, there were always buyers for land.

Where estates are partitioned, one method of avoiding impoverishment is to try to reconsolidate holdings through strategic marriages with kin. Such a method is described by Davis in Pisticci, Italy and by Segalen in Brittany, France [Davis, 1973; Segalen, 1986]. The process may take several generations

depending on how 'close' is the intra-kin marriage. Segelan finds that on average the cycle takes five generations, Davis describes cousin marriages which allow consolidation over a shorter time span. This type of practice is less significant where few females get any land and does not appear to be used in Biddenden. However, the problem exists that if it were practised over many generations (as in Brittany) it would be difficult to detect given the paucity of detailed land records and the limited time depth of the study.

Land sales and migration

Although the method of acquiring new land for transmission might be preferred, some shares were clearly more equal than others. In some cases one or more sons had to make do with a lump sum or a rental income rather than land. Only one son would get the family farm, usually distinguished by the term "my mansion house" to describe the residence. Others would get secondary estates, acquired by inheritance, marriage or purchase. These might not be in the same parish or even the same area as the parental home. In this case they could be rented to a tenant, sold and perhaps a local estate bought or the heir would move away to work the more distant farm.

Landed property was in the majority of cases given to males, usually to sons. Daughters received money portions which would be used as dowries when and if they married. In the sixteenth century there appears to have been a preference for dividing land fairly equally among sons, but during the seventeenth century unigeniture and unequal partition became more common. This was probably related to the more difficult circumstances of the later period (see chapter 3). Those sons who did not receive land would be given portions in cash or kind, or in some cases an annuity.

Because land could be bought or rented, not inheriting land or being given a non-local estate did not necessarily lead to migration. But sons who did not receive land seem to have been more likely to leave. Partible inheritance did not guarantee that heirs stayed, and the sale of their lands added to the local land market. A wealthier man would try to give each son landed property buying the estates during his lifetime. The need to accumulate land for this practice and capital for dowries and to compensate for any inequalities may have contributed to the development of clothmaking enterprises.

Portions in money

There are 147 wills in which a father makes bequests to children. Of these, in 50 cases all children are unmarried and are below the age at which they may take up their inheritances (this age is set within the will but is usually between 18 and 22 years). In another 60 wills all children are above this age range and most are already married.

	All (141)		Child (47)			
	Daus	Sons	Daus	Sons	Daus	Sons
1560	62% (16)	46% (12)	78% (7)	33% (3)	43% (3)	14% (1)
1590	51% (30)	39% (23)	65% (11)	47% (8)	37% (10)	22% (6)
1620	68% (38)	54% (30)	71% (15)	43% (9)	64% (16)	56% (14)
all	60% (84)	46% (65)	70% (33)	43% (20)	49% (29)	34% (20)

Table 4.4: Number and percentage of wills leaving money portions to children by sex and age group. Percentages are of the total number of wills in each period with bequests to children.

Overall and particularly in the case where heirs were all children, daughters were clearly more likely to get money portions than sons. This is less marked for adult children, possibly as girls received their main portions when they married, as a dowry. Viewing the high percentage of wills giving money portions to daughters and taking statements by historians such as Wrightson [Wrightson, 1982] into account, it is likely that a cash dowry was considered very important in enabling a woman to marry. Possibly it was almost essential (see chapter 5). The portions received by adults differ from those for younger children in that they are usually much smaller and may be seen as extra gifts, supplementing pre-mortem transmission.

	All (141)		Child (47)			
	Daus	Sons	Daus	Sons	Daus	Sons
1560	28.81	18.54	32.14	34.51	0.83	1.18
1590	33.65	91.59	75.17	95.70	8.09	33.83
1620	53.54	76.79	80.53	56.00	20.17	37.68

Table 4.5: Money Portions - mean amount by sex and age group of children

The size of money portions left to younger children increased greatly between 1560-89 and 1590-1619, partly due to inflation but also probably resulting from the trend towards inequality in land bequests outlined above and the concomitant need for compensation. Howell, examining inheritance in a midland parish among smaller farmers [Howell, 1976] finds an increase during the sixteenth and seventeenth centuries in the value of portions but her period of study is longer and her time divisions broader making detailed comparison impossible. Biddenden wills seem to indicate that there was inflation in portions between 1560-89 and 1590-1619 after which values levelled out. Taking the price index used by Cooper in his examination of similar inflation in the marriage portions of the aristocracy [Cooper, 1976], portions to young children were outrunning price inflation at this period but, unlike portions among the very

wealthy, then levelled off for daughters and fell in the case of sons. The fall in the size of portions in the final period for sons in the case of 'child' wills mirrors the pattern given by the number of wills in this category giving land to one or more sons. A similar dip in the proportion of sons in this group receiving goods takes place in the 1590-1619 period. This would indicate that a greater number of men who did not own land, but could afford to pay significant portions, were making wills in this period than before or afterwards but that money was preferred to goods as a bequest.

	Land %	Goods %	Portion
1560	56	33	34.51
1590	24	24	95.70
1620	38	57	56.00

Table 4.6: Land, goods and size of portions left to sons. The columns for land and goods are expressed as a percentage of wills leaving this type of bequest to any son in each period.

Portions in Kind

Portions were not only given in money. Many children received all or part of their inheritances in the form of goods. The bequeathing of goods can be broadly divided into two categories; specific goods which are identified in the will (such as chests, sheets and dishes) and the unspecified mass of things subsumed under the phrase "rest of my goods". This latter type of bequest may be composed not only of goods in the sense of objects, but also of cattle, money and (hopefully) incoming debts. Because of this it should be examined separately.

	All (141)		Child (47)		Adult (59)	
	Daus	Sons	Daus	Sons	Daus	Sons
All Goods	34% (48)	57% (80)	38% (18)	40% (19)	29% (17)	66% (39)
Rest	7% (10)	42% (59)	6% (3)	19% (9)	10% (6)	59% (35)
Other	27% (38)	15% (21)	32% (15)	21% (10)	19% (11)	4% (7)

Table 4.7: Portions in goods given to children by sex and age group. 'Rest' of goods (see below) is distinguished from 'other' types of goods. Percentages are of the number of wills containing bequests of goods of that type.

The general category goods gives a distorted picture because most 'goods' bequeathed to sons, especially adult sons, are in the "rest of my goods" category. In fact willmakers usually left the residue of their goods, after the specified legacies were taken out, to either a son or the widow. Where a son is the main heir to land, he often receives the residue of goods as well. Otherwise this bequest often goes to the

eldest son. In many cases the residue of goods might represent a portion larger than those given to siblings. It is difficult to judge how far this represented inequality as the recipient in many cases was also the executor and therefore responsible for paying the outstanding debts and funeral costs of the deceased, as well as probate expenses. When goods are examined without this special category, this form of portion appears as being given to daughters in most cases. There are few exclusively male or female types of property in Biddenden, but there is a tendency for fathers to bequeath certain categories of goods more often to children of one sex.

	Daughters	Sons
Linen	17	6
Utensils	16	7
Furnishings	33	9
Animals	15	17

Table 4.8: Type of bequests in kind by sex of child (number of wills).

Household goods are mostly left to daughters, which may indicate that it was common practice for the wife to bring such items to her married residence. Animals however are given fairly equally to sons and daughters. The only types of property passed on exclusively to children of one sex are books and working tools. Books are rarely mentioned in wills and where given to a child this is always to a son. Inventory evidence, however shows them in the ownership of both men and women. Men alone have ledgers and law books, but both men and women own bibles and religious works.

Working tools for trade or farming are passed between males in wills. Some are found in the inventories of widows, but these are fewer than in a male inventory and often not in a place where they might usually be used (such as a workshop). Looms seem to belong exclusively to males. They were valuable items, both in terms of cost and potential, and do not seem to have been left unused. Where men did not have a son, or enough sons, who might use his looms these would be left to another kinsman or an apprentice. Spinning and carding tools are rarely bequeathed. They were fairly cheap and may have been passed on by informal means, if at all. Cards and stockcards, judging by the numbers in which they were made were probably 'throw-away' items.

A few wills detail that certain children should receive particular goods that had belonged to a deceased relative. This may be because that relative had given the object to the child, but put it in the parents keeping. The implication of this and other statements made concerning the ownership of items, is that despite the legal situation where all property belonged to the husband and father, in practice items could be associated with particular individuals, be they male or female. This may equate to a set of personal items being treated differently to other goods, as with the married woman's paraphernalia [Goody, 1962].

Portions in money and kind - implications

When property was in the forms other than land, bequests seem on the surface to be more equal between children regardless of sex and birth order. This is often only apparent for two reasons. Firstly the bulk of the deceased's personal estate may go to his widow and she may have power to redistribute it as she wishes in her own testament, at least if she remains unmarried. Secondly, one child, or some times more than one may get the property covered by the phrase "the rest of my goods." This may consist of items and money of greater value than the individual bequests to other children. However, since the recipient(s) of "the rest of my goods" was frequently also made executor of the will, the value of this bequest might be somewhat offset by the requirement to pay the deceased's debts and funeral expenses, plus the probate fees.

In some cases however there was variation in the portions of children from families of few or modest means. John Withernden [PRC17/48/314] a weaver of limited means, left his loom to his son, 3s 4d to his eldest daughter, 6s 8d to the next and a heifer to the youngest. Shopkeeper Francis Coventry, a man of middling status with no land of his own left £12 each to his eldest son and daughter, and £10 each to his younger daughters [PRC17/62/284]. Birth order was sometimes used to apportion amounts of gifts but did not always work by decreasing amounts eldest to youngest.

Other inequalities in non-landed property might occur when one child receives the tools of the parent's occupation(s). This would save the child an important, though often not great, capital outlay at a time when resources were much needed. Other children would have to meet such expenses out of their money bequests, their savings, and the capital brought by a spouse. This would apply to both male and female children. Men would need tools to take up farming or a trade, women to carry out domestic production such as spinning, dairying and brewing. The type of tools left in a will could vary between the turner's tools valued at 10s in his inventory which Richard Lull left to his wife's son [PRC17/40/199 and PRC10/3/27], through the three looms worth £2 each left by John Stedman [PRC17/52/147 and PRC10/29/412], to the workhouse and clothier's implements that Simon Moysé bequeathed jointly to his sons [PROB11/52/30]. Spinning tools, as noted above were rarely bequeathed, John Frow being unusual in leaving woolen and linen trendles to his wife [PRC17/51/72]. The objects associated with women's work were not always given to females. In 1598 Margaret Ramsden, a widow left all of her milk truggs to be divided between her son and two daughters [PRC17/51/352].

It is often difficult to assess the relative value of siblings inheritances when they contain items other than land and money. Furniture, linen and clothes might help to save expense in setting up a household but this is difficult to quantify. One item left by many willmakers as an individual gift is a bed. William Boddenden left one bed to each of his children, his son having the best, and his daughters the next in

quality by ascending age order [PROB11/61/22]. These were all feather beds, and some of them, given Boddenden's wealth, would have been elaborate items worth several pounds each. However, considering the general standard of provision for children of this status, such gifts were probably less important individually in future life than the simple wooden bedstead and flockbed which weaver's widow Emme Stedman left her daughter in 1604 [PRC17/53/97].

Although much has been written in anthropology and history about the transmission of land among the wealthy and not so wealthy, little has been said about inheritance among the landless. In part this may be because the different types of property are hard to compare. Money seems simple, objects less so. The amounts may seem very small, a chest, a table-cloth, a few shillings. It must be remembered however that the objects would have to be purchased for the child's own home. The money may amount to only a few days wages, but it is money beyond that needed for subsistence which was the destination of an adult's wages. From inventory values, many household items were fairly cheap, especially old items which might be purchased second-hand, and a few shillings of capital could go some way toward furnishing a simple home. Therefore, even at this level, variation might have some importance. The task of trying to compare bequests in this way would be very expensive in time and labour, however, and variations in the quality of information between cases would make clear comparison difficult. Inequalities clearly existed between those who were given the bulk of the willmaker's goods and other children. Further kinds of unequal treatment may also be found in bequests of both money and goods. It is difficult to compare these items but their transmission may have had more significance than might be assumed.

The predominance of daughters among young children given cash portions points to the importance of a cash dowry. Average portions increase until the early seventeenth century and then level off. The substantial increase for adult sons at this period may reflect compensation for not receiving land. More men without land seem to have made wills in the early seventeenth century but gave cash rather than goods. Portions in kind are more likely to go to daughters as individual bequests with household goods preferred. Sons, in particular the eldest, are most likely to receive the 'rest' of the willmakers goods. The tendency to give household goods to daughters may indicate that they provided many such items for their new households at marriage (but see chapter 5).

Inheritance by other kin

Where wills were made by people with no children, land and goods might be redivided among siblings. The pattern for such redivision in the case of the death of the stated heir is often laid out in parent's wills, but usually only applies until the child is of age to receive the inheritance. Wills redividing among siblings can be more subversive to the ideal of equality than parental wills. The only known case of total disinheritance is between siblings. Edward Young, clothier, a single man who made his nuncupative will in 1656 left most of his goods to his deceased sister's husband, James Bunce but "...as for his brother James Young he said hee would give him nothing..." [PROB11/301/259]. Edward also left money to his widowed sister's children and asked Bunce to take care of her and her family. Little is known of Young other than that he was the 29 year old son of a clothier and that a bequest in his will of £10 to George Hammon indicates that he was a follower of the popular dissenting preacher. His father was still alive when Edward made his will, but may have passed on some property pre-mortem.

The will of Richard Russell, an unmarried weaver, made in 1613 is not so drastic in action but shows the way in which lateral bequests could change the pattern of inheritance [PRC17/59/200]. Richard's father Thomas had left the residue of his goods to be equally divided among his three sons, Richard, Simon and Thomas, and his widow while his three married daughters received 20s each [PRC17/52/3]. Token bequests were made to the children of two daughters and his married son Simon as well as 10s to Simon's wife. Richard's will concentrates most of his bequeathed property on Simon's family. Simon had died the year before Richard made his will. Three of Simon's sons receive 20s each and each of his three daughters is given £4, but his youngest son Richard is left an annuity of 40s per year. Given that it was common practice to name children after a same sex godparent, this special treatment may indicate that the younger Richard was the elder's godson. Simon's widow also receives £20 and her step-brother John Barrow the residue of Richard's goods. By comparison Richard leaves £5 each to his own sisters, only 20s to his younger brother Thomas and nothing to members of Thomas' family. Because Thomas the elder died when his children were grown up, the equality of their portions cannot be known although it is unlikely that there was any land to be bequeathed (neither Simon nor Richard leave land in their wills).

The preference shown by Edward Young for his sisters' families is unusual. It is more common for brothers and their families to receive more. Richard Beale, an unmarried 28 year old clothier, made a will in 1622 which gave his lands equally to a son of each of his eldest and youngest brothers, and an annuity of 30s per year from these lands to his other brother [PROB11/141/18]. By contrast the children of his two sisters were given only 20s each. In 1566 Joan Chalker, the unmarried daughter of a blacksmith (deceased), made her will in which she left £3 each to her two brothers plus a chest to the younger while her sister received only 5s [PRC17/40/46]. Her father had left both daughters an equal portion of £10 with

land and goods going to both sons and tools to the elder son who would follow his father's trade [PRC17/29/25]. The children were all below age when their father made his will in 1553, so that pre-mortem inheritance is unlikely. The two brothers received more, even from their sister.

Major bequests are very rarely made outside of the family of procreation. Land is given within this group in 83% of cases, annuities in 78%, and 'rest of goods' in 79% of wills where this bequest is made. Where this does happen the willmaker is usually unmarried or at least childless. Land may be given to a widow only for life and then passed to a more distant relative or to a brother. Bequests of land other than to widows and daughters are in all cases to males, whether kin or non-kin although in a few cases affines or descendants through females are chosen. This indicates more than a mere concern about land going out of the male line of descent. The tendency to give land to males may indicate that women were seen as less capable of managing land than males. It is sometimes implied that a widow will let land she has been given the use of, rather than farm it herself.

Bequests to kin outside of the willmaker's family of procreation are most likely to be to siblings and their families, including in-laws. There seems to be a tendency for such bequests to diverge from the attempts at equality found in parental wills. These may in practice even up previous unequal bequests, but often seem in fact to reproduce pre-existing inequalities or to make new ones. This seems to be particularly true in the favouring of brothers over sisters, but also extends to differences among siblings regardless of sex. As with children, male kin or even non-kin were preferred to females in the case of landed property though men linked through women might be chosen.

Provision for widows

In almost all cases where a man makes his will, expecting to die before his current wife, special provision is made for her. This could take many forms but generally involves one or more of four types of bequest. These are:

1. An annuity, often from land given to a child, but sometimes from the return on invested money.
2. Residue of goods. As noted above this could be a generous gift or not depending on circumstances.
3. Land, usually given for life (or at least widowhood) or while children are growing up. Occasionally given for an unspecified period or in perpetuity.
4. Money, a cash sum similar to a child's portion.

Just over half (54%) of Biddenden wills contain some form of provision for a widow. Of these 133 wills, 29 (22%) leave an annuity, 25 (19%) leave land and the same number cash sums, but 77 (58%) leave the residue of goods to the widow. Immediate needs might be met by leaving foodstuffs and farm animals, especially milk cows, pigs and poultry (all of which related closely to female farm and household tasks), to a widow. Similarly arrangements might be made for her lodging in the short term with one of the willmakers children.

The provisions made for Ann, wife of Steven Bateman, clothier, in his will of 1574 illustrate many of these methods [PROB11/56/22]. As well as cows, fuel and food for the immediate aftermath of Steven's death, she received £60 cash and an income of £20 per year for life. She was given lodging in Steven's main house which he left to his younger son. Eight rooms for her use were specified: the hall, the chamber over the hall, the great chamber with the garrett over it, the old parlor with the chamber beyond it, a chamber next to the garden and a small chamber next to the great chamber. She also was to have the use of premises for baking and brewing, access to "...the pitt..." for water and the use of the inner garden. However, if she were to remarry, Ann would have to leave the house and lose these rights. Steven junior, the younger son, may have ceased to live in the house with his mother by spring 1579 when, according to the statements given by George Holland and Robert Webb before the church court in a slander case [EcCX10.18, f156-7]. Holland was living with the widow, his aunt, as a "...sojourner or border..." and a female servant. The son was resident in Biddenden through the 1580s and early 1590s, but whether in this house or elsewhere is uncertain. By 1605, when he died, he was living at his wife's natal home near Faversham. Ann died in 1609. The rooms mentioned in her inventory include those provided as her future dwelling in her husband's will indicating that she still lived in his house [PRC10/33/274]. She had not, of course, married again.

John Saywell, a shearman, left the residue of his goods to his wife Joan when he made his will in 1606 as well as specifying that she should receive a bed. Goods including shearing tools were bequeathed to his two sons, the husband of his daughter and one son of his wife by her previous marriage as well as small money portions [PRC17/59/200]. In his inventory certain goods (furnishings plus brass and pewter vessels) valued at just under £2 are said to be "...such household stuffe..." that Joan "...brought unto..." John "...she being a widdow before marriage..." [PRC10/35/412]. The property was formally John's, but seems to have been regarded separately from his other goods. The Saywells were poor in comparison to the Batemans. John Saywell's total goods were valued at only £26 6s as opposed to over £62 for the widowed Ann Bateman's possessions. When widow Joan died in 1611, her goods were valued at only £10 8s 4d [PRC10/35/360]. She occupied four rooms of the same house that her husband had lived in (his inventory mentioned nine rooms), the hall and kitchen with the two rooms above. Her possessions were modest, the two beds (one inherited and one brought to her second marriage), other simple furniture, linen, cooking and eating utensils and some of her late husband's tools. In her will she distributes these

goods to her own children (by her first husband) along with small amounts of money. Despite their relative poverty Joan had a jointure from her later husband in the form of a bond to leave her worth £20 at his death [PRC2/16/173].

These two cases illustrate the intentions and practice of provision for widows. Both are able to continue living, in reduced circumstances, without remarrying. The gap in wealth and standards of living is maintained but does not appear to have narrowed significantly. Joan Saywell's jointure is only known because the probate accounts for her husband's will have survived which indicates that more widows may have had such a provision than appears from will evidence alone. How long her situation could have been maintained is uncertain, she died within a few years of her husband. Ann Bateman's more generous provision may have enabled her to live out a long and comfortable widowhood of twenty-five years.

In stating a condition of continued widowhood for her rights to lodging in his former home, Steven Bateman was making a very common proviso. Where wives were given such rights, or rights to profits from land these were usually severely limited. One form of limitation is for a time period to be specified for such rights, either in terms of years or until a child reaches adult years. The other main form of limitation is the requirement, seen in the Bateman case, for a widow to give up certain rights were she to remarry. Lands are generally left to a widow for the term of her life only (52% of cases) but a surprising number (26%) leave her such property with no limitation. In four of the seven cases of permanently bequeathing land to a widow, the willmaker has no surviving children but in the other three several small children exist. These three wills were made by a clothier, a yeoman and a labourer so that wealth is unlikely to be a factor causing this action. Cicely Howell found in a midland parish that of 56 wills leaving land to widows, in 71% of cases no safeguard was made to protect other heirs and in only 27% of the 56 wills was the maker childless [Howell, 1976]. In this perspective, the willmakers of Biddenden appear protective of their children's interests and even of interests of siblings and other kin. John Besbych allows his widow an annual income of £20 for life but reduces this to £14 if she remarries [PRC17/58/216]. Besbych, whose will is dated 1608, was a yeoman and it is significant that restrictions concerning remarriage were more likely for the wives of wealthier men, who were left annuities and land, than for those of poorer men who received only goods.

Such restrictions might be viewed as a means of limiting sexual access to widows by making it unattractive for them to remarry. As fewer widows remarried than did widowers (see below) this may have worked in practice but the intention was probably to protect the inheritances of children. Several wills demand that a remarrying widow put in a bond to pay legacies to her late husband's children but make no further restriction. Thomas Norton, a yeoman, leaves his goods and the profits of his lands to his widow for life. He then specifies that if she were to remarry and her husband were to take these profits but fail to maintain his new wife, then such monies were to be paid to her personally [PRC17/54/174]. Norton was

childless and left his properties to distant kin or non-kin in the long term. His concern for his wife's welfare is clear but no restriction is put on any future marriage. The widow does indeed marry in 1606, one year after the death of her first husband and is the only married woman to have a probate inventory among such documents used in this study. At her death in 1609 she has a small amount of personal property, a lease and two debts owed to her, worth in all £5 10s [PRC10/38/253].

Provision for widows in wills therefore was usually adequate to maintain the woman in a state corresponding to her late husband's status. The overriding concern, however, was to protect the inheritances and other interests of children. It was for this reason that legacies to widows had limitations set upon them.

Wills and social relations

Wills may not be merely mechanisms for passing property from one generation to the next. They can also be used to try to influence future social relations. This may be done in three ways. Firstly the will itself may be considered as a means of settling potential disputes over property or may contain statements which point to possible problems and potential solutions. Secondly persons mentioned in the will may be given obligations towards one another which go on in time beyond the death of the willmaker. Thirdly a willmaker may give small, symbolic bequests to other persons, perhaps hoping to maintain their goodwill or dependancy towards his or her major heirs.

Potential problems

Some statements envisage possible future problems among immediate family members. According to John Chalker, one of the witnesses, when the widow Venice Carpenter made her will in 1597, she "...desired that there might be quietnes among her Children after her death..." [EcCX11.3, f122-5]. Another witness, one of Venice's daughters adds that her mother had wished that her children would "...not trouble one the other about her will or her goods..." [*ibid*].

Two years later one of the daughters, Margaret Wilcock, brought a dispute before the church court claiming that her brother had altered the will, depriving her of a legacy of £20. According to the questions in court [EcCJ/J/5/114] Venice's eldest son is said to have been "...in a great rage..." about this bequest and while writing the will "...did in a rage fling yt awaye & said hee would not bee executor..." [*ibid*]. Another sister, Bridget Farmer, tried to conciliate suggesting her husband as an alternative executor, but John picked up the will but did not add the bequest. One point of interest here is that what is in dispute is not the major inheritances of the children, received from the father and probably at marriage, but the division of the relatively small amount of goods and money belonging to the widowed mother. When Steven Bateman bequeathed a small estate to his married daughter in 1574, he considered that if his sons

...do dislike of this my gifte to my daughter Julyan Hausnothe and will not suffer her and her heirs quietly to enjoy the said house and lands... [PROB11/56/22].

she should have £100 instead. The sons were both to receive far more landed property than this farm, but might still begrudge their sister this gift. It was a legal gift but unusual as land was very rarely given to a daughter where sons existed. They might cause trouble either by challenging the will or perhaps through personal animosity. John Young in 1609 wished that his will might be carried out "...in all peace and Christiane love without contention and discord..." [PRC17/58/215]. The will consists of a division of goods and some money payments to John's three adult children and his widow. It is not clear where any grounds for contention may lie. Innkeeper's widow Joan Stowe made her will in 1616 "...soe that there be noe fallinge out about the same after my decease..." [PRC17/62/74]. Dispute appears to have been always possible and seems to be envisaged as between siblings.

As well as potential disagreement about property, co-residence of persons from the same family of origin was seen as a possible source of problems. A yeoman, Edward Collens, wished his widow to live with his second eldest son, in his house while she remained a widow [PROB11/67/42]. But if she "...doe dislike her dwellinge and maintenance within with my sonne..." she could live instead in the house of the eldest son. A similar concern is also seen in the will of Simon Brissenden in 1647 who leaves the residue of his household goods to his two sons provided that "...they shall not part but keepe house together until michaelmas next cominge: without troubel on of an other..." [PRC16/256/1039]. The younger son, Robert, was 45 years old, married for 22 years and had five living children while his elder brother, John, aged 59 years was unmarried and was heir to Simon's lands. Co-habiting adult siblings were probably rare in this period [Laslett, 1972] but may have been more acceptable where only one was married, as in this case. It must be assumed that John had been living with his younger brother or with his father prior to 1647. Clergyman John Whetcombe wished his widowed sister to live "...with all peace and quietnes..." on part of his lands, the main threat appearing to be from his son. He also wished that "...for better peace quiet & comfort..." his unmarried sister would "...make her place of habitacion with her duringe her owne pleasure...", an arrangement in which he thought the son "...will take verie good pleasure..." [PRC17/59/110]. Perhaps John the younger did not want his aunt living in his household. The arrangement that the two middle-aged women should share a house seems to have been viewed positively by the willmaker.

Obligations - kin and non-kin

Because of the diverse futures which would be pursued by offspring, there is a tendency in wills to try to lay out patterns of relationships for the future. Brothers may be obliged to pay a set or calculable income to sisters, their mother or younger brothers, for a term of years or for life. Such an annuity was most commonly payable from a son to the widow. Wealthy shoemaker Jervis Ramsden gave his land to his two sons equally in 1580 but they were to pay an income to his widow for life from this property [PRC17/43/359]. Yeoman John Besbych in 1608, left two farms each to his two sons but they were to pay uneven shares of an annuity from these lands to the widow [PRC17/58/216]. The elder son was to pay 60% of her annual income, the younger 40%. Such a division may have been proportional to the value of their inheritances.

Another type of obligation was the payment of a younger sibling's portion at some time in the future. Thomas Ricard wished his son to pay his three youngest daughters their portions at 22 years of age as well as paying the widow her annuity of £6 when he took charge of his landed inheritance at age 30 years. The two eldest daughters, who would reach 22 years before Francis received the land, would get their portions from their mother who was to look after the property in the mean time [PRC17/59/3]. Such obligations could be fulfilled after many years from the date of the will. Thomas Ricard died in 1607 when his son Francis was 23 years old. When Francis paid the portion of his youngest sister Ann he would have been 40 years old. As he did not inherit his father's estate until he was 30 years old, he delayed marrying until this time but would have had to pay out the portions of his sisters during the first ten years of marriage while his own family was growing. Such obligations clearly had economic implications as well as maintaining ties to members of a person's family of origin. Three payments of £13 6s 8d might not have been welcome at an already expensive period of Francis' life course.

The third major type of obligation was the request to a widow to "bring up" and sometimes to "educate" the willmaker's children. In some cases the widow is given a larger annuity until the children are grown to help with this task, in other cases a bequest of the willmaker's goods is said to be for this purpose. Some men, perhaps of a more puritanical inclination, elaborated this wish as "...shee shall educate and bring up every of my said children...in the feare of god and knowledge of his lawes..." (Francis Coventry 1613, PRC17/62/284). George Richardson in 1618 wanted his children educated "...well and vertuously..." [PRC17/63/334]. Sometimes instructions might be more specific, detailing certain skills that the children should acquire or a trade that should be followed. Some such as the carrier Thomas Drayner in 1613 [PRC17/58/154] or the labourer Richard Shoebridge in 1631 [PRC17/68/121] merely asked that the widow might bring up and educate their children. Examined from the context of late twentieth century attitudes and images involving families and children, such requests appear somewhat

strange. That a widowed mother would bring up her children appears too obvious a situation to need detailing in a will. But this may be to anachronistically read such wills with the cultural luggage of a twentieth century mind. Anachronism is the historical equivalent of ethnocentrism. The statements in the wills may only be a conventional form of words (although they are not universal). That such a form of words was used does indicate some contemporary concern in this area.

Firstly, the widow may not be the mother of the children mentioned in the will or at least, not of all of them. She might therefore have felt less personal obligation to care for her late husband's children by a previous marriage than she would were they her own. Francis Coventry had four children, but only the youngest two were by his widow Sarah. She was however, asked to bring "every" of them up. Secondly, the widow may not always have had the resources to bring up and educate the children on her own as well her husband could have provided for. A bequest to the widow is sometimes "in consideracion" that she will bring up the children. Opportunities for women to earn money existed but they were paid less than men. The widow of a moderately well off man such as Francis Coventry would have been less troubled perhaps in this respect than Mary Shoebridge, the widow of a much poorer man.

The third situation can be illustrated by Sarah Coventry. She remarried within one year of Francis' death so that his children would have been step-children to the 26 year old and then childless Warham Reader, a man nearer in age to the Coventry children than he was to their late father. Eleven months later Sarah died. What happened to the children in her charge at this time is not known. The two eldest daughters remained in or returned to Biddenden to marry and live there. They were 18 and 11 years old when Sarah died and may have been in service by then. The ever present possibility that a widow might remarry would place the children in her charge in the position of step-children to another man. Goody discusses step-mothers and their image in Europe [Goody, 1976b]. Curiously there is a lack of stories about wicked step-fathers although remarrying mothers must have been common in the recent past in at least northern Europe.

The fourth situation emerges from the wording of Steven Ramsden's statement that "...my wife shall have the kepeinge and bringinge upp of Persis my daughter..." [PROB11/72/35]. The possibility exists that someone other than the widow could in some circumstances be preferred for this task. In a small number of cases a person other than the widow is asked to bring up and/or educate the willmaker's children. In 1574 Steven Dorly, butcher, asked Thomas Mayer, probably non kin, to bring up his four children although he left a widow [PRC17/42/85]. The widow was not the mother of any of these children. Three of the children are evidenced later in Biddenden. John Hogben [PRC17/66/287] a fairly recent immigrant to Biddenden when he made his will in 1620 asked his brother to "...keepe and maintayne..." both his son and daughter at school, despite his leaving a widow. He wishes to be buried at Sheldwich, next to his first wife and she may be the mother of these children. In 1658 John Verrall wishes his brother

“...to take care of his sonne...” and he is duly appointed legal guardian of the boy by the court [PROB11/286/18]. John has a wife who has two children of her own but does not choose her to look after his son. His previous wife died eight years earlier, so that his widow may not be the mother of the son. All three cases therefore may involve a situation where the widow is stepmother to the children.

The requests discussed above are ways in which ties of dependency and obligation were projected forward beyond the will-makers present. In these cases the ties involve the immediate family of the willmaker, the widow and children. Several points emerge from looking at such obligations. Adult males have obligations toward adult females whether of the same generation (their sisters) or the preceding one (father’s widow). Females are therefore considered dependant on males except where the woman is adult and the male a child. The ties attempt to hold together the fragile network that an early modern family could become when the father died and children grew up. Fragmentation took place as the children left home for service and then to set up their own households. Some would migrate to other places, some would stay in the vicinity of their former home. Remarriage again might rupture some of the ties of a previous family placing children in the position of step-children to another man or woman. Binding former family members by obligations did not prevent fragmentation, but may have helped maintain contacts that could otherwise have been broken. The purposes were economic but the implications were also social. The fundamental inequality in male/female relations is clear, especially in the reversal of dependency between widow and son when the son comes of age.

Other direct obligations are set out by giving kin, friends or neighbours duties in connection with a will. Executors are usually immediate family members, but in some circumstances can be more distant kin or non-kin.

Executors	cases	%		cases	%
Immed family	184	62	Widow	86	29
			Son	85	28
			Daughter	13	4
Family of orig	25	8			
In-laws	16	5			
Other kin	21	7			
Non kin	48	16			

Table 4.9: Executors of wills by relationship to willmaker

Widows and sons were clearly preferred to daughters and where members of the willmaker’s family of origin are chosen, brothers are more likely (18 cases) than sisters (1 case) or parents (father 3 cases, mother 1). This may in part reflect the fact that parents would be available in only a few cases. Outside of

these types of close kin, non-kin were more likely to be chosen than more distant kin. Males were more often chosen (64% of cases) as executors than females (36%), especially outside of the immediate family (excluding sons, widows and daughters) with males in 34% of cases and females in only 2%. Executors were responsible for seeing that the bequests in a will were carried out. Occasionally a pattern for passing on the executing is laid out in case the nominated person dies or refuses the task, or where that person is too young to do the immediate tasks. In some cases joint executors are chosen. This is especially likely where one executor is a young child, not considered old enough to take on the responsibility.

As well as appointing one or more executors, a testator might also appoint one or more overseers, who were to supervise the execution of the will and generally aid and advise the person doing the task. Appointment of overseers implies some form of continuing dependancy on the part of the executor.

Overseers	cases	%
Immed family	2	2
Family of orig	13	15
In-laws	7	8
Kin	12	14
Non kin	53	61

Table 4.10: Overseers of wills by relationship to willmaker

From these figures it can be seen that members of the immediate family were rarely chosen, and that overseers were most commonly non-kin, that is friends and neighbours. They were also overwhelmingly male. In the Biddenden wills a woman is made overseer on only one occasion. This is the widow of Steven Bateman in his will of 1574 [PROB11/56/22] with her son and daughter's husband as executors.

	cases	% of execs of this type
Immed family	82	45
Family of orig	6	24
In-laws	6	38
Kin	9	43
Non kin	20	42

Table 4.11: Executors of wills where overseers are appointed, by relationship to willmaker

Members of the willmakers immediate family (almost all widows and sons) had in the majority of cases non-kin to oversee their executorships. Such overseers were friends and neighbours of roughly the

same status as the willmaker. They would have the appropriate knowledge of land, leasing and investment to advise an executor, but unlike kin could not claim any interest in the property of the deceased. More distant kin and non-kin might also be given obligations of the type often associated with immediate family such as paying an income or portion, supervising education and providing housing. This was not as common (40% of cases) as these obligations between members of the willmakers immediate family (60%). Siblings, in-laws and non kin were equally likely to undertake tasks for the willmaker's widow and children. Similar obligations might be performed for other kin who were usually children at the time when the will was made. This latter situation is mostly found where the willmaker has no immediate family or at least no children.

All of these forms of obligation imply unequal power relations. Some people have access to the resources or knowledge to allow them to carry out actions on behalf of others. The inequality is based for the most part on gender and age. Young children are dependant on adult women and men, but adult women and younger men are dependant on adult men. In some circumstances future actions, both single instance or repeating, imply a continuation of relationships which existed when the will was made. This is particularly true in the case of the willmaker's immediate family.

Small bequests

Less direct obligations would be created by small gifts to kin, friends and those in other power relations to the willmaker. Servants frequently receive small amounts of money and those working for the will-maker in other capacities such as workmen, weavers and spinners may also receive small gifts. Occasionally tenants are given bequests, periods rent free or security of tenure for a time.

Godchildren

Minor bequests may be given to kin outside of the immediate families of the willmaker, such as uncles, aunts and those relatives described by the terms kinsman/woman or cousin. Cousin was a loosely defined term applied usually to more distant lateral relatives both consanguinous and affinal, but could also be used for close non-kin friends. Small amounts of money are often given to grandchildren and sibling's children, sometimes in situations where the parents receive nothing. Such gifts can be seen as a way of including members of the willmakers families who do not for some reason receive a major bequest, such as married daughters who have had their portions.

Some grandchildren and sibling's children may also be godchildren to the willmaker. These generally receive more than their siblings who are not godchildren. Widow Margaret Crouall in 1585 left 3s 4d each to her godson Nicholas and goddaughter Margaret but the siblings of Nicholas only received 3s 4d divided between them [PRC17/46/232]. Her two godchildren were the son of her daughter and the

daughter of her son. George Downe, yeoman, in 1614 gave 10s each to his three godchildren, all children of his siblings, but nothing to his sibling's other children except one sister's eldest daughter [PRC17/57/315]. In some cases godchildren could be the grandchildren of a spouse, as with John Besbych whose godson John Beale was the son of his wife's daughter by an earlier marriage [PRC17/58/216]. Some will-makers appear to have had godchildren who were less close kin or non kin. Philippe Swift [PRC17/66/191] had two goddaughters, the daughter of her son, Philippe Goldwell, and the daughter of a "cousin" (in this case her deceased brother's granddaughter), Philippe Besbych. Though not confined to wealthier people, most willmakers leaving bequests to godchildren were of higher status and more than 20% of wills with such bequests were those of widows. As only 14% of wills (34) have such bequests, it is uncertain whether wealthier and higher status persons were more likely to have godchildren than those of moderate or little wealth.

Anthropological studies of godparenting indicate that such a relationship may imply some thing about that between the parents and the will-maker. It is not possible on my evidence to understand a great deal about godparenthood and little work has been done on this relationship in contemporary England. In a classic study Mintz and Wolf indicate that the most important relationship in Latin American *compadrazgo* is that between the child's parents and the sponsors [Mintz, 1950]. This relationship can be formed at occasions other than baptism and the choice of *compadres* will vary in different communities between exclusively kin or only non-kin. They distinguish two types of *compadrazgo*, one between equals and one between people from different social classes or status groups.

Goody likewise sees the choice of godparents in Europe divided in this way

In some regions and periods godkin were mainly consanguines while in others they formed a potential ladder for social advancement and were therefore chosen from prestigious outsiders or even friends [Goody, 1983].

This statement probably roughly reflects the situation in Biddenden. Thomas Wells, a wealthy yeoman, names five godsons and five goddaughters in his will of 1629 [PRC17/68/403]. One godson and three goddaughters have fathers of equal status to Thomas but the others are of somewhat lower status though not poor. One goddaughter, Sarah Dodson is the sister of Thomas' apprentice Steven and one godson Thomas Farrance is probably kin to his servant John Farrance and is the son of Nicholas Farrance, also given a bequest in the will. All of Wells' godchildren are non kin and reflect friendship and one form of link to social inferiors which may be part of a denser network of links of dependancy. In fifteenth century Florence, Klapisch-Zuber finds parents choosing sponsors from persons below themselves in status and cites a contemporary, Giovanni Morelli, who lists becoming godfather to children of "...good men...", those "...of substance and power..." as a means of acquiring and maintaining friendship [Klapisch-Zuber, 1985, 90]. There appears to be no instance of poorer persons godparenting the children of wealthier families in Biddenden.

Change over time has been noted by some anthropologists in the choice of godparents. In Ambeli, Greece choosing kin has become rarer in recent times, parents opting for non-kin who might give aid, and this is seen by du Boulay as part of the decreased importance of the kindred [Boulay, 1974]. By contrast, White, speaking of Abruzzi, Italy claims that the practice of choosing more powerful persons as godparents is less common today because increasing affluence makes the need for their help less likely, and the choice is usually from friends or kin of equal status [White, 1980]. There is no clear change towards or away from kin in Biddenden, but there does seem to be a decline in leaving godchildren bequests overall. Of the 34 wills with bequests to godchildren, 68% were made before 1610. This does not necessarily reflect a decline in choosing godparents as such. Houlbrooke notes that puritans tended to disapprove of the practice which may have contributed towards any decline in importance given to such links [Houlbrooke, 1984].

Pitt-Rivers for Andalusia states that the *compadrazgo* is a stronger bond than kinship because it is voluntary. In this case sponsors can be kin or non-kin, equal or higher status depending on birth order and the wealth of the child's family [Pitt-Rivers, 1954]. Similarly, in Pisticci, Davis sees the relationship as closer than most kinship relations but here it is more common to create *comparaggio* with kin than with a powerful non-relative. In Biddenden, relations of sponsorship seem to have been more distant than those with members of the immediate family or the family of origin, but closer than links with more distant kin. Making grandchildren and siblings' children into godchildren strengthened this tie and reinforced that with the child's parents. The sponsorship of friends children was a way of creating a close, long lasting (if only in memory) link between persons with no formal tie. In this way it may be seen as somewhat similar to marriage. When persons of higher status became godparents to less wealthy children, this can be seen as a formal way of reinforcing links which already existed between families, usually involving dependency on the part of the poorer party.

In his study of the diary of Ralph Josselin, Macfarlane sees godparenthood as of "...little impact in everyday life..." [Macfarlane, 1970, 145]. Josselin chose both powerful non-kin and kin for his first two children. Macfarlane also notes the rarity and smallness of gifts to godchildren in wills of the sixteenth century. The ways in which links of sponsorship might be used probably varied much from one case to another. Some persons, such as John Flete in 1568, might give a substantial bequest to one godchild [PROB11/50/11]. He left 100 marks (about £68) to Philipe Gibbon, his goddaughter who was the daughter of his sister but much smaller amounts to his five other godchildren who were more distant kin and non-kin. In most cases, godchildren who are also kin receive more than those who are not. That a gift is small does not mean that it is without any significance. Such bequests can be seen as more symbolic than economic.

Ties of sponsorship may have been used in some cases to help a child in some way. Two Biddenden weavers Thomas White and John Stedman [PRC17/43/143 and PRC17/52/147] left looms to their godsons. White's godson lived with him and in both cases the boys may have been their godfathers' apprentices. But the import of the relationship may lie in most cases with the adults involved rather than between adult and child. The medieval and early modern term "gossip" or god-sib was used to refer to close friends, the group of people to whom one would gossip. This is a more inclusive use but carries with it the idea that relations between god-sibs should be close and friendly. Such a relationship may be implied when the unmarried young gentleman Francis Allard, made his will before departing overseas in 1597, leaving all of his property (land and goods) to his step-brother Richard Maplesden whom he calls his "Welbeloved Brother in God." Maplesden in this case was preferred in the will to Francis' two full brothers who received mourning rings "...for a remembrance" [PROB11/109/11].

Gifts to non-kin

Not only kin or 'fictive kin' are the recipients of small amounts of money or goods. Many such bequests are given to persons to whom the willmaker has no other clear link. They may be of similar or lower status than the willmaker but very rarely of higher status. In some cases they are stated to be friends or neighbours of the willmaker though this appears to be more likely where the recipients are also given an obligation to perform such as overseeing the will. Herbert Randolph, gentleman, gives 20s each to his "...loving friendes..." John Crane and his wife of Canterbury "...in token of my love to them." The gift made of his old clothes by yeoman John Carpenter in 1603 to Ralf Brewster "...a poore labouringe mann..." clearly indicates inequality by the description but not by the gift [PRC32/39/49]. Clothes were often given to equals and to close kin. In some wills the recipient of a small bequest is linked to the willmaker by a non-kinship relationship such as being a servant or a tenant. The relationship is usually one of dependancy on the part of the recipient. In a few cases the recipient is a superior as in the case of Thomas Smith a servant or apprentice who gave 5s to his master Richard Allard [PRC17/67/169].

Small bequests - dependancy

Servants receive bequests in (16%) of wills but these are not distributed evenly through the period. Before 1610 27% of wills contain bequests to servants but in the period 1610-1660 only 9% of wills contain such gifts. A clear decline in this form of bequest. The gifts are usually fairly small amounts of money though goods are occasionally given. In some cases certain servants are singled out, mentioned by name and given a larger bequest while fellow servants are in the same will treated as an undifferentiated group. William Boddenden in 1579 [PROB11/61/22] gave £6 13s 4d to "...my servant..." John Webb but "...everie of my servauntes that be dwelling with me at my departinge..." except Webb received only 6s 8d. That John Webb's mother received a gown and his siblings 20s each indicates that the master/servant relationship could be more than a simple contractual one. This instance of the preferment of one or more servants is not unique. Neither are the bequests to members of a servant's family.

Some masters were particularly generous. Jervis Vinall bequeathed "...one Chest which I daylye use to putt writings in for my owne comoditie and one Bible..." to his servant Joan Stubbs [PRC17/54/257]. He also gave her £10 "...in recompense of her longe service and thereby to mend her portion towards marriage..." stating that this was additional to any wages due to her. Joan's long service may have made her less marriageable, due perhaps to age, so that a larger portion could help her in this respect. Apprentices might receive the tools that they would need to practice their future trade. Richard Jennings was given one of his master's two looms when William Knight made his will in 1655 [PROB11/243/18] the other going to Knight's brother. Some masters and mistresses might give money to former servants, as did Richard Allard [PROB11/82/55], which indicates that some form of relationship could outlive the actual period of service.

Tenants were another group who might be given small bequests. Although relationships of tenancy involved dependancy, they were not always between persons unequal in status otherwise. Ambrose Drayner, a wealthy clothier, left 20s to Nathaniel Knight, a young clothier of about 22 years of age, who was also his tenant [PRC32/45/178]. Knight's brother John was made an overseer to the will of Ambrose's widow Elizabeth three years later and is described there as "...my good friend..." [PRC32/45/279]. According to a deposition given before the church courts concerning problems with Ambrose Drayner's will Knight describes Drayner as his "...neighbour and sometymes his master..." [EcCX11.14, f38-9]. Brother John also visits Drayner "...as a friend..." Clearly relationships could be complex, involving elements of equality and dependancy through time. Again it can be seen that the relationship between a master and his servant or apprentice need not end with the period of service but could be transformed to other types of relations.

Not all relationships of tenancy were like that between Drayner and Knight. Christopher Clark, son of the second wife of the wealthy William Boddenden bequeathed one years security of tenure to the much poorer Thomas Pylgrym [PROB11/59/42]. The complexities of landholding and leasing in Biddenden and the Weald do not lead to a marked division however between rich landlords and poor tenants. Some tenants were poor like Pylgrym, others were closer in status to their landlord.

Persons working for the willmaker in other capacities than servant or apprentice could receive small bequests. Francis Allard, a clothier, left money in 1592 to his two apprentices, a male and a female servant and two men each described as "...my weaver..." [PROB11/79/9]. A later clothier, William Randolph in 1641, gave his "...workmen..." 20s each, both of them being weavers [PRC31/120/245]. Richard Clark [PRC31/122/280] left 5s each to "...his antient Spinners..." and "...somewhat..." to his other spinners. "Antient" here probably means of long service. Unlike servants, weavers and spinners did not work on a fixed term contract to a clothier. They undertook piece-work with raw materials usually supplied by the clothier, and were paid for their labour or for finished goods. Some clothiers may have found it advantageous to have an on-going relationship with particular workers and the bequests may reflect such a situation.

Bequests to the poor - individual and charitable

In some cases bequests are given to people of explicitly unequal status to the testator, the recipients being described as "poor". The gift to Ralf Brewster a "poore labouring mann", mentioned above, was one example. Richard Allard, a wealthy man, left £60 which his eldest sons were to "...freely lend unto six poore men..." of whom he went on to name five [PROB11/82/55]. These bequests were individuated by the naming of those who were to receive them. In this they differ from the general, charitable bequests to 'poor people' and imply a personal power relation as opposed to something more like a class relation. Allard in fact also makes twelve bequests of the latter type in his will, giving varying amounts to "...the poore people..." of Biddenden and other places.

Such charitable bequests are common among the wills of higher status persons. In many cases the distribution of the legacy is put into the hands of named persons, usually friends and kin of the willmaker or sometimes the churchwardens and minister. Allard nominates his cousin John Evernden, Mr Whetcombe "...the Pastor..." and two of his sons to distribute the £3 6s 8d for the poor of Biddenden. In some ways such bequests can also be seen as gifts to the persons chosen to distribute them. They were always persons of high status locally and might stand to share some of the reputation of the deceased by giving out his bequest and therefore being seen in the reflected glow of his generosity. By giving such details of the distribution of the bequest, the giving could also be controlled as the distributors would choose exactly who the "poore people" were.

Mourning rings

From the 1590s some of the wealthier willmakers gave bequests of gold rings, or money to buy rings to kin and friends, both male and female. Such gifts might be given to immediate family and to more distant kin as well as to persons unrelated in this way. Recipients were all however of equal status to the willmaker. In the 1590s some of these rings were said to bear a 'death's head' emblem, clearly being associated with death and burial. Jeremy Bewle in 1596 left each of his step-sisters a gold ring "...with this poesye Eschew evill" [PRC17/51/257].

Such rings could be bequeathed again. Bewle left a ring to his mother's last husband John Evernden. Evernden, two years later, gave his daughter's husband a gold ring "...bequethed unto me by Jeremy Beawle with deaths head theron..." [PRC32/40/60]. These rings were seen as symbolic. Henry Allard in 1645 left 20s each to three close relatives to make rings "...in token of my love unto them..." [PRC31/126/382]. William Randolph left rings to his close kin "...as a token of remembrance..." [PRC31/120/245]. The largest bequest of rings is that by Richard Allard to 54 persons of his immediate family and kin, both consanguinal and affinal.

...to every of my Auntes Brothers Sisters sonnes daughters kinsfolks and Allyes and frendes hereafter named for a Remembraunce of my love toward them a Ringe of gold with the form of a deathes heade in it of the price of 12s for every man and of the price of 9s for every woman... [PROB11/82/55].

Small tokens these rings may have been, but Allards' bequest would have cost almost £29. Such small gifts clearly had some significance to the giver.

Rings are the main form of specialised object associated with mourning to be mentioned in wills. The only other similar bequests are the "mooringe gowne" which Thomas Flete, gentleman, left to each of his wife, his mother and his wife's mother in 1572 [PROB11/54/40] and money to buy gloves given by Jonathan Rogers, gentleman in 1659 to the two friends whom he chooses as overseers to his will [PROB11/298/89].

These objects - gowns, rings and gloves - are of similar types to those given as marriage tokens [Ingram, 1981, 46; Stone, 1987, 334], although it is unlikely that 'deathes head' rings *per se* were given at marriage. Such items do appear to have been viewed as capable of carrying symbolic significance.

Similar significance may in a different way apply to the other small bequests described above. After all, were the will to be viewed as merely a vehicle for ensuring the continued maintenance of the willmaker's immediate family and for the transmission of property, minor gifts to more distant kin or other persons might seem superfluous. But a will could be used as more than such a bare mechanism. Alongside such processes it might also become a statement of the willmaker's estimation of his or her own social worth.

Generosity was an important element in building and keeping a good reputation. Small bequests could therefore enhance reputation. They might also project important relationships from the willmaker's lifetime forward in to that of his or her survivors and heirs. Seen in this way such gifts represent a peculiar form of delayed reciprocity [Bourdieu, 1977] whereby the return must be made to persons other than the giver. Goody remarks in a similar context

...not only that the exchange itself may establish or strengthen a continuing relationship, but that the expectation of that event at some future date may have a similar result... [Goody, 1962, 294].

Keith Hopkins has also noticed this type of bequest in ancient Roman wills

What a donor gave (when it hurt him least) would, in due course, with luck be repaid to his heirs, in cash or in favours [Hopkins, 1983, 246].

Because of the importance of friendship, of good relations with at least some neighbours and the optative nature of kinship, ways of attempting to maintain a set of relationships were particularly important in early modern England. Bourdieu visualises these bonds in economic terms, as 'symbolic capital', stating that

The acquisition of a clientele, even an inherited one, implies considerable labour devoted to making and maintaining relations, and also substantial material and symbolic investments... [Bourdieu, 1977, 180].

Bourdieu speaks of labour and investment going into the maintaining of relationships whereas Hopkins stresses the minimal cost of deathbed gifts. Those links to others built up and important to the willmaker during his or her lifetime did represent considerable investment in some ways. Through gifts which were small in cost (both economically and in Hopkins' sense) but of greater significance in a symbolic sense, the willmaker tried to transfer this 'symbolic capital' in the same way that he or she might transmit 'real' capital with the set of rights and obligations surrounding that property.

Death and burial

Death meant more than the redistribution of property; as with marriage the renegotiation of social relations were involved. Such re-arrangement was in many cases linked to property distribution because the nature of some relationships was predicated on the control of resources. Inheritance of land or a workshop could transform a son and dependant into a master in his own right, controlling resources that had been his father's and negotiating from this new position of strength.

The death of a spouse broke one of the links to the remaining spouse's affinal kin, although the important link through the children of the marriage might remain. Such a relationship was not predicated on property, though there might be some connection, but on the conventions and choice of kin relations. When an widowed person died leaving small children, their position as orphans necessitated a

renegotiation with respect to their relations to kin and others. Someone would have to take on their day to day care in the immediate aftermath of death, they would have to be fostered with kin, neighbours or someone else willing to be responsible for them. One case of such post-mortem arrangements illustrates the continuation of affinal relations. Widow Joan Gibson died in 1617 leaving two sons aged below 12 years [PRC2/21/39]. After her death her household goods were looked after and cleaned, and her sons cared for, for twenty weeks by her first husband's brother, whereas the children were from her second and probably lower status marriage. They were later transferred to further temporary care with a neighbour before more permanent fosterage by apprenticeship and guardianship.

Burial of the dead had two elements which can be observed through extant sources and which provide some commentary on the social relations of death. Firstly the funeral, which could be quite elaborate or relatively simple. Costs given in probate accounts in the early seventeenth century vary from the expensive burial of wealthier Josias Selyard at almost £7 to the modest 10s of labourer Thomas Gibson [PRC2/17/345 and 21/36]. There are few details concerning the funeral of Selyard, but the expense was explained by the statement "...hee being a man of good countenance and reveanew..." Curate Watts Jones was said to have died "...in good credit and reputacion..." to explain the 40s spent on wine at his funeral [PRC2/34/220]. The burial of Thomas Lacy cost £5 "he Lyving and dying a man of good credit and in good reputation and esteeme amongst his neighbours and acquaintance" despite the fact that his inventory was priced at only £16, although this may be due to probable retirement by the nature of his goods [PRC2/34/78 and PRC10/69/339].

Of the 68 probate accounts mentioning burial, 30% refer to a "drinking" or "dinner" as part of the funeral events. This was for "...such neighbours and freinds as accompanied the Corps to the Church" [PRC2/26/98]. The funeral of Margaret Wells in 1612, widow included "...a dynner or banckett made for such persons as came to the buriall...being her kindred & other neighbours of her..." [PRC2/16/60]. Where the relationship to the deceased of those attending such occasions is mentioned they are rarely said to be kin, but kinship relations may be covered by the term "friends" which is found more often. Neighbours are in all cases said to have been present. Such events do not seem to be the province of the wealthy, Thomas Winsor a weaver, had a "drinking" for his neighbours and friends, although dinners seem to be confined to wealthier men and their widows. There is no reason to suppose that those funerals where no 'celebration' is mentioned did not include such an event. It may have been a normal part of the ceremony.

Although given in the case of rich and not so rich, drinkings appear to have had some connection with the reputation of the deceased. This is borne out by evidence from elsewhere. Houlbrooke saw the funeral as an occasion for the "Demonstration of the esteem of friends and kindred..." [Houlbrooke, 1984]. He notes that a "...large gathering was a measure of [a person's] 'worship'." This is why "...the

Companie..." at widow Dorothy Basden's drinking was noted as "...they being many in number..."; it was not only an explanation of expense but a source of pride [PRC2/27/20]. Houlbrooke says of this type of occasion

The funeral feast was a last demonstration of the dead man's liberality, exercised through his surviving representatives. Many, even among the pious, judged generosity on this occasion to be essential to preserve the good name of the deceased and his family [Houlbrooke, 1984, 204].

He goes on to quote a northern Puritan, Adam Martindale relating the funeral dinner and drinking for his father to his high reputation among his neighbours. Macfarlane believes that neighbours predominated over kin at funerals [Macfarlane, 1970]. This may have been due to the difficulty in assembling distant kin in the necessarily brief time between death and burial. The funeral of Margaret Wells mentioned above was attended by her "...kindred and other neighbours..." indicating that only kin living locally would be present. Although the accounts sometimes use the term "invited" the expression "who came" is more usual, and may indicate that attendance was voluntary in theory which could more easily allow monitoring of who and how many turned up. The connection between funeral and reputation is therefore clear and indicates that both the wealthy and those with less might have reputations. The funeral feast could also be used by survivors as an occasion on which to re-negotiate their relationships with their neighbours.

The nature of the burial itself also had connections with the relationship of the deceased in regard to others. There was a major division between burial in the church and in the churchyard. The most prestigious locals were buried within the church, usually near to the chancel. At Biddenden the slabs which were made to cover their graves, with inscriptions and portraits engraved in brass, survive for some of these people. William Boddenden gave directions in his will that he was to be buried "...in the upper end of the southe Ile even before the seate where I doe nowe use to sitte when I am at church..." [PROB11/61/22]. In life his seat in church would probably have marked his high status; in death his place of burial would continue and confirm this as reference for his survivors. He further wanted "...one marble stone to cover my sepulchre with my name graven in it and the names of my wives and of all my children." The stone with its inscriptions, and indeed images of William, his two wives and his children, is still in place. The design shows his family of procreation whether alive or dead at the time of William's burial with the daughters grouped beneath the respective mother and his only son beneath his own image. The family are ordered vertically by age and horizontally by gender; the son is heir to the father, the daughters to his wives. Their relative sizes reflect the power relations of the family, the father largest, the wives smaller and the children much smaller still. John Greenfield, a clothier of moderate means knew his place to be in the churchyard [PRC17/51/54] but young yeoman Jeremy Bewle was more uncertain of his standing proposing "...the church or churchyard of Byddenden..." [PRC17/51/257]. Most willmakers are vague about their burial place, leaving their burial to their executor, asking to be buried "...where it shall please God..." or just leaving their bodies "to the earth". Spufford suggests a link between such

vagueness and non-conforming beliefs, [Spufford, 1974, 331] but it may be that the possibility of dying away from one's own parish was recognised and allowed for. William Boddenden only wanted his elaborate burial arrangements if he died "...within ten miles of Biddenden."

Whether in church or outside, some people stated a preference to be buried near to departed family members. This may not have been easy as stone markers were rare in churchyards until the late seventeenth century and were not always made for church graves. Minister John Whetcombe wanted to be buried in the chancel "...beside my deare & faithfull wife...", so that they might rise up together at the "...comminge of our Lord..." [PRC17/59/190]. William Randolph in 1641 wished to be interred "...neere unto the bodyes of my loveinge Father and Mother in the middle chancel..." [PRC31/120/245]. He also requested a stone with the names of himself, his wife and all of his children engraved in brass. His father, Barnard had asked to be buried in the middle chancel "...neereunto my well beloved wife..." with a similar tombstone. Younger brother Herbert joined them in this family location though only wanted his own and his wife's names upon his stone [PROB11/153/50 and PRC31/125/370]. The Carpenter family were buried in the churchyard but John Carpenter wished in 1603 to be interred there "...soe neere adioyninge to my mothers grave there allreadye made and buryed as the grounde there will aforde." His identification with his mother may not be unconnected with his central place in the dispute over the provisions of her will which broke out among her children [PRC32/39/49 and EcCX11.3, ff122-3]. As Venice Carpenter was buried only six years before, her grave may still have been locatable.

At the other extreme to the burial in church were pauper burials carried out at the expense of the parish [KAO:P26/5/1]. It is unlikely that they were accompanied with any drinking or impressive gathering of neighbours. The parish were not lavish in life, they were unlikely to be so in death. The churchwardens' accounts merely note payment to the sexton for digging the grave. Because of the lack of grave markers, no distinction can be made among the majority of people who were buried in the churchyard so it is uncertain whether or not the English tradition of nearness to the church indicating greater wealth, was applied.

William Dossett in 1616 "...was layd in the ground out of Chrestian Buriall..." as he "...stoode excommunicate..." [BIDD PR]. A strong appeal was made to restore John Whetcombe of Halden, gentleman, retrospectively to the communion of the church after his death. His wife, children and "...his other kindred and alliance...wolde all bee muche disparaged & dishonored if hee showlde not bee admitted to Christian buriall..." [EcCX5.9, f147]. It was wished that he be interred in Biddenden church where his parents and some of his children lay buried. The irony of the cases of Dossett and Whetcombe is that the latter had been excommunicated for adultery committed and admitted to having lived a "...badd lyffe..." whereas Dossett had taken a bribe for allowing another, wealthier, man to have sex with his wife [EcCX5.9, f55]. Inequality in death might result in more than the different locations of the graves.

Three ideas emerge from this examination of death, linking it to other themes pursued in this research. Firstly the importance of reputation, seen in the funeral ceremonies through generosity and numbers of mourners and in burial itself through the linking of the church courts and church rites. Secondly inequality of status is apparent in the location of the grave and in the difference between the "social" burials with drinkings, mourners and sermons and the interment of the poor. Thirdly the continuity and construction of social relations is seen in the funeral gatherings and in the identification with deceased family members in burial place. These themes link with those examined in the contexts of willmaking and marriage.

Summary

Because each person had a unique set of kin, death broke links which were predicated upon relations to that individual. In this way, as well as with property, death can be seen to cause fragmentation. This is a feature shared with marriage, which entailed the setting up of new households, and constituted the dissolution of those focussed on the spouses' natal families. Through wills death could, however, also be an occasion when attempts were made to reproduce relationships of importance to the willmaker, for his or her survivors. Through small bequests and numerous mourners, statements about the reputation and status of the deceased could be made, which reflected on those left behind.

There is a clear indication of increasing inequality in the treatment of sons in wills. This can be related to the more difficult times of the seventeenth century, when it became harder to maintain a standard of living which was appropriate to status through manufacture (see chapter 3). While with cloth making as an alternative occupation, a smaller amount of land would be adequate for this, the land itself would not be enough. Sons who did not receive land and daughters, were given bequests in cash or kind. For daughters this would represent their dowry. Daughters are more likely to be given particular bequests of household goods, but the eldest son was most likely to receive the bulk of the deceased's goods.

Wills indicate inequalities which reflect more widespread unequal power relations relating to age and gender. Widows are bound to provide for small children, but this is reversed as sons become adults and the widow in many ways becomes dependent upon them. Sons may also be made responsible for their unmarried sisters. Land, the most important locus of maintained wealth, is almost always given to males. Rights associated with land and its profits are linked to the maintenance of other social relations. Siblings are in many cases treated unequally, and this inequality may be reproduced in their own wills in terms of bequests to one another. A contradiction exists between the potential hostility of siblings because of perceived inequalities of inheritance and attempts to maintain relationships originating in those of the natal family.

Small bequests may reflect both equality of relations (as with mourning rings among the elite) and inequality (as with gifts to dependants and charity). Willmaking along with ceremonies and place of burial both make manifest and reproduce such inequalities. Through concepts of generosity and in the inequalities of funeral display and burial, reputation can be seen as linked to status. The next chapter will examine the way in which reputation is linked to status and the creation and maintenance of social relations in regard to the making and practice of marriage.

5: Marriage

This chapter concentrates upon the making of marriages. Goody draws a strong distinction between northern Europe with late marriage and limited concern about pre-marital chastity, and the mediterranean with earlier marriage and a strong emphasis on honour [Goody, 1983]. Similarities and differences between these societies, in particular with regard to concepts of honour are examined here. The process of choosing partners and the criteria for doing so are looked at along with attitudes to bridal pregnancy and the relationship of illegitimacy to marriage. Age at marriage is further examined in relation to resources and inheritance. Remarriage is discussed briefly both as regards attitudes and incidence. The question of the way in which marriage could create kinship is then examined. Finally two aspects of the practice of marriage are looked at. Marital breakdown is examined in relation to status and adultery is viewed within the context of the evaluation of reputation.

Studies of marriage in England during this period indicate that few people in Biddenden would have had formally arranged marriages. Although Shorter claimed that marriages were usually arranged in the sixteenth century but that this became less common from the eighteenth century [Shorter, 1975]. Most scholars now agree that such a picture would not be true for the majority of people in England during this period [Stone, 1979; Wrightson, 1982]. Arranged matches were largely the preserve of the county gentry and aristocracy who might use them as one counter in power and property strategies. The marriages of the parochial elite were perhaps subject to arrangement, while those below might be influenced by parents, and were very often carefully vetted before being allowed to proceed, but the initiative was with the couple.

Meeting Partners

Young people appear to have had numerous opportunities for mixing and selecting partners. The practice of sending teenagers away for several years in service allowed them to meet similarly placed young people in their new households and interacting and neighbouring families.

The system of farming out the children, which permitted them a moderate freedom without forcing them to resort to marriage... [Macfarlane, 1970, 94].

Some matches clearly could be formed in this way as can be seen from marriage related disputes in the church courts such as when Bartholomew Pigden in 1563 asked his fellow servant in Benenden, Mary Willard, "...can you fynd in your hart to for sak all men in the earth and take me to be thie husband..." [EcCX10.12, f114-5]. Other opportunities might be found in church going where Ralph Josselin first noticed his future wife [Macfarlane, 1970], in visiting family and friends, in the alehouse as with Roger

MISSING

leading to immorality and disorder by church and moralists, a certain degree of supervision by the group seems to have taken place [Medick, 1984]. This may have been so at the Wealden dances.

The freedom of unmarried girls in early modern England is in strong contrast to the close supervision by family members and restriction of movement often found in mediterranean societies. This does not, however, mean that parents or other kin were totally disinterested in the making of their childrens' marriages.

Control of Marriage

Though for most people the couple took the initiative in marriage making, it was generally accepted that parents, and to some extent other interested parties, had a right to veto the match. Once a couple had decided that they wished to marry, the next step was to secure the consent of parents and other persons who might be seen as having a rightful say in the matter. This step appears to have invariably been taken by the man. If agreement could not be reached, some couples seem to have set about a more lengthy process of persuasion, rather than give up their plans.

The process of marriage negotiations is seen in a dispute concerning an intended match between William Newland and Elizabeth Asherst of Great Chart. Newland came to visit Elizabeth's mother several times to ask her permission to speak with Asherst "...but never requested [the mother's] goodwill..." [EcCX11.9, f214-5]. According to the mother Elizabeth was uncertain about the match claiming "...she allways misliked him..." and that "...she was not yet mynded to marry with him...but tyme would trye all things..." William had hoped to advance his case on his final visit when he promised to make a marriage settlement which would leave the girl £50 more than her portion if she were widowed. He also claimed that he had £25 annual income from his lands and an annuity of £6. Having failed with the mother at home, Newland met with Elizabeth, her mother, her father-in-law and Edward Andrew, a relative of Elizabeth, in an inn in Ashford where they drank wine. William asked for Edward's consent to the marriage, but Edward asked "...leave to enquire..." about Newland as "...he was a stranger to him..." William thereupon brought a copy of his father's will to persuade Edward that he had lands worth £25 per year. Edward "...being not very Credulous desired to see the same lands..." and a visit there was arranged. But, said Edward, the suitor had "...deceived [him] both in his tale and in his meetinge for he had neyther land nor mett with [him]..."

This story from the church courts illustrates several things. The girl's father is dead, so the suitor tries to gain the consent of her mother and her kinsman. He hopes to impress both with his, allegedly false, wealth. He also appears to be trying to use the consent of the mother to influence the girl who is uncertain about the match. The mother seems unimpressed but mentions her daughter's feelings in her statement to the court, the kinsman (probably acting in place of her father) concentrates on financial matters. The

mother's current husband appears only as an onlooker.

Ricard Hopper of Biddenden claimed that he and his wife "...were contracted in matrimonie & man and wife together..." more than a year before their child was born, and "...had beene married long before they were but that the mother of his said wife was against yt and would by noe means suffer them soe to doe..." [EcCX4.11, f175]. The mother's current husband appears as a witness for the couple affirming that his wife "hindered" the marriage. The couple respected the need to obtain the mother's permission and delayed the wedding because of this despite the bride being pregnant. The father-in-law seems to have taken the couple's side but had no say in the matter.

That the consent of a father-in-law could be important, however is seen in the case of David Bishop and Mary Willard of Biddenden, who would have married earlier if "...the Father-in-law of his said wife would have consented thereto..." It is uncertain as to why the father-in-law's permission was needed in this case [EcCX6.8, f271]. Other kin could deny consent and delay marriage such as when the brothers of a Tenterden man's bride would not "...at that tyme suffer them to bee married...", although the husband did not know why. In Newenden, Richard Scranton had "...a kinswoman...of some reasonable good worth whom [he] had gyven Counsell to take heed to her selfe and be well advised whoe shee matched with..." Her suitor "...understandinge thereof boore a grudge..." to Scranton and was said to have attacked him one night [EcCX6.7, f112]. A less formal method of control but, as Scranton describes his assailant as "...haveinge ben a suitor..." to his kinswoman, perhaps it was a successful one. Other permissions might need to be sought as in a case from Halden where a couple had to delay marriage

...they beeing servants together in one house their Mr and Mrs would not suffer them to bee married till Michelmas about which time the time of their service being ended they forthwith married... [EcCX6.8, f170].

In this case, the master and mistress are not acting *in loco parentis* but are ensuring that the couple work out their contracts. It is interesting that they were able to enforce this and leaves the question of how they did so. In the case of an Ashford couple the wedding was delayed as the bride was "...loath to displeas her sister Elizabeth...whose covenanted servant shee was..." and who refused to consent [EcCX6.8, f177]. Work agreements reinforced by kin ties.

In many of the above cases, the couple have already made a contract between themselves, before seeking consent. They had taken the initiative, which differs somewhat from the case with William Newland who was seeking permission to court his hoped for bride. In almost all cases, however, it is from the bride's family that refusal to consent comes. Men ask for women and women are denied to suitors by their kin. Women are not secluded but they are more closely controlled. Most of these cases involve bridal pregnancy. This was not in itself regarded by many as damaging a woman's reputation, but abandonment might do so, especially if it left her an unmarried mother. Pregnancy may therefore have been used

as a weapon by these couples to gain the consent they needed. As the couples must have had a fair degree of freedom in courtship to allow this, it is clear that other matters than reputation were at stake. The importance of repute can, however, be easily overlooked and is not always separable from other matters.

In some cases a woman's family might go so far as to forbid a marriage. One way of doing this was to obtain a caveat which forbade the church courts to issue a marriage licence. Such a licence might be used by a couple to marry without parental permission at some distance from home, as it avoided the publicity of banns. A caveat of this type was issued to prevent Tomsen Evernden marrying by license, especially with Thomas Cryer of Biddenden, for her guardian Thomas Burr [Willis, 1972]. Unfortunately I have no evidence as to whom she did marry. This type of action was rare, more usually a couple might conceal their marriage as did Mary Withwick when she "...intangled herself in a contract of marriage..." not telling her grandfather who had 'brought her up tenderly', an action which "...did much displease..." him [EcCX11.14, f99].

So far constraints on marriage from kin and those in direct, personal power relations to the couple have been examined. Some persons met other types of opposition both formal and informal. One Staplehurst couple could not marry because they could "...not say the new catechisume..." in 1577. Whether this was because they disagreed with the new form and felt unable to comply, or because they were unable to remember the words, is not stated [EcCX1.13, f125]. In 1576 John Nodwell of Biddenden was presented for co-habiting unmarried with the explanation that

...he is a poore man & therefore is not mete as it is thought by the most parte of the parishe to be yoined in marriage for the parishe hath byn chardged with him & his children these 20ty yeares... [EcCX1.13, f8].

This is somewhat exaggerated, Nodwell's two surviving children were only 9 and 8 years old in 1576 and his first marriage took place in 1563, but the import is clear. The parish authorities had the power and the will to forbid marriage to the poor because this led to their families living from relief. How far they might succeed in the long term is debatable. Either with or without the sanction of his wealthier neighbours Nodwell was married again in June 1577 to Agnes Watts, presumably the woman he had co-habited with. Agnes died after four years and he went on to make two more marriages. The parish must have been relieved that all of his children born from 1577 onwards died within five years of birth. At Bethersden in 1599 the churchwardens were similarly able to prevent a marriage but this time demanded that the intended husband "...brought a testimoniall from the parish where [he] dwelt of his good behaviour..." [EcCX4.3, f264]. Why this was necessary is not stated, but the case again points to formal control of marriage by the parish elite.

The wealthy did not have it all their own way. Their formal control contrasts with informal sanctions which were open to everyone. Such controls have been written about in the form of charivaris or 'rough-

music' [Davis, 1987; Thompson, 1972] but could be exercised in other ways. In 1608 "...sume of the best yeoman..." in Cranbrook parish asked their minister to write to the church court of a "...fowle..." matter concerning a wedding "...whereunto divers of good accompt resorted..." [EcCX9.9, f91]. A wedding one presumes of persons of some standing. But the stile over which the couple came on the way to church was "...dealt withall after a beastlie manner, and flowers put in it..."

The makers of this display were a woman and her recently married daughter who the minister described as "...but poor and beggerly for non of cowntenance would do the like..." [*ibid*]. The account contrasts the status of the wedding guests with that of the two women. The action did not prevent a marriage but it allowed comment to be passed upon it, and as "...greate offence..." was taken the display seems to have succeeded. Why the two women felt the need to do this is not mentioned but presumably some of the wedding guests would have been able to interpret.

Control then, is seen to come not only from parents and kin but also from other persons in power relations to the couple, including parish officials. The latter type of control was by the wealthy and powerful and of the poor and powerless. It related to relations of status unlike the other forms of control which appear to be connected with inequalities of age and gender. The sanctions of the powerless were perforce informal, commenting rather than actively preventing.

Choice of Partner — the idea of equality

Limits on adult control do not mean total licence and young people would have a reasonably clear idea of contemporary ideas concerning the basis of a good marriage. These were based around the idea of equality between partners, an idea which seems to be very common throughout Europe. This equality related particularly to age, status, reputation and religion [Wrightson, 1982].

William Perkins in his tract on domestic life *Christian Oeconomy*, lists as essential to a good marriage parity in religion, "...equality in regard of age and condition..." and "...public honesty and credit whereby the contract becomes a matter of good report, well thought and spoken of abroad..." [Perkins, 1970 422]. He also lists good health as essential to the validity of a marriage, both in the sense of "...ability and fitness for procreation..." [*ibid*, 421], though he later states that barrenness must not be grounds for divorce, and general bodily health.

Equality in Religion

Parity in religion was probably not a problem in Biddenden as there were few persons not of generally Protestant adherence in the Weald and in Kent in general. The problem was more acute in places such as Yorkshire, where there were larger numbers of Catholics as in the case of the son of puritanical Adam Martindale who "...did to all our griefes marrie a papist..." [Wrightson, 1982, 81].

There may have been a tendency for those with particularly strong beliefs or belonging to a dissenting group to marry a like minded person, or to encourage their children to do so, but there is no real evidence. Brownists in Ashford and other separatists appearing in the church courts are sometimes married couples such as those presented at the Archdeacon's visitation in 1637 [EcCZ3.16, f11] and Lawrence Heyward and his wife of Smarden who were keeping suspect books in 1605 [EcCX4.8, f93], but it cannot be ascertained if their religious beliefs were a foundation for their marriages or developed later. Ozment states that some early protestant sects such as Hutterites and some Moravians had marriage partners chosen by church elders with little or no consultation of the couples, believing this practice avoided 'self will' (strong individualistic tendencies). The rector of Biddenden in 1683, states that there are some Brownists in the parish who "...boast that they have kept themselves unmingled with all other dissenters ever since the days of [their founder]..." [Woodruff, 1895]. Whether this indicates genealogical or religious purity is not certain and as I do not know the names of any of the Biddenden Brownists there is no way of checking whether they form an endogamous group.

Equality in Age

Parity in age seems generally to have been achieved, the average gap between first spouses being three years, with the man older than his bride. Many tracts and contemporary songs, tales and ballads warned against the mismatch of young and old and such marriages could become the focus of rough-music or charivaris. Marriages between old men and young women were usually thought to be unhappy for the woman, while those between old women and young men were seen as being mercenary on the part of the man, and leading to regret for the woman [Ozment, 1983]. Very large discrepancies in age between partners in Biddenden are rare, and the man is usually the elder but the age difference does rise to six years for later marriages.

The gap in spouses ages is not constant over the whole population. Yeomen and clothiers, the parish elite, are in some cases much older than their wives, with differences of ten to twelve years. This group shows some tendency for males to be in their mid to late twenties and their wives between 16 and 21 years at first marriage. In discussing age at marriage and difference in age of partners in Italy since the late eighteenth century, Bell puts forward a model which links these variables to freedom of choice of

partner [Bell, 1979]. He proposes that earlier age at marriage indicates choice of partner entirely by parents or entirely by the marrying individuals, while a later age indicates a period of 'difficult' transition between these two extremes. He also suggests that where choices are made on an individual and romantic basis there is a tendency towards age equality in spouses and that marriage of a young girl to a much older man is more common in places with little economic diversity. I would argue that although this variation can be explained in terms of change over time or different economic situations in some cases, in Bidden-den the variation is more likely to be due to the particular circumstances of different economic groups. This will be dealt with in more detail in a later section. For the moment I suggest that the early age of marriage of the wives and daughters of the elite group and the age discrepancy with spouses may indicate that marriages are more likely to have been arranged than those of most of the population.

Equality in Status

As well as equality in age, Perkins recommends equality in condition by which he means status and wealth. Davis finds that most marriages in Pistocci are endogamous in terms of status and wealth, such parity being one of the reasons why a spouse is often sought amongst kin [Davis, 1973]. A preference for status and wealth equality is found in the Vaucluse [Wylie, 1974] where partner choice is made by the young on grounds of love and in Greece where marriage is arranged by family and kin and non-arranged matches, formed by elopement, are believed to lead to status inequality between spouses among other problems [Boulay, 1974]. Boissevain notes that in Malta the preference is for same status marriages, or marrying 'up' (to someone of higher status) [Boissevain, 1980] and like Davis finds this given as a reason for marrying kin, though cousin marriage is somewhat disapproved of in practice.

That such notions can be found in other places and times in England can be seen in Elmdon, where in the nineteenth century there was a high degree of endogamy among classes [Strathern, 1981]. Wolfram sees a long tradition in this concept of status equality and notes a discrepancy in the way unequal matches are popularly viewed [Wolfram, 1987]. It has long been considered mercenary for a lower status man to marry a higher status woman, he would be seen as living off his wife which is viewed negatively. On the other hand the marriage of a low status, poor girl to a wealthy, high status man is positively evaluated and seen as romantic, forming the plot for many novels from at least the eighteenth century.

Goody finds that 'homogamy', by which he means status/wealth endogamy is most usually achieved by marriage within the group, be that kindred, clan, caste or community [Goody, 1976]. This practice appears to be common in its various forms throughout Eurasia and areas influenced by Eurasia (such as North America). He notes that Flandrin has found that in early modern France the Catholic church would give dispensations to marry kin otherwise prohibited in order to allow equality of status. Goody predicted a positive association of 'complex caste' (close in-marrying strata — a wider definition than caste as used

to describe ranking in India), and 'diverging devolution' (inheriting of property — both land and goods — by males and females). Such an association can be found from Ethnographic Atlas data, but is weak. He concludes that advanced agriculture and a hierarchical ordering of society are linked to marriage within status groups or upwards and monogamy, as well as the concentration of inheritance on close kin and the control of female sexuality.

From the study of nineteenth century marriages of residents of Elmdon, it was found that the proportion of marriages made with local (within 5 miles) partners, varied with status [Strathern, 1981]. It was suggested that this reflects the availability of such persons for each different group, given the preference for status endogamy. So labourers were more likely to marry a local person, and gentry least likely to. It has been stated that by the sixteenth century, a national marriage market had developed for the aristocracy and major gentry [Wrightson, 1982] through contacts at court, while the lesser gentry married on a county wide basis. Kent county gentry were highly endogamous, perhaps reflecting the coastal nature of the county. Wrightson sees those of lower status marrying near to their parish of residence (rather than birth).

Because the origins of only a proportion of those marrying people from Biddenden is known, little can be definitely said about the geography of marriage. The situation is also complicated by the probability that some of those not born in the parish but marrying there may have already been living locally for some years. This may be especially true with those who had been in service. Those whose origins are known seem mainly to have come from other parts of the Weald — adjacent parishes or the next to them. Some people, in particular the wealthier, sought urban spouses, although these too often have local connections (see chapter 3; migration). Because of the difficulties outlined there is little point in giving figures at present. Further work on limited groups may provide better information.

Status endogamy is also problematic. In 90 cases the status/occupation designation of both the bride's father and the husband are known. Among the wealthier (clothiers, yeomen and rich tradesmen) 70% of both men and daughters made marriages within the group. This appears to be much less marked for poorer persons (husbandmen, weavers, poor trades and labourers) where only 45% married within this broad status band. Husbandmen seem to have married 'up' (59% for males, 73% for daughters). The daughters of weavers rarely married clothiers (14%) but most often married other weavers (36%). Overall the tendency is toward status endogamy (63%) as Goody's model would suggest.

Equality of Reputation

Less is said in most mediterranean ethnographies about the virtue of the male partner in comparison to that of the bride. Pitt-Rivers indicates that it is less important, stressing the importance of sexual relationships in attesting masculinity and stating that it is more difficult for a girl to enter into a second engagement than for a male [Pitt-Rivers, 1954]. The Sarakatsani see male virginity as ideal, but as blame for sexual relations always falls on the female, departure from this does not seem to carry the serious overtones and consequences that it would for a woman [Campbell, 1964]. Du Boulay indicates that in Ambeli double standards clearly applied as a male could be proud of his pre-marital sexual relationships [du Boulay, 1974], while such activity would seriously devalue a girl as a bride.

Indications from church court material for the Weald are that female virtue appears to be of more importance than male virtue in practice, though equality in this respect was stressed by many contemporary moralists [Ozment, 1983]. It is possible that male virtue was an issue, but may have been evaluated on different criteria from female virtue.

In most Mediterranean societies, the chastity of the bride is a very important element in evaluating her. A daughter's virtue not only reflects upon herself but also upon her whole family. Her father and brothers are the guardians of her honour. In the early modern Weald also, the virtue of a prospective bride was important. Suspect behaviour on the part of the woman during courtship was clear grounds for breaking off the relationship by the man. In 1577 James, a collier (probably charcoal burner), was involved in a, probably sexual, relationship with Elizabeth Burrish, a servant at Cranbrook when he

...tooke one Gybsen a weaver dealyng dishonestly with hyr, wherupon the said Collyar myndyng before to marry with hyr, did cast hyr of and refused hyr... [EcCX2.2, f20].

Again from Cranbrook, in 1626, Thomas Goddard said of his former intended that

...hee had an intencion to marrie her but by reason hee afterwards fownd her to bee very lewdly given and unseasonably and that very suspitiously to frequent the Company of other men he altered his former intencion rather choosinge to have his shame laid open to the full then to espowse himselfe to a Comon harlott as hee feareth shee will prove... [EcCX6.7, f218]

This quote illustrates the implications that suspicions of sexual misconduct on the part of an intended bride may have for her male partner. Cuckoldry was very shameful for a man and was obviously considered as a future danger when evaluating a marriage partner. Goddard claims he may lose face through admitting his mistake in choosing a suspect potential bride, but less than if he were cuckolded when married. The marriage of Mary Willard and Bartholomew Pigden appears to have been broken off by Mary. After, according to a fellow servant, privately promising to marry while at work one day and after she had received several tokens, Mary seems to have gone back upon her word and claimed that she regarded the

tokens "...not in the waie of marriage..." [*ibid*]. The case differs from those from Cranbrook not only because it shows a woman ending the relationship, but in one other respect. Mary does not claim sexual transgressions with others as a reason for rejection, as did the Cranbrook males, but claims that Pigden's advances were only made because he wanted "...his pleasure of her..." [*ibid*]. The case concerns breach of promise and Mary's own story is designed to free her from any contract. The claims put forward, however, must have been reasonably believable in order to convince a court. It is difficult to argue convincingly from an isolated case but it is possible to use it to raise questions on the matter in hand which cannot be answered within the constraints of this research. To this end I will put forward a model of reputation and breaking off relationships.

1. Men could terminate relationships with a woman on the grounds that she had sexually misbehaved with others. This was more difficult for a woman, but she could use a claim of dishonourable intentions toward herself on the part of her partner, to challenge the seriousness of his suit.
2. It was less relevant to a man's future that he had been involved in an unsuccessful serious relationship, than it was for a woman. Non-serious relationships seem not to have mattered to either.
3. Although equality in virtue was an ideal, reputation was evaluated in different ways for men and women.

Equality of reputation may reflect a comparison of the honour of a wider group of persons than the marrying individuals, for instance their immediate family. Various indications (see section on reputation) make it likely that reputation attached to families as well as to individuals. When discussing the virtue of a person mention might be made not only of the reputation of their own kin, but also that of their in-laws. In arguing for John Whetcombe the younger (son of the rector of Biddenden) to be restored from excommunication retrospectively after his death, the notary public mentions not only John's own "...good family..." but that he was "...well allied..." and calls his wife "...a vertuows gentlewoman well descended..." [EcCX5.9, f147]. The standing of a persons kin might be relevant to a marriage, it could be used to enhance the standing of both partners if good, and might reflect poorly if not. Wrightson notes that later in the seventeenth century, Emm Potter began to experience doubts about her suitor, the diarist Roger Lowe after hearing a rumour that he was base borne [Wrightson, 1982]. In contrast to the Whetcombes, Lowe and Potter were of fairly humble origin. Family reputation did not just matter to the wealthy.

Women were allowed a great deal of freedom to associate with men in comparison with the situation in mediterranean societies. Fathers do not seem extremely concerned about their daughters virtue; the position of brothers and sisters may be similar. Men seem more concerned about who their female kin might

choose to marry. Women may be evaluated as possible wives rather than as daughters. As with mediterranean societies, some form of double standard seems to have been applied to the sexual reputations of prospective husbands and wives. In the evaluation of male reputation such criteria were less important. Although not to the same extent as in southern Europe, the honour of a possible spouse's family does appear to have mattered. Some of these issues will be returned to in the section on reputation.

Pre-marital sexual relations and illegitimacy

In the *Willard vs Pigden* case, it is claimed that the man's advances, and perhaps his promise to marry, could be interpreted as a means of obtaining sexual access to the woman. Catherine Tilman claimed her former lover had promised her marriage many times before they commenced sexual relations, when she appeared before the church courts for incontinency in 1636. He was by then "...beyond the seas..." but expected to return. While males might attempt to use promises of marriage to gain access to women, females might try to exploit these actions to further a marriage. Audrie Roane appeared in 1592 before the church courts charged with sexual misconduct claimed that "...she did yt, for that she thought thereby rather to procure the said John Gifford to marry with her..." [EcCX3.5, f114].

In the following year a widow claimed to be pregnant but was found not to be and it was believed that "...she thought by that meanes to obtaine a husband..." [EcCX3.8, f17]. Although pre-marital sexual relations were often the cause of church court presentments, and therefore disapproved of officially, these cases do seem to indicate that the situation may have been more ambivalent among at least some sections of the population. If men thought that they could persuade girls into such relationships by promising marriage and women that they might secure husbands by such acts, this was clearly not a society where pre-marital chastity had to be strictly maintained in all cases. Illegitimacy is a topic of little concern in mediterranean anthropology, so comparison is limited to the implications as regards honour and marriagibility. The topic has been dealt with in the Alps and Portugal [O'Neill, 1987; Viazzo, 1986]. O'Neill relates bastard-bearing to inheritance practices and the reproduction of relations of inequality, though his detailed explanation may not be widely applicable. Viazzi also finds links to inequality but then reduces the argument to a discussion of whether illegitimacy has positive or negative 'functions'. Both seem to wish to distance the topic from questions of moral evaluation, although these are assumed by O'Neill rather than rejected. The approaches of Macfarlane, Levine and Wrightson, linking bastardy with both inequality and moral evaluation are more promising [Levine, 1980; Macfarlane, 1980].

I will examine three aspects of pre-marital sexual relations and illegitimacy with relation to inequality. A distinction is made between bridal pregnancy and bastardy, though in some cases this may be privileging the outcome.

1. What was the incidence of such relations, using both church court and parish register evidence.
2. What were the chances of marriage for women bearing illegitimate children.
3. What were contemporary attitudes to pre-marital sex.

The study of a Portuguese village by O'Neill stands out in contrast to most studies in Southern Europe in considering 'honour and shame' of little relevance to the inhabitants. He finds very high rates of illegitimacy, rising to over 73% of all baptisms in the decade 1910-19 and between 42% and 48% in the 1880s and 1950s [O'Neill, 1987]. There appears to be no bar to the marriage of mothers of illegitimate children. He states that

...it is not uncommon for women (if not already pregnant) to have borne several bastard children prior to their marriage [*ibid*, 16].

These mothers are found among the poorer inhabitants of the community, but O'Neill relates their experience to inheritance practices and the pattern of relationships between the richest and poorest in the village, rather than proposing a *Bastardy Prone Sub-society* as has Peter Laslett [Laslett, 1977, 147; Laslett, 1980].

Stone, looking at early modern England, sees pre-marital pregnancy as an index of affection in the marriages of the poor and bastardy as reflecting marriages which for some reason fail to happen [Stone, 1979]. He puts forward a typology of reasons for pre-marital pregnancy.

1. Co-habitation between contract (promise to marry) and church wedding.
2. Forced marriages after pregnancy is discovered, including where this has been used to secure a partner.
3. A poor girl, made pregnant by a rich man, being married to a poor one for the sake of appearances, or its converse with a rich girl married by a poorer man to get her property.

Stone's first type refers to the ambiguous definition of marriage at this period. This problem seems to be at the root of many of the cases of pre-marital pregnancy which reach the church courts. Three forms of marriage co-existed in this period. Marriage solemnised by the church, a promise to marry using words in the present tense and a similar promise using words in the future tense but followed by sexual intercourse. Although all three were supposed to be allowed as valid marriages in law, the church courts frequently handed out penances to those claiming a formal promise followed sometime later by a church wedding and more rapidly by copulation.

The confusion caused by different interpretations of what constituted a valid marriage led to such apparently illogical statements as "...they had married together long before they were married..." [EcCX4.8, f17]. Most of the court cases involve a situation in which sexual activity before the church wedding is made obvious by a birth occurring soon after that ceremony and, from explanations given, tend to involve some form of delay. It therefore becomes difficult to tell how frequently sexual intercourse began between contract and wedding, as for most people the delay between the two events may have been quite brief, making successful impregnation less likely.

Despite the best efforts of the ecclesiastical authorities to discourage this practice, cases continue until the closing of the church courts in the late 1630s and many couples continued to see the contract rather than the wedding as making the marriage. The picture is further complicated by breach of promise cases where one party claims the contract as a valid marriage and the other disputes this. Unfortunately, it has not yet been possible to ascertain in whose favour judgement went. This information, found in the 'instance' side of the church court records is a subject for further study.

decade	bridal pregnancy cases	sexual cases	% of all sexual cases
1560	0	20	0
1570	0	17	0
1580	3	21	14
1590	3	47	6
1600	9	35	26
1610	7	25	28
1620	7	25	28
1630	2	13	15

Table 5.1: Bridal pregnancy cases. Note: only cases from 1566 examined for decade 1560; sexual cases includes all cases of fornication, adultery or incontinence including bridal pregnancy.

Ingram [Ingram, 1987] examining the instance records of the church courts of Salisbury diocese, but taking into account other areas, finds only sporadic prosecution for bridal pregnancy before the late sixteenth century. This would be consonant with the figures for such cases detected from Biddenden, where the earliest case (from 1566) is that of George Constable and Joan Kylllet in 1581 [EcCX2.2, f104]. After this the number of cases increases in most places including Biddenden cases at Canterbury. This is in marked contrast to the pattern of bridal pregnancy found from the Biddenden parish registers, where the number of children baptised less than 8 months after the wedding of the parents decreases throughout the period both in real terms and as a percentage of all first births. The figures for the latest period may be less reliable due to poorer registration after 1640.

date (30 year bands)	all 1st births	less than 8 months	%
1566-95	186	34	18.3
1595-1625	173	24	13.8
1625-55	107	7	6.5

Table 5.2: Baptisms within eight months of marriage as a percentage of all first births.

This trend may indicate, as Ingram deduces from spousal litigation [Ingram, 1987], that the official, ecclesiastical view of what constituted marriage was gaining ground. The interest taken by the church courts and their local supporters in such cases may have contributed to such a change in opinion. Illegitimacy resulted from both pre-marital and extra-marital sexual relations. Some cases came about because intended marriages failed to happen but others involved single women or widows and married men and so were clearly unrelated to marriage. Adultery between men and married women is unlikely to result in bastardy unless the husband was known to have been absent for some time.

decade	baptised	illegit	%
1560	315	1	0.3
1570	338	6	1.8
1580	398	6	1.5
1590	400	13	3.3
1600	410	7	1.7
1610	422	7	1.7
1620	439	10	2.3
1630	454	9	2.0
1640	347	7	2.0
1650	255	3	1.2
all	3778	69	1.8

Table 5.3: Rates of illegitimacy by baptismal cohort

These figures indicate a marked rise in the proportion of baptisms of base children in the 1590s. More detailed examination shows the fifteen year period 1590-1605 to have high percentages of bastards baptised, with further peaks 1610-15, 1620-25 and 1635-45. The largest being that of 3.8% illegitimate baptisms in 1595-1600. The life-chances of these children were poor with an infant mortality rate of 246.37 per thousand live births calculated from the 69 baptisms. Laslett [Laslett, 1977] gives an overall rate of bastards to all baptisms for southern England in the period 1581-1640 of 2.1% which exactly matches the

rate for Biddenden 1580-1639. The low figure for the 1560s in Biddenden may partly be due to the poor registration during part of that decade. The rates reflect the trends shown in Laslett's national sample of 98 parishes for the 1590s and after 1620 but are lower for the 1580s and from 1610-1619.

That very local factors may be involved (which may include under-registration) can be seen by comparing ratios from three other Wealden parishes calculated by Zell [Zell, 1985]. Brenchley, Cranbrook and Goudhurst all show fairly low rates for the 1590s (1.8%, 1.5% and 1.8%) while both Cranbrook and Goudhurst have higher rates than Biddenden for the 1600s (2.4% and 3.3%). Parish attitudes towards bastardy and especially towards the marriage of poor persons may be involved. Other factors involved might include the out-migration of potential bastard-bearers and differences in the numbers of people who relied upon farming, cloth making or both as their chief source of income. Although ratios of illegitimate to total baptisms can be seen broadly as reflecting economic trends, such trends might work in both directions. Plenty of work could allow couples to marry more easily, reducing the number of base born children but it could conversely allow women an independent source of income with which they might hope to maintain themselves and their children without resorting to marriage. It is not possible to untangle the threads of causality in these parishes as the evidence makes any simplistic explanations concerning the cloth trade or grain prices difficult to sustain in the light of substantial local variation. Therefore, having outlined the demographic trends, the causes and consequences of illegitimacy must be examined in more detail through both the church courts and reconstructed relations.

Illegitimacy levels in Biddenden are at no time in the sixteenth to mid seventeenth centuries anywhere near as high as those found by O'Neill. But similarities do occur with women who have had several bastards being able to marry. They tend to marry much later than most women who have not had illegitimate children, indicating that they were considered less desirable as brides, despite the fact that their bastard children tended not to live very long. Some cases are clearly what Stone sees as the main cause of illegitimacy; marriages that fail to happen. Such was the situation of Ann Crottall whose prospective husband had been pressed for a soldier [Bid.PR 1595].

Other women bore several illegitimate children, before, between or after their marriages. Most of these women seem to have been poor. There is, on the surface the appearance of Laslett's "...shadowy society of the bastard-bearers..." [Laslett, 1977, 107]. Laslett and others studying bastardy in England have found kinship links among the women having illegitimate births with one student remarking

It is clear from the work I have done already that the problem is common to certain families throughout many generations [*ibid*, 149].

The Laslett model lacks any social context. It is true that some women bore several bastards and that some bastard bearers were related by kinship, as well as being related to some fathers of illegitimate children. Laslett and others have found the evidence, and similar patterns can be discerned in Biddenden.

Writing about this subject, Laslett is less inclined to examine the contexts of bastardy (as opposed to mere statistics) and attempt to explain his 'sub-society' than he is to moralise. For instance, when discussing a family named Hoare several of whose members bore bastards, he says

There could be no more appropriate name for a family selected as an instance of a situation which could be succinctly described as the claim that when illegitimacy increased it was due more to the activities of whores, or to women whose procreating activities look unmistakably like those of whores, than to any other identifiable influence [*ibid*, 149].

Like the church courts, Laslett can do no better than blame and abuse the women involved. There may be several explanations as to why women have several illegitimate children but imagining a 'shadowy' 'sub-society' is no more of an explanation than was Lewis's 'culture of poverty' as O'Neill points out [O'Neill, 1987]. Some may have been rural or small town prostitutes, such as Rebecca Browne of Cranbrook who said she had received money in return for sex [EcCX6.8, f152]. In most other cases what is seen may be differences in the ways in which certain types of activity were interpreted by different sections of the population. This does not equate to a sub-society.

The families with several mothers of base children existed within the same common cultural framework as those with none. Although society in early modern England can be seen to some extent as being divided into endogamous strata by wealth and power, this was not rigid and the boundaries were blurred. Though ties of kinship rarely extended through all social ranks, those of obligation and dependancy did so. Such relations within a local area were for the most part face to face. Bastard bearers knew what other people might think or say about them, but the way in which their situation was viewed by themselves and other people might vary. The views of the 'better sort' were made very clear to them. Of the illegitimacies recorded in the Biddenden parish register, at least 81% were brought before the church courts.

Illegitimate children were seen by some as being a financial burden because they would be provided for by parish relief. This also coincided with a moral view against sex outside of marriage so that it was "...honeste people..." who were "...chardged with their bastards..." [EcCX1.11, f17]. It has been seen that pre-marital sex and what made a marriage were differently viewed by much of the population and the church authorities. Similar differences may have obtained between those who saw a bastard child as a catastrophe as did Jane Posse of Pluckley whose presentation for this was "...to the greate greife of her parents and kindred, and to the utter shame and discredit of her selfe..." [ECcX5.9, f77], and others such as Catherine Godfrey of Biddenden who "...had one bastard before this tyme..." [ECcX5.5, f147] and remained excommunicate for this when presented again for fornication.

For some reason, bearing an illegitimate child was less of a problem to Godfrey. Perhaps her marriage chances were limited, perhaps she had lost credit by her previous behaviour and had little more to lose. She was probably from a poor family; another Godfrey settled in Biddenden at about the same time was described as a labourer. Her first child was conceived while she was in service with Thomas French and

the reputed father came from Smarden where French had lands [EcCX4.11, f48]. Her later citations in the courts do not mention any service. Perhaps her situation precluded such an arrangement. She bore three more base children over the next nine years, all of whom died as infants, and then in 1617 married William Cooper, a widower of six months with at least two surviving children.

Some instances of bearing several illegitimate children may point to other practices. Mary Stokes according to the Biddenden register bore "...her Third baseborne Child..." in 1623, the reputed "...Father of them being John Taylor, Clothier..." [Bid.PR 1623]. Taylor was one of the wealthier and more powerful parishioners, though for various reasons less well off at this point than in the past, and was also a married man of about sixty years old in 1623. Stokes was at this time about twenty-nine years old, the daughter of a "...poor labouring man..." [Bid.PR 1610]. The continuing relationship of the older man of some substance and the poor girl in her twenties, may indicate that she acted as his mistress. In the church courts she attempts to father the child on Richard Post of Great Chart but on enquiry, he proves to be non-existent, so that she appears to be protecting Taylor, whom "...the Comon fame..." in Biddenden says is the father [EcCX6.7,54].

It was stated above that relationships can be found amongst those bearing and fathering illegitimate children in Biddenden. Using Catherine Godfrey as a starting point, one set of relations can be examined.

The father of her third base child was Henry Bryant, a recent widower whose late wife Sarah Cliff had borne an illegitimate daughter to Thomas Cook before her marriage. Cook himself was also the supposed father of an illegitimate child born to Mary Cutbush two years earlier in 1597. Catherine Godfrey's husband, William Cooper, had a daughter Jane by his previous wife. Jane bore a base son at age 27 years in 1638. He died in infancy but Jane did not marry until eight years later. Several of those mentioned above were brought before the church courts more than once for a variety of offences.

Jane Barrow, the daughter of a weaver, bore one illegitimate daughter, Judith, in 1620 at 26 years of age and married Robert Holland, a weaver, in 1628. But before her marriage, in the will of her father Thomas (1625), Jane's mother and brother are bound into a continuing obligation to pay 2s each month to Jane "...towards her daughter Judith her education..." until she reaches 14 years of age [PRC17/64/391]. Mothers of illegitimate children do not appear to have been rejected by their families as a matter of course. Thomas Barrow continued to treat Jane as fairly as he did his other children and took steps to secure the future of her daughter in a modest way. Jane was able to get married, though several years later than the average for women, to a man of the same main occupation and probably status as that of her father. Judith was born when Jane was a little older than the mean age at first marriage for women in the 1620s. Her older siblings and younger sister were already married. Jane may have been hoping for marriage with Steven Bluett the reputed father of her child but Bluett purged himself of incontinence with her and married another woman the year after [EcCX6.7, f19].

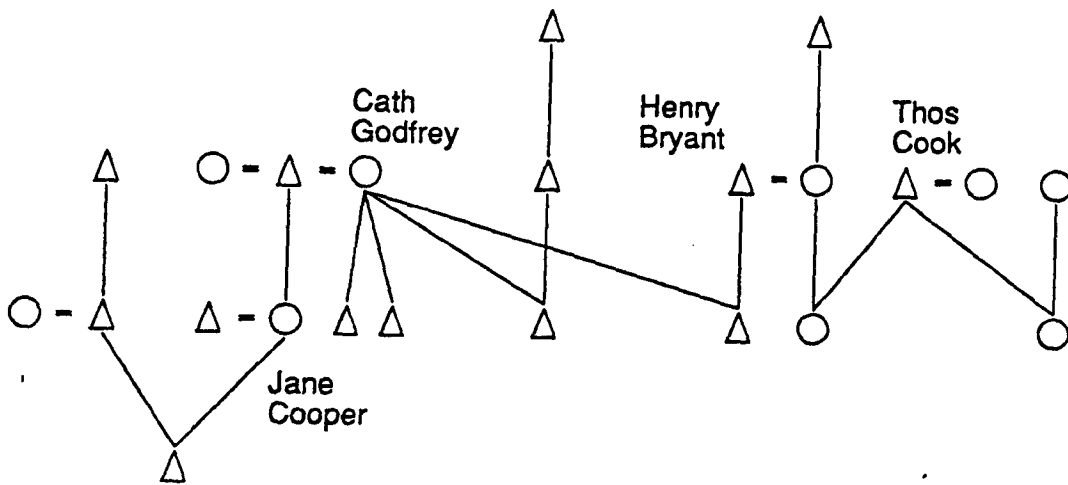


Figure 5.1 Relationships of Catherine Godfrey involving illegitimate children.

In 1619 Elizabeth Stringer, a widow for two years bore the first of two illegitimate children, a daughter Joan. Joan herself bore three illegitimate children the first at age 23 years. The pattern here reproduced itself directly which appears to be less usual than the type of links between the families of bastard bearers outlined in the case of Catherine Godfrey above. The question is raised as to whether certain families were, as Laslett notes [Laslett, 1977] prone to producing base children or whether there was some common factor shared by the families of those who did.

One factor which the families of some who can be linked did share was relative poverty. Godfrey was probably related to a labourer, Stokes was a labourer's daughter, the Cliffs were cardmakers (a poor trade). Others were in a situation of dependancy to the suspected fathers such as Elizabeth Stevens made pregnant by her master and probable relative by marriage, Richard Blush. A further group are widows, possibly left in difficult straits by the death of their husbands, perhaps seeking new ones, perhaps just exploitable. Some mothers are the daughters of weavers and husbandmen, though these tend to have only one illegitimate child. Repeaters are often poor, but Judith Bluett daughter of Steven, supposed partner of Jane Barrow, a hammerman, may be an exception here. She had three bastards in the 1640s and early 1650s and married William Stedman, a tailor in 1656. She died of smallpox in 1669 and was described as

“...an old whore...” in her burial record [BIDD PR]. There is a possibility that she is the same person as Bluett and Barrow’s daughter Judith.

Poverty and dependancy cannot in themselves explain illegitimacy or provide a link between those families in which it occurred. Many people were poor but only a small number produced bastards. Some were clearly unfortunate, failing to marry the father, others were exploited, servants made pregnant by their masters. The network displayed as centering on Catherine Godfrey indicates a relationship to poverty but also an association with persons of already poor reputation in the eyes of those presenting to the church courts. Catherine herself had been presented on no less than five charges of incontinence with different men between 1606 and her marriage in 1617 and Thomas Cook on a similar number with different women. The Cliff family, William, his wife and his children Edward, Richard and Sarah all came before the church courts on charges of incontinence, drunkenness and abusing the minister of Halden and his wife. In 1611 Richard Cliff was denounced because

...hee hath of a long tyme leade a verie disordered lewd life in frequenting the alehouses more than hath beene meete & not followeing his vocacion att all, but whollie gyveing himselfe to ill Companye [EcCX5.5, f112].

The male Cliffs also appear in recognizances among Kent civil court records ordered to keep the peace and standing surety for one another and for others [KRO QM/SRc and Q/SRg various]. Mary Cutbush was brought before the church courts for incontinence with three different men and in 1607 was described as *mulieris incontinen et meretricis*, an incontinent woman and a whore [EcCX4.3, f26].

Not only poor people led ‘disordered’ and ‘lewd’ lives and not all poor persons did so. The persons mentioned above are distinguished by a combination of poverty and bad reputation. There is clearly a link between wealth, status and reputation. Women from wealthy families are hardly ever presented for incontinence although their male kin might be. The ethos of the courts was that such persons might be reformed through the shame of penance and the elite parishioners who presented them to the courts asked for such reformation. That their misdeeds may have been differently viewed by the perpetrators is indicated by the fact that some persons continued to stand excommunicate for years. Catherine Godfrey, Bennet Grover (another ‘repeater’) and Henry Bryant were among these.

Families helped female members or kin who had become pregnant. Several cases in the church courts bear witness to this as well as Thomas Barrow’s will. Agnes Brissenden of Bethersden took her pregnant daughter in as she was “...destitute of frinds and owte of service...” and saw herself “... bound bothe by law and consciens...” to give this help [EcCX2.4, f368]. Similarly William Paine of Rolvenden took the “...unlawfully...” pregnant Agnes Paine into his house “...beinge his owne naturall daughter & redye to starve for lacke of reliefe...” [EcCX4.11, f188]. Other women may have found themselves completely destitute and friendless. Such may have been the situations of Sarah Smith of Biddenden [BIDD PR] and

Grace Homersham of Headcom [EcCX3.5] who were sent before the civil authorities for murdering their illegitimate children. These cases date from the hungry 1590s and may reflect extreme reactions to distress. In 1609 Ann Cook of Halden had been seen to "...see the Savine in milke to drinke..." [EcCX9.9, f74], making an abortifacient as she appears to have been pregnant by a man she later married. Whether fear of the practical consequences or shame at her situation prompted her action is not known.

How common induced abortion may have been is uncertain. An earlier case from Great Chart (1571) involves a girl accused of being with child by her sister obtaining "...medsonnes to destroy yt..." from a woman accused of sorcery [EcCX1.11, f13 and f41]. As the most common practical proof of fornication was pregnancy and considering the accusation by the sister, it may be that abortion was used by those trying to avoid public shame by getting rid of the evidence of their incontinence. Those who murdered their children had already passed that stage and are perhaps more likely to have acted from economic or pathological motives.

Illegitimacy may be interpreted differently within the same society. The families of bastard bearers seem in several cases to have given them help although the 'outcast' image of the unmarried mother is still present. Some women were mothers to a number of illegitimate children before and/or after their marriages. It is difficult to assess the way in which mothers viewed their situations. The denigration, perhaps being thrown out of service, presentment to the church courts and the dreadful ordeal of demanding the father's name at the birth by means of threats and curses, must have made them very aware of the negative evaluation given by their superiors to their conduct. The variation in reactions, however, indicates that there may have been a plurality of interpretations of illegitimacy available to these women alongside the dominant view. There are some indications that bridal pregnancy may have been less harshly evaluated than illegitimacy. Couples appear to suffer little in the way of damaged reputations for this offence; their 'bad life' is in the past. They are also more likely to be of middling status rather than being poor.

Bastardy, especially where 'repeaters' are concerned, appears to be linked to poverty. The material presented so far in this chapter seems to indicate a more general link between inequality and reputation. The poor are more likely than the wealthy or middling to have bad reputations ascribed to them; they are also more likely to bear bastards. Such reputations are not necessarily caused by bastardy. Rather than posit sub-societies by focussing on the horizontal links of status between these people, attention should now be given to vertical relations of inequality. Such relations are not only expressed in the sexual relationships examined by O'Neill but also in the denigrations and accusations stated in the courts. I hope to indicate in the final chapter that this is not just reforming zeal from a godly few, but part and parcel of the reproduction of inequality.

Marriage and Resources

Marriage required resources. These were of three main kinds, skills, income and housing. Skills would be acquired during the educational phases of childhood and service. Clauses in wills stipulating education for a child make clear the way that these life-course stages viewed as ones of knowledge acquisition and the importance attached to this. To run a successful household both partners had to be competent in work which would generate income and manage resources. The exact combination of these skills would depend on the individual abilities and choices of those involved, the prevalent sexual division of labour and the material resources available to them. In Biddenden, both men and women appear to have been skilled in several types of work in most cases, which allowed a certain degree of flexibility in meeting difficult circumstances.

Resources for Trade

An income did not just depend on the abilities of the couple but also on their material circumstances. Some couples would own land which would give them their basic support. Those practising a trade would require tools and raw materials. The cost of such items would vary with the type of trade. The outlay for a clothier was substantial involving buying wool and dyestuff plus dyeing equipment, having storage space for wool and cloth, capital to organise the putting out of work to spinners and weavers and carriage to, plus storage of cloth in, London. A thatcher could get by with a few fairly cheap tools and easily accessible, inexpensive raw materials. Labourers required no more than a few tools and the skills to use them. A farm would need to be stocked with seed and animals, and even those with only a garden would usually keep a pig. If a supply of milk was available, women might need the sets of utensils for making butter and cheese. Most households contained the tools used for wool processing, a spinning trendle and carding tools.

Housing

Another important requirement was housing. It is clear from many studies that it was considered very important in England at this period, for each new couple to set up in a separate house. Younger married couples living with one set of parents was rare, as were co-resident married siblings. Such co-residence of married couples was said, by William Whately, a conduct book writer, to create "...unquietness of all parties..." [Wrightson, 1982, 69]. The acceptability of co-residence varies not only in time and place but also due to status and circumstance. It may have been more acceptable among the aristocracy and upper gentry of early modern England and in the difficult circumstances of mass migration to cities during the nineteenth century [Anderson, 1971]. Although several wills stipulate temporary co-residence of married child and widow or of siblings, these were probably only short term arrangements (see chapter 4).

Difficulty in finding housing was a cause cited as delaying marriage in church court cases. John Lockyer of Hothfield delayed his wedding to the widow Joan Atkyns in 1590 because "...hee cowlde come to noe pointe with Mr Hall his Landlorde..." who had "...thrust his said nowe wife & him owte of doores..." [EcCX3.5, f54]. John Borden of Sandhurst had been able to make better provision when he "...agreed with [his wife's landlord] for the said house & payd him rent for the same..." half a year before his marriage [EcCX3.8, f172].

Housing generally belonged to males and was passed from father to son. Most men, however, rented their dwellings from a landlord as in the two cases cited above. It was not considered to be part of the duties of either set of parents to provide housing in the way that fathers in Greece and Cyprus have become expected to give each daughter a dowry house, preferably an urban one [Friedl, 1962; Loizos, 1975]. For some a house came as part of an inherited estate, or with the continuation of a lease held by the father. For most housing had to be negotiated with a landlord on marriage. Because of the possibility of renting or buying an estate, there was no clear distinction whereby women left the parish and men stayed. Daughters could stay, marrying incoming men as well as by marrying a local stayer.

At times of population pressure housing became more difficult to obtain. This would have led to three main reactions, delaying marriage, migration and building more housing. The latter solution was problematic as it was illegal to build a cottage with less than four acres of land attached. This law was probably only enacted in a minority of cases, but the more powerful local inhabitants might have an interest in bringing cases to light due to their fear of adding more potential paupers in need of relief. Three people from Biddenden were indicted for the offence in 1610, indicating that there was pressure on housing at this time. Difficulty in finding a house probably affected poorer couples more than those with access to a certain amount of capital, as they would be restricted in the rents they might afford and were more likely to meet the prejudice of rate payers. The cottage builders of 1610 had been a labourer, a poor widow and

a cooper.

Marriage and Inheritance

The wherewithall to rent housing or land and buy tools and furniture came from inheritance and savings. Although most males received their inheritance on the death of their father, females generally took their 'portion' at marriage. Inheritance in Biddenden was ideally equal partition between sons or sometimes between all children (especially where there was little property). In practice, some sons received a better share than others, or took theirs in a different form. The portions given to daughters might also vary. Because so little is known about property transmission other than through wills, it is not possible to say how important birth order and the prospect of a good match might have been in determining daughter's portions. The wills either pre-date the marriages of all daughters or make no reference to the portions of those already married.

There is however, a link between marriage and inheritance, as one might expect from many anthropological studies. The nature of inheritance practises and the need for the resources to be transmitted, may affect the age at which people marry and indeed, whether they marry at all. The situation is complex, involving not only the type of inheritance (partible or unigeniture) and the life-course incidence of the transmission (at marriage, at parental death or otherwise pre-mortem), but also the way in which these are carried out and the type of property involved. O'Neill, examining Portugal, has shown not only the way in which unequal partible inheritance can affect marriage chances and timing, but also how this varies according to status and birth order [O'Neill, 1987]. It is difficult to separate discussion of marriage and inheritance, but I would like to concentrate here on the effects of transmission of power and property on the incidence of marriage and age of marriage.

Incidence of Marriage

It must be stated from the outset that this cannot be known with any degree of accuracy for Biddenden. As there is no census like information available, the only sources which might allow the incidence of marriage to be known would be parish registers. Because of the high rate of both in and out migration, in particular out migration associated with service and education, there is no way that this information can be determined from the reconstruction attempted from such registers. For large numbers of children, their futures are not known.

Where it can be stated that a person died having married or having remained celibate, it is not known how this relates to the futures of those for whom no further information is known. Wrigley and Schofield estimate 4-8% of persons remaining celibate in the late sixteenth century rising to 20-24% by mid century [Wrigley, 1981]. Even allowing for the unreliability of these figures, there is a significant increase which

the authors relate to the economic difficulties of the period. Zell believes that the figure may have been 'low' in the Weald in the sixteenth century due to the prevailing economic circumstances [Zell, 1985]. But, he, like myself, has to rely on register data for the most part and cannot calculate incidence. Neither does he elaborate on what 'low' might mean.

Having established that a measure is out of the question, it is still possible to examine celibacy from individual instances. As this question does relate to other matters concerning marriage, it is worth examining in the context of the present study, of the general historical context, and of comparative ethnography.

The attitude of official religion in England towards celibacy, changed at the Reformation from one of placing a high value on abstention from marriage and sexual relations, to one in which a higher value was placed on the married state. The dissolution of the monasteries removed a possible career for wealthier men and women to pursue without marriage, and as clergymen could now marry, another similar avenue was closed to men. Protestant theologians wrote strongly in favour of marriage, for the clergy and everyone else. Raising a family gave a minister an understanding of the everyday lives of his flock that was not easily obtained by a single man. Such a practice was probably in line with public opinion. There was a long popular tradition of using the celibate state of the clergy to discredit them, particularly in reference to their non-marital sexual adventures. In late sixteenth century England, the virgin queen notwithstanding, marriage was the proper state for both sexes. It was, according to William Perkins, "...ordained of God in paradise..." and "...free to all orders and sorts of men..." [Perkins, 1970, 419].

Despite this encouragement, not all persons married. In the Tyrol region of Italy, Cole and Wolf found marriage opportunity being restricted for some of a group of siblings in conditions of both partible inheritance and primogeniture [Cole, 1974]. Only one child could marry and raise a family on the parents farm. Other siblings had the choice of leaving or remaining as an unmarried dependant. O'Neill contrasts the situation of those not marrying among wealthy landowners and the poor landless in Portugal [O'Neill, 1987]. The landowners would leave the estate to a favoured heir who marries early, while siblings had to delay marriage or not marry at all while remaining in the heir's household. For the heir's sisters celibacy equated to high status which offset the difficulty they had finding suitable matches (of equal status). The brothers were likely to form unions with poor women but not marry them. The landless inherited nothing. Males mostly chose to migrate, females might stay and bear children to the excluded sons of wealthy families.

Thomsen Whetcombe died unmarried in 1611. She was the sister of the rector of Biddenden since 1574, John Whetcombe, and must have been in her fifties or early sixties when she died. Her brothers received a good education, and other sisters appear to have married, so it is unlikely that she was without a portion of any kind. She was a woman of some learning, owning a number of books including one by

Erasmus [PRC10/35/185], and appears from her inventory to have been competent in household tasks. Her celibacy must be due to either an inability to find a suitable match or simply personal choice. Whether due to misfortune or choice, her life appears to have been spent as a dependant in the houses of relatives (will of John Whetcombe). Her celibacy does not appear to be in any way a systematic exclusion as found by Cole, Wolf and O'Neill.

Simon Brissenden left his land to his 59 year old, unmarried elder son, John in his will of 1647 [PRC16/256/1039]. Younger son Robert was married with children and both daughters had married. There is no clear reason why John Brissenden never married. The situation looks similar to the classic problem of post-mortem inheritance where an heir must wait for his father's death in order to have the resources available to marry [Bourdieu, 1972]. This might well apply in a society where inheritance was the only means whereby a man might acquire the resources to marry. However, here the younger brother was able to marry and make a living on a small farm (he described himself as a 'husbandman'). In Bidenden and the Weald, although inherited land might help in establishing a household, it was not absolutely necessary as other means of making a living could be found or land might be bought or rented. The reasons for his celibacy remain uncertain. Rather than answers these examples pose a question.

A larger sample of wills and life-course information would be needed to explore more fully the interaction of processes of marriage and inheritance in detail. Celibacy is very important, as other writers have found [Cole, 1974; O'Neill, 1987] in examining these processes. But it is difficult to investigate from English historical data. Because of the variety of family circumstances found at the time of willmaker's deaths, a larger number of wills than is available for this study would be needed to carry out such a task. 1039]. Even if the estimates (see above) are fairly accurate, they take no account of status and wealth. A move toward more unequal inheritance (see chapter 4) may have had an effect on marriage chances for the wealthier and middling, in the same way that work opportunities would for the poor.

Saving up to Marry

During their years in service, young people were expected to save a significant proportion of their wages towards setting themselves up in adult life. The combination of the couples' portions, any small inheritances received from grandparents or other kin, and the joint savings of the couple might provide a stable financial basis on which to marry.

Such circumstances could not exist in Vasilika, Greece [Friedl, 1962] where girls may have no part in amassing their dowries as this would damage the honour of her father or brothers who are seen to be wholly responsible. The women in a family are responsible for putting together a collection of linen for each daughter's marriage and have their own prestige competition involving its quality and quantity. Davis sees the collection of linen for a daughter's marriage as a traditional way of saving for women

[Davis, 1973]. It is clearly not a financial investment but could be considered one of prestige. Women are not exclusively given linen in Biddenden, though the wills indicate that females are more likely to receive bequests of linen (62 wills) than males (18 wills). Inventories indicate, however, that in a marriage linen, like other movable goods, is considered to be the property of the husband.

Cole and Wolf found in the Tyrol that women often save for their own dowries by working part of the year away from the village and that landless men may emigrate, returning with enough money to buy land and therefore acquire the pre-requisite for marriage [Cole, 1974]. In Malta, Boissevain indicated that daughters may contribute towards their own dowries from their wages, while those Basque heirs who save money while working abroad will share this out to make better portions for themselves and their siblings [Boissevain, 1980; Douglass, 1975]. Savings from service in early modern England seem to have been for the benefit of the saver in marriage, and not to have been considered part of the portion but supplementary [Houlbrooke, 1984; Wrightson, 1982]. Such saving was probably more important to poorer couples, with small portions than to those already well provided.

One use of savings was probably to purchase furniture and utensils for the future house. Before Mary Shoesmith, a servant in Benenden married Thomas Ilden of Biddenden in the summer of 1622

...the said Mary aboute the feast of Simon and Jude the last was 12 monthes bought Certaine howsehold stuffe... [EcCX6.7, f102]

which she left at a friend's house while working out her contract of service. The date of the purchase may indicate that the goods were bought at Biddenden fair which was held on the feast of SS. Simon and Jude. Such goods could also be bought by the male partner as when Richard Barrett of Tenterden purchased "...houshold stuffe to keepe howse..." in advance of his wedding in 1634 [EcCX6.8, f92]. Such resources were necessary to a marriage in a society where each new couple ideally started life in a household by themselves. The amounts that might be saved were not enormous. There was no way of earning large sums (relatively) in a short time, such as are available to emigrants from southern Europe. A document detailing wage rates for Kent issued in 1669 gives figures for servants and apprentices [KRO:Q/AW1/1]. Although this dates from just beyond the end of the period studied, it seems from renewals of (no longer extant) earlier rates at Tenterden, that official rates remained constant through the seventeenth century [KRO:Te/JQad5]. For servants 'in Husbandry', meaning farm servants, the rates for men were between £3 and £4 each year plus keep, depending on skill level but only between 40s and 50s for women. As a separate and very low rate is given for boys between 14 and 18 years old, it may be roughly calculated that a man marrying at 26 years old would have earned between £24 and £32 and a woman marrying at 25 years between £14 and £18 after age 18 years. Not all of this would have gone towards their savings but indicates that savings might result in an amount that was large enough to be very useful but not enough to alter the chances of the couple for future life. It might buy household goods, some materials and tools for trade, a few animals or help with the first year's rent but would not allow enough stock or land to be

acquired to permit social mobility.

Inheritance, Resources and Age at Marriage

The relatively high age of first marriage for males throughout the period in Biddenden, probably reflects a number of things. Service or education were needed to provide the skills to carry out the work of adult life and were also opportunities to save money. This would not allow these men to marry at an early age. Further delay would be created if a man wished to delay marriage until he had received his inheritance.

Thomas Ricard left his lands and houses to his only son Francis at his death in 1607, at which time Francis was 24 years old. However, in his will, Thomas stipulated that his widow Avis should have the profits of the estate until Francis reached 30 years of age, after which he would pay an annual income to his mother. It is probably this circumstance which delayed Francis' marriage as he married Mary Castleden about two months after reaching 30 years. Some sons seem to have been given pre-mortem settlements of land. When Walter Chantler, a yeoman, dies in 1634 he leaves only 12d to each of his two sons Richard and John, who are 42 and 40 years old. Both sons married in their early twenties and had established families when Walter died, so that they probably received land well before their fathers death, perhaps at marriage. This may help to explain why they both married at an early age for males.

Using the same status/occupation groups that were distinguished in chapter 3 in order to examine variation in marriage ages for husbands and wives, similar measures were calculated for sons and daughters (see table 3.6). They proved to follow the same pattern, which may be due to status endogamy.

The average age at first marriage for women is low in the sixteenth century but later in the seventeenth century (see chapter 3). The early age is closer to that found by Levine in a 'proto-industrial' village in the eighteenth century [Levine, 1976]. Women were able to generate a certain amount of income through spinning wool for clothiers and weavers. The necessary tools were cheap, the skills fairly simple, and acquired early in life. Women could gain income from making and marketing butter and cheese but only those married to men with farms (rather than just cottages) had the opportunity to do so. Therefore the age at which women might marry would be influenced by their ability to generate income, but was also dependent on the resources of an intended husband.

As females usually received their inheritances on marriage, they were less restricted in terms of the timing of marriage than males. The daughters of wealthier men appear often to marry much earlier than the norm, that is between their mid teens and early twenties. This may be due to their more generous portions and possible personal incomes. When girls married at 16 or 17 years old, they would have had little time to save and might not have been in service at all. Any savings or possible income from their own work would be small in comparison to the generous portions received by wealthy women. Therefore the

tendency to marry early, combined with the importance of their portions to their future, indicates that the marriages of wealthier women were more likely to have been controlled by their fathers rather than sanctioned by them as with poorer girls. Wills generally allow daughters to receive their inheritances at age 18 or 21 years, or at marriage if before. This indicates that the women marrying very young were considered below the age of financial maturity (as far as women were allowed this at all).

The rise in the average age of first marriage in the seventeenth century may reflect the series of crises and eventual slow decline of the cloth manufacture from the second decade onwards. Although wool processing tools continue to be found in houses, linen spinning wheels become more frequent but are rarely found in poorer households. The decline in demand for wool spinning and the seemingly limited access to linen spinning may have contributed to the clear rise in marriage age.

Weavers were the earliest marrying males, as their earning capacity offset the need to acquire land or capital through savings or inheritance which delayed the marriages of farmers. In the more prosperous earlier period, clothiers could marry earlier than the farmers but later on they may have likewise needed greater resources to ensure success. A clothier might also wish to work out of service for a few years before marriage to gain extra capital and competence. When a son did not wish to wait for a post-mortem inheritance, there were several ways in which he might acquire land to farm.

The sons of wealthier men sometimes had incomes from their fathers during their teens and twenties. This would support them in education or training but was probably too little to support a marriage and household of appropriate status. If however they married a woman with a good portion or personal income, then the capital to set up home on a rented farm might be found. A few sons appear to have rented from their fathers. Because households in Biddenden were often not totally reliant on farming income males may have been able to marry earlier than in some societies where post-mortem inheritance is the norm, such as the west of Ireland [Brody, 1973]. A small number married heiresses and could live on their wives property.

Dowry and Jointure

Two aspects of inheritance are associated with the marriage of women. The portion or dowry was the inheritance which a daughter received from her family of origin (usually her father, but other relatives some times contributed) at marriage. It was usually in the form of money and was given through the bride to the new family, in effect to her husband as he would control her property. The second form of inheritance is that which is set aside for the wife to live from if she were widowed and is known as the jointure or settlement. It could take the form of land, an income or a lump sum of cash and was agreed before the marriage and 'settled' on the bride by her husband's family. Where such an agreement did not exist, the widow was entitled to one third of her husband's lands, an arrangement known as her dower.

Portions are mentioned frequently in wills but in connection with children. The term was most often used to refer to a girl's dowry but might also refer to the cash inheritance of a boy would not inherit land. Such inheritances are never referred to retrospectively by men or women willmakers; they become part of the property of the new family and no longer have a separate legal existence after the marriage. Because this family is an independent household, the portion may not be used by either family of origin. This situation is similar to that noted in Vasilika, Greece [Friedl, 1962] and Pisticci, Italy [Davis, 1973]. It differs markedly from Basque practice [Douglass, 1975] where the dowry goes to the parents of the spouse designated as an heir, and may be used to pay dowries for their unmarried children. Houlbrooke [Houlbrooke, 1984] indicates that similar behaviour may be found among the early modern English upper gentry and aristocracy. It seems to be associated with a notion of a stem family, passing the same estate through time to one heir. In Malta, Boissevain finds that although the dowry goes from the wife's family to her husband and is for the benefit of the new family, it continues to belong to the wife and can support her in case of separation [Boissevain, 1980]. This was not the case in Biddenden, but provision for widowhood could be made by means of a jointure.

Unlike portions, jointures are mentioned in relation to both daughters and wives. William Boddenden stipulates in his will (1579) that his daughter, then 22 years old, should have a portion of £80 "...if she marrie such a man as came and will make her a Jointure of £6 by the yeare..." or put in sureties to leave her worth £100 [PROB11/61/22]. The same will also illustrates the way in which a jointure could take the place of the dower. William leaves his wife Agnes an income of £10 per year which he has formally agreed with her before marriage (it was a second marriage for both parties). She must however make a legal release to William's only son "...of all suche right or dowre as she might claime in my landes...", or lose all of the legacies given to her. Houlbrooke, commenting on the increasing practice of making jointures during this period, claims that women with such settlements were at a disadvantage because their value often fell during the husband's lifetime to less than the income from the legal dower of one third of

his lands [Houlbrooke, 1984].

The jointure could also be altered during the lifetime of the woman for whom it was to provide security. Another of William Boddenden's daughters, Joan, married James Bateman, a yeoman/clothier in 1568. When James' father Steven Bateman made his will four years later, he made special provision for his younger son Steven if Joan was left a widow because he had settled lands on her as a jointure which were part of young Steven's inheritance. In 1610 James made his will, leaving an estate of his own to Joan while she remained a widow but on the condition that she gave up all claim to any jointure out of his lands or any lands which had once belonged to his father. In the same will James ensures that his only son Richard cannot give his wife Elizabeth more than the £10 worth of goods, money or lands which he himself has secured to her as a jointure. If Richard disobeys, his father's lands will pass to the children of his three sisters. The circumstances never arose as Elizabeth predeceased Richard by three years in 1649.

Clearly it was very important to prevent land going out of the consanguinal line by passing to a widow who might remarry as a jointure. A marriage settlement was negotiated by the two families before the match could proceed and may be seen as a compensation to the bride for the subsuming of her portion into the patrimony of the new family. It also allowed the parental generation, in particular her husband's father a degree of control over her future. Her husband might be able to modify the provisions made, not necessarily to her advantage, but she had no direct power to determine the nature of her future security. This contrasts very strongly with those societies where the dowry is considered as the bride's property, brought to the marriage and providing for her afterwards as in Malta [Boissevain, 1980]. The control of a woman's natal family after her marriage was minimal (at least in formal terms) because of the dowry/dower system. This would have prevented the situation in Florence whereby a widow's remarriage could be controlled by her family of origin [Klapisch-Zuber, 1985].

Mention of a jointure or marriage settlement is only found in the wills of the wealthier inhabitants of Biddenden. It is probable that this form of determining provision for widowhood was only used by aristocracy, gentry and more prosperous yeomen and tradesmen. The less wealthy might make provision in their wills or allow the more generous dower apportionment of canon law. Portions in contrast were provided for daughters and sons in all status groups. A dowry, even if small, seems to have been important for the marriage of women. 10s of a fine paid to the churchwardens of Biddenden in 1566 went towards "...poor girls maritagium..." [EcCX1.8, f68].

Inheritance by males was therefore of some importance in the decision to marry but not of absolute significance. Although some men may have been kept waiting during their father's lifetime, the situation was not like those described by Bourdieu and others [Bourdieu, 1972]. Opportunities existed to make a living by other means than farming alone, and with renting and land sales, a man could acquire an estate without inheriting one. It is likely that some form of money portion may have been given to male heirs at

marriage to enable them to set up independently.

Women generally received their portions as a dowry at marriage. This dowry went towards the patrimony of the new household and could not be directly recovered. This indicates that upon marriage a woman's family of origin lost any formal responsibility towards her. This was now transferred to her husband, and indirectly to his family of origin in the form of the jointure or dower. There is no evidence that this formal loss of interest had any implications for emotive relations between a woman and her natal kin. It may however have contributed to a view of women as wives or potential wives rather than as daughters (see chapter 6).

Savings from a period in service and the potential to generate income through practising skills were important features in marriage, particularly for the less wealthy. Savings could help with the costs of establishing a household but would not have been enough alone or with a small portion to achieve any significant change in circumstances. As with inheritance, the need to save contributed to the practice of late marriage. Working against this was the possibility of earning enough through male and female skills to facilitate earlier marriage without the need to acquire land. This is why weavers could marry earlier than farmers.

The distribution of resources of any type was uneven in time and unequal at all times. At some periods, because of population pressure, housing was in short supply. There is also the possibility of landlords deliberately controlling access to housing to prevent increasing numbers of poor on the rates, rather as they controlled access to marriage as parish officials. When trade was depressed or prices high marriage might be delayed for many of the poor and middling. Poorer persons may have had greater freedom in marriage because they were less dependent on receiving a large portion from their parents, and could rely more on their own savings and working income. Other forms of inequality, in particular those related to birth order, migration and celibacy need further investigation.

Remarriage

Of the 2694 people known to have married once, about 13% remarried at least one more time. Men were more likely (19%) to remarry than women (7%), although this may be overstated due to unknown earlier marriages of incoming women. A small number of people (1%) married three or four times. Few European ethnographies mention remarriage of widowed persons and it is not possible to compare the incidence, as none give any indication of this. In some societies remarriage is rare and often frowned upon by others. No evidence exists that in contemporary England remarriages might result in public ridiculing as was found in Andalusia by Pitt-Rivers [Pitt-Rivers, 1954]. There disapproval was said to be because of the situation of step-children which threatened the ideology of equal treatment for all children and because the romantic associations of courtship were seen as inappropriate for older people.

In Biddenden and the Weald there is no evidence of public disapproval of the courtship of remarrying persons in itself. Where dislike of the match is found, this seems to be largely due to other reasons. Elizabeth Handcocke of Kingsnorth married Richard Dethicke of Great Chart at London in 1597 soon after the death of her husband. There had been rumours about an adulterous relationship between Elizabeth and Dethicke for more than a year before her husband died. This in itself was strongly disapproved of but was compounded by later events. Elizabeth at the death of her husband "...before suche time as he was socked or buried in most offensive manner went from him .. leaving him in most loathsome sort..." with the parishioners "...forced to hire men to Carie him to Church to be buried she .. being not present at his buri-all..." [EcCX4.3, f64 and f70]. It was rumoured that she had already gone to live with her future husband. In this case it is not the making of a second marriage that is disapproved of, but the way in which it was made.

From the evidence of wills, the re-marriage of widows was a cause for some concern, as it would make the testator's children the step-children of another man. The new husband might well favour his own children, by his new or a previous marriage, more than the new wife's existing offspring. There was an obvious fear that the children's inheritances might be lost and any bequests to the widow go to her new husband and his children. Careful safeguards are therefore made to ensure that children receive their rightful inheritances and that goods, land or money cannot pass through the widow to her new husband. Widows receive bequests for life only or lose them if they remarry. From this it seems that the remarriage of widows was not so much positively discouraged as guarded against. The restrictions may have provided disincentives to some.

In some cases a further marriage could be encouraged. At Easter 1594 William Lorkin of Headcom

...lieing then in his death bed & making accompt he should not live long requested...Wm Allen who came to visit him...that he would be good unto his wife, and as it were comended & committed her unto him to be his wife, saying he could wish with all his hart that he the said Allen & his said wife after his death should be matched together, if the said Allen thought well of it... [EcCX3.8, f180-1]

Allen, a close friend of Lorkin while he lived, proceeded to court the widow and "...hereupon such liking grewe betweene them..." that the couple made a contract of marriage only a few days after Lorkin died. The man who told this story to the court had been present at both the deathbed speech and the marriage contract and appears to have approved of all proceedings.

Attitudes to remarriage probably varied depending on the amount and type of any property involved and whether the previous marriage had produced living children who were still dependent at their father's death. The way in which the second marriage was made and the suitability of the partners also affected the way in which the marriage of widowed persons might be viewed. Choice of partner was probably even less restricted than for single people. As stated above natal kin had no practical way to influence decisions of daughters and the same was probably true for sons. Affines in some cases may have had more leverage, but whether they exercised it is unknown.

Relations with Affines

Although marriage is formally between two persons, it may also concern the relatives of those persons. This is clearly the case in southern Europe from the evidence of ethnographies, though the exact nature of future relations may differ. In the case of the Sarakatsani, the partners' families of origin are hostile to each other at first, with this attitude being slightly modified as time passes [Campbell, 1964]. This is an extreme example, but makes clear the importance of the relationship of both sets of kin to the children of the marriage.

Both Loizos in Cyprus and Friedl in Greece stress the importance of links with affines, these being particularly close in the cypriot case [Friedl, 1962; Loizos, 1975]. Friedl notes however that such links generally last for only one generation. Loizos contrasts the benefits of relations with affines in Cyprus, with the drawbacks of those with consanguineous kin,

...a man may find in his wife's father and wife's brothers a quality of informality, and support pleasantly free from the authority and competition of his own natal family [Loizos, 1975, 74].

As siblings marry they lose their former solidarity and may eventually come into conflict over the division of family property. Both Lison-Tolosana in Aragon and Davis in Pisticci have found brothers to have formal and distant relationships with one another, but close relationships with their sisters [Davis, 1973; Lison-Tolosana, 1983]. In Aragon relationships among all siblings may erupt into conflict over the division of parental property (as in Cyprus), resulting in avoidance and hatred which is sometimes, though rarely life long. It is the division of property which creates conflict among brothers in Pisticci. As most

land is divided and given at marriage, shares are likely to be unequal, reflecting the combination of timing of marriage and the history of the parental estate during the period when siblings are getting married. Further conflict may result from additional land being divided at death. Close links persist between sisters who receive town houses at marriage, and therefore often live near to one another. Cole and Wolf explain the difference in levels of interaction with the outside world between the two Tyrolean villages studied as being related to attitudes towards affines. In Tret, historically and culturally Italian, people make much use of relations with their affines and through this meet a wider selection of people from outside the village and the area. This is in contrast to the Germanic influenced village of St. Felix where affinal relations are of limited importance and people have more limited geographic horizons [Cole, 1974].

Looking at relations with kin beyond the immediate family in early modern England is difficult. Firstly evidence is limited and secondly it has been largely ignored as a topic or dismissed as of limited importance. It is clear from the reconstruction of relationships in Biddenden, that many people had kin of some form resident in the parish. An attempt to display all persons related in some way by kinship using Gnet, produced a graph containing almost 3000 persons. This network, however, was not for the most part closely integrated. Most people were related to others outside of their immediate family by only one linking marriage. Methods of re-linking families through time, such as cousin marriage are very rare. The two main forms of re-linking found both imply the consolidation of relationships of shorter duration and are found among the wealthier families for the most part. They are also more likely to involve marriages to families not resident in Biddenden. It is possible that a different picture of kinship in the Weald may emerge from looking at the relationships between wealthier families in several parishes than is seen with those of differing status in one parish.

The two forms of re-linking involve marriage between two pairs of siblings and a marriage between the widowed parents of a married couple. In 1573 Richard Allard, a wealthy yeoman with urban interests and widower of three months, married Joan, widow of Jervis Maplesden, a yeoman of the neighbouring parish of Rolvenden who had died five years earlier. In 1584 a further link was created when Richard's 16 year old daughter Mary married Peter Maplesden, the 22 year old son of the late Jervis and Joan (now Richard's second wife). The two eldest sons of Richard Allard, Henry and Richard junior may have created another double link when Henry married Philippe Gibbon in 1587 and Richard married Elizabeth Gibbon in 1593. The two women were probably sisters and members of another local family of similar status to the Allards and Maplesden.

A double link through parent and child, similar to that made by Richard Allard and his daughter, was created by the Pattenson family. Thomas Pattenson, youngest son of wealthy clothier Roger Pattenson, married Phebe Reader of Boughton Monchelsea, 10 miles north-west of Biddenden in 1630. After the death of his wife Julian (the mother of Thomas), Roger married Joyce Reader, the widowed mother of his

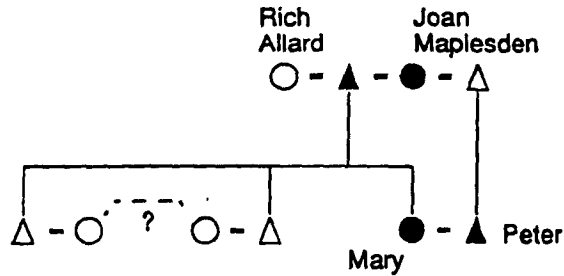


Figure 5.2 Marriages of Allard and Maplesden families.

son's wife Phebe.

A more certain double sibling link than the Allard/Gibbon case was made by two of the sons of wealthy yeoman-clothier Barnard Randolph. Herbert married Elizabeth, daughter of Giles Master of Canterbury, in 1625 and his brother Edmund married Elizabeth's sister Deborah in 1628. This connection was both strengthened and continued when in 1652, Mary daughter of Herbert and Elizabeth married the son of another of the Master sisters, his parallel cousin.

Although a few more cases of such linking can be recognised, they are few. This may partly be because marriages were taking place between members of a wider population than those within this study. In all of the situations described here, the marriages were between Biddenden inhabitants and outsiders. No rule or preference for marrying close kin existed and it would be foolish to look for a significant number of such matches. What the examples do show is that affinal relations were considered important enough that in some cases multiple links might be created by marriage. The Allards, Pattensons and Randolphs were among the most wealthy and powerful families in Biddenden. Their partners were of similar wealth and status. The marriages did not consolidate or add to property, in the way that the close

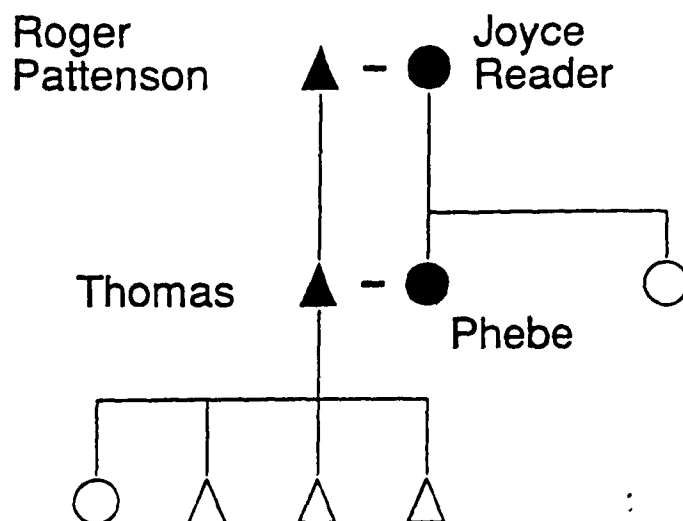


Figure 5.3 Marriages of Pattenson and Reader families.

marriages described by Davis in Pisticci did [Davis, 1973, 141-5]. Mary Allard did not inherit land and neither Phebe Reader nor the Master sisters appear to have been heiresses. It is unlikely, in the light of contemporary practice, that either of the widowed mothers had anything but a life interest in or income from land. From the point of view of property acquisition, any marriage with persons of similar status would have achieved as much. Persons from the local parish elites were not severely restricted in their choice of partners by the preference for status endogamy as they found partners from a wide geographical area. The marriages are more likely to result from close and frequent relations between affines creating the affective requirements for a second match, and a wish to maintain and extend those relations.

That such re-linking took place implies some importance was attached to affinal relations. This is borne out by wills where 'in-laws' may be given responsibilities in carrying out the plans laid down in the document. Affines may be divided into four types by the nature of the relationship to ego;

1. The kin of ego's own spouse(s).
2. The kin of the spouses of ego's siblings

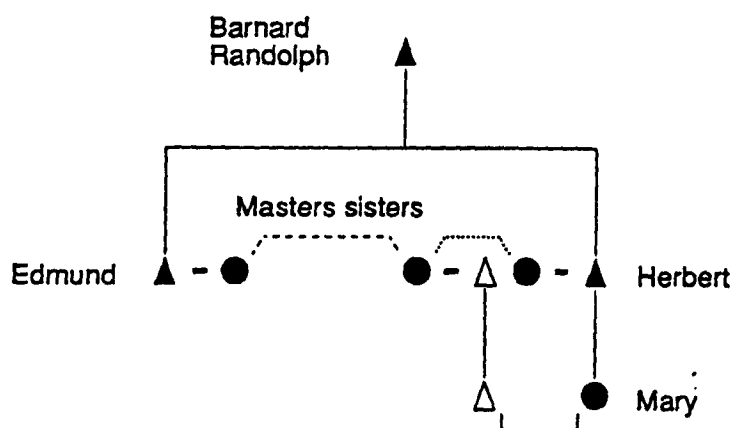


Figure 5.4 Marriages of Randolph and Master families.

3. The kin of any previous or future spouses of ego's parents.
4. The kin of the spouses of ego's children

All of these relationships could be distinguished by the post-fix 'in-law' which was used to cover what in more recent times English kin terms have distinguished as 'step' relations. The post-fix was not always used and a sister's husband (ZH) could be called either brother-in-law or simply brother. Jeremy Bewle refers in his will (PRC17/51/257) to three men using the term father. One is his (recognised) genitor, Thomas Bewle who died in 1564, another is his mother's second husband John Evernden, and the third is Henry May, the father of Jeremy's wife.

Within the flexible and optative framework of early modern English kinship, it may be said that affinal relationships within and from Biddenden do appear to have been of some importance. This may have been especially true for wealthier people. In some cases relations between in-laws seem to have been close but there is no distinction between brothers and brothers-in-law in the way that is found in southern Europe. A man could have close relations with both his brothers and his sisters' husbands. That being said, in a society where inheritance was frequently partible, the potential for sibling conflict was always

present. Therefore, although not as extreme as some mediterranean examples, affinal kin may have acquired an additional importance. It is interesting in this light that the network of kin migrating to New England examined in chapter 3, were related through affinity.

Married life

The earlier parts of this chapter have examined the making of marriage, with particular reference to the material and symbolic aspects. A brief consideration of two aspects of the practice of marriage will contribute to a fuller picture of the relationship of reputation to other aspects of life in early modern England. The areas of married life to be considered could be seen perhaps as pathological ones, marital breakdown and adultery. This is due in part to the nature of the sources used, court records, and must be seen against the background of the majority of marriages, which were broken only by death, and the evidence of some wills for a close relationship between spouses. An example of this is the wish of minister John Whetcombe that he and his "deare & faithfull" wife "maye rise together passe and enter together" into heaven [PRC17/59/190].

Marital Breakdown

In a society where divorce was all but impossible for the vast majority of people [Wolfram, 1987], two options were open to unhappy couples; to continue to live together despite this or to separate without recourse to law. Most court cases indicating marital breakdown involve separation because for a married couple to live apart was a presentable offence.

The cases are few and Biddenden examples all relate to, at least ostensibly, material factors. Some involve separation due to work migration [EcCX6.8, f100]. Poverty may also lead to a couple living apart in the same parish. Thomas Morris and his wife "...beinge both poore olde people by their owne consents have devyded their howshold & do lyve asounder in this our paryshe" [EcCX2.2, f97]. In such cases no indication of a breakdown in the relationship is given, although this may be disguised. The reasons are poverty related. Morris and his wife were probably too old and infirm to keep house but too poor to employ a servant and might survive better as lodgers in more active households. This may explain the paucity of possessions found in the inventories of some old people, particularly widows (e.g. Lettice Moyse PRC10/14/169). Work migrants usually claim that they will bring their wives to join them or return to them, but knowledge from elsewhere indicates that the marriages of the poor may have been particularly unstable [Ingram, 1987].

Other Wealden parishes indicate other reasons for abandonment. The wife of Henry Mills was living in Bethersden in 1569, with her children but apart from her husband who was at Tenterden [EcCX1.9, f152]. She said that she was afraid to live with him "...lest he should hurt her..." and claimed that he took all of

her income from lands and "...suffereth her to lack..." She was probably presented in part because she and her children were a charge on the parish and in part because her situation was viewed as subversive to the proper order of things. The wife and children, according to the presentment should rejoin the man "...of hym to be susteyned as reason & right dothe requyre..." Many years later, in 1637, another woman was living in Bethersden while her husband resided in Smarden as "...he doeth much misuse her & therefore [she] desires to live from him..." [EcCX6.8, f336]. She was ordered to live with her husband. The first case indicates that it was not only the marriages of the poor which might break up, although poverty for the woman — which usually meant for her children as well — was likely to result because of the legal situation of marital property and the limited earning and subsistence capacity of women in this period. In both cases the judgement of authority supported the maintaining of the marriage despite the violent situation. Wife-beating was by law allowed "in moderation" but was disapproved of by moralists and, if excessive, by public opinion [Wrightson, 1982]. Although it seems, regarded as less serious an offence than separation, wife-beaters might still be presented, especially if the wife behaved in a way that led to her being more highly evaluated than the husband. The wife of Thomas Edwards of Newenden in 1600 was said to "...often tymes reprove him for his lewde lyfe..." in response to which he, "...a man of verie evill behaviour...doth beate her" [EcCX4.5, f6].

As well as violence, infidelity might lead to separation, as with John Arwin, vicar of Bethersden in 1632 who had commenced a suit for adultery against his wife, who was living in London, so that "...hee maye bee lawfullye & iudiciallye divorced from her" [EcCX5.9, f218]. Most people could not afford such legal remedies. A complex case from Newenden in 1579 involves a married man and a married woman, both poor, who "...dwelle to geathers & lyve very suspycouslye..." supposedly with the knowledge of the woman's husband [EcCX2.2, f57]. The man refuses to be brought to the court and tries to use his offence as a lever to obtain a house for the woman. He further threatens to "...forsake the contrye..." and to "...leave his wyf & children upon the chardges of the paryshe..." and to "...Jame his wyf before he goe, because the paryshe shall keape her." The marital disorder of the two couples is here being played against both the attitudes of the local elite to social order and their fear of "chardges" on the rates. The physical violence is only threatened and may not be really intended but indicates an ambivalent attitude to the husband's "duty" to maintain his wife and children and knowledge of ways in which this might be avoided.

From this brief survey, it would seem that marriages broke down because of a number of factors and that these were difficult to separate in some cases. Firstly, poor people might live apart due to subsistence migration, while older or sick people might find themselves no longer able to keep house together. Much has been written on the centrality of the household, and its internal order, to early modern ideas of ideal social organisation. A growing number of instances indicate that this may not have been possible for some people due to the conflicting needs of subsistence. Secondly, personal difficulties between the

couple, ranging from infidelity to physical abuse brought about some separations. Despite the ideological centrality of household unity, some women were prepared to break with convention and live apart but they seem to have found little support from those in power. Because of their dependent status and difficulties in maintaining independent subsistence, such disapproval was reinforced by material handicaps. Although men might also meet with public disapproval for abandoning their wives, action was generally instigated by the parish in which the wife, usually with her children, was forced to claim relief. The opportunities for poorer men to find labouring or petty trade work adequate to support themselves and even a new family, allowed them greater freedom to leave. The case of Thomas Mills indicates how a poor man might see ways in which to use potential disorderly conduct as a threat to those in authority. He plays on the parish elite's fear of "chardges" on the rates and their disapproval of extreme domestic violence as well as any dislike of his extra-marital relationship in an attempt to improve his very limited bargaining power. Mills appear unconcerned about any damage to his reputation.

Adultery

A certain number of the sexual cases presented to the church courts involved adultery by men or women. There appears to be a decrease in the percentage of sexual cases involving married women over time. In the 1560s and 1570s, such cases account for 46% of all sexual presentments from Biddenden but by the 1590s this figure had dropped to 30% and between 1627-1637 was only 17%. For men the corresponding figures are 34%, 30% and 25%, a slight but less marked decrease. This may indicate that perhaps the idea of adultery being wrong for both sexes, which was promoted by moralist writers and preachers, had been less successful than the promotion of a double standard. However, other factors may have been involved. To understand these it is important to examine the implications of adultery.

Sexual infidelity by a married woman implicated her husband. Her adultery made him a "cuckold" which was a severe insult to a man. Cuckolded men seem to have been the target of popular jokes, songs and informal shaming ceremony although the term is defended against in slander suits less than might be expected [Amussen, 1985; Ingram, 1987]. It implied more than merely being deceived by a wife. The ability of a man to control his wife's sexuality called into question his competence in controlling other aspects of his life both as regarded his household and other relationships. The link between these aspects of control lay in the way that household order was seen as symbolic of order in society as a whole [Amussen, 1985]. Loss of authority as a husband undermined the power of a man in regard to others. For a wife, such an accusation undermined her reputation and might cause her behaviour to be regarded as suspect in other aspects of life. There was clear scope for reputation damaging accusations.

The effect of adultery charges brought against men is more difficult to determine. Some men, such as Gregory Taylor of Biddenden, (first married 1552, died 1585), were presented many times. No statement

appears in any of these cases which indicates that Taylor suffered a very low reputation because of this, but negative evidence is no proof. He was a man of some means and had been churchwarden at some time [EcCX1.10, f76], indicating fairly high status within the parish. That informal sanctions may have been used against this seemingly notorious sexual offender, is suggested by an incident where a man of lower status, Valentine Ship "...dyd cast 2 egges at Gregory Taylor ymedyatly after he had donne his penance..." [EcCX1.9, f52]. Late in the year, 1568, Taylor obviously felt that his reputation was worth defending when he made a detailed denial of a charge that he did "...suspycously accompany..." another man's wife [EcCX1.9, f77]. Other cases show male adulterers attempting to conceal their offence or going to some lengths to deny the charge [EcCX4.8, f224 and X5.9, f55]. On the other hand such men are rarely presented or otherwise accused of being of "evill life" or some such marker of low reputation, which is on many occasions the case with female sexual offenders. The overall impression is that a double standard did exist in regard to adultery, just as it seems to have done with fornication by unmarried persons (see above), but that an accusation could still do some harm to a man's "credit". It implied an inability to control himself, bringing into question his character and sobriety, and also threatened the stability of his marriage and household.

Husbands might attempt to defend the honour of accused wives by trying to disprove charges. Nicholas Hamper appeared in court in 1567 when his wife was presented as "...suspected..." with "...a bowrder in his howse..." and claimed that the man had "...requested & moved..." to have sex with her, but that she made her husband "...pryvye therof..." at which point Hamper "...ymedyatley putt him awaye..." [EcCX1.8, f138]. The story in all points follows a course of action which maintains the authority of Hamper in his household (his wife tells him what happened and the border is thrown out) and preserves the honour of his wife (she refuses the request by making it known to her husband). In another case which has certain similarities to the Hamper one, it is the wife who comes to court to defend herself, perhaps because she is accused of initiating the offence. Abraham Warry, former servant of Thomas Norton, was presented in 1599 because he had confessed that "...he did lye with..." the wife of his former master. Warry has also said that Katherine Norton "...hathe gyven him extraordinarie maintenaunce certen sommes of monye at dyvers tymes at his neede, to th'intente to intice him to lye with her" [EcCX4.3, f202]. A few months later they appear in court again with Katherine saying that Warry had admitted that his previous claim was false supported by a recital of the grounds for her reputation. She is said to be

...a woman in yeares, viz. above 50 yeare old & hathe byn married to her nowe husband Thomas Norton by the space of 28 yeares at least & duringe all that tyme hathe lived free from suspicion of any Incontinence... [EcCX4.3, f255]

Warry admits that "...he therein did greatlye slander and belye..." Katherine Norton but that he spread the rumour "...because he would finde some cause to departe out of his masters service" [EcCX4.3, f256]. The resemblance to the Hamper case lies in the attempt by a dependent member of the household to subvert the authority of the husband and head. This is done not by actually committing adultery with

the wife but by attempting to defame her by rumour. Hamper's border claimed of his approaches that "...he dyd yt in jeste...", but damage lay in the fact that he did it at all. Hamper tells his story, emphasising the correct behaviour of himself and his wife while Katherine Norton obtains a confession from Warry and backs this up with a declaration of her unsullied reputation. Warry's claim, where adultery is compounded by payment, seems very damaging when compared with his wish to leave service and may stem from some deeper sense of injury.

Other adultery charges are constructed to emphasise the fault of the "cuckold". Richard Brushwood, a single man was said in 1597 not only to have had sex with the wife of Thomas Willard but to "...frequen-teth and usethe the house of the said Willard and violentlie intreatethe & beateth the said Willard in his owne house..." [EcCX4.3, f47]. This rumour not only subverts the authority of Willard through sexual access to his wife but also through demeaning him in the exercise of physical power over him, in the very place where Willard should be master. A different way to imply complicity by the husband was to allege that the adulterous male had bribed him to silence. William Dossett was accused in 1615 of "...takeing a bribe..." of Cherubin Bickenden, after the latter had attempted the chastity of Dossett's wife [EcCX5.9, f55]. Likewise Richard Reife was presented "...for receavinge of an angell of golde..." from Gregory Taylor after "...takyinge hym in his chamber with his wyfe..." [EcCX1.13, f10]. It may be that some husbands did act as bawds to their wives, supporting them in prostitution, but another explanation may be the double dishonour of being takers of and givers of bribes put upon the men involved by the rumour. The position of the bribe taker, who sells, and thereby no longer controls his wife's sexuality may appear to be the worse one, but the Bickenden case involves further corruption charges and may be an attempt to compound the damage to Bickenden. The fact that Bickenden was probably of higher status than Dossett, though not one of the parish elite may have implications for the interpretation of this case. Further indications that inequality of status might be involved in these cases are seen in the alleged sexual careers of Gregory Taylor and John Flete, in the many cases where masters were accused of getting servants pregnant and in the converse cases of Hamper and Norton.

Summary

An examination of cases involving marital breakdown and adultery emphasises two points that also emerged in regard to the making of marriage. That is the importance of reputation and a connection with status which may be found in cases involving reputation. Some types of activity might have status associations such as bridal pregnancy and bastard bearing. Other cases indicate inequality in the way reputation was considered which relates to status. Inequality, however, may also be seen in the extent to which the elite could limit access to marriage by poorer persons who were also disadvantaged in terms of the resources needed to marry. Likewise, their marriages were more likely to end in informal separation. Because marriage was not totally dependent upon a partner inheriting land, but could be made on the basis of savings, a cash portion and income from work, this meant that it was not restricted to one sibling or a narrow band of wealth. This caused a wide separation between the marriages of the poor, discouraged and more liable to break down, and those of the majority of people who could make a simple living at least.

Both in cases of the evaluation of the sexual virtue of a partner, and in cases of adultery, a double standard appears to have existed for men and women. This may not have been total however. Women appear to have been able to mix freely in day-to-day life with men, unlike in southern Europe. The interest shown by family members in the choice of partner appears to have been stronger than that concerning the honour of the daughter. Men seem, however, to have considered sexual virtue important in selecting a wife. There may be implications for the way in which women were evaluated in the dower/dowry split. This focussed resources on the new household and limited the practical control which her natal family might have on a married woman. This also had implications for her freedom of choice in remarriage.

The importance of affinal links is indicated by the making of more than one marriage between two families. This practice appears to be more likely among the local elite. Examining surnames of marriage partners seems to indicate that this group formed a local network, covering several parishes. The wealthier also seem most likely to have practised status endogamy while the middling tried to marry up. Such practices may have helped the elite differentiate themselves as the 'better sort', along with their ability to claim a higher reputation. The mobilisation of affinally linked kin may be seen in emigration (see chapter 3). The final chapter will examine social relations in regard to reputation, power and inequality. Attempts to reproduce and extend good relations will be viewed in a changing atmosphere of potential hostility and security which was status related. Evaluations of honour will be examined in relation to inequality and the reproduction of inequality.

6: Conclusions

A small elite composed of wealthy male householders controlled the parish. They were able to maintain their power through the use of the evaluation of reputation within the framework of an ideology of patriarchal household authority. Though able to challenge each other in this area, they were also able to protect themselves through greater access to resources than were poorer persons. By these means as well as by patronage and establishing a regional elite through marriage they could maintain their power through time. Honour evaluation was important in the Weald and was connected with status and power. But, unlike southern Europe, women were evaluated as wives rather than as daughters.

An ecological model has been put forward whereby cloth making could permit a higher population and greater wealth than the land itself would sustain. Decline in manufacture led to greater social differentiation, imbalanced out-migration and greater inequality in the transmission of land. The wealthier became more secure, their honour less likely to be challenged. Those small farmers, who had gained part of their livelihood by cloth making, and other people of middling status became less secure. Affinal relations appear to have been important, particularly for the elite, but not more so than those with natal family members.

Comparison with ethnographies of southern Europe has been possible and constructive. While studying the nature of migration to and from Biddenden types of movement not often studied in anthropology were found. This indicates that historical ethnography can usefully contribute to anthropological knowledge.

A variety of types of information was used in this study, with similarities to that which might be acquired in more conventional ethnography. Some was of a well structured nature, while other information was much less so. Ethnographic computing requires a flexible approach to software. Rather than a single solution a variety of computing methods are needed.

In this final chapter I present the concluding arguments. The relationship of status, power and reputation are examined in the light of the earlier chapters. I then consider the lessons learned and implications for future development of the use of computers in this form of research.

The importance of reputation

Most cases that came before the church courts appear to have started as gossip. Presentments very often state that the accusation is made because of a "fame" or "rumour". Such origins did not invalidate the presentment as such, if other evidence such as witnesses or a confession could be obtained, and were

more likely to be looked favourably on where the person or persons involved already had a bad reputation. Conversely a undamaged reputation might be claimed as a defence. John Walter of Biddenden, before the court for whoredom with one Alice Hills calls her “...that ungodly woman...” and refers to her bearing of an illegitimate child in the past [EcCX1.13, f97]. A Lenham woman who had lived apart from her husband for two years, claimed to have met him accidentally in London “...to save her honesty...” when accused of fornication [EcCX1.11, f31]. A man, his children and a woman who lived with them in Smarden were said to be “...very ynfected people...” [EcCX2.2, f50]. A woman alehouse keeper in Hal-den in 1597 was said to have excommunicate and incontinent persons and “...such as are not of good name and fame...” among her customers [EcCX4.3, f72]. When Richard Cliff is presented for not receiving communion at Biddenden during almost two years before October 1611, the image of a man with a bad reputation is given by the accompanying description. It is said that:

...hee hath of a long tyme leade a verie disorderd lewd life in frequenting the alehouses more than hath bene meete & not followeing his vocacion att all, but whollie gyveing himselfe to ill Companie... [EcCX5.5, f112].

Clothier John Taylor claims a good reputation when he is given a £5 fine for incontinency alleging “...that he hath heretofore lyved in good Credit and in esteeme amongst his neighbours in the same par- rishe...” [EcCX6.7, f54]. In a case of suspected incontinency between young clothier Richard Bateman and his father’s former servant Beatrice Tomsett, both Bateman and his protagonist John Whetcombe, the rector, construct an image of Tomsett’s low repute in contrast to one of Bateman’s alleged clean record [EcCX4.11, f224]. Beatrice is said to be “...a wenche of lewde behaviour & suspected life & suche an one to whome noe credit is to be gyven.” For Bateman, on the other hand, it is said that he has always lived in Biddenden and “...was there alwaies of good report & estimacion & never was reputed jiltie of any suche Cryme.” His behaviour was, according to Whetcombe, “...till of late untouched...” Proven guilt would cause for him “...the displeasure off Friends, desgrace with his honest wiffe, and unkinde shame with all his acquaintance.”. That a reputation was not only discussed in a court defence is indicated by Whetcombe’s own will where he made plans to pay his debts so that he would not be

...stayned in christiane fame and so subject to their mowthes whoe are most readye to slaunder espe- cially them whoe are of the howsahold of god [PRC17/59/190].

From these cases and others mentioned before in different contexts, an attempt can be made to describe the way that reputation was acquired. It was clearly assessed through observation and gossip and related to the actions, or believed actions of a person over time. Bateman’s honour was said to be untouched, the woman from Lenham tried to “save” her honour; a good reputation was where nothing could be found in that person’s history which damaged his or her honour. The alehouse customers, Richard Cliff and Beatrice Tomsett were all said to have bad reputations. Cliff had been leading his “lewd life” for a “long tyme” and Tomsett had been of “suspected liffe” before she came into service with Bateman’s father. The assessment is again historical.

A good reputation was a resource for whoever could claim one, honour was worth saving. Where a bad reputation could be implied, that person's case was already weak. Reputation was used in this way as a weapon in disputes which might have further bearing on a person's honour, but it appears to have had more general implications. Several words are used for this type of assessment of character through personal history, apart from reputation itself, such as "esteem", "fame" (a word also used to mean rumour) and "credit". Credit is a clearly polysemic term. Apart from the meaning of repute or worth it implies trustworthiness in the sense of telling the truth. Another aspect relates to financial probity. There was an elision of these meanings in the way that the word was used in early modern England, because of the way (mentioned above in connection with household order) in which behaviour in one sphere of life was seen to reflect on a person's capabilities in others. Simon Drayner of Frittenden was a tailor and "his onely stay and expectation of maintenance" was "divers mens worke of good accompt" [EcCX6.8, f31]. He asked in 1627 that a penance for pre-marital sex with his wife be commuted as "...hee doubteth hee might loose..." this trade "...and grow a person Contemptible by reason of evill peoples upbraiding him..." if he were to perform public penance. This "...would bee the undoing and impoverishinge..." of the couple. A man from Great Chart said that public penance would "...greatly weaken and impare his Credit..." [EcCX6.8, f97]. A Rolvenden couple claimed such a punishment would be "...to their greate hinderance, greater grieffe and allmost utter undoeing..." [EcCX6.8, f306]. Loss of honour, through the formal public exposure of an offence, would lead to a lowering of the persons reputation and this could have material consequences.

In discussing honour, the connection between a high moral standing and being of high status in local terms has been apparent in numerous cases, as has the converse tendency to connect a bad reputation with low status. This is not absolute however. Nicholas Benskin said that he and his wife did "...live in good credit and repute amonge their neighbours as touching their lives and conversacions, although they be of small estate themselves..." [EcCX6.8, f151]. Benskin, who made most of his living by the manufacture of buckets and tubs, claimed a good reputation despite his relative poverty. The poor could claim honour but in doing so they appear to have been working against common assumptions. It may be however that honour was relative, as indeed was status (see chapter 3). The wealthier had more control of the representation of their reputations in formal contexts. They also considered their own credit, and that of their peers to be of importance to them whether supporting claims or attempting damage. The honour of poorer persons may however have been of some relevance among their peers and in seeking the favour of those to whom they were subservient. Charity was more likely to be directed to the "honest" poor. The honour of the poor does not seem to have been in competition with that of the wealthy. A poorer person's reputation is said to be low in two types of situation. Those that may be considered situations of social control, such as where Richard Cliff, a cardmaker, is presented for not attending communion, have been dealt with at length by a number of historians (e.g. Amussen, 1985; Ingram, 1987). The second situation is where a case involves relations of inequality, such as sex between a master and a servant, and the more powerful

(and usually wealthier) person stresses the low moral standing of the less powerful one in order to highlight the credibility of his or her own case.

It is also clear that inequality in resources could seriously damage a person's chances of securing a favourable verdict. Such resources might not be wholly financial. They also included the ability to call upon the help of friends, neighbours and kin in times of trouble.

Reputation and social relations

When presented to the church courts, a person might ask for the chance to clear their name by means of purgation. This meant producing a specified number of "honest neighbours" to swear that the accused was innocent. Two things seem to have been required for this, firstly the network of social relations from which compurgators might be drawn and secondly the resources to bring them to court and probably to give them some financial incentive to appear.

John Dod, a servant in the parish of Eastwell, north-east of Biddenden was unable to produce his purgators. He claimed "...that the most part of the parysheoners there ar very ryche men & will not go on his purgacion beinge a poore man..." [EcCX3.8, f60]. Dod saw himself limited in terms of a useful network by his poverty. George Ship of Biddenden in 1633 was unable to produce any purgators because of "...his great poverty..." [EcCX6.8, f201]. Where the names of Biddenden purgators are given, they are frequently of low status or bearing surnames with low status associations, and sometimes persons who have appeared as defendants in other cases. When John Basden of Tenterden had to produce Biddenden compurgators in 1598, churchwarden Roger Patenson objected to two of them [EcCX4.3, f138-9]. William Stokes was said to be "...one that will goe on any mans purgacion..." (he was indeed often chosen) and Thomas Broker was at fault because "...he is gyven to be dronken & that there have bin warrants out against him upon suspition of sheepe stealinge." The quality of one's acquaintances was clearly important as well as the quantity.

Purgators were also suspect if any link could be found between themselves and the accused which might imply coercion or impartiality. One Cranbrook man in 1632 had his purgators questioned because they were poor and one of them was his tenant [EcCX6.8, f152]. Other ground for dispute could be related to other aspects of status as in the case of John Barnard of Biddenden, dismissed as a purgator because he was under 21 years and unmarried [EcCX6.8, f300]. Close kinship could also invalidate purgation. Richard Sloman of Hawkhurst had claimed that he was "...fathers brothers sonne..." to the accused, but was in fact his natural brother and therefore invalid as purgator [EcCX4.5, f153]. William Benskin of Biddenden proved deficient in his purgation as he produced a son of both his sister and brother [EcCX2.4, f215]. There are too few cases to work out which kin might be permitted as purgators, but the two cases above would fit with the degrees of marriage given by both Archbishop Parker and Leviticus

[Wolfram, 1987].

Similar problems of coercion, interest and poverty applied to producing witnesses. It is clear therefore that a fairly wide network of persons with whom one was on good terms could be useful. Although purgators were dismissed on the above grounds of invalidity, this obviously did not prevent people producing other persons who were bound to them in some way. The bonds that could be used in this way are many; kinship, tenancy, employment, friendship, debt and probably others. There appear to have been numerous other circumstances in early modern England, in which a person might need help from others to validate a claim; help which might involve pledging substantial sums of money. In the civil courts recognisances were needed to put in bond for the accused on promise to obey a court order [KAO:QM/SRc]. A cursory examination of those relating to Biddenden, indicates that both kinship and friendship through trade may have been important.

Similar circumstances applied to the securing of administrations of goods in the case of intestacy, though with the larger amounts entailed a certain amount of patronage may have involved. The need to create and maintain a network of well-disposed persons connects back to the use of wills to "bind" kin, friends and others by stated and symbolic obligations (see chapter 4). Certain official procedures of which we have knowledge required an individual to demonstrate personal support. The face-to-face nature of contemporary society was an inbuilt assumption underlying such processes as it was behind the rituals of public shaming and the detections of churchwardens. There has been a tendency for anthropologists to visualise such face-to-face societies as static and circumscribed. It is clear that Biddenden and other Wealden localities contained mobile and outward looking populations. The creation and maintenance of social relations was therefore important and active. Friendship and kinship were not "givens", they had to be worked at, created anew in new locations, renegotiated at times of transition such as marriage or death and maintained through time where possible, even over distance.

There was of course another side to this coin of social relations. Not all neighbours, or indeed kin, were friendly. Although cases before the church courts have been largely viewed in terms of social control by historians [Ingram, 1987; Levine, 1979] there appears to be a further aspect which is much more rarely considered. This is the element of competition seen in the presentment of the elite by the elite. After all, if the only motive had been control of disorder among subject groups (the poor, women, children) why then were members of the subjecting group (wealthier adult men) presented? The detection of fornication can be linked to parish elite fears of bastards on the rates, but this does not explain the presentment of (often wealthy) male partners from their own parishes when the mother had left and the child had been born elsewhere. Maintenance cases were disputed in the civil courts.

Spufford has dismissed the necessity of seeing a causal link with the imposition of a puritan ideology [Spufford, 1985]. Ideological shifts may have provided the grounds for accusations but probably had less

effect on the motives. Ingram has noted that in certain cases in Wiltshire, disputes in the courts might arise from other, longer standing disagreements or be used to head off potential ones [Ingram, 1987]. The possibility of cases reflecting less formalised but socially important antagonisms has not really been posited. Historians have shied away from anthropological concepts such as honour and shame used as principals of ranking. But it is just these concepts which might be most disputed between persons of roughly similar status. Two men might have similar wealth and power in material terms, for instance John Flete and William Boddenden in mid-sixteenth century Biddenden, but one (Flete) put himself below the other (Boddenden) when examined in terms of moral assessment.

Many cases may contain elements of material and moral dispute, but the material was seen to be affected by the moral. In 1599, Francis Allard was presented as "...a common dronckard..." [EcCX4.3, f214]. He claimed that the detection was instigated by churchwarden Roger Pattenson, without the consent of the other warden and described Pattenson as *inimicus capitalis et adversarius huic respondenti*. Allard could state that this was an attempt to discredit him by someone with reason for malice. Allard was dismissed. There was no case to answer. It appears that it was the local elite, like Allard and Pattenson, who were most sensitive to questions of honour. They were much more likely to bring cases of defamation to the courts as individual suits [Ingram, 1987]. This may, however, at least in part reflect the fact that they were much more likely to have the resources to do so, as well as to contest presentments, than poorer persons.

Such sensitivity could be exploited by those who may have had less to lose. The case of the servant Warry, trying to discredit his master's wife, (see adultery above) finds him spreading the gossip to a local farmer of some substance. In 1568 Gregory Taylor was said to "...suspiciously accompany..." the wife of his tenant, shearman and publican John Hampton [EcCX1.9, f77]. Taylor claimed that Hampton owed him money and so "...made meanes & asked counsell of others to worke a waye to have his dett forgyven & therapon by counsell did rayse this brute & slander". Hampton seems to have placed himself in a precarious position according to Taylor, hazarding his being seen as a cuckold and therefore losing face himself. Taylor was frequently being presented for sexual transgressions and may have had an insecure reputation while Hampton was an alehouse keeper, an occupation which may have been seen as morally suspect. The reality of inequalities of power were re-asserted when Taylor evicted the couple. The honour sensitivity of the elite could be viewed as a potential weapon by the weak, perhaps their only one, but success must have been difficult in the face of unequal material sanctions and resources.

So far the social relations of the active aspects of reputation have been examined. When mediterranean ethnographers speak of honour it is often in the sense of a corporate, as well as an individual commodity. Families, groups of kin, have honour and an insult to one can be construed as an insult to all. In early modern England, kinship was egocentric and depended as much upon choice as ascription. Such practices

do not seem conducive to any corporate identity. For reasons discussed above (see adultery) honour in some senses attached to households, with the reflexive nature of the father's authority and the other members' obedience. The behaviour of the head and his wife in particular seem to have been subjects for scrutiny.

The behaviour of small children is usually only complained of in a general sense rather than being related to particular parents, or even to parents at all [see EcCX6.8, f251]. Older children and servants may have been seen as more responsible for their own behaviour, which by this means could reflect upon their households. The father of John Basset of Cranbrook, when his son was sentenced to public penance was said to "...cryeth at any doore day and night as on loath to se his sonne come to such a Publique shame" [EcCX4.11, f214]. Peter Bettenham, gentleman of Pluckley claimed to be "...descended of good and gentile parents..." and that public penance would bring them "...shame & griefe..." [EcCX6.8, f293]. It is interesting that most examples of this type concern the actions of sons. The unmarried daughters of wealthier men rarely, if ever appear in the church courts. The poorer daughters who are the mothers of illegitimate children, are not considered in relation to parents, but usually as servants. Where parents of such mothers enter cases it is through aiding their daughter and protecting her. These daughters might have found it more difficult to marry, but their behaviour may not have reflected upon their families of origin. In contrast to mediterranean societies, the honour of unmarried women seems to have been of more concern to possible husbands than it was to parents or siblings. This may explain the degree of freedom given to unmarried women (see chapter 5) and is in contrast to the significance attached to the control of married women by their husbands.

In some cases shame might be reflected upon a wider network of kin. John Whetcombe, son of the Bidenden rector, died excommunicate in 1617. His wife asked that he be restored so that he might have a Christian burial, claiming that not only herself and their children but "...his other kindred and alliance..." would "...bee mucche disparaged & dishonored..." if this did not happen [EcCX5.9, f147]. As well as being used to indicate the effects of shame, kin could also be used in creating a case for leniency. Whetcombe was said to be "...a gent of good familye & well allied..." while his wife was "...a vertuows gentlewoman well descended..." The honour of his relatives might mitigate the man's individual bad reputation. Such considerations of wider kinship do not appear to have been used by poorer persons.

Honour, status and historians

In most cases, historians visualise the use of the church courts in terms of the control of social order. Although some [Amussen, 1985; Ingram, 1987] recognise that the contests which took place in the courts revolved around honour and reputation, this is again related only to the control of the behaviour of subordinates (poorer persons, women). It is true that people in the sixteenth and seventeenth centuries were very concerned about the threat of disorder from below, *the world turned upside down* [Hill, 1975].

But such worries are hardly confined to one historical period in one place. The formal structure of the church court was clearly aimed at social control, and had been for several centuries. This does not imply that this was the sole use that could be made of its facilities. It was also an arena for the pursuit of local contests. The elite group through the office of churchwarden, exercised power over who was presented. They did not only present the disorderly poor. Cases of disorder by other members of the elite were also presented. Public exposure of disapproved behaviour appears to have been feared by both the elite and their less wealthy neighbours alike. Although much evaluation of honour must have taken place in informal contexts, through gossip and rumour (see slander cases e.g. EcCX10.13, ff119-20), presentment to the courts and public penance could convert such informal knowledge to a form of more widely available and proven information. The shame of penance was that it was an admission of failings before neighbours, whether enemies or friends, rich or poor, less or more powerful.

Historians seem uncertain about conceptualising honour in early modern England. Ingram states that England in this period was not "...a classic 'honour and shame society'..." although he gives little impression as to what he thinks constitutes such a society and how England differed [Ingram, 1987, 318]. He does allow that "credit" was "...to an extent...of real significance" but attributes defamation cases more to pre-existing hostilities than to any desire to defend reputation [*ibid*, 318-9]. Why hostilities should have found expression in slander in the first place is thereby passed over. If suits related to "...long-standing struggles for status and prestige...", there must be some reason why it was considered possible to preserve or damage such valuable commodities by means of verbal insult. Existing hostility could be claimed as a reason for a slander being made, but does not explain why slander was thought to work.

In 1980 Miranda Chaytor published a paper examining aspects of household and gender relations in early modern England, focusing on material from her own researches on Ryton, County Durham [Chaytor, 1980]. She rightly criticised the quantitative studies of households which proliferated during the 1970s as "...descriptive rather than analytical..." [*ibid*, 50]. Soon afterwards Houston and Smith wrote a rather intemperate review of her paper demanding that researchers "...abandon ideological preoccupations in favour of a closer adherence to the accepted tenets of scholarship..." [Houston, 1982, 129]. Among

these "...ideological preoccupations..." is the use of "...anthropological analogy..." with "...societies with a well developed sense of 'honour and shame'" [*ibid*, 126]. In such societies male kin would avenge the dishonour of women and girls married in their teens. This is somewhat of a misrepresentation of ethnographies of "...Spain, Italy and Southern France..." and it is interesting that the anthropological works cited by these authors relate to the mountains of Greece. There are clearly differences between the way that honour was viewed in early modern England and its place in the societies of Spain, Italy and particularly Greece which have been the subjects of ethnographic research. This does not however preclude either comparison with such societies or the examination of the English situation in the light of anthropologically derived ideas. Chaytor recognises the importance of gossip, which she sees, following Harding, as the "...politics of the officially powerless..." [Chaytor, 1980, 49; Harding, 1975]. This is one aspect of the uses of rumour, seen in Biddenden by servants and tenants attempting to undermine the honour of those who have power over them but fails to recognise its potential utility to the official power holders. She also notes the limiting impact which considerations of honourable behaviour could have on women's lives but makes the mistake of seeing women thereby confined to the "...private..." sphere and "...inhabiting a separate culture..." from men [Chaytor, 1980, 50]. It was the public nature of personal affairs, the reflexive nature of household relations, that made evaluation of honour through rumour, gossip and the more formal means possible.

Most historians have been reticent in the use of concepts such as honour. Stone however does note the importance of honour in early modern England, indicating that men might lose it through telling untruths and cuckoldry, whereas women could be damaged by accusations of unchastity [Stone, 1979, 316-7]. He also makes the interesting point that it was only in the 1630s and 1640s that the double standard of sexual morality was seriously questioned. Although his example comes from the upper ranks of English society, Christopher Hill's work on radical sects in the mid-seventeenth century may have shared these ideas indicating that they had exposure among the less privileged [Hill, 1975, 309-13].

Changes did take place during the period concerning what types of offence were presented. There is a decline in accusations of adultery by women, a rise in those for drunkenness and pre-marital pregnancy. Perhaps there is a slow move from the group responsibility of the household to individual responsibility which reflected upon family and kin. Such a move would be very uneven. It may be reflected in other aspect of life such as movement from partible to more unequal forms of inheritance. Decline in cloth manufacture and population at the same time may have limited the possibility of social mobility achieved through manufacture and with this the competition for resources. But there is no real evidence that honour competition stopped, it may have just changed. Studies of the post-1660 period indicate that this competition no longer took place in the church courts but it is uncertain whether such contests really did stop or whether the church courts ceased to be used as an arena.

Honour, status and anthropology

The study of honour and shame in anthropology is closely connected with studies of mediterranean societies. It is usually discussed with reference to its evaluation in terms of sexual conduct. In particular the protection of womens' honour by their male kin, leading to severe restrictions on female behaviour. Examples range from the disapproval of women working in the fields [Davis, 1973, 94-5] to the seclusion of unmarried girls [Campbell, 1964, 287]. Among European cases, that of the Sarakatsani [*ibid*] is the most extreme, perhaps more similar to female seclusion in Islamic societies than with much of southern Europe.

Although some ethnographers see the evaluation of honour as being largely unconnected with power and status [Lison-Tolosana, 1983; Pitt-Rivers, 1954] while others view it as linked with wealth and status, all view it as a method of ranking people. In Pisticci Davis said wealth and honour rankings to some extent "...permeate each other, so that honour is associated with wealth, poverty with dishonour" [Davis, 1973, 90]. It is clear that in Biddenden and the Weald, honour and status were connected. People of almost all levels of wealth are involved in accusations in the church courts except the very wealthy (the Henders and Randolpfs). Members of the parish elite such as the Allards and Seliards are involved, though they are less likely to have sexual charges brought against them. Persons of low status may have been viewed as having little honour, though this may depend on the status of the person evaluating them. It is possible that the very poor may never have had much stake in such a ranking process but the delayed marriages of multiple bastard bearers, who are mostly low status women, could indicate some degree of evaluation. The elite and middling groups appear to have been very sensitive to honour, especially in the late 1620s and 1630s. As in Pisticci, there seems to be a rough association of honour with wealth. Poorer persons might claim honour despite their poverty, wealthier ones might make an explicit connection as in the phrase "of good countenance and revenew". Competition about honour seems to take place amongst near equals, and may be a method of ranking persons who are similar in wealth. In this respect James Bateman may have had high status (in terms of power and wealth) but low honour, while Nicholas Benskin could claim low status but a high reputation. Although honour can be described as describing "...the distribution of wealth in a social idiom" [Davis, 1977], in this circumstance it may go further. If the poor have little honour, a rich man with a bad reputation is like a poor man. Because the wealthy had greater resources with which to display their honour (by generosity and charity) and to defend it when challenged, a person who could not do so may have been seen to lack the funds or network needed. In these ways rankings on wealth and on honour may be seen to be in some ways reflexive.

Although honour is often related to sexual behaviour, actual evaluation in mediterranean societies may take place concerning other aspects of life. Davis mentions women working in agriculture [Davis,

1973, 94-5] while du Boulay finds the performance of domestic tasks by women as areas of assessment [du Boulay, 1974, 131]. Behaviour in these areas is seen as reflecting on honour as regards other aspects of life. Similar resonances are found in Biddenden, and indeed in early modern society generally. Drunkenness, bad language or being found alone with an unrelated man may cause a woman to be suspected in her sexual mores. Failure to control the sexuality of a wife may imply lack of authority in other dealings for a man. The preponderance of sexual failings in the church courts may reflect one extreme of gossip and rumour, while any commentary on day-to-day matters went on unreported.

Jane Schneider in 1971 put forward the idea that honour was most important where there was competition for scarce resources [Schneider, 1971]. She notes the importance of "...the economic autonomy of nuclear families..." in generating conflict between such groups [*ibid*, 16]. This may also be true of early modern England. A further suggestion is the link between competition for limited resources and honour, particularly where there is partible inheritance [*ibid*, 16-7]. This is also true of Biddenden and the Weald at least until the 1620s. Opportunities in cloth manufacture encouraged population growth and the practice of partible inheritance among sons may have contributed to competition for resources. It may be significant that the nature of contests changes as population pressure declines and inheritance practices become less egalitarian (see above). Schneider suggests a further connection between family autonomy and honour because "...father and sons lose their joint stake in a patrimony..." with the possibility that they may become competitors "...at great cost to social order" [*ibid*, 21]. A joint interest in the honour of daughters gives them a common interest which unites them. Biddenden and the Weald may differ considerably here.

As has been stated above, there appears to be more concern with the honour of women as wives than as daughters. Young unmarried women frequently lived away from home in service and mixed freely with males on a day-to-day basis. At least among the poor and to some extent the middling, pregnancy outside of marriage seems to have evoked a certain amount of sympathy from family and kin, even though it appears to have damaged a woman's marriageability. Criticism of such women was from the elite who feared the cost of bastards to the rates and who also seem to have seen the women as threats to men (by "enticing" them to sin). Masters may have been seen as more responsible, and were inclined to remove girls from their service (possibly in fear that they might be named as a possible father, see EcCX6.7,f8-9) while parents and kin took the stranded women in. Although the elite may have been more watchful over their daughters, honour seems to have been an individual responsibility for unmarried women. It was an important factor in choosing a wife as was the reputation of a spouse's family.

The sexuality of women does not appear to have been considered dangerous in itself unlike among the Sarakatsani [Campbell, 1964, 276-7] or in Ambeli [du Boulay, 1974, 102-3]. A common early modern English stereotype of women views them as having "...a powerful, potentially disruptive sexuality"

[Henderson, 1985, 55] which needed control particularly by the woman herself. This led to an image of women, comparable with the mediterranean [Schneider, 1971, 20], as untrustworthy, liable to cuckold their husbands. It was the use of their sexuality that was in question. Why it was that married womens' sexuality was seen as connected with their husbands' authority but such considerations were less important between daughters and fathers or brothers is at present uncertain. It may be in part connected with the absence of girls from the parental home between menarche and marriage due to life-cycle service. Another connection may be with the way in which agnatic and affinal kinship was viewed.

Comparison between mediterranean societies and the early modern Weald is useful in indicating general similarities and differences. To refuse to acknowledge the relevance of honour, as some historians seem to wish, would be as pointless as applying models for the contemporary mediterranean directly to the historical situation. The use of honour as a method of ranking, the reflexive nature of evaluation, plus a link between an interest in honour and both autonomous families and resource competition are found in the mediterranean and in the Weald. But the major expression of honour in mediterranean societies is the control of womens' sexuality by male kin, with particular emphasis on unmarried daughters. This is in direct contrast to the historical situation where honour attaches to the behaviour of wives rather than daughters or sisters in this sense. The evaluation of males by their own actions is found in both the Weald and in mediterranean societies, but male sexual fidelity seems to be of more importance in the English context. If the sexual honour of daughters was less important in the Weald and perhaps in England generally, the setting up of children in independent households, whether male or female, does seem to have been a matter of pride to parents. This has similarities to the importance to male honour of providing dowries found by Friedl in Vasilika [Friedl, 1962, 69]. This must be modified however by the knowledge that marriage was not regarded as inevitable for either sex in early modern England, though probable.

Social relations, wills and marriages

When examining wills, they were seen to be used both to exclude and to include. The excluding sense related to the inheritance of property by the children of the willmaker. Daughters were in most cases excluded from the inheritance of land. While the rule in cases of intestacy was male partible inheritance, a will might be used to exclude some sons from receiving landed property, leading to unequal partibility or unigeniture. This type of exclusion became more common during the seventeenth century and may reflect the more limited opportunities available with the decline of cloth manufacture. Another form of exclusion gave token bequests to married children who had received their main property or portion before the will was made.

There was however a tendency to attempt to give each child a reasonable inheritance, be this in the form of a portion in money or kind, or in land or rents. Such a situation could be subversive to an ideal of

harmony among siblings. The outcome appears to be that relations between siblings were ambivalent. The negative aspects are seen in the cases of John Carpenter and his sisters and of Edward Young and his brother (see chapter 4). More positive aspects appear in the wills of brothers Robert and Simon Russell, and of William Randolph (see chapter 4). Parents used wills to attempt to preserve relations between their children by making some responsible for future provisions affecting others. In this way, the family of origin could survive its fragmentation in terms of co-residence, even when the parents were dead. The ambivalence of sibling relations is in contrast to the tendency in mediterranean societies for brothers to quarrel but for both brothers and sisters to have good relations with sisters.

Marriage too had elements which can be seen as representing the fragmentation of the family of origin and the transfer of resources. Women received their portions at or before marriage while many men received portions or land before their marriages either through their situation as regards inheritance or by the death of their father. Although, inheritance was not strictly post-mortem, several men seem to have had to wait until their father's death or a specified age to marry. Others had no such problem as their fathers died when they were children. Because it was possible to gain a living without having inherited land (through trade or renting a farm), property transmission was probably not as important in determining when a man married as in some societies [Bourdieu, 1972; Cole, 1974]. On the other hand the situation differed from a society where most property was transferred at marriage [Davis, 1973].

As marriage entailed the setting up of an independent household, the family of origin obviously suffered fragmentation. This may have been limited in its impact by the fact that most children would have been living away from home in service prior to marriage. Service meant that for most people, the resources which were needed to set up a new household would be in part acquired through savings from wages. This meant that many people were at least in part independent of the control which the dependence on portions from parents could entail. It is probable that the larger portions of the daughters of more prosperous men meant that fathers had more control of their marriages than with poorer girls. Similar control could be exercised over sons through large portions and landed property. The availability of manufacturing work meant less need to depend on land in the sixteenth century and the decline of cloth making may be partly responsible for the rise in marriage ages for men and women.

Other uses of wills were more inclusive in nature. Small bequests were given to kin outside of the willmakers immediate family and to neighbours and friends. These gifts are usually small in comparison to those bestowed on children, wives and siblings and appear to have some meaning beyond the provision of resources (although they may do this if the recipient is of modest means). To some extent these bequests were statements of the generosity of the willmaker. As seen with funerals, generosity was a social virtue and one which seems to have found particular expression in death. Such gifts single out persons from the willmaker's network of kin, neighbours and acquaintance. The gift itself is probably less

important than to have been "remembered" in the will. Some types of bequest, such as mourning rings, seem to be associated solely with this activity and are confined to the elite group who were in any case more likely to use their wills to "remember" a large network of persons.

The death of a householder, male or widow, involved the renegotiation of relationships by the survivors in the same way that marriage involved such rethinking of bonds by the introduction of new persons to the group defined as kin. The selection of persons by the willmaker through the medium of bequests, gave the survivors a framework within which to perform this renegotiation, and in some cases prescribed future relationships through the creation of long term obligations (such as overseeing, deferred payments or guardianship). These aspects of willmaking can be seen as an attempt by the dying to facilitate the reproduction of social relations over time.

Marriage too had what might be seen as inclusive aspects. In a bilateral system, each marriage creates kinship. This means that each person has a wider range of potential kin available for recognition, not only at his or her marriage, but at those of siblings and at remarriages of parents. An obvious corollary of this would be that were each person to have three marrying siblings the number of potential kin available to each individual could be enormous. The boundaries drawn indicate both general attitudes as to which kin were regarded as closest and also a large amount of choice in recognition.

As with honour, there has been great trepidation in examining kinship in English historical situations. Such statements as "...the extended kin were of relatively small significance..." [Wrightson, 1982, 48] for most people in early modern England, seem to beg the question 'for what?' There seems to have been in recent years an almost obsessional interest in the lack of co-resident kin found in English households, far beyond the original purpose of Laslett's work of falsifying the existence of large households with many kin in the English past. More recently others, such as Macfarlane and Wrightson have stressed the unimportance of wider kin in English society as a whole [Levine, 1979; Macfarlane, 1970]. Again this is contrasted with an imaginary peasant past which had hitherto been believed in (presumably the same one that had the large households and unrestricted fertility). It is only in the much-abused work of Miranda Chaytor and the more recent studies of David Cressy that aspects of the use of kinship have been examined in a context outside of this shadow-boxing with imaginary pasts [Chaytor, 1980; Cressy, 1986]. Another frequent attitude is that kinship could not be important in a society with high rates of migration. This appears to be based more on the unfounded assumptions of modernisation theory than on evidence and would be contrary to findings for the past and present [Anderson, 1971; Eades, 1987; Nelson, 1987]. Cressy has found kin ties to be important in migration to New England and Wealden evidence suggests them to have been significant in some rural-urban contacts.

Chaytor attempts to examine the ways in which kinship might interact with household processes over time and create links between households [Chaytor, 1980]. There are several technical and theoretical

problems with her paper, but the overall direction is towards a better understanding of the practise of social relations. The work of David Cressy on the use of kin links by migrants to the New England colony is perhaps the best challenge to the view which minimalises the importance of kin in early modern society [Cressy, 1987]. Earlier writers had stressed the infrequency of contacts between kin and the limited number of kin resident within the same parish (summarised in Wrightson, 1982). For Cressy

Although the *frequency* of interaction among kin cannot be measured, and may have been slight, the *value* of such contacts was potentially enormous [Cressy, 1987, 287].

He also demonstrates the way in which seemingly remote links could be used to claim kindred for a variety of purposes [Cressy, 1986, 45]. Some writers seem to view the flexibility and optative nature of English kinship as further evidence for its supposed "weakness". I would argue from indications in the Wealden material and in Cressy's research that therein lay its *strength*. It also has greater similarities in this to kinship in other European societies despite differences such as household types and rules of residence. To quote John Davis "Broadly speaking the north-western mediterranean is bilateral, without kin-groups" [Davis, 1977, 197]. Davis also notes the importance in the discussions of bilateral mediterranean kinship of selectivity [*ibid*, 220-2]. He rightly cautions against the assumption that such selection is always instrumental.

This assumption tends to be inbuilt into Cressy's work and my own, largely through the nature of the sources used. None of the inhabitants of early modern Biddenden are available for interview. However, there are indications that kinship could be important outside of "rational" calculating claims. The kin who took in destitute pregnant women seem to fall into this category. The closeness of Edward Young to his late sister's husband, the care given by John Stonard to the children of his brother's widow by another marriage are no less lacking in calculation than John Carpenter's hatred of his sister and her husband. Although only a small number of possible kin links might be practically maintained, there does seem to have been a general assumption in early modern England that kin should feel an obligation to one another.

Cressy uses the model of a set of concentric circles to describe and illustrate the "...kinship universe..." of an individual in seventeenth century New England [Cressy, 1987, 287-9]. This model was suggested by references to kin from the letters and memoirs of colonial settlers. A similar model appears to be suggested by bequests to persons in Biddenden wills, in this case extended to include friends and neighbours. Given the particular purposes of wills, it is not surprising that the closest ties seem to be with the willmakers immediate family (wife and children if married, siblings and parents if single). In some cases a particular friend, sibling, uncle or in-law might form part of this group. Beyond this would be friends, servants, tenants and more distant kin, whether local or remote. Between these broad groups (wills do not permit finer distinctions at this level of abstraction) some individuals would probably have certain siblings, siblings-in-law to whom they were closer, perhaps in view of nearness in spatial terms.

Such evidence from wills is crude in comparison to that used by Cressy, but suggests a similar model. A model, however, is not all there is to interpretation. Macfarlane uses a similar graphical medium to examine Ralph Josselin's relationships and reaches a different conclusion [Macfarlane, 1970].

It was stated above that in a bilateral system, marriage creates kinship. There is some indication that affines may have been regarded as important in early modern England [Houlbrooke, 1984, 44]. The Biddenden data for some of the elite families, indicating more than one link being made by marriage to the same family, points in the same direction. Affinal links seem to have been concentrated on either one or two generations, although this might indicate deficiencies in the data due to the limited generational depth. Such a view does however seem to fit with that of wills, indicating a selection of kin over a depth of three generations with interest in affines, including relatively distant (in kin terms) ones, (see Robert and Simon Russell). Although kin beyond the immediate family and siblings (including in-law) rarely seem to have acted as a group, being able to claim that one was well descended or allied (linked by marriage) appears to have been considered useful in some circumstances (see Whetcombe). The emigration of the kin of Smallhope Bigge shows how such links could be important in recruiting settlers and in maintaining relationships over distance.

Because the focus of current research has been necessarily limited to Biddenden, the indications of the importance of affinity may be understated. The elites of the Wealden parishes, from the suggestive evidence of surnames, seem to have formed an intermarrying network. However, the density of such a network cannot be established without examining marriages between the families of yeomen, clothiers and rich tradesmen over a wider area. But it is suggested as a hypothesis that such links were important to the maintenance of local elites and to the incorporation of in-migrants into them. It may be no coincidence that churchwardens tended to be related by marriage to other churchwardens, not to form any grand kindred but small sets of alliances over time. Other writers, such as Houlbrooke and Everitt, have noted that kinship ties may have been stronger in Kent than elsewhere in southern England due to the effects of gavelkind in establishing several "lines" of the same family and intermarriage [Everitt, 1966, 41-3; Houlbrooke, 1984, 51].

The importance of affinal links has been noted in mediterranean ethnographies [Davis, 1973, 65-6; Loizos, 1975, 74-6] as providing a basis for close relationships between brothers-in-law when those between brothers might be problematic. In Biddenden some people appear to have had good relationships with both brothers and brothers-in-law, while in some cases the bond between father and son-in-law may have been close (James Bateman and Giles Bishop, Henry Allard and Terry Aldersey, Jeffrey Brissenden and Roger Sturmy). To understand the place of affinity research cannot be confined to a single parish, though a tendency towards status endogamy will allow it to be pursued in relation to stratified groups.

Despite the current limitations, it can be said with reasonable confidence that affinity was of some importance. This may link with the stress placed on the husband-wife relationship and the possible evaluation of women as wives rather than as daughters in terms of honour. An anonymous seventeenth century writer said of women "All of them are understood either married or to be married" (quoted in Henderson, 1985, 72) and popular literature mostly assessed women in terms of their marital relationship. Brothers may have been less interested in their sisters' virtue than in their choice of husbands. For men marriage appears to have made little difference in the way that they were assessed.

The interest in the behaviour of married women declines somewhat by the 1620s and 1630s, although affinal kin continue to be important (see William Randolph). Such a change occurs at a time when the resources available locally are declining as is the population, while age at marriage (probably reflecting opportunity to marry) rises. Along with this there is a tendency toward more unequal forms of inheritance of land, leading to the preferment of one major heir (although more than one son may still be given land). Although the types of kin and neighbours who receive small bequests remains roughly the same, the numbers mentioned in wills appear to decline. The middling groups minor trades and small farmers, suffer by the difficult conditions as extra work through cloth making is less likely to be available. At the same time, those offences such as bridal pregnancy which are more common among this group are increasingly presented. Also the less wealthy become more defensive about their honour. Because time considerations have forced a narrow chronological scope upon this research, it is difficult to see where these changes are leading. Because of the poor documentary evidence available for the 1640s and 1650s, this problem would best be solved by examination of the period after 1660 to see whether apparent changes were long term in nature or not.

A current working hypothesis may be put forward. The evaluation of reputations was used in the creation and maintenance of a power holding elite - the "better sort". These persons could be challenged but, because they were also the wealthiest in the locality, greater resources were available to them to defend and protect themselves. The more general ideology of the patriarchal family — often used to uphold royal government — was a hierarchical order of power viewed as being natural. Such an order was not suitable for local power where a number of men formed an elective hegemony. But the idea of household authority could be used as a ground for challenges and for the maintaining of control by this hegemony. This elite had no complete power base; they did not control all land or all work. They controlled partly through patronage with small, overlapping networks, partly through the cultural hegemony of honour and partly through the establishment of a regional elite by endogamous marriage.

As opportunities declined, so the elite felt more secure because there was less threat of in-migrants coming in to compete for resources in the way that Roger Pattenson, Josias Selyard and Bernard Randolph had done in the late sixteenth century. Such security led to a decrease in the importance of fostering

a wide circle of potential support among neighbours, less hostility and competition but still relied on affinal links to maintain local and urban ties. Among those with land, descent began to have greater importance because of gentry aspirations and the move to unequal transmission of land. Increased security for the elite, less security for the middling and the decline of manufacture led to greater social differentiation between rich, middling and poor.

This however elevates certain aspects of time while suppressing others. In examining religion it was noted that the radicals of the 1650s and 1660s were all of roughly the same cohort, that born in the 1620s. This raises the possibility for a different kind of time analysis, by generation similar to that carried out in Aragon by Lison-Tolosana [Lison-Tolosana, 1983]. It is not certain whether the more distant past could be examined in this way beyond a few possible instances of the type mentioned above. Yet another form of time may relate to different families, with varying histories of demography, opportunities and resources leading to differences in the adoption of attitudes and practises.

The nature of historical ethnography

In the first chapter, several studies were discussed which can be seen as historical ethnography. Such an enterprise is clearly different to conventional ethnography. The people studied can never be asked questions directly. The learning experience of living in the society is lacking. There are however similarities. The skills of using documentary sources successfully are not as far from those of eliciting information from living persons as is often thought.

When examining historical sources, a researcher does not do so uncritically. It is not a matter of deciding whether or not an event or the recounting of it is true or false. For the better types of history, such a question is often irrelevant. The interest is in how and why the statement was made. Ginzburg notes that no document is 'objective' [Ginzburg, 1980]. An important point to mention here is that the researcher is invariably reading the text to elicit information which it was not the main intention of the maker of the document to convey. Burke sees the method as reading 'obliquely' [Burke, 1978]. Bloch has spoken of forcing documents to speak against their will as

...even when most anxious to bear witness, that which the text tells us expressly has ceased to be the primary object of our attention today [Bloch, 1954, 63]

Bloch talks of the work as following 'tracks' which are left unintentionally. This of course must be balanced against more recent interests which relate not only what is mentioned to the writer but also the way in which it was said. When examining church court records, I am not usually interested in whether or not a person really did commit the offence, or whether he or she is as good or bad as they are said to be. I am concerned with the way in which evaluations of persons are used and in the context of accusations.

Bloch writes of 'cross-examination' of documents [*ibid*], but it may be argued that it is not possible to cross-examine the persons studied in the way that a fieldworker might ask questions to an individual from several directions. It is not possible to ask the person writing the document or making the statement which was transformed into the existing text, what was meant by any phrase. To some extent this problem may be resolved by looking at the way in which similar ideas are discussed by different people or in a number of contexts. Further information is available, perhaps not from one source, but from others studied or from suggestions by other researchers providing a general context for interpretation. Specific context is that in which the document was produced. A record of statements and accusations in a court is the product of a set of social relations. But it is also constructed from the knowledge and interpretations of those involved in its production, some of whom may have more influence on its final form than others. This does not only apply to the court records but to seemingly simple statements of 'facts' such as parish registers.

It was stated at the outset that historical ethnography should be holistic, not focusing on one aspect of life to the exclusion of all others, in the way in which some historians privilege economic conditions. However no such study, whether undertaken in the present or upon documents from the past can include everything. The human being is unable to observe or ask questions about all aspects of life in the locale studied. Documents are subject to the selectivity of content and survival, but even for the past greater amounts of information may be available than can be usefully employed. Both types of study are subject to selection and emphasis. For this reason, holistic means permitting several aspects of society to be examined and not giving overwhelming priority to one.

One aspect of historical ethnography that has been stressed is that, like more conventional studies, it should be comparative. Rheubottom stresses comparison in his study of marriage practices in Ragusa, explicitly using another study, of fifteenth century Florence, for this purpose [Rheubottom, 1988]. In this way historical ethnography is not a 'replacement' for conventional studies which is 'needed' because the old "...hunting grounds..." are supposed to be disappearing [Macfarlane, 1976, 1]. It should exist alongside present day studies, offering comparison and critique. Thompson sees historical studies providing such a critique for anthropological theories [Thompson, 1971].

An attempt has been made during the course of this volume to compare Biddenden and the Weald to southern Europe. Many differences and some similarities have been found. The major similarity dealt with has been the importance of the use of reputation and honour as a system of ranking which is connected with other inequalities. This theme has been developed both by examining the use of such concepts in the reproduction of power relations and in proposing a difference in the evaluation of women which may have implications for other relationships.

A further comparison was made between the nature of migration in and from the Weald and that discussed in anthropology. Although common features, such as chain migration through kin and subsistence migration by the poor are found, some types of movement can be seen that are not well studied in anthropology. A certain amount of migration was local and rural-rural, involving families as well as lone individuals. This was practised by the more wealthy and middling, which indicates that subsistence was not at issue. A further difference can be seen in overseas migration, which combined features of betterment with religious conviction. Again, migration for emotive reasons is not well dealt with in anthropology. A third distinction is the evidence that several different types of movement were taking place to and from one location at the same time. In contrast anthropologists tend to study situations where the nature and often the destination of migration is similar. Rarely too, are rural locations with a fairly high rate of in and out migration studied. The examination of such factors in this project has been necessarily sketchy. It is hoped that further work might provide a better picture.

In several ways then, this study has achieved its goals as historical ethnography. In particular the comparative aspects and relation to other work on power relations, allow it to be situated in an anthropological context. Some aspects have been dealt with in more detail than others. This is regrettable but due in part to time constraints, but also to the problems associated with access to and survival of historical information. I hope that I have gone some little way towards meeting Sydel Silverman's high standards

The anthropologist-as-historian will always be limited by the data available, but the object should be to approach good ethnography [Silverman, 1985, 243]

This research has suggested four lines for useful future enquiry. There is a need to improve information about the status of Biddenden inhabitants and also to extend the period studied beyond 1660 at least until 1685. Examination of marriage and kinship should be expanded to include a group of Wealden parishes but focusing on the elites. Work on the church court archives should be extended by examining instance cases and focusing on the evaluation of men and women in terms of their relationship to others (eg. as daughters or wives). Finally there is a need to gain a better understanding of migration in terms of type, timing and relationships involved. These themes, however, must be integrated so that connections are not overlooked.

Computing for ethnographic studies

In undertaking this research I have made much use of computing methods. As I have stated before, the types of information used, have similarities with some of those that might be encountered in more conventional ethnography. Therefore my conclusions as regards the computing component of this work are considered within a broader framework than this specific study. Using a computer in a subject area where such activities are uncommon has also involved experiential learning. Although in some ways a stranger in the foreign territory of a computing laboratory, my work has left me with little time to study this situation ethnographically. In a similar way I have been a stranger amongst anthropologists (especially away from Kent) because of this aspect of my research. My conclusions from these experiences are therefore impressionistic, but I hope indicate some of the problems that exist between anthropologists and computer use.

My approach throughout this project has been to utilise existing computing tools wherever appropriate ones have been available. Much work has been done with simple programs, such as those in the UNKSTAT and *hum* collections, along with standard UNIX facilities such as *awk*, *grep* and *join*. I have also made use of relational database systems, initially *RDB* and later *Ingres*, where they were appropriate for my needs. Use has also been made of other large programs such as the Oxford Concordance Program (OCP) and *SPSSx* for specific tasks which could not be performed adequately by more simple tools. Where no appropriate tools were available, I have had to write my own programs. As I am able to program in Pascal and C, this was a realistic possibility, although very time consuming. It must be said that although some available tools can be used very simply, to obtain greater benefit does require a certain degree of knowledge. It is therefore questionable how far some of the more flexible programs such as *awk* are really user's tools rather than programmer's tools.

I have encountered the problem of acquiring familiarity with a wide enough range of tools to clearly work out what might exist and be usable for my purposes (although perhaps originally designed for different uses). Time constraints have left little opportunity for exploring and learning about the wide range of software potentially available to me. If this has been the experience of a social anthropologist based in a computing laboratory and familiar with computing, the situation must be many times more difficult for the limited or occasional computer user in anthropology. Often the only link for such people is through advisory services, but there is understandably limited experience of the problems and goals of social anthropologists. After all, only a small number have ever used or considered using computers in their work.

My situation, being based in the computing laboratory has allowed me to acquire extra knowledge about what is available and the confidence to try software or hardware that I might otherwise have not

known about or considered relevant to my work. Though formal channels, newsletters, courses and electronic news, do exist to inform the general University community about such matters, my experience is that a large amount of the knowledge which users have is acquired by word of mouth, from the advisory services and perhaps most often, from other users. There are several problems with using other users (among which I include myself) as sources of such information. Firstly their universe of knowledge is limited to the programs which they have had direct experience of using or know indirectly through the use which colleagues have made of them. This is likely to be only a subset of what is available and not necessarily the most appropriate choices. Secondly the information might well be incorrect. Not all users have a great degree of computer literacy, and even those who do may have briefly skimmed over the options available within a program which were not of interest to them, but may not recall them precisely. This could potentially lead to a great deal of wasted time and effort.

There is no simple solution to this communication problem. A computing service cannot be expected to provide customised lists of software or a resident 'expert' for every subdivision of every discipline practised in a University. Both the computing needs of users and the facilities available are constantly changing. Therefore a certain amount of the onus of finding out what might be available lies with the user. But users are often wary of coming to people in computing for information. A grey area of uncertainty exists between users and computing. Computing people are often believed to be remote, unintelligible and unsympathetic. Numbers of 'Just So' stories exist, originating from academic and non-academic situations, to verify these beliefs for users. In many cases potential users are frightened of computers. This may be due to experience or to bad images projected by science-fiction or popular discourse (e.g. '£2000 electricity bill' stories). Also, people are only beginning to become aware that computers can be used for something other than number-crunching. They are still too often seen as the tools of the 'scientist'. This image is now being replaced by that of the 'business' computer, as promoted in so many advertisements and media situations. This has the positive aspect of promoting the ability to maintain large quantities of information and ease of access. However, this may be offset by the tendency of the business image to conflict with views of good scholarship.

Given these stumbling blocks to communication, it may not be surprising that many users in non-traditional computer using subjects, such as anthropology prefer to turn to 'one of their own' for help. At the University of Kent there are more people in a position to give such help than is usually the case. Some locations probably lack any person with 'in-house' knowledge and most will have only limited expertise.

My research has indicated that anthropological information demands a pluralistic approach. Despite the impressions promoted by the suppliers of 'integrated' software packages, one piece of software will not solve all problems. Information comes in many different forms and there is a problem concerning integration. At present the solution lies in knowing what to use and how different parts relate to the

whole. There are tools appropriate for one aspect of research and different tools for another, but very little that helps with integration. The conversion of data from a form suitable for one program into that required by another may often be a trivial exercise for those with the necessary experience, but it often proves a major stumbling block for many users. This may have the effect of restricting the user's appreciation of what can be achieved to the capabilities of a known package, and therefore discouraging data exploration through a variety of media. At the very least, the user requires a basic understanding of what computers can do, what they can not do and how they perform tasks.

In the first chapter I mentioned that the most important recent development for computing in anthropology is the availability of small portable micro-computers which can be taken into the field. Many of the machines now easily available are able to run a certain amount of useful software. Increasingly they will have hard disks of reasonable capacity which will improve speed, access to data and program capability. The nature of the software that a researcher might take with her will need to be thought out in advance of fieldwork. Also secure physical storage media and great attention to making backup copies of information will be necessary. My research has drawn attention to the variety of types of information that an ethnographer might acquire and wish to explore. Several methods of doing so have been employed but each has its drawbacks. A relational DBMS is useful for organising well structured data, generating standard reports and dealing with *ad hoc* queries. However this latter strength can be over-emphasised; the need for extensive exploration of complex data in this type of research means that this is often the major use of the database and the limitations of the available query languages and user interfaces quickly becomes apparent.

The highly structured database approach is probably less useful in a situation where the pattern of information could not be decided in advance so that standard design procedures were inappropriate. Fieldwork can be viewed in this way with the structure of data being a subject of research in itself. Interviews tend to be non-directed, so that it would not be a simple matter of entering answers into a database, with pre-defined entities and attributes. It may be best to regard the computer as a machine for entering text, perhaps from handwritten notes, but also for organising information contained in that text. Again flexibility is called for. I have certainly found a portable most useful for text, with the more analytical work of modelling being undertaken later, though still within the research process. From this the use of the computer in the ethnographic process may not be as simple as at first appears. Further differences may be found between those who are involved in first-time research, where uncertainty may be great, and those making repeat visits who may have more narrowly defined aims in mind.

In some senses, the the task of the ethnographer is similar to that of the systems analyst in the early stages of the 'systems life cycle' of a computing project. The objective is to produce an analysis of the 'problem' and to examine the feasibility of a 'solution'. The differences come in the breadth and depth of the study and the fact that in the case of an ethnography there are no direct parallels for the subsequent

design and implementation phases. With ethnographic research the 'product' is the result of the analysis, and this subsequently becomes subject to critique which in turn prompts further analysis.

Ethnographers need flexible information handling able to deal with disparate types of information. The need to explore and gain in depth familiarity with this material is a very important one. Software should help an ethnographer to do this. A wide variety of tools each provide part of this task and the diversity of problems will not be solved by a single 'integrated' solution. It is important that an ethnographer who wishes to use a computer should be familiar with an adequate range of tools but not be constrained by the limitations of the software. At this point it is instructive to return to the comments of Hymes on the need to

...be able to mediate wisely between advances in the state of the computer art, on the one hand, and in the content of anthropology, on the other [Hymes, 1965, 18].

Both of these are continuous processes.

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Appendix 1: Index to documentary sources

Kent Archives Office, County Hall, Maidstone

Bidd PR:	P26/1/1	Biddenden Parish Register 1540-1598
Bidd PR:	P26/1/2	Biddenden Parish Register 1558-1688
KAO:	P26/5/1	Biddenden Churhwardens' Accounts 1594 - 1660
KAO:	P26/12/1	Biddenden Overseers' Accounts 1652 - 1690
KAO:	Ch28/A1	Biddenden School Accounts 1628-1843
KAO:	TR/1042/5	Cranbrook Parish Register (transcript)
KAO:	Q/RTh	Kent Hearth Tax 1664 Lent
KAO:	QM/SB	Quarter Sessions Records (Sessions papers)
KAO:	QM/SI	Quarter Sessions Records (Indictments)
KAO:	QM/SRc	Quarter Sessions Records (Recognisances)
KAO:	Q/SRg	Quarter Sessions Records (Gaol delivery roll)
KRO:	Q/AW1/1	Wage rates for the county of Kent 1669
KRO:	Te/JQad5	Wage rates Tenterden 1618-1668

Public Records Office, Chancery Lane, London

PROB11	50-301	Prerogative Court of Canterbury Wills 1568-1660
PRO:	C142/693 No 26	Inquisition post-mortem - Sir Anthony Mayne 1612
PRO:	E179/127/516	Lay subsidy roll for Barkley & Cranbrook Hundreds (taxation) 1598
PRO:	E179/128/608	Lay subsidy roll for Barkley & Cranbrook Hundreds (taxation) 1628

Lambeth Palace Library, London

Lambeth	MS1126	Religious survey of parishes in the diocese of Canterbury at Lambeth Palace Library
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Canterbury Cathedral Library, Cathedral Precincts, Canterbury

Probate Sources

PRC2	1-34	Archdeaconry Court Probate Accounts 1580-1638
PRC10	2-72	Archdeaconry Court Probate Inventories 1566-1638
PRC16	231-263	Archdeaconry Court Wills 1640-1650
PRC17	40-70	Archdeaconry Court Wills 1566-1638
PRC27	2-12	Consistory Court Probate Inventories 1597-1646
PRC28	8-20	Consistory Court Probate Inventories 1618-1638
PRC31	120-128	Consistory Court Wills 1641-1646
PRC32	39-52	Consistory Court Wills 1597-1638

Records of the Ecclesiastical Courts of Canterbury Diocese

Detecta et comperta (presentments)

EcC	X1.8	1566-1567 various deaneries
EcC	X1.9	1567-1569 various deaneries
EcC	Z3.10	1569 Archdeacons' visitation (including totals of communicants)
EcC	X1.10	1570-1571 various deaneries
EcC	X1.11	1571-1572 various deaneries
EcC	X1.12	1574-1576 Charing deanery
EcC	X1.13	1576-1577 Charing deanery
EcC	X2.2	1578-1581 Charing deanery
EcC	X2.4	1582-1589 various deaneries
EcC	X3.5	1590-1592 Charing deanery
EcC	X3.8	1593-1596 Charing deanery
EcC	X4.3	1596-1600 Charing deanery
EcC	X4.5	1600-1603 Charing deanery
EcC	X4.8	1603-1606 Charing deanery
EcC	X4.11	1606-1608 Charing deanery
EcC	X9.9	1608-1610 Charing deanery
EcC	X5.5	1610-1615 Charing deanery
EcC	X5.9	1615-1620 Charing deanery
EcC	X6.7	1620-1627 Charing deanery
EcC	X6.8	1627-1637 Charing deanery
EcC	Z3.16	1637 Archdeacons' visitation

Other court records

EcC	X10.12-19	Deposition books 1564-1585
EcC	X11.1-19	Deposition books 1585-1672
EcC	J/J	Consistory court papers 1595-1639

Libri Cleri (clergy and parish officers)

EcC	Z3.9	1567-1572
EcC	Z7.1	1576-1579
EcC	X2.3	1580-1582
EcC	Z3.12	1582-1585
EcC	Z3.13	1586-1590
EcC	Z7.2	1591-1593
EcC	V/V1-55	1594-1642 (Visitation books)

Miscellaneous

CCL:	H/Z/26	Compton census (religious), original return for Biddenden
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Appendix 2: The Research Process

Chapter 2 has given a general overview of the methods used in this research and has highlighted major problems encountered. This appendix gives more details of the research process and the development of the methods employed. The way in which the actuality of research often involves compromise has been indicated. From this and other experiences, several conclusions are drawn for computing and anthropology.

Initial models, programs and data

One major problem that I faced in undertaking this research project was that of linking a large number of pieces of information. This information related to individual persons or groups of persons. It was derived from documentary sources as described in Chapter 2 of this thesis. Some of these sources were in what approximates to tabular form, such as parish registers, others consisted of blocks of text, such as wills.

The ideal model of persons and their relationships would consist of relating these pieces of information in two ways, through persons and through time. At the centre would be the ways in which individuals were related to other individuals, as kin, debtors, employers. This would incorporate temporal information which would allow me to know which people were alive at the same time and some idea of their age and/or stage of life course. Other information such as property, court texts and transmission details could be linked to both people and to their relationships.

This was however an ideal, rather than a realizable model. At the time that I began my research, the University of Kent did not have a full relational database management system available on the right machines. I intended to work mostly in a UNIX[†] system with the possibility of porting to micros. Berkeley Ingres was available on UNIX but precluded micros. Because the project would involve a certain amount of textual material, it would not have been easy to use even a large relational database management system to organise all of the information. Therefore it was clear from the start, because of the nature of the material and the software initially available, that a variety of computing techniques would have to be used.

I saw my first priority as building a model from the relationships given in the parish registers of Bidenden. This would help to identify most of the persons who would be important in the study and some of their relationships. I had written a simple program for building a model of persons and relationships as

[†] UNIX is a trademark of AT&T Bell Laboratories in the USA and other countries.

my project at the end of my first year. This had been used with a number of data sets and proved satisfactory for dealing with them. These data sets were from the details of kin relations given in Richard Gough's *History of Myddle* and genealogical data on the Saudi royal family. The model involved two files, one of people and another of relationships. These were read in by the program and stored entirely in memory. The person records were stored in a linked list, each node having a pointer to a linked list of nodes holding relationship data for that person. Each of these relationship nodes pointed to a person node. This meant that there were two ways of navigating the list of persons, in list order or through relationship links. When the name of a person was entered, the list was searched for matching names. Then all of the persons found, were presented one by one to the user along with all of their known relationships. The user could then choose whether to identify one of the presented persons as the individual sought or to create a new person record.

I decided to use the underlying concepts to write a more advanced model building program for my research. This program would need to perform some of the tasks that would be required of a database management system, but must also incorporate some features of record-linkage. These features would include a "soundex" system to allow more flexible name matching and a set of rules to narrow down the range of persons retrieved. Unlike my earlier program it was essential that temporal information was used in the selection process.

Software development and data collection were performed in parallel. The program was written while I was transcribing the parish registers from a microfilm copy, and then checking my transcription against the originals and the "Bishop's Transcripts". The first stage of the program held all of the data in memory. When it was working I began to enter the data. This proved successful but after about 2500 person records had been created in this way, along with their relevant relationship records, the program was beginning to run out of memory. At this time, development was taking place on Lucy, the anthropology Orion, on which I had a memory limit of 256K. I wished to keep memory requirements as low as possible so that the program could run on a wide range of platforms, including micros.

To this end it was necessary to further develop the program and move away from keeping the model entirely in memory. So a new version was written which incorporated more sophisticated data management. Now only indexes to the data files would be kept in memory along with any person and relationship records added each time the program ran. After quitting from the program separate programs merged the new data with the existing data files and recreated the indexes. This was so that new data could be checked before it was added to the main files, something which was very important in the uncertain days of development but became less necessary the more I used and was able to trust the program.

The program still used the two main data files containing person and relationship records. To these were now added the two index files. One was a sequential index locating each record in the person file

and the first record of the relationships for each person in the relationship file. The other was an inverted index using coded names as keys and identity numbers as terms, and was stored as a binary tree. The person records and the relationship records added or modified during a run were stored as linked lists and written out when the program terminated. When a name was entered, it was encoded and the code searched for in the inverted index. The identity numbers retrieved were then located in the sequential index and the appropriate records found. If the person passed the selection rules, the record plus known relationships was presented on the screen as before.

There are both dangers and benefits in using a substantial amount of real data for testing. Were I to have invented test data, I do not believe that I could have built in the number of problems that exist with real information. Incomplete records, the problem of ordering three sets of parallel events (baptisms, burials and marriages) and the more difficult names for matching, may well have been overlooked. It is unlikely that I would have made such a large body of data for the purposes of testing. This proved important because the program would have to deal with thousands of records and I wished to investigate efficient memory usage as the project proceeded. The dangers lie in errors that may enter the model at this stage through early program malfunctions and crashes. Information may be lost or misrepresented. Because of this a very close check must be made on data consistency. This was proved at one point when during such a check I found that six marriage records had been lost. It was necessary to keep an adequate backup of data.

Two examples can be given which illustrate the benefits of using a substantial amount of real data while developing a program. Firstly, the use of a list of about forty names and versions of names, many selected for their difficulty, to test the modified soundex coding system proved very useful. It allowed modification of the system and in particular indicated the usefulness of developing codes for initial letters. The utility of encoding sex along with name was also demonstrated. Secondly, practical use of the program indicated that a number of persons who were clearly inappropriate were being retrieved. This led to the provision of an extra rule to exclude persons who had been long dead at the date of the information being entered.

Dealing with information from wills

While the data entry process described above proceeded, I finished checking my register transcript, and began to abstract the wills of Biddenden people. I made a second data set, using the same program, of persons and relationships from the information in wills. This was used to check the consistency of the main model built from parish registers. It was especially helpful in distinguishing persons with identical names. Where the main model (from parish registers) was clear it was possible from the will model to further understand ways in which relationship terms were being used in the wills.

The main model was further modified on the basis of the information thus derived from the wills. Information from marriage licences was also used to clarify and refine the model. Data entry and the refining of the model was a long process. As problems were resolved they often pointed the way to new problems or to the resolution of other existing ones. The program produces a printed list of persons, sorted alphabetically by surname and first name, giving their relationships. This information is identical to that which appears on the screen during the search operation described above. The printed list was particularly useful for checking data and for comparisons between data sets.

It was originally intended that a specialised editor would be built into the program to correct errors. Development of this facility began but proved very time consuming. It was decided to abandon the editor and to perform corrections on the original data files. This had to be done with very great care and much cross checking but was a necessary compromise in order to complete the project.

As data entry, checking and refinement proceeded I was considering how to represent the information contained in wills and in probate inventories. There were three possible approaches that I could take with wills, as I was interested in the light that they might throw on the uses of relationships between people.

Firstly my abstracts could be entered directly as text files and searched with text retrieval programs. This would however be laborious and time consuming to do and would not allow fairly easy extraction of some types of information. A second solution involved building a complex model based around my person-relationship model, but incorporating information on each bequest and the conditions of bequest (see Fig A2.1). This would have provided a great deal of information but again would have involved much time and labour. It was also not realistically feasible without a relational database management system. I attempted to create a database for this type of information using the micro-computer database management system DbaseIII+¹ but this proved inadequate to the task and was quickly abandoned.

The third option was to build a simple model from the will information involving a summary of the data from each will (see Fig A2.2). Because of my focus on relationships, only the type of goods given and the type of relationship involved would be recorded. With cash bequests, the amount would be recorded. This model involved only two files, one with data on each will, the other with information on bequests. It was conceptually simple, suited to most of the queries that I needed to make on will data (see Chapter 4 for example results), and seemed more cost effective to implement. Each will was given a unique number and, by using the UNIX utilities *awk*, *sort* and *join*, a simple relational database was created. *Awk*, a pattern matching and data manipulation tool, could be used to extract records and data fields. *Sort* put the extracted data into a suitable order for matching with the other file through the will

¹ DbaseIII+ is a trademark of Ashton Tate Corporation

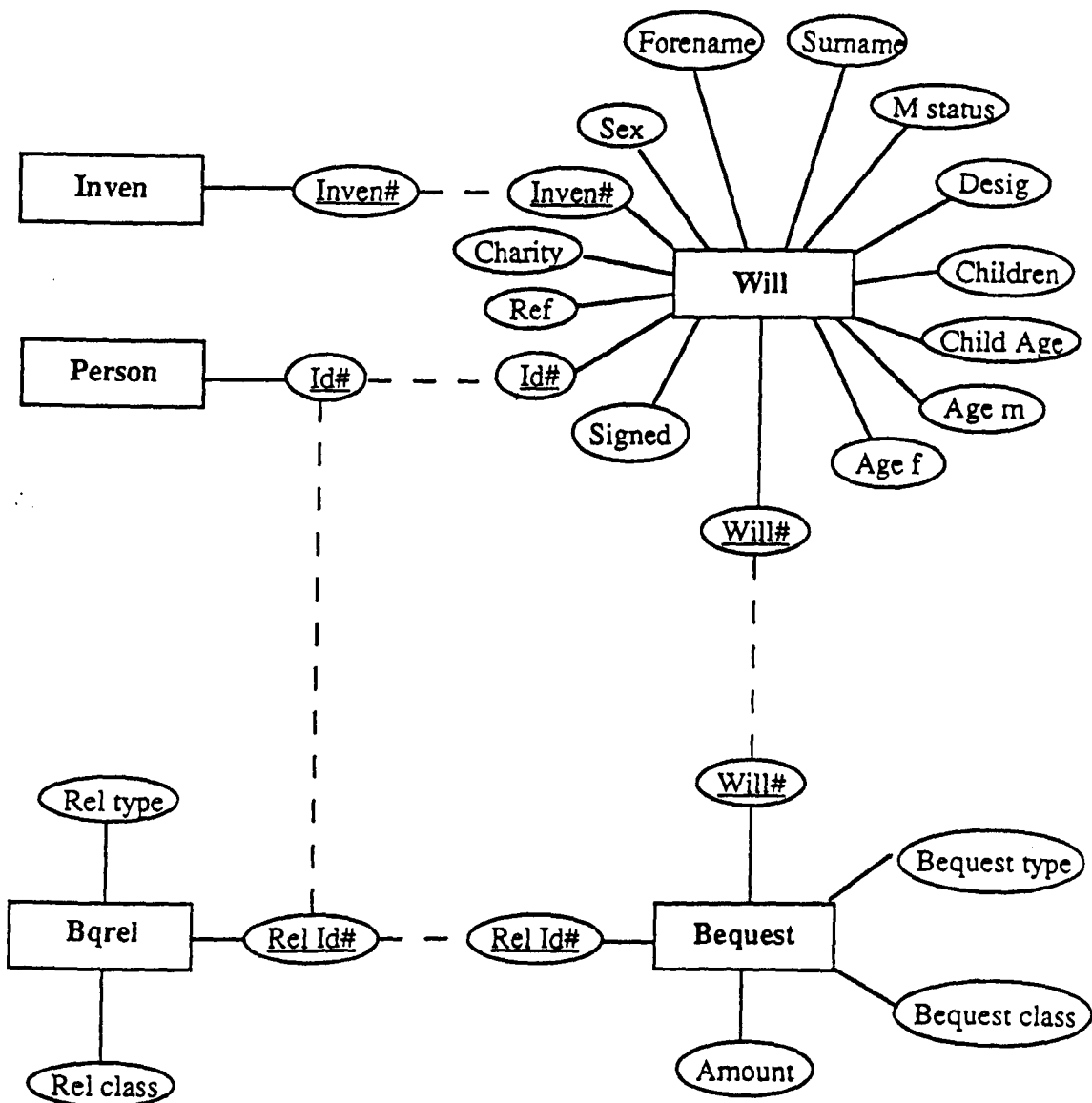


Figure A2.1: Structure diagram for a database of will information based on the person relationship model used for life event data.

number with *join*. In this form the database could be used to extract information about wills but was time consuming to use and difficult to update consistently.

Dealing with information from probate inventories

The information from probate inventories likewise could be represented in a simple or a complex way. Every item could have been given a record and related to general information about the inventory. There

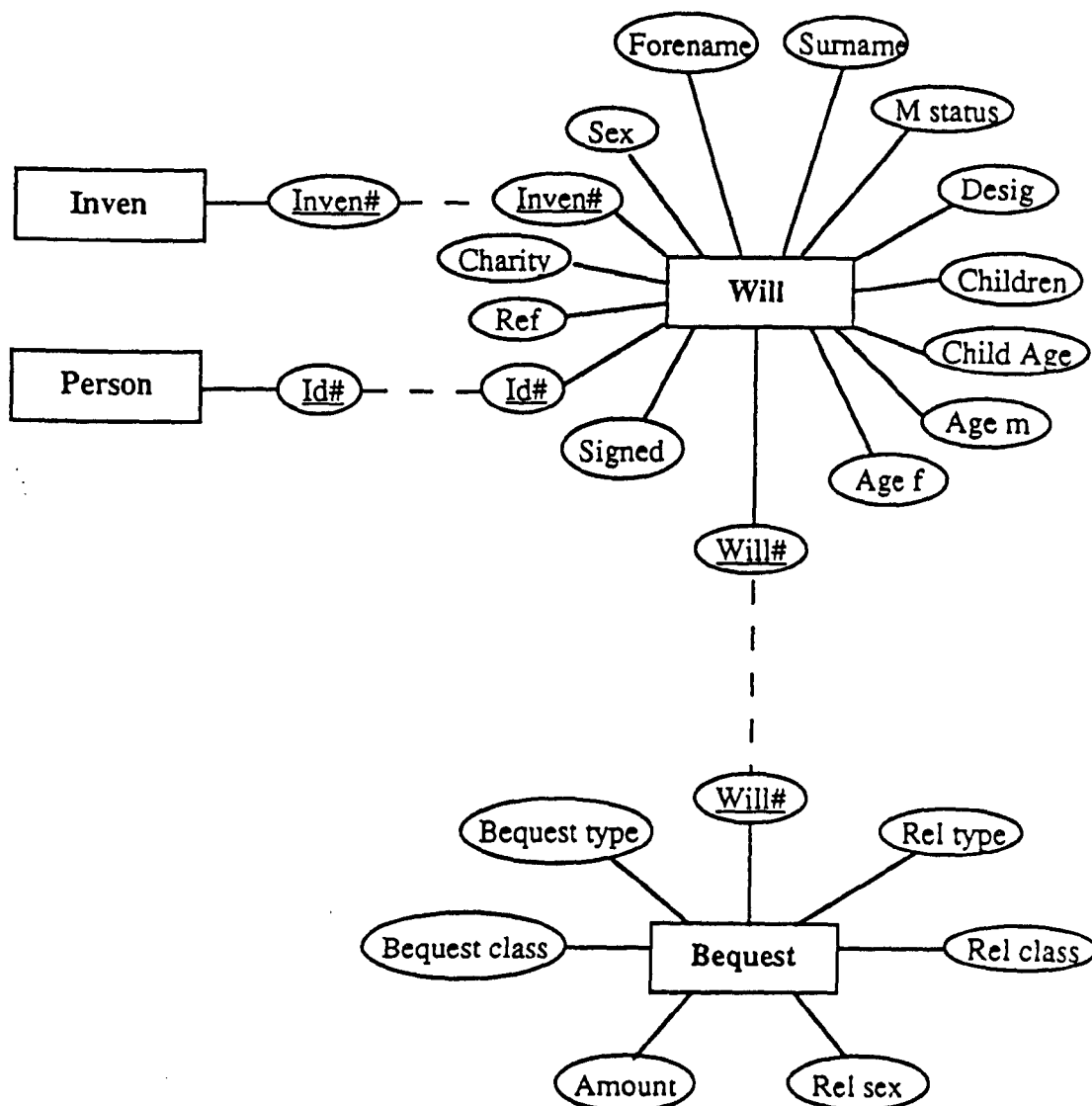


Figure A2.2: Simple model of will information as implemented.

was no real point in individually recording every pot and pan, and as is made clear in chapter 2, this would not have been a straightforward task. Therefore certain categories of item only were included, those which concerned a broad definition of work and economic activities. In retrospect I regret not having included some types of information such as measures of the amount of linen or pewter owned which would have provided indications of status which might elaborate those derived from other information. A file of information concerning rooms mentioned in the inventory was created, with a view to studying variation in housing, but this was not used during the project reported here.

Each will and inventory was also identified to the person for whom it was made by including the identity number of the individual in the main person/relationship files. This gave some coherence to the project despite there being no formal organising mechanism, providing an overall data model.

At this time a number of probate accounts were also abstracted. These were maintained as a paper archive, but the persons involved were located to the will, inventory and person data files where possible. The set of accounts was incomplete with only those from the Archdeaconry court being examined due to time constraints and the shortcomings of the early modern indexes to the registers.

Later in the project brief notes on each will were entered into a text file using an editor. Keywords relating to important themes such as DOWRY were used to signal relevant wills. These could be retrieved by searching the file with the *sfind* utility from the UNIX *hum* (humanities programs) toolkit, using the keywords. *Sfind*, with the -s flag, retrieves blank line separated paragraphs from text files on the basis of keywords. It has pattern-matching metacharacter facilities. This file of notes proved very useful during the writing up process, allowing relevant quotes or examples to be identified.

When the VAX/VMS² system was installed at Kent, I transferred copies of the person and relationship files to the RDB relational database. This system proved very difficult and time consuming to use as an interactive integral "front-end" was not available. All queries had to be embedded in a conventional programming language such as C or Pascal. This facility could have been used to implement the model building program but no means were provided of expressing *ad hoc* queries which is very important for a research database. Therefore after some experiments this approach was abandoned.

Textual information from ecclesiastical court records

At this time I began to transcribe parts of the ecclesiastical court records as discussed in Chapter 2. My transcripts consisted of blocks of text of varying length (from one sentence to a long paragraph), entered directly onto a portable micro-computer and then transferred to the anthropology department mini. Because the Canterbury Cathedral Record Office was due to close for a year in the latter part of my research period, the work of making these transcripts had to receive priority over other tasks for a time.

When they were complete I made a concordance using the *Oxford Concordance Program*.³ This software package has been much used in the analysis of literary texts. The output is a concordance of every word in the text except those words excluded by the user (usually words such as "the" and "on"). A concordance is an alphabetically ordered list of words set within the context of surrounding text, usually

² VAX, VMS and RDB are registered trademarks of Digital Equipment Corporation.

³ Oxford Concordance Program is a trademark of Oxford Electronic Publishing

one line. The user provides an ASCII file of text along with a set of instructions detailing words and symbols that the program is to ignore. Such instructions are given in a structured format at the head of the text file. Although a concordance building program called *kwic* (keyword in context) is provided in the *hum* toolkit, this is suitable for use with smaller samples of text only. As the court transcripts amounted to over 300K in total, the larger package was better suited to my task.

The concordance provided both an index to the texts and a way of examining how words were being used within them. An example is the interpretation of the phrase "common crime". By using the concordance to examine other adjectives often associated with the word "crime", I was able to decide on an interpretation of *common* other than the meanings of frequently occurring or vulgar. Alternative words in the context were *open* and *public* which led me to interpret *common* as meaning commonly known. This may not appear to be a major discovery in itself, but was important in aiding my understanding of the nature of knowledge in relation to offences and the role of public discourse in reputation disputes.

I made a further index of Biddenden cases detailing the type of offence, the date and the person involved. The identity number of the person in the main person file was used to aid reference. Each case was given an identifying number. The number of times that a person appeared in court, in what circumstances, who else was involved and the types of cases could be examined. Such a procedure was particularly useful in looking at the persons involved in illegitimacy cases (chapter 5). This index file could also be used to examine the types of cases relative to one another over time.

Analysis and Presentation

The output from my model building program consisted of an alphabetical listing of persons giving brief details of their known relationships to other people recorded. I realised that a better form of output was needed to provide a reference when writing up. I would also require a set of standard demographic measures for my population.

A further program was written using the person and relationship files created by the model building program as input. This program also reused a proportion of the code and some of the data structures from the model building program. It was designed to build a model of the immediate family of an individual over her/his life course. One form of output was a tabulated description of certain demographic events during a life course with embedded commands for the text pre-processor *tbl* to allow a neat laser printed page to be produced (see Chapter 2, p.51 for an example).

This program was not without its own problems. Because I wished to be able to have a printed sheet for any person, I needed to be able to construct probable life-course events where the data was imperfect. The output listed children for each person under the relevant spouse where possible. If no spouse was known

this was clearly impossible. Where spouses were known but the date of marriage or end of marriage was not certain for every case a problem was raised. I decided to assign children to marriages by creating fictive end or beginning of marriage dates based on the burial date of the previous spouse or the marriage of the next one. These fictive dates were only used for this purpose and were never printed out. The data was organised to note them as fictive and not suitable for use in any other context such as the calculations of age at marriage or at birth of children printed on the output sheet. This step was taken to provide possible life-course material, for use with reservation, in discussion. Such constructed data was entirely excluded from demographic measures.

A second set of output functions gave a file of standard demographic measures. The functions used only a subset of the data which met the demographic criteria outlined by Wrigley for reconstitution studies. The measures were arranged in a set of standard formats to make them suitable for extraction using the UNIX *grep* or *awk* utilities and the *dm* program in the *Unix/Stat* toolkit. Another program, *desc*, from the same toolkit was used to provide statistical summaries of these measures. Most of the figures calculated in the demographic section of Chapter 3 were produced in this way. Some data was exported to SPSSx⁴ to investigate the feasibility of doing this and to make use of cross-tabulation which is not available in *Unix/Stat*.

However, certain types of demographic measure such as child mortality and closed family size needed special treatment. For child mortality calculation a measure of when the child was in observation had to be calculated. For closed family size, calculations can only be performed where the starting and end dates for the parents' marriage are known. Special functions were added to the new program, specifically to deal with these problems. They were incorporated into the parts of the code devoted to output, while the model built remained the same. Because of time constraints, it was not possible to redesign the program to take these changes into account. This meant that while new functions were added, they were not always incorporated into the program in an ideal manner. It is clear that any future version of the program will need to address the problem of types of calculation.

As I have made clear, existing programs were used for statistical work wherever possible. Two demographic calculations, child mortality and age-specific marital fertility, could not be easily undertaken with existing tools. These were considered essential for my research and therefore special small programs were written to produce them. A special output option of the demographic program produced the input for the child mortality program. By using the *dm* tool mentioned above to select subsets of data, calculations could be made for defined periods of time, by submitting the input in blocks relating only to the encompassed dates.

⁴ SPSSx is a trademark of SPSS UK Ltd.

The problem of calculating age-specific marital fertility was less straightforward. Because of time constraints the data was constructed partly by hand using the raw standard demographic measures produced by the "life-course" program, for cases selected on the relevant criteria. This was then typed in as a tabular file which was used as input for a second small program designed to produce these particular measures. The two cases outlined here are contrary to the ethic of the original demographic program which was to produce a general set of data usable as input to existing analysis tools.

The Ingres Database

During the summer of 1988-89 the University of Kent obtained the Ingres⁵ relational database management system. This system is both fairly easy to use and very powerful. It became available at Kent on the VAX/VMS, Sun⁶ UNIX workstations and IBM PC⁷ compatibles. Importing both my person relationship files and other relationally organised data into Ingres was very simple. I took the opportunity to reorganise the person/relationship database into four tables by creating an event table for marriages and a note table. Because all data files outside of Ingres had been organised primarily around person identity numbers and secondarily around document numbers, it was possible to create an integrated relational database within Ingres with little effort.

Further data was entered into the database at this time. This included information on office holding and data on executorship and overseeing of wills. Again the existing system of identity numbers made it possible to extend the database in an integrated way to answer new questions.

The database was initially built on the Sun UNIX workstation system so that it could be used with Dr Ryan's graphical program *Gnet*. The *Gnet* program has been used during the research for examining information on relationships in a graphical form. The program was in development during this period and the Biddenden data was used as one test dataset for this. Using this data various problems were encountered and many improvements were made during the course of this research project. When the data was initially examined in this way, I tried to display all of the known relationships outward from one individual. As a result of this query, 3000 related individuals were displayed at once. Such a large and complex network was impossible to understand in one piece. Therefore a facility for limiting the number of related persons outward from the chosen individual was added to the program. The Biddenden database was later installed on an IBM PC AT compatible.

⁵ Ingres is a trademark of Relational Technology Inc.

⁶ Sun is a trademark of Sun Microsystems, Inc.

⁷ IBM, IBM PC XT and IBM PC AT are registered trademarks of International Business Machines Corporation.

The original model building program and the demographic program still existed independently of the Ingres database. They could become "front ends" to this database but there was not time available to develop this possibility given the late arrival of Ingres within the research project timetable. It was possible however to examine demographic data for groups selected from the database by exporting a list of relevant person identity numbers from Ingres and using these as input to the demographic program.

Statistics based on information from wills and probate inventories were obtained by counting relevant instances using the internal functions of Ingres and then employing a pocket calculator on these for further calculation. The numerical data based on parish register information used in the section on migration were also produced in this way. This seems to indicate a possible need for the provision of simple statistical functions within a database query language, or as a form of "front end" to a database. Currently counting, summing and averaging functions are available as part of Ingres SQL but I have found a need for other basic, simple calculations such as percentages, crosstabulation and chi-square. These, of course, can be performed using more complex SQL queries but for many measures it is easier to export results to other programs.

Writing Up

The final thesis was written on my own Atari ST⁸ microcomputer using the public domain text editor *MicroEmacs*. Draft chapters were printed at home on a small printer or transferred to the anthropology UNIX mini, Lucy, and printed on the main service line-printer. The intention was at all times to produce the final text on a laser-printer using the UNIX text formatting program *troff* with the *-ms* macros. The brief formatting commands used by this program were inserted into the text before it was transferred from the micro to the UNIX system for printing the final version. Diagrams were produced using the public domain *Gnuplot* program, *Gnet* and PostScript⁹.

Conclusions

Four important points have arisen out of the practice of my research concerning the integration of computers into anthropology. Firstly the need to use a wide range of types of software to deal with the different types of information examined. One package could not deal with this variety of information nor perform all of the necessary tasks. It is very unlikely that this ever will be the case. Such requirements are often difficult to generalize and may vary considerably between individual research projects. This indicates that a 'tools' approach is more suitable. This however does involve its own problems.

⁸ Atari and ST are trademarks of Atari Corporation

⁹ PostScript is a trademark of Adobe Systems Inc.

My second point involves these problems. Some people think that a computer can organise their research information for them. This is a false assumption. Although using a computer can help with the organising of research data, whatever form the information may take, the planning must be done by the human researcher. This is apparant in building a database. Information must be organised in such a way that different pieces of data can be related through an overall plan. Effective use of a database imposes very clear obligations upon the user to organise the data for this purpose, and several books and articles provide guidance in this problem.

A similar problem is involved in trying to organise research using a variety of software. I have attempted to achieve some degree of coherence through the whole project by using person and document identity numbers so that different but connected pieces of information could be related whether by hand or using computer methods. The system is not, of course, perfect. The court records are not really well integrated and require further work to make them so. The plan must also reside in the researchers head rather than being fully automated. Indeed, it may encompass information which is not stored on a computer but in more traditional notebooks and paper files. Any changes in one part of the system, such as changing a person identity number, have to be reflected through the whole. This in practical terms means a great deal of work.

These procedures were suitable for myself. The University of Kent has a campus wide network to which most machines are connected directly or indirectly. Therefore access to different computers and transfer of files is greatly facilitated. Although the picture is improving, most anthropologists do not have access to such a network. I am used to using a wide range of software on different machines, to transferring files between machines, and can write programs to deal with data conversion. Most people in social anthropology have limited experience with computers and little time and perhaps, inclination, to learn more than basic data management skills. Therefore using a more limited range of software might be more appropriate for most people. The key to effective use however remains the same. Learning to use computers is not really about which key to press or menu item to select in a particular piece of software. It is about how to organise information to achieve good retrieval and to aid in making connections while at the same time maintaining the integrity of the research data.

The need for organisational skills raises the problem of whether or not all people wishing to use computer software for research will also wish to learn how to model the data and how to implement such models. With programs such as Ingres, tools such as ABF (Applications By Forms) make implementation much simpler. They still require great effort in normalising and modelling the data. Even with ABF, effective use often demands writing simple programs in the applications language OSL. It is likely that these demands will mean that some specialist help will be required by many users. This is even more likely as software becomes more powerful and therefore more complex.

The third point involves keeping track of which results were the product of which questions. One frequency graph from *desc* can look very much like another, although the input may be very different. Using the independent tools of *Unix/Stat* requires much more self discipline on the part of the researcher than the integrated but less flexible environment of a package such as SPSSx. Therefore I developed a system of UNIX shell-scripts and editing procedures to identify the analyses and label the output. In many ways this again relates to the use here of skills which may well be beyond those which most anthropologists have the time or desire to learn.

The final point is related to the problem of specialist skills. Through my training year and subsequent research I have gained knowledge and practical experience of application design and programming. These skills have enabled me to achieve a considerable amount and will continue to be of use in themselves and as a basis from which to learn more. One of the problems found in this research project has been trying to combine the skills of researcher, designer and programmer in one person. Both design and good programming practice have at times had to be sacrificed to the time constraints of the project. It is well known in Computer Science that good software takes a long time to become useable and that it is usually the work of a team rather than one person. If applied computing is to become widespread within social science and humanities disciplines such considerations need to be well understood.

There is a clear tension between the flexibility offered by a 'tools' approach with its associated need for demanding input by the user, and the constraints of using a package which places less burden on the researcher but may not be suitable for many tasks. There is a myth that software will improve to meet these requirements with time. Although some software to deal with specific problems and to improve ways of solving general ones will become available, it is unlikely that all problems will be met. Much, if not most, software is designed for administrative use in commercial and public service situations. Beyond special applications in the big budget sciences, most academic users are constrained to use the administrative software. This is unlikely to change in the foreseeable future. Apart from this, research practices and their associated methodologies change through time. The applications needed by current researchers might be less important in twenty or thirty years time. It is important that the limitations of available software are not allowed to interfere with the development of method. Computers are after all only tools.

Appendix 3: Software and Hardware used during the research project

Computers used in the project

The following hardware was employed during this project as described in Chapter 2 and Appendix 2.

Lucy - Anthropology Orion running Unix¹
Eagle - UKC Service VAX 780 running Unix
Saturn/Janus/Titan - UKC Service VAX cluster running VMS²
Atari ST 1040 and Mega2 running TOS³
Viglen IBM PC AT 286 compatible running MS-DOS⁴
Sun⁵ workstations on ethernet running Unix

Software used in the project

A variety of software, commercial, public domain and specially written, was used during the course of the project. The methods of employment are described in Chapter 2 and Appendix 2.

Commercial packages

Ingres⁶ Relational DBMS
Oxford Concordance Program⁷
RDB Relational DBMS
SPSSx⁸
DbaseIII+⁹

Unix Tools

grep, awk, join, sort, nroff and the -ms macros, unixlstat, the hum utilities, Berkeley C compiler.

¹ UNIX is a trademark of AT&T Bell Laboratories.

² VAX, VMS and RDB are registered trademarks of Digital Equipment Corporation.

³ Atari, ST, Mega2 and TOS are trademarks of Atari Corporation

⁴ Viglen is a trademark of Viglen Ltd., IBM PC and AT are trademarks of International Business Machines Corporation, MS-DOS is a trademark of Microsoft Corporation.

⁵ Sun is a trademark of Sun Microsystems, Inc.

⁶ Ingres is a trademark of Relational Technology Inc.

⁷ Oxford Concordance Program is a trademark of Oxford Electronic Publishing

⁸ SPSSx is a trademark of SPSS UK Ltd.

⁹ DbaseIII+ is a trademark of Ashton Tate Corporation

Non Commercial Programs

Gnet - interactive graphical network display program written by Dr Nick Ryan, Computing Laboratory, UKC

Own Programs with brief description

This section consists of a description of the main programs written for the project. It is designed to be of interest to programmers. The text should be used in conjunction with the appropriate call graph.

1. rels - the main model building program

The rels program allows the user to interactively enter, retrieve and link records in order to build the population and relationship model. There is an interface consisting of menus and forms. The operation of this program, and the data model are described in pp. 35-46 of Chapter 2 with further information in Appendix 2. The most important functions are shown in call graph Fig. A3.1. A number of functions and data structures are re-used by the other programs described below. Descriptions have not been repeated there.

Data structures

```
struct date {
    unsigned int day;
    unsigned int month;
    unsigned int year;
};
```

Structure for storing date in three integers. Only used when performing calculations on dates. A date is otherwise stored in a single integer in order to save space. Conversion is performed with the `shortdate()` and `split_date()` functions.

```
struct mar {
    char *Pmar; /* place of marriage */
    unsigned int date;
};
```

Structure for storing marriage data;

```
typedef struct reltype {
    char *mot; /* relationship term eg. 'mother' */
    struct reltype *next_type;
} RTYPE;
```

Structure for storing data on type of link. This was introduced to avoid having to store the relationship name in each link node and therefore to save space.


```

typedef struct link {
    unsigned int id1;      /* identifier of person 1 */
    RTYPE      *rt;       /* pointer to relationship term */
    unsigned int id2;      /* identifier of person 2 */
    char      stat;       /* used to note new or edited data */
    struct mar *mp;       /* pointer to marriage node */
    char      cert;       /* accuracy of link */
    struct link *nextlink;
} LINK;

```

Structure for storing link data. Along with the person structure (see below) this type of node forms the main building block of the rels model.

```

typedef struct person {
    char      *fname;     /* first name of person */
    char      *sname;     /* surname of person */
    unsigned int id;      /* person identifier */
    char      sex;
    char      *desig;     /* occupation or social status term */
    char      *note;
    char      *Pbapt;     /* place of baptism */
    unsigned int bapdate; /* date of baptism */
    char      *Pbur;     /* place of burial */
    unsigned int burdate; /* date of burial */
    unsigned int mdate;   /* date of first marriage recorded */
    char      state;     /* used to note new or edited data */
    struct person *next;
} PERS;

```

Structure for storing person data

```

struct tnode {
    unsigned int code;    /* soundex code of name (index term) */
    unsigned int n_ints; /* number of entries for term */
    unsigned int *list;  /* pointer to array of entries */
    struct tnode *left;
    struct tnode *right;
};

```

Structure for node of inverted index based on soundex coded names.

```

typedef struct loc {      /* node for seq fileindex */
    unsigned int idno;
    long      pno;
    long      rno;
} LOC;

```

Structure for sequential index node. Stores offsets in person and relationship files of records for each identity number.

```

struct tabline {
    char*rel;      /* relationship term */
    char*mrev;    /* reverse term for male relative */
    char*frev;    /* reverse term for female relative */
    char*prev;    /* reverse term for unsexed relative */
    int rcode;    /* complex model code */
    int dcode;    /* display order code */
};

```

Structure for line of relationship table. Reverse terms are given for all relationships (eg. parent - child). The codes are used for classifying in the complex model (eg. mother/father/parent all have one code) and for display order in output from rels.

Function descriptions

Top Level Functions (see Fig. A3.1):

```

void main(argc, argv)
char *argv[]; int argc;

```

Calls `index()` to read inverted index and sequential index files and store indexes. Calls `read_table()` to read `tdefs` file and store table. Calls `in_data()` for interactive search and data input. If data has been added at end of program run, calls `out_p()` and `out_r()` to write it to output files.

```

struct tnode* mkindex ()

```

Calls `build_tree()` to create inverted index tree and `make_loc()` to create sequential index array.

```

void in_data (pin, rin)
FILE *pin, *rin;

```

Calls `menu()` to display program options. For search/entry calls `ent_type()` to determine entry type, `in_person()` to search/enter person details and `in_rel()` for relationship and related person. Calls `pr_screen()` to display output on screen or `lprint()` to send output to printer. Quit option returns to main.

```

void read_table (in)
FILE *in;

```

Reads table data from definitions file into array of tabline nodes. Table is searched by `table()`.

```

void out_p (pout)
FILE *pout;

```

Accesses `PERS` node list sequentially and writes details to output file. The output files are named as "inputfile.t" to distinguish them from the input files (see the 'merge' program).

```

void out_r (rout)
FILE *rout;

```

Accesses `LINK` node list sequentially and writes details to output file.

Other functions (see Fig. A3.1):

```
struct tnode* build_tree (in)
FILE *in;
```

Reads each line of inverted index file into node. Allocates array for ids in each node. Calls maketree() to insert node into binary tree and then rebalance() to balance completed tree. Returns root of tree.

```
int calc_age (p, age)
PERS *p; int *age;
```

Calculate rough age if enough information and whether dead or alive if cut off date being used. Returns whether dead or not.

```
int checkdate (p)
PERS *p;
```

Checks whether person retrieved obeys demographic rules and returns TRUE or FALSE.

```
PERS* checkpers (fname, sname, sx, pin, rin)
char *fname, *sname;
char sx; FILE *pin, *rin;
```

Finds person node with matching names using findpers () or creates new node. Returns pointer to node or NULL if search abandoned.

```
void display_p (rin, pin, p, i)
FILE *rin, *pin;
PERS *p; int i;
```

Displays details for person using screen output functions pr_pers() and pr_det() and then calls get_rels() to display related persons.

```
int encode (name, code)
char *name, *code;
```

Examines each letter of name, assigning a digit code based on groups of letters and relation to other letters. See Chapter 2. Returns number of digits plus one.

```
int ent_type ()
```

Menu for selecting type of entry. Flags are set for baptisms, burials or marriages with default for other types of entry.

```
PERS* findname (code1, code2, sx, p)
long code1, code2;
char sx; PERS *p;
```

Finds persons with matching codes in linked list of PERS nodes.

```
PERS* findpers (fname, sname, sx)
char *fname, *sname; char sx;
```

Encodes names and sex with getcode(). Searches list of PERS structures using findname(). Searches

inverted index with `scan_tree()` and then retrieves records with `search_tree()`. Uses `display_p()` to show retrieved persons and relationships to user. Returns pointer to node that user chooses, otherwise NULL.

```
PERS* find_p (tp1, tp2, pin)
struct tnode *tp1, *tp2;
FILE *pin;
```

Matches id terms in index nodes using `get_term()` and `search_term()` and locates record in data file using `loc_rec()`. Calls `checkdate()` to check person retrieved fits demographic rules for query.

```
void find_relative (rel, pin, i, stream)
LINK *rel; int *i;
FILE *pin, *stream;
```

Looks up relative by id in list of person nodes and sequential index. Displays details of relative on screen.

```
long get_code (name, sex)
char *name, sex;
```

Calls `make_code()` to get code for name, returns code converted to long.

```
LOC* get_offset (key)
unsigned int key;
```

Binary search on array of structures after Kernighan & Ritchie¹⁰ Returns pointer to structure containing key.

```
int get_r (stream, term, l)
FILE *stream; unsigned int term;
LINK *l;
```

Reads line from relationship data file into LINK structure if first item in line is same as id passed as parameter. Returns false if no records found for id.

```
PERS* get_rec (offset, stream)
long int offset; FILE *stream;
```

Locates person record in data file by offset in bytes. Calls `read_person()` to read from file.

```
void get_rels (rin, pin, key, stream)
FILE *rin, *pin, *stream;
unsigned int key;
```

Looks up relationship record for id in sequential index using `get_offset()` and calls `get_r()` to read record from data file. Then calls `find_relative()` to find details of related person and display on screen.

```
unsigned int get_term (tp)
struct tnode *tp;
```

Returns next id from array in index node or 0 if at end of array.

¹⁰ B.S. Kernighan and D.M.Ritchie 1988: *The C Programming Language* London: Prentice Hall

```
PERS* in_person (pin, rin, cur_name)
FILE *pin, *rin; char *cur_name;
```

Search for person on names and sex using checkpers (). Create new person record or modify details of old one. New or modified records stored in linked list of PERS structures.

```
int in_rel (pin, rin, name, idA)
FILE *pin, *rin; char *name;
unsigned int idA;
```

Interactive entry of relationship details. Calls in_person () to search for, create or modify details of related person. Makes link in both directions. Returns TRUE or FALSE depending on whether search/entry abandoned at this stage.

```
PERS* loc_rec (key, pin)
unsigned int key;
FILE *pin;
```

Finds person record in sequential index using get_offset() and then calls get_rec() to locate record in data file.

```
void lprint (pin, rin)
FILE *pin, *rin;
```

Opens pipe to Unix command lpr. Calls pr_menu() and pr_select() to print chosen details.

```
struct tnode* maketree (root, ncode, n, id_list)
struct tnode *root;
unsigned int *id_list;
unsigned long ncode; int n;
```

Builds binary tree from inverted index, sorted on code. Returns root of tree. Based on an algorithm in Stout and Warren¹¹

```
void make_code (name, code, sex)
char *name, *code, sex;
```

Calls encode() to make soundex-type code for name. Appends digit for male, female and unknown sex to code string.

```
int make_loc (in)
FILE *in;
```

Reads each line of sequential index file into node and stores nodes in an array. Returns number of records read.

```
int menu ()
```

Displays program options, allows user to set some parameters and returns menu choice.

¹¹ Q.F. Stout and D.L. Warren 1986: 'Tree rebalancing in optimal time and space'. *CACM* 29.9, 902-908.

```
void pr_all (rin, pin, stream, name2, name1, sx)
FILE *rin, *pin, *stream;
char *name2, *name1, sx;
```

Looks up last names of person and name2 using `getcode()`, `scan_tree()`, `get_term()` and `loc_rec()` to locate record. If records located uses `pr_indv()` to display/print them.

```
void pr_det (p, age, stream)
PERS *p; int age; FILE *stream;
```

Display/print details of person. Calls `calc_age()` to calculate rough age and if alive where cut-off date has been specified.

```
void pr_indv (rin, pin, stream, p)
FILE *rin, *pin, *stream; PERS *p;
```

Display/print name, details and relationships for one person using `pr_pers()`, `pr_det()` and `get_rels()`.

```
int pr_menu (string)
char *string;
```

Displays menu for print options, allows some parameters to be set by user and returns menu choice.

```
void pr_pers (p, stream)
PERS *p; FILE *stream;
```

Display/print names and id of person

```
void pr_screen (pin, rin)
FILE *pin, *rin;
```

Sets output device to be `stdout`. Calls `pr_menu()` and `pr_select()` to display chosen details.

```
int pr_select (rin, pin, stream, str, i)
FILE *rin, *pin, *stream;
char *str; int i;
```

Reads last names from alphabetical list in file "pnames" using them to order output. Calls `pr_all()` to send details to device sending names from list as parameter.

```
void read_person (in, p)
FILE *in; PERS *p;
```

Reads line from person data file in into PERS structure.

```
struct tnode* rebalance (root, size)
struct tnode *root;
unsigned int size;
```

Balances complete tree. Based on an algorithm in Stout and Warren (*op. cit.*). Returns new root of tree.

```
struct tnode* scan_tree (code, tp)
unsigned int code; struct tnode *tp;
```

Recursive search of binary tree containing the inverted index. Returns pointer to index node with matching code.

```
int search_term (tp, term)
struct tnode *tp;
unsigned int term;
```

Binary search on array of integers after Kernighan & Ritchie (*op. cit.*).

```
PERS* search_tree (tp1, tp2, pin)
struct tnode *tp1, *tp2;
FILE *pin;
```

Determines shortest array of ids in index node and calls find_p() to locate person record using these arrays.

```
unsigned int shortdate (d,m,y)
unsigned int d,m,y;
```

Puts three date integers into one integer

```
void split_date (dt,date)
struct date *dt;
unsigned int date;
```

Splits date integer into day, month, year and returns pointer to struct date

```
char* table (word, sex)
char *word; char sex;
```

Lookup relationship type in table giving reverse relationships.

2. lco - the second model building and demographic program

This is a program for building a more complex model and for providing demographic statistics. The results can either be presented as a summary of the main demographic events in the life of an individual or as statistics suitable for input to other programs. More information about this program, including a reproduced summary data sheet, can be found in pp. 50-52 of Chapter 2 and in Appendix 2. The most important functions are shown in call graph Fig. A3.2

Data structures

```
typedef struct lcego {
    char    *fname;      /* first name of person */
    char    *sname;      /* surname of person */
    unsigned int id;     /* person identifier */
    char    sex;
    char    *des;        /* occupation or social status term */
    char    *nt;         /* short note about person */
    char    *Poc;        /* date of baptism */
    unsigned int doc;    /* place of baptism */
    char    *Pob;        /* date of burial */
    unsigned int dob;    /* place of burial */
    char    state;      /* used in assigning child to parent */
    struct lcego *parent [2]; /* pointer to parent array */
    unsigned int parmar; /* date of parents' marriage */
    struct person *sibl; /* pointer to sibling list */
    struct spouse *sps; /* pointer to spouse list */
    struct person *child; /* pointer to child list */
} EGO;
```

Structure used for storing central person in lco program. Details of relatives are recorded in person structs (see above).

```
typedef struct spouse {
    char    *Pom;        /* place of marriage */
    unsigned int dom;    /* date of marriage */
    char    domst;       /* accuracy of date of marriage */
    unsigned int eom;    /* date of end of marriage */
    char    eomst;       /* accuracy of end of marriage date */
    struct person *pers; /* pointer to spouse person */
    struct person *xchild [30]; /* pointer to child list */
    struct spouse *nxtsp;
    char    cert;        /* accuracy of marriage link */
} SPS;
```

Structure used for marriage data. The details of the spouse are stored in the person struct pers.

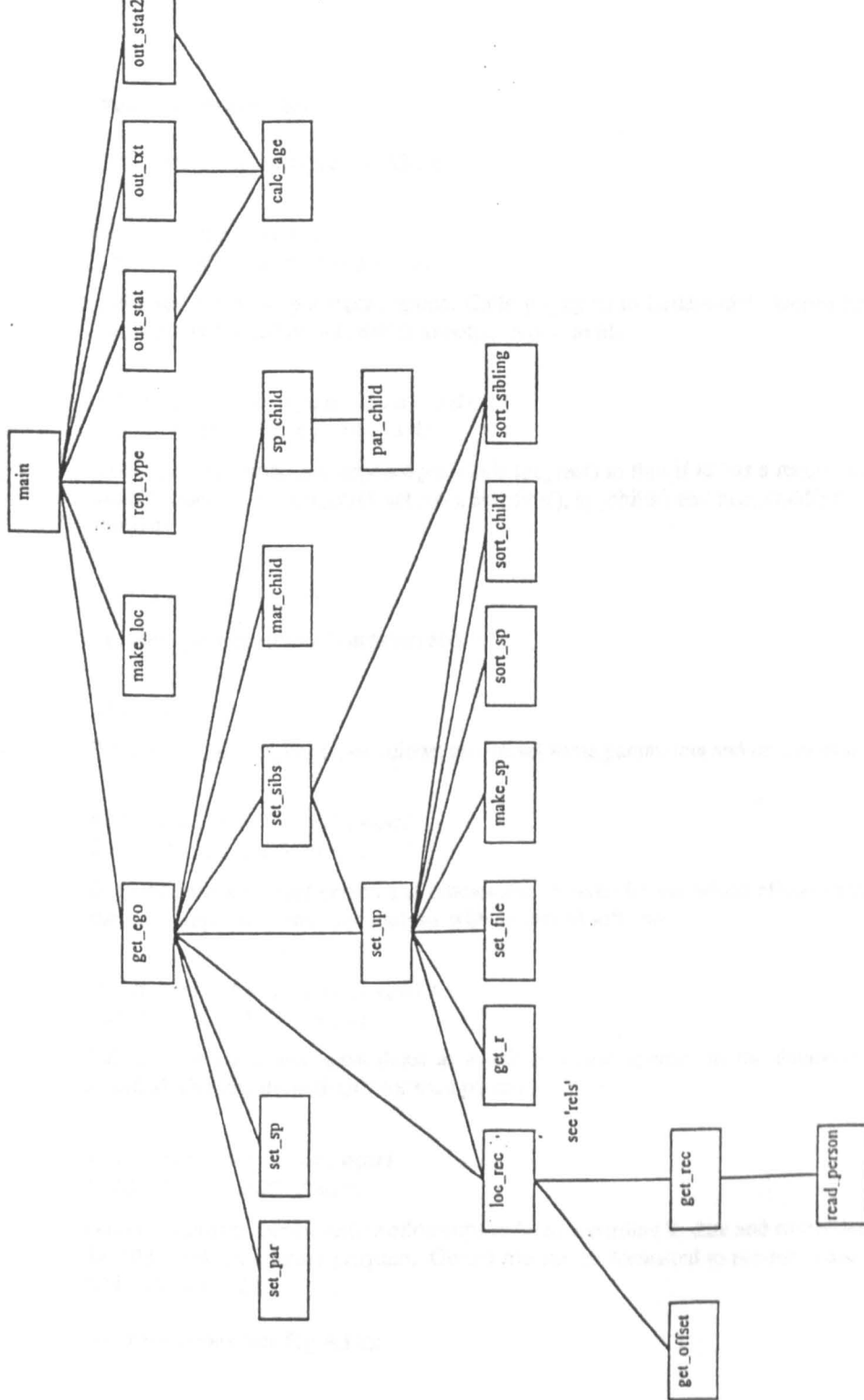


Figure A3.2: Call graph for the Lco program.

Function descriptions

Top Level Functions (see Fig A3.2):

```
main(argc, argv)
int argc; char *argv [];
```

Calls rep_type() to get report option. Calls get_ego() to buildmodel. Depending on report option uses out_txt(), out_stat() or out_stat2() to output report to file.

```
EGO* get_ego (pin, rin, id)
FILE *pin, *rin; int id;
```

Constructs ego node and appendages. Calls loc_rec() to find if id has a record and then set_up() to build simple model. Uses set_par(), set_sp(), set_sibs(), sp_child() and mar_child() to extend model and check integrity.

```
int make_loc (in)
```

See Rels program (other functions) above.

```
int rep_type ()
```

Presents menu of report types, allows user to set some parameters and returns number of menu choice.

```
void out_stat (out, ego)
FILE *out; EGO *ego;
```

Outputs statistics about person and relationship in fixed format which allows extraction using Unix tools such as "grep" and "awk" for analysis with statistical software.

```
void out_stat2 (out, ego)
FILE *out; EGO *ego;
```

Calculates earliest and latest dates at which a person appears in the database and the type of event signified. Outputs these details for each person.

```
void out_txt (out, ego)
FILE *out; EGO *ego;
```

Outputs details of person and relationships ordered according to date and embedded in commands used by the "tbl" table formatting program. Output file can be formatted to produce page of details as shown on p.51 of Chapter 2.

Other Functions (see Fig A3.2):

```
void make_sp (l, sp, edob)
LINK *l; SPS *sp;
unsigned int edob;
```

Calculates beginning and end of marriage from marriage date and burial dates of ego and spouse if known.

```
int mar_child (rin, ego)
FILE *rin; EGO *ego;
```

Searches relationships of each child to find first marriage and then stores date of this marriage in child node.

```
int par_child (cbap, sp, f)
unsigned int cbap; SPS *sp;
int f;          /* flag to note last, mid or last spouse */
```

Checks child within parents marriage date range

```
int set_file (in, term, ft)
FILE *in; unsigned int term, ft;
```

Gets offset and sets file pointer. Returns false if no records found.

```
int set_par (pin, rin, ego)
FILE *pin, *rin; EGO *ego;
```

Checks that both parents known else locates missing one by checking children of known parents marriages for ego.

```
void set_sibs (pin, rin, ego)
FILE *pin, *rin; EGO *ego;
```

Calls set_up() for each parent and then puts children of parents into sibling list with sort_sibling() with no duplication allowed.

```
void set_sp (ego)
EGO *ego;
```

If date of beginning or end of marriage not known for spouse, tries to construct date based on end of previous marriage or beginning of next. Marks date as constructed and not useable for statistics.

```
int set_up (pin, rin, ego)
FILE *pin, *rin; EGO *ego;
```

Search for relatives of ego using set_file() and read relationship records with get_r() and person records with loc_rec(). Calls make_sp() and sort_sp() to add spouse records, sort_child() to add child records and sort_sibling() to add sibling records. Returns FALSE if no relatives.

```
PERS* sort_child (new, hd)
PERS *new, *hd;
```

Insert child nodes into linked list sorted on date of baptism

```
PERS* sort_sibling (new, hd)
PERS *new, *hd;
```

Insert sibling nodes into linked list sorted on date of baptism

```
SPS* sort_spouse (new, hsp)
SPS *new, *hsp;
```

Insert spouse nodes into linked list sorted on dates of start or end of marriage

```
void sp_child (pin, rin, ego)
FILE *pin, *rin; EGO *ego;
```

Searches relationships of each spouse to find extra children born within marriage to ego. Calls par_child() to check child against parents marriage dates.

3. merge - program to merge data files

The merge program merges existing data files with update files output by rels to create new master files. The update files have are given the extension .t to distinguish them from the original files. Because of the experimental nature of the program, this feature allowed newly entered data to be checked by hand from time to time. It would, of course, be implemented as part of the entry process in a production program. The most important functions are shown in call graph Fig. A3.4

```
main(argc, argv)
int argc; char *argv [];
```

Calls merge_p () to merge master and update person files when writing to new person file. Calls merge_r () to merge master and update relationship files when writing to new relationship file.

```
int get_action (code)
char code;
```

Returns action dependant on code in update file.

```
int get_link (buf, id1, id2, code, stream, u)
char *buf; FILE *stream;
unsigned int *id1, *id2, *code, u;
```

Reads record from relationship file, if update file use get_action() to determine what to do.

```
int get_p (buf, key, stream, u)
char *buf; unsigned int *key, u;
FILE *stream;
```

Read record from person file, if update file use get_action() to determine what to do.

```
void merge_p (master, update, new)
FILE *master, *update, *new;
```

Reads master and update person files line by line with get_p(). Writes either master or update line for given id depending on action.

```
void merge_r (master, update, new)
FILE *master, *update, *new;
```

Reads master and update relationship files line by line with get_link(). Compares keys and relationship type and then writes either master or update line for given set of ids and relationship depending on action.

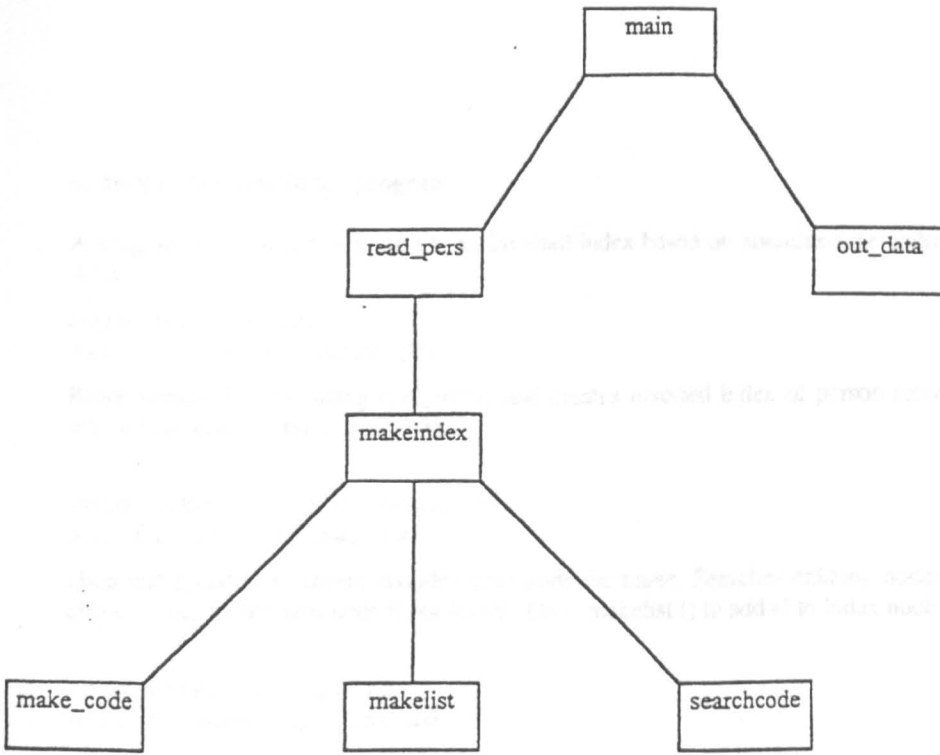


Figure A3.3: Call graph for the Index program.

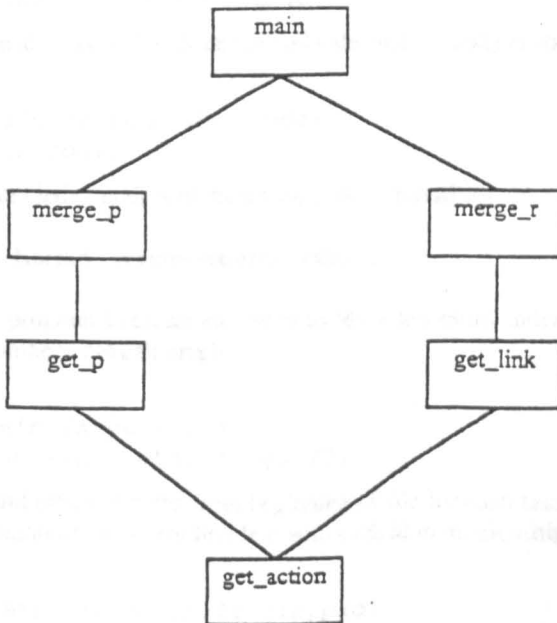


Figure A3.4: Call graph for the Merge program.

4. Index - inverted index program

A program to build and write to file an inverted index based on soundex-type codes. See call graph Fig. A3.3.

```
main (argc, argv)
int argc; char *argv [];
```

Reads person data file using read_pers() and creates inverted index of person records using out_data () which also writes index to output file.

```
void makeindex (id, name, sx)
int id; char *name, sx;
```

Uses make_code() to obtain soundex-type code for name. Searches existing nodes for code with searchcode() and inserts new node if not found. Calls makelist () to add id to index node.

```
void makelist (ip, id)
struct index *ip; int id;
```

Inserts id into linked list of ids for this index node.

```
void out_data (out)
FILE *out;
```

Outputs inverted index to file.

```
void read_pers (in)
FILE *in; struct index*
```

Reads person data from file and calls makeindex() to construct inverted index.

```
void searchcode (code)
int code;
```

Find index node with matching code in linked list.

5. Locind - creates sequential index

A program to create and write to file a sequential index on the person and relationship files, based on id numbers. No call graph.

```
main (argc, argv)
int argc; char *argv [];
```

Find offset in bytes from beginning of file for each line in person file. Call get_roff() to find offset from beginning of file for first line with each id in relationship file. Write to sequential index file.

```
long int get_roff (in, pid)
FILE *in; unsigned int pid;
```

Returns offset of first record for each id in relationship file

6. Other small programs written for the project

asm - small C program for calculating age specific marital fertility

chmort - small C program for calculating child mortality

