

CHAPTER 15

FAMILY NAMES

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15.1 ORIGINS OF HEREDITARY SURNAMES

15.1.1 Personal Naming Systems of the World

Every human society has a naming system for identifying individuals within it (see chapter 13). This normally consists of one or more given names (see chapter 14) and an additional name whose function is to identify the individual as a member of a family within society. With very few exceptions, there are just three such systems of personal naming throughout the world: the patronymic system, the binomial system, and the Arabic system. The focus of this chapter will be on family names within the binomial system, but first we give a brief account of the other two systems, both of which have contributed to the development of family names within the binomial system in the English-speaking world and in other European languages.

In the Arabic personal naming system a person's name comprises up to five elements. These are: *kunya* (a kind of aspirational nickname, for example *Abu-Fazl* 'father of bounty' and *Umm-Abdullah* 'mother of Abdullah', which could be adopted regardless of whether any child called Abdullah actually exists), *ism* (given name), *nasab* (patronymic), *nisba* (locative name), and *laqab* (distinguishing nickname such as *al-Aswad* 'the Black'). *Kunya*, *nasab*, *nisba*, and *laqab* have all been adopted as 'surnames' among people from the Islamic world who have migrated to English-speaking countries and to other countries where the binomial system of personal naming is prevalent.

While this is the standard system of Arabic personal naming, used throughout the Islamic world, there is much variation in different countries, with the different elements being used in different ways (for more information see Schimmel 1989; Ahmed 1999; Roochnik and Ahmed 2003). One of these differences concerns the use of fixed family names. Ahmed (1999) comments:

In some Muslim countries, e.g. Egypt, Iran and Turkey, family names are well established, but in the Indian subcontinent a complete liberty in selecting names means

that there is no necessary continuation of the surname from father to son. Also, there is little distinction between a surname and first name and they are freely interchanged. (Ahmed 1999: xiii)

The patronymic system was once the norm throughout most of Europe. People were named according to their parentage, so that along with a given name, they would be identified by the given name of their father and very often by reference to previous generations too (see, for example, section 15.1.2.4, on Welsh surnames). The patronymic system survived in Sweden well into the nineteenth century and still exists today in Iceland, where people are typically known by a given name and a patronym. Thus, the son or daughter of a man with the given name *Sven* would be *Svensson* or *Svensdóttir* respectively. This system is also found in English medieval records such as the fourteenth-century poll tax returns, where, for example, Alicia *Robertdoghter* is recorded in Rigton, West Riding of Yorkshire, in 1379. However, no names of this *-daughter* type have survived in England today. This example shows how the patronymic system, which is not hereditary, is distinct from the binomial system, in which an individual inherits a hereditary surname¹ as well as being given a forename at or soon after birth. The binomial system is used today throughout the English-speaking world, in Europe, and in certain other countries.

The binomial system has been established in most European countries since the fourteenth century. Between the twelfth and the fourteenth centuries (and in some places earlier) descriptive, non-hereditary bynames—typically derived from locations, relationships, nicknames, or occupations—gradually became fixed within family groups and passed down to subsequent generations. Throughout Europe there is remarkable uniformity in the types of names used, with comparatively few local differences. An example of a local difference is that family names of locative origin are very rare in Ireland but very common in England. This is predominantly due to differences in the historical development of bynames and hereditary family names, which we will now summarize by giving a brief account of surname history in Britain and Ireland.

15.1.2 The Origin and Typology of Surnames in Britain and Ireland

15.1.2.1 *English Surnames*

There is no simple answer to the question when and why hereditary family names first came into use in England. The history of their development is complex, with much variation in different parts of the country and different social classes, over several centuries. However, some broad generalizations can be made. It was very rare for a person to be

¹ The term *surname*, which used to mean no more than ‘additional name’, is now used interchangeably with *family name*.

recorded with more than one name before the Norman Conquest. Hey (2000: 51) comments that ‘the Englishmen who were recorded in Domesday Book as the holders of land before the Conquest did not possess hereditary surnames but were known simply by a personal name, such as Alric, Thorald or Wulfstan’. However, in some pre-Conquest records, ‘it was often found convenient to identify a man by describing him as son of his father’. Therefore, it could be said that some people bore second names at this time, but ‘such names were not family names; they died with the man’ (Reaney 1967: 75).

The next step toward the adoption of hereditary family names in England was the use of non-hereditary bynames. These names had a rather different semantic value from that of surnames today. They were used to describe some aspect or feature of their bearer, distinguishing him (or her) from other people by reference to occupation, geographical location or origin, relationship to another person, or some physical or behavioural characteristic.

Bynames and surnames are classified under one of the following four broad categories: locative names, nicknames, occupational names, and relationship names. Each category can be further subdivided. Thus, locative bynames can be either topographical (derived from a feature of the landscape, e.g. *Hill, Ford, Marsh*) or toponymic (taken from the pre-existing name of a town, farm, or other habitation, e.g. *Burford, Blakeway, Coplestone*). Many occupational names are straightforward and self-explanatory even today (e.g. *Baker, Smith*) but others are fossils, from a term that is no longer used (e.g. *Wright, Chandler*). Some occupational names originated as metonymic nicknames, for example the surname *Cheese* denoted a maker or seller of cheese. The surname *Wastell*, denoting someone who made or sold fine cakes, is a metonymic nickname from a Norman French word that is the equivalent of modern French *gâteau*. Status names such as *Knight* and *Squire* are usually classified as a subdivision of occupational names.

Bynames were coined mainly in Middle English—the vernacular language of the time—although names of Norman French origin were also adopted. The adoption of bynames following the Norman Conquest may have been accelerated by an increase in medieval bureaucracy. Hey (2000: 54) attributes the development of hereditary surnames at least in part to the fact that ‘whereas the Anglo-Saxons and Vikings had used a wide range of personal names, the Normans favoured very few’, some of which are still strikingly frequent today, such as the traditional male names *John, Robert, and William* and the female names *Juliana, Isobel, and Elizabeth*. The smaller stock of given names in use among the Normans and the gradual abandonment of most Anglo-Saxon given names meant that a larger number of people were known by the same name, so there was a need to distinguish between individuals in some other way than the use of a sole given name. Bynames were used for this purpose. As each byname was particular to the individual, it would not have been passed on to any offspring. This non-hereditary characteristic meant that any one individual might be known by two or more bynames. An example is ‘Ricardus filius Walteri, de Cliue’ (Reaney 1997: xii), recorded in a Worcestershire assize roll from 1221. This court record identifies the individual both by his parentage and by the location (Cleeve) from which he came.

Throughout this period (eleventh–fourteenth centuries) hereditary surnames were gradually coming into use, but they were by no means stable. There is ‘evidence that . . . nicknames and “bynames” continued to replace or modify established surnames into the nineteenth century at least’ (Redmonds 1997: 96). On the other hand, it is clear that certain names began to be passed from father to son from soon after the Norman Conquest and that this practice established itself as the norm by the end of the fourteenth century. Thus some people were known by what we today would call surnames, while others during the same period were known by non-hereditary bynames. Some of these bynames came to be transmitted along family lines and so established themselves as hereditary surnames, while others died out during the medieval period. Sturges and Haggett (1987) have shown, by purely statistical modelling, given reasonable assumptions about the number of marrying sons in each family, that there is a general tendency for common surnames to become more common, while rare names become rarer and many of them die out.

The use of hereditary names in England was highly socially stratified from the beginning, soon after the Conquest, and was influenced by their use in Normandy, where ‘some of the more important and wealthier noble families . . . already possessed hereditary surnames’ (McKinley 1990: 25). Indeed, it was the wealthy landholders who were the first to adopt hereditary surnames in England, ‘in the two centuries or so after the Conquest’ (McKinley 1990: 28), while other social classes continued to use non-hereditary bynames. These landholders typically used toponymic names—that is, they were typically identified by the names of estates from which they came.

While the development of surnames was by no means uniform throughout the country, most authorities agree that hereditary surnames were in the majority in the south of England by about 1350 and by 1450 in the north (Reaney 1967: 315; McKinley 1990: 32; Hey 2000: 53). Some hereditary surnames ‘had genuinely late origins, evolving in parts of northern England well into the 1700s’ (Redmonds 1997: 57). The development of hereditary surnames in England was a complex, long-drawn-out process.

15.1.2.2 *Irish, Manx, and Scottish Gaelic surnames*

The Scottish Gaelic language and the Irish language are closely related and this was even more true in the Middle Ages, at the time of surname formation. Scottish Gaelic is spoken in the Highlands and Islands and was, until the sixteenth century, in Galloway in the southwest. A traditional view is that Scottish Gaelic was brought to Scotland from Ireland in the fourth–fifth centuries AD, but it seems more likely that there was continuous interchange from earliest times around the Irish Sea, for example in the ancient maritime kingdom called Dál Riata, which extended from northern Ireland up into the Hebrides.

Many similarities can be perceived between the Irish Gaelic names of Ireland and the Scottish Gaelic names of Scotland. Attempting to distinguish between the two risks making a false distinction. Nevertheless, many surnames can be identified as distinctively Irish, while a smaller number are distinctively Scottish. In particular, the latter include names in the clan system, a distinctively Scottish social institution according to

which people were associated by birth, servitude, or locality with the hegemony of a clan chief, either taking the clan name as a surname or taking a surname of a 'sept' (a subordinate group) of one of the major clans.

Initially, Gaelic patronymics were formed by use of the prefix *Mac* and (in Ireland) by *Ó* 'grandson of', giving patronymics such as *Mac Cárthaigh* 'son of *Cárthach*' and *Ó Conall* 'grandson of *Conall*'. Non-hereditary names of this form 'will be found in the records relating to centuries before the tenth', with their use as hereditary surnames having come 'into being fairly generally in the eleventh century' (MacLysaght 1985: ix). Names that became hereditary yielded anglicized forms such as *McCarthy* and *O'Connell*. Woulfe (1923: 15) observes that 'Irish surnames came into use gradually from about the middle of the tenth to the end of the thirteenth century'.

After the convention for prefixing names with *Mac* and *Ó* had become common, further changes in Irish surnames took place. Some included the words *giolla* and *maol*, meaning 'follower' or 'servant', 'in the sense of devotee of some saint e.g. *Mac Giolla Mhártain* (modern Gilmartin or Martin) or *Ó Maoilbhreanainn* (modern Mulrennan) from St. Martin and St. Brendan' (MacLysaght 1985: ix). Surnames deriving from occupations and nicknames were also formed, such as *Mac Giolla Easpaig* 'son of the servant of the bishop' and *Mac Dubhghaill* 'son of Dubhghall', a personal name meaning 'dark stranger'. Most Irish surnames acquired one or more anglicized form in the sixteenth century. For example, the two names just mentioned yielded the anglicized forms *Gillespie* and *McDowell*. Many Irish surnames yielded two distinct sets of anglicized forms, due to the phonetic phenomenon of lenition. For example, in the Irish surname *Mac Daibhéid* 'son of David', the *D-* came to be pronounced as a guttural voiced fricative, yielding the anglicized surname *McKevitt* alongside the more etymological form *McDevitt*. The same phenomenon in Scottish Gaelic yielded both *McWhan* (lenited) and *McSwan* (unlenited) as anglicizations of *Mac Suain* 'son of Sveinn'. Similarly, *Mac Domhnuill* 'son of Donal or Donald' is the source of both *McDonnell* (*McDonald*) and *McConnell*. In a further development, the patronymic *Mac-* was often dropped or reduced to a residual *C-*, yielding anglicized surnames such as *Connell* and *Donald*. Patronymic prefixes in Ireland 'were very widely dropped during the period of submergence of Catholic and Gaelic Ireland which began in the early seventeenth century' (MacLysaght 1985: x). Some Irish names were translated to give English equivalents, with the Irish *Mac a'ghobhainn* 'son of the smith' sometimes being anglicized as *Smith* and *Mac an tSionnaigh* 'son of the fox' as *Fox*. Sometimes, Irish names were mistranslated due to folk etymology, as in the case of *Bird*, which, as an Irish name, represents quite a large number of Irish names that happen to contain the letters *éan*, for the Irish word *éan* does indeed mean 'bird', although this has nothing to do with the surnames *Ó hÉanna* (*Heaney*), *Ó hÉanacháin* (*Heneghan*), or *Mac an Déaghanaigh* (*McEneaney*), which are among those for which *Bird* has been adopted.

The development of Irish surnames into their modern forms was sometimes even more complex, as MacLysaght (1985) shows in a discussion of *Abraham* as an Irish surname:

Of course that is Jewish elsewhere, but in Ireland it is the modern corrupt or distorted form of an ancient Gaelic surname, *Mac an Bhreitheamhan* (son of the judge). It was first anglicized *MacEbrehowne*, etc., which was shortened to *MacEbrehan* and *MacAbrehan*, later *MacAbreham* and so to *Abraham*. Other anglicized forms of this name are *Breheny* and *Judge*. (MacLysaght 1985: xii)

The prefixes *Mac* and *Ó* in Irish surnames re-emerged in an anglicized form in the late nineteenth century. MacLysaght (1985: x) suggests this began as a result of a ‘revival of national consciousness’, and comments that there was a steady increase in the number of people adopting *O* in the name *O’Sullivan* from 1866 to 1944. Similarly, Yurdan (1990: 3) notes that ‘during the renaissance of interest in things Irish during the period 1930–60, the “O”s and “Mac”s were reinstated to their former positions’. Since the 1960s there has been an equally noticeable resurgence in the use of Irish-language (Gaelic) forms of family names in Ireland.

As noted by Hanks and Muhr (2012), there has been considerable exchange of surnames between Britain and Ireland for almost a millennium. In the twelfth and thirteenth centuries, English kings and Norman barons brought family names such as *Butler*, *Clare*, *FitzGerald*, and *Bermingham* to Ireland, and in the sixteenth and seventeenth centuries many other family names of English, Welsh, and Scots origin became established there. In the early seventeenth century, King James I of England (and VI of Scotland) encouraged the settlement of ‘plantations’ in Ireland, particularly northern Ireland, as a result of which the family names of Scottish Border reivers and others (*Nixon*, *Armstrong*, *Paisley*, etc.) became established in Ireland, mainly northern Ireland. In the nineteenth and twentieth centuries, the flow was reversed and most Irish surnames, in their anglicized forms, became established in Britain: notably in south Lancashire, Lanarkshire (Glasgow), the coal-mining region of south Wales, and the industrial west Midlands.

While many Irish and Scottish Gaelic hereditary surnames were in existence as early as the eleventh century, non-hereditary names persisted, as can be seen in this late example noted by Black (1946: xxv): ‘Gideon Manson . . . died in Foula in March, 1930. His father’s name was James Manson (Magnus’s son) and his grandfather was called Magnus Robertson.’

Before leaving the topic of Gaelic family names, we should note that there are approximately 200 distinctively Manx family names in Britain today. Many of these begin with an initial *C-* (*Clague*, *Cretney*) or *Q-* (*Quirk*, *Quinney*), residues of Gaelic *Mac-*.

15.1.2.3 *Surnames in Scots-speaking Scotland*

Scotland is a country with a rich variety of linguistic and cultural heritages. In addition to Gaelic, Scottish family names are also of Cumbric origin,² Scandinavian (also known

² Notably among the so-called ‘Strathclyde Britons’, who, up to at least the fourteenth century, spoke a language closely related to Welsh and lived in an area around the lower Clyde valley.

as Old Norse), and Anglian (the northern dialect of Old and Middle English). The latter in Scotland developed into distinctively Scottish varieties of English, sometimes called Lallans (the language of the Lowlands), the Scots *leid* (the Scottish language), or simply Scots, which is the term we shall use here.

Hereditary surnames first occurred in Scots-speaking regions at around the same time as in England, and many were ‘introduced into Scotland through the Normans’ (Black 1946: xiii), usually with names of toponymic origin. Following this, the ‘spread of surnames in Scotland seems to have been slow’ (McKinley 1990: 45). While most landholders seem to have ‘acquired surnames . . . by about 1300’ (McKinley 1990: 45), it seems that ‘the general spread of hereditary surnames was not complete in the Scots-speaking regions until at least the sixteenth century’ (McKinley 1990: 46). The establishment of hereditary surnames in the country occurred later than in England.

An important influence on the development of Scots family names was the importation of a Norman bureaucracy in the twelfth century, for which the person most responsible was King David I (reigned 1124–53). David had been brought up at the English court of King Henry I and had married Maud, Countess of Huntingdon. When, at the age of 39 or 40, he unexpectedly succeeded to the throne of Scotland, he took with him a cohort of Norman retainers from eastern England with surnames like *Lindsay*, *Ramsay*, *Sinclair*, and *Hamilton*.

Scots surnames can be classified using the same typology as for England (see section 15.1.2.1). Black (1946: xxix) notes that ‘contrary to the common view, I have found few of our [Scottish] surnames to be derived from nicknames’.

15.1.2.4 *Welsh Surnames*

The development of hereditary surnames in Wales was very different from the English, Irish, and Scottish patterns. Even though Norman lords acquired land in Wales soon after the Conquest, ‘neither this, nor the increasing use of hereditary surnames by English settlers in Wales, seems to have had much influence among the Welsh population’ (McKinley 1990: 41). Even by 1500, hereditary surnames were still rare in Wales. The Welsh patronymic naming system involved using Welsh *mab* ‘son’ to create names in the form of ‘X *mab* Y’. The word *mab* would have become *fab* due to grammatically triggered lenition, which subsequently became *ab* because ‘the Welsh *f* sound was probably bilabial and therefore more easily lost’ (Morgan and Morgan 1985: 10). Generally, *ab* occurred before names with initial vowels, and *ap* before those with initial consonants, resulting in names such as ‘Madog *ab* Owain’ and ‘Madog *ap* Rhydderch’ (Rowlands and Rowlands 1996: 8), although not all recorded names conform to this rule.

In Wales, not until the mid-sixteenth century did ‘the change to settled surnames begin to filter through different levels of society’ (Rowlands and Rowlands 1996: 25), resulting in the loss of *ab* or *ap* in a number of names. This explains why such a large proportion of surnames in Wales today are derived from given names. *Jones* and *Williams* are typically Welsh names: the English genitive *-s* apparently replaced Welsh *ab/ap* in many cases, with such genitive *-s* names having ‘been common in Wales since at least

the sixteenth century' (McKinley 1990: 226), coinciding with increased adoption of hereditary surnames in the country.

The Welsh patronymic form is still retained, to some extent, in certain hereditary surnames, where *ab/ap* has become incorporated with the following name through metanalysis, 'thus Thomas *ap* Howell would become 'Thomas Powell' (Rowlands 1999: 166–7). This was, and is, most common in areas of 'greatest and earliest English influence' (Rowlands 1999: 167), close to the English border. In other parts of Wales, the Welsh patronymic system appears to have been retained much longer, with names in *ap* occurring as late as the eighteenth century 'in upland Glamorgan parishes and in western Monmouthshire' (Rowlands and Rowlands 1996: 25–6). There are some personal names found today in Wales with the form X *ap* Y. These can be attributed to 'renewed national awareness and growing interest in the past', leading to a revival of patronymic names 'in the second half of the twentieth century' (Rowlands and Rowlands 1996: 34).

15.1.3 The Effects of Migration on the World's Family Name Stocks

While each country and indeed each region has its own histories and patterns of family name development, worldwide migration has meant that present-day name stocks tend to be much more ethnically and culturally diverse than they were a few decades ago. Therefore, any attempt to survey current family name stocks in any one country generally requires a wide variety of linguistic expertise. In the UK in particular, a reasonably comprehensive account of present-day surnames requires not only traditional expertise in Old and Middle English, Latin, Anglo-Norman French, and the Celtic languages but also expertise in Yiddish and Hebrew, other modern and medieval European languages, Arabic, Persian, Turkish, Indian languages, and Chinese, among others. Only in this way can a reasonably comprehensive account of modern family names in countries such as Britain, Australia, and America be developed. Family name dictionaries and surveys have been compiled in several but by no means all countries of the world.

15.2 STUDIES OF FAMILY NAMES IN BRITAIN AND IRELAND

The most reliable traditional introductions to the study of surnames in Britain are those by Reaney (1967) and McKinley (1990), which offer a philologist's and a historian's perspective respectively. Because they are essentially national surveys, they have little to say about surnames outside Great Britain, while at the other end of the spectrum they can do little more than exemplify fine-grained local details and regionally specific patterns of surname development and distribution that are now recognized as

an essential component of the study of surnames. McKinley (1990) himself identifies the problem thus:

It is impossible to examine the surnames present in several counties, from different parts of England, without being struck by the very sizable differences which existed in the Middle Ages, and which in large measure persisted into later periods, between the different English regions. (McKinley 1990: 20)

An ideal introduction to the study of surnames would be interdisciplinary, bringing together the expertise of historians, historical linguists, demographers, statisticians, genealogists, and (more recently) geneticists. Increasingly, this interdisciplinary approach is beginning to be adopted, but at present no such survey exists. An international perspective beyond English can be gleaned from the 108 pages of introductory essays in the *Dictionary of American Family Names* (DAFN 2003).

15.2.1 England

Compared with other onomastic fields such as place-names, family name research has received relatively little scholarly attention in Britain until recently. The earliest work offering information about surnames is a chapter in Camden's (1605) *Remains Concerning Britain*, which includes an alphabetical list of 253 locative surnames, mostly the surnames of gentry of Norman French origin. Over two centuries were to elapse before the next relevant work, namely Lower (1849), which outlines the chronology of hereditary surname adoption. It organizes the discussion of surnames by categories, though these are different from those that are generally used today.

The next important work is Bardsley (1875), which categorizes surnames using a typology of five types: 'Baptismal or personal names', 'local surnames', 'official surnames', 'occupative surnames', and 'sobriquet surnames or nicknames'. Building on this, Bardsley (1901) produced the first reasonably comprehensive inventory of English surnames. Among other innovations, it makes a systematic attempt to support etymologies with examples of early bearers. In the early twentieth century, studies of English surnames were published by Weekley (1916) and Ewen (1931, 1938) among others.

'The standard work on the etymology or meaning of surnames' (Redmondset al. 2011: 4) is P. H. Reaney's (1958) *Dictionary of British Surnames*, published in a revised third edition as *A Dictionary of English Surnames* (Reaney 1997). Explanations are terse and sometimes cryptic, but they are grounded in traditional scholarship. Most importantly, they are supported by a wide selection of early bearers from medieval records. Recent research has shown, however, that the Reaney (1997) dictionary must be used with caution. Reaney was a great scholar, but we now know that some of his magisterial pronouncements are simply wrong. For example, Redmonds (2014) has shown that *Gaukroger* is a locative surname meaning, roughly, 'cuckoo crag' and not, as Reaney asserts, a nickname meaning 'foolish Roger'. Others of Reaney's explanations

are ‘fudges’, which blur the issue to the point of being misleading. Typical is *Ramshaw*, which Reaney has merely as a cross-reference to *Ravenshaw*. Etymologically these two surnames are indeed related, but in fact *Ramshaw* is a toponym from a place near Bishop Auckland in county Durham (a place not mentioned by Reaney), while *Ravenshaw* (the main entry in Reaney), which is now rare or extinct as a surname, is from a place in Warwickshire. They explain a cluster of eight different toponymic surnames (*Ravenshaw*, *Ravenshear*, *Ramshaw*, *Ramshire*, *Ranshaw*, *Renshaw*, *Renshall*, *Renshell*) as ‘dweller by the raven-wood’, appearing to imply that they are variant spellings of a single topographic name—but the fact is, there is no such thing as a ‘raven-wood’ and no one was ever named as a dweller by one. The family names concerned are from different place-names, and these places were named hundreds of years before surnames came into existence.

Such problems were compounded by the fact that, for many names, Reaney’s terse explanations regularly give only an Old English, Old Norse, or Continental Germanic etymology, bypassing intermediate steps such as Middle English and Old French. Reaney adopted this policy mainly because of space constraints imposed by his publisher due to post-war paper shortages, but it is particularly misleading because surnames were formed in the Middle English and early modern English periods; there is no such thing as an Old English surname.

Perhaps Reaney’s greatest weakness was his almost complete failure to take account of the statistical relationships between surnames and locations. It must also be mentioned that literally thousands of well-established English surnames do not appear at all in Reaney’s dictionary, which has been described as a dictionary of medieval surnames arranged under their modern derivative forms. If Reaney had nothing to say about a name, he simply omitted it. We mention these points, not to carp at Reaney’s achievement, which is remarkable by any standard, but in order to illustrate the enormous amount of fine-grained detailed research that is needed before studies of surnames and family names can take their place as adequately informative and reliable works alongside place-name studies and works of historical lexicography.

One recent work that is better focused and stands up to scrutiny is Redmonds’ *Dictionary of Yorkshire Surnames* (forthcoming). This is based on detailed evidence of many kinds: medieval local records, local dialects (past and present), genealogical and genetic tracking, and contrastive geographical distribution. It will serve as a model for future county and areal studies. Hopefully, in years to come, a range of comparable county-by-county studies will be created, emulating Redmonds’ achievement for Yorkshire.

Two other works of surname lexicography that must be mentioned here are Cottle (1967) and Titford (2009). Cottle’s is an admirably succinct and reliable work, which proved popular for over forty years. It contains a few entries that were not explained by Reaney and an occasional dry witticism. For example *Butlin*, the surname of the founder of a chain of holiday camps, is explained as being derived from Old French *boute-vilain* ‘hustle the churl’; Cottle adds, ‘suggesting an ability to herd the common people’. Titford (2009) is an expanded edition of Cottle’s work. It made extensive use of previous

publications: not only Cottle and Reaney but also Hanks and Hodges (1988) and DAFN (see section 15.6 below).

Rigorous scholarship is a feature of the *Lund Studies in English*, inspired by Professor Eilert Ekwall, himself a great surname and place-name scholar. These works are far from comprehensive, but their focus on surname typology makes them useful sources of particular early name bearers and etymological information. For example, Fransson's (1935) *Middle English Surnames of Occupation 1100–1350* provides a list of occupational names with early bearers and suggested etymologies; Löfvenberg (1942) explains a selection of medieval locative surnames; and Jönsjö (1979) does the same for nicknames. Other relevant works in this series are Thuresson (1950) and Kristensson (1967–2002). However, these works are not without problems. Fransson (1935) studied names from only ten English counties. Jönsjö's (1979) etymological explanations are sometimes ambiguous and his treatment of names that share an element is not always consistent. McClure (1981b) comments:

If one dimension of information is chiefly lacking in the comparative methods used in *Lund Studies of ME bynames* it is that of local and biographical history. The name is treated as 'word' rather than 'person', as a manifestation of linguistic form rather than social life. (McClure 1981b: 101)

Clark (2002: 116) makes a similar point, that 'to study in purely lexical and etymological terms a form recorded as a name, and sometimes solely so, may be to study something that never, and certainly not in the given context, existed at all'. Nevertheless, the *Lund studies* made an important contribution to the identification and understanding of English surnames.

The *English Surnames Series* (ESS), funded by the Marc Fitch Foundation at the University of Leicester, set out to investigate surnames historically county by county. Only seven volumes were published (Redmonds 1973; McKinley 1975, 1977, 1981, 1988; Postles 1995, 1998), but these have provided a wealth of detailed information on surnames in the particular counties and regions studied. Clark (1995) recognized the importance of this approach, noting that the works of the ESS

never lose sight of the special nature of naming, as distinct from common vocabulary, and so proceed consistently in terms of social status, of domicile and landholding, of migration-patterns, of economic activity, of gender and familial relationships, of types of milieu, and of ramification of individual clans. (Clark 1995: 384)

However, it is not necessarily the case that county-based research is suitable for investigating regional surname patterns. Postles (1995: 4), in his ESS volume for Devon, concedes that 'counties can never be' regional societies, while Redmonds (2004b: xiv) has also commented that 'many of the counties are made up of several distinct regions, and these can be linked to marked differences in their topography, history and language'. Future surname research could benefit from focusing on socially, topographically,

culturally, and linguistically distinct regions, perhaps investigating particularly localized patterns of development, as Hey (2000: xi) has suggested:

The research that will forward our understanding of how surnames arose and spread will need to be focused on particular parts of the country, looking at how groups of names were formed at different times in particular local communities. (Hey 2000: xi)

In 2009–10 Oxford University Press and the Arts and Humanities Research Council of Great Britain were persuaded to initiate an ambitious research project called *Family Names of the United Kingdom* (FaNUK). Eventually, this found a home at the University of the West of England under the direction of Richard Coates, with Patrick Hanks as lead researcher. It is due to be published in 2016 as the *Dictionary of Family Names in Britain and Ireland* (FaNBI). The entry list is based on a comparison of 1881 Census data with a more recent inventory based on 1997 electoral rolls, so that in principle almost every surname in the UK, no matter how rare, can be considered. People often ask, how many surnames are there in the UK? Unfortunately, a simple answer cannot be given, because among the hundreds of thousands of very low-frequency items, genuine surnames (most of which are recent immigrant names—i.e. names that came to the UK after 1945) merge imperceptibly into misprints and transcription errors. FaNBI contains entries for all family names with 100 or more bearers in the UK in 1997, regardless of ethnic or cultural origins. To these were added entries for names that are in other British surname dictionaries and ‘established names’ that are of particular historical or philological interest. ‘Established names’ in this context is a term that contrasts with ‘recent immigrant names’. In practical terms, established names are those found in both the 1881 census and the 1997 data.

The result is a headword list of over 45,000 family names. There are almost 20,000 main entries and over 25,000 current spelling variants, together with innumerable examples of historical spelling variants. The spelling of family names in the UK is much more volatile than the spelling of place-names or English vocabulary words. Particular spellings of a widespread name sometimes come to be accepted as conventional in different families or in different local areas. There are at least three ways in which FaNBI differs from previous works: (1) early bearers, (2) information about geographical location, and (3) recent immigrant names.

Following the lead set by Bardsley and Reaney, examples of medieval and post-medieval early bearers are systematically included in FaNBI under each main entry, extracted from sources such as medieval tax records, court records, wills, and parish registers, many of which are now available for analysis in digitized form. These lists show the linguistic development and geographical spread of each surname since the time of its first use, while in many cases early forms provide evidence for etymological origins.

The main location of early bearers in Archer’s (2011) *British 19th Century Surname Atlas* (see section 15.3.1) is summarized briefly but systematically for almost every FaNBI entry. An attempt is made to record the earliest known bearer in the main geographical location with which the name is associated. In many cases, especially among locative

surnames, the geographical distribution of a surname correlates with the locality in which it originated, and this can provide useful evidence for the identification of lost place-names. The information about the main 1881 location also makes FaNBI a useful genealogical resource, pointing family historians toward the county or counties in which their research is most likely to be productive.

In addition, FaNBI provides a picture of immigration to Britain through the centuries. The Celtic, Anglo-Saxon, Scandinavian, and Norman population stocks were augmented in substantial numbers from time to time over the centuries. Flemish weavers migrated to England, having been first invited in the fourteenth century by Edward III with the aim of maintaining and improving the English wool and cloth industry. Huguenots entered Britain during the seventeenth century, fleeing to avoid religious persecution. Sephardic Jewish surnames from Spain, Portugal, and other Mediterranean countries arrived from the seventeenth century onwards, and waves of Ashkenazic surnames from central and eastern Europe arrived in the nineteenth and twentieth centuries.

Following the collapse of the British Empire in the second half of the twentieth century, ethnic diversity in Britain greatly increased as many people holding (or acquiring) British passports chose to migrate to England for economic and other reasons. As a result, many names borne by recent immigrants have been pressed into service as family names in Britain. Approximately 3,800 recent immigrant names with more than 100 bearers are recorded in FaNBI and more than 1,600 of these are from the Indian subcontinent, with Muslim, Hindu, Sikh, and other religious affiliations, each of which provides a rich set of etymological and cultural traditions. Muslim names in the subcontinent are mostly of Arabic etymology, with some Persian; Sikh names are derived from Panjabi, while Hindu names come from many different Indian languages. The Indian family name *Patel* is the 32nd most frequent surname in FaNBI's 1997 data with 95,177 bearers, followed by *Khan* with 63,795. Muhammad has only 15,016 bearers, but that is because there are seventeen variant spellings in the dictionary (plus a lot more that are too rare to be included).

Over 400 family names in Britain are of Chinese origin, many of them being Hong Kong romanizations of Chinese names in the Cantonese dialect, as opposed to the Mandarin forms, which are regarded as standard in China itself. Other family names of Chinese origin arrived via Malaysia and Singapore. English surnames of Chinese origin are particularly complex: a single 'English' orthographic form may represent up to twenty-two different Chinese surnames ('different' in that they are represented by different Chinese ideographs, each of which may have more than one explanation as to its origins). Ambiguity is avoided because Chinese is a tonal language: most apparently homophonous surnames in Chinese are distinguished by different tones, which are lost in English transcriptions.

In many entries, FaNBI gives additional information about family names, over and above the etymology, for example information about Scottish clans or historical information on great and powerful families such as *Cecil* and *Cavendish*. In other cases, brief summaries of obsolete occupations are given, as for the surname *Reeve*:

In medieval England a reeve was an administrative official responsible for the administration of a manor, including organizing work done by the peasants on the land for their lord, collecting rents, selling produce, and so on.

Elsewhere, explanations of relevant terms in the feudal system of land tenure are given, for example at *Ackerman*. Reaney's (1997: 2) explanation of this surname says tersely:

OE [i.e. Old English] *æcermann* 'farmer', a husbandman or ploughman.

The FaNBI entry, having the luxury of greater space, is able to explain:

An ackerman was a bond tenant of a manor holding half a virgate of arable land, for which he paid by serving as a ploughman.

For further information about FaNBI methodology, see Hanks et al. (2012).

15.2.2 Multidisciplinary Surname Research

Redmonds et al. (2011) have clearly shown the benefits of a multidisciplinary approach to surname research, coordinating philology, history, and genealogy with geographical and biographical evidence, where (for example) they consider a wide range of historical sources to determine the origin of the name *Tordoff*. The 1881 distribution shows that this surname was concentrated in the West Riding of Yorkshire, encouraging the researcher to search local records from this area. However, Redmonds et al. (2011) established that

the surname survived in Dumfriesshire into the late fifteenth century. The next references place it in York between 1499 and 1524, where the family were pewterers, and then in and around Leeds and Bradford by 1572, where it ramified successfully in the village of Wibsey. More than 95 per cent of the 707 Tordoffs in 1881 lived in the West Riding, with Bradford (386) and Leeds (145) the major centres; the surname is still numerous in both places at the present day. (Redmonds et al. 2011: 99)

The Dumfriesshire origin of the name led to the conclusion that the surname *Tordoff* 'derives from a locality known as Tordoff Point on the Scottish side of the Solway Firth'. Without the prosopographical evidence, this origin may not have been so easily found or so confidently asserted.

Redmonds (1997) has also shown the advantages of considering a wide range of historical sources in determining a surname's etymology, particularly in his analysis of *alias* names. With a purely philological approach, a surname's origin can often be identified through the comparison of similar name forms. However, where a name has been altered by scribal influence to such an extent that its form is no longer etymologically representative, linguistic comparison is of little help, and a different approach is required. Redmonds' investigation of a large number of

sources has allowed him to discover certain *alias* names, where a person is recorded with two or more names, which suggest an etymological connection between two surnames which might not appear to be related on form alone. One such example is the case of ‘Simon Woodhouse alias Wydis’ from Thornton le Moor in 1611 (Redmonds 1997: 125).

DNA evidence is also relevant (see Sykes and Irven 2000; Jobling 2001; Bowden, et al. 2008; King and Jobling 2009). Redmonds et al. (2011: 156) argue that ‘just as a father passes on his surname to all his children, so he passes on his Y chromosome type to all his male children,’ and they then pass the same Y chromosome type to their children, and so on. By comparing the Y chromosomal DNA of different people with the same surname, it is possible to demonstrate that the bearers share a common ancestor. In this way, Sykes and Irven (2000) showed that the English surname *Sykes* is most probably monogenetic, despite previous work that predicted it to be polygenetic.

The multidisciplinary approach has not only involved the application of wider historical knowledge and DNA evidence to surname study, but also the use of surname data in other historical studies. McClure (1979) used toponymic surname data to investigate rural and urban patterns of medieval migration, and the value of this methodology led to its use in further migration studies (see Penn 1983; Rosser 1989; Kowaleski 1995). Researchers in demography and geographical information science have made use of surname evidence (Schürer 2002, 2004; Longley et al. 2005), while lexicographical research using surname evidence has also been carried out (see, for example, Mawer 1930; McClure 2010a, 2010b, and the Swedish works, predominantly by students at Lund University, which provided antedatings for a large number of words, such as Fransson 1935; Löfvenberg 1942; Thuresson 1950; Jönsjö 1979).

15.2.3 Ireland

As a result of the complex development and anglicization of Irish Gaelic names, the construction of an Irish surname dictionary is no simple task. The standard work was Woulfe (1923), which took full account of this difficulty, being a dictionary in two parts, the first of which lists Irish Gaelic surnames with their anglicized and English equivalents, while the second contains etymological and historical discussion. This important work was followed by MacLysaght’s (1957, 1985) *The Surnames of Ireland*.

Both Woulfe and MacLysaght were redoubtable scholars with a deep knowledge of Irish family histories and an understanding of the linguistic vicissitudes that have affected family names in Ireland over the centuries. As a result, Ireland is better served by its surname dictionaries than other European countries including England. However, neither of them includes evidence for early bearers, which makes it difficult for subsequent scholars to evaluate their more controversial etymologies. By contrast, FaNBI includes early bearers from several Irish sources, notably the Annals of Ulster, the Tudor Fiants, and a list of nearly 60,000 individuals (*Flaxgrowers*) published by the Irish Linen Board in 1796. A more recent work, providing etymological, historical, and

distributional information and based on the 1980s Irish telephone directory, is by de Bhulbh (1997).

15.2.4 Scotland

The standard work on Scottish surnames is Black (1946). This is a remarkable work of scholarship, all the more remarkable because it was compiled in the New York Public Library. It contains over 8,000 surnames recorded in Scottish historical documents since the medieval period. Wherever possible, entries in this dictionary include etymology, information about early bearers, and variant spellings. Entries for surnames derived from Scottish place-names are particularly thorough and informative.

A more concise, though readable, work on Scottish surnames is Dorward (1978), which contains entries for over 1,000 common Scottish surnames, explaining their etymological origins and geographical distribution.

15.2.5 Wales

Dictionaries of Welsh surnames tend to be short in comparison to those from England, Scotland, and Ireland. The dominant patronymic naming system of Wales (see section 15.1.2.4) means that there are a relatively small number of different family names in the country. For this reason, Welsh surname dictionaries have sufficient space to give thorough accounts of surname origins and development. The two main works are Morgan and Morgan (1985) and Rowlands and Rowlands (1996, 2014), which between them give a comprehensive account of surnames in Wales. Entries in the Morgan and Morgan volume represent the medieval Welsh personal names that are the etymons of most surnames of Welsh-language origin. Rowlands and Rowlands is a more user-friendly work, of particular usefulness for genealogists.

15.3 STUDIES OF FAMILY NAMES IN CONTINENTAL EUROPE

Not every country in Europe has a reliable dictionary or other study of family names, while even those that do exist are rarely comprehensive. Some local historical and regional studies are available, but much work remains to be done by way of investigation of the family names in Europe.

Where national surname dictionaries are not available, DAFN provides at least a starting point. American family names come from all over the world, so DAFN may be regarded as roughly equivalent to an international comparative dictionary of world

surnames. In some cases, DAFN is all there is; in other cases, not even DAFN includes information about family names in certain regions of the world.

15.3.1 The German-speaking Lands

The main dictionaries of German family names are by Gottschald (1932), Brechenmacher (1936, 1957), and Bahlow (1967, 1993). Gottschald's work has extensive lists of name variants and etymological explanations for some of the names, but no examples of early bearers. Bahlow includes an occasional mention of some early bearers under certain entries, while Brechenmacher includes more extensive explanations, often supported by early bearers.

A major research project currently in progress in Germany is *Der Deutsche Familiennamenatlas* (DFA), a collaborative project based at the universities of Mainz and Freiburg, under the direction of Damaris Nübling (Mainz), Konrad Kunze (Freiburg), and Peter Auer (Freiburg). The research involves the systematic analysis of surnames, using telephone directories, with geographical distribution maps of selected surnames and surname features. This kind of distributional analysis represents a key development in family name study, with a focus on the systematic computational analysis of large datasets. Eventually, a new etymological dictionary of family names in Germany will be based on the Atlas, superseding existing works. There are several local studies of surnames of particular German regions, while Zamora (1992) provides an account of Huguenot names in the German states of the seventeenth and eighteenth centuries.

The standard work on Austrian family names is Hornung (1989), while Finsterwalder (1978) provides a more closely focused account of family names in Tyrol. The standard reference work for Swiss names is Meier (1989), which includes all family names borne by Swiss citizens in 1962. Each entry contains a list of the Cantons in which bearers of the family name are found, the year or period when the family name first appeared in the country, and the cantons in which the name has occurred previously but has since died out. For names that are not of Swiss origin, the bearer's previous country of residence is given.

15.3.2 Belgium and the Netherlands

A major scholarly and comprehensive dictionary of surnames in Belgium (including entries for the majority of Dutch surnames that have any substantial frequency) is Debrabandere (1993), in which the entries contain etymologies, variant forms, and early bearers. Not only surnames from Dutch- and French-speaking Belgium but also surnames from northern France, where there was once Flemish influence, are included.

A database showing the geographical distribution of surnames is the *Nederlandse Familienamenbank*, hosted at The Hague's Centraal Bureau voor Genealogie (2000–). However, there is still no prospect of a comprehensive dictionary of Dutch family names.

15.3.3 Scandinavia (Denmark, Norway, Sweden) and Finland

While the languages of Denmark, Norway, and Sweden are very closely related, patterns of surname development in Scandinavia show distinctive national and regional differences. There are generalizable differences in the types of surnames used in the different countries, with, for example, the majority of Danish and Swedish family names being patronymic, while most Norwegian family names are of locative origin.

Scholarly works on Scandinavian family names and their origins include Modéer's (1989) survey of the history of Swedish personal naming and family naming, Veka's (2000) dictionary of Norwegian family names, and Knudsen et al.'s (1936–64) study of Old Danish forenames and nicknames.

Finland has its own history of family naming, with perhaps the most characteristic feature of its names being the common ending *-nen*, originally a diminutive and possessive suffix, which was later simply added to patronyms as a way of creating surnames. Studies of Finnish family names include Mikkonen and Sirkka (1992) and Pöyhönen (1998).

15.3.4 France

The standard reference works for the surnames of France are Dauzat (1945, 1951) and Morlet (1991). These dictionaries are extensive collections of names, giving etymologies and variant forms under each entry. However, neither dictionary provides information about early bearers.

15.3.5 Italy

A comprehensive dictionary of Italian surnames is DeFelice (1978), in which most entries include a list of variant forms, etymologies, and the geographical distribution of the name, although early bearers are not provided. DeFelice (1980) is a more discursive work, providing information on the history, typology, and geography of Italian family names.

15.3.6 Spain and Portugal

The nearest to a comprehensive dictionary of Spanish family names is Tibón (1995 [1988]), a heroic one-man effort to provide etymological and other information on surnames throughout the Spanish-speaking world, without access to the necessary apparatus in support, such as databases of medieval records, distributional surveys, census data, and so on.

There are several surveys of family names in certain areas. Notably, Catalan is well served by Coromines (1989–97) and Moll (1982), while Basque names are described by Michelena (1973).

Machado (1984) includes information about Portuguese family names as well as vocabulary words.

15.3.7 Hungary

Kálmán's (1978) work provides an account of the origins and history of Hungarian family names, along with discussion on given names and place-names.

15.3.8 The Slavic and Baltic Countries

A selection of the numerous works on family names from Slavic countries are: Rymut (1990–4, 1999–2002) on Polish names; Beneš (1998) and Moldanová (1983) on Czech surnames; Unbegaun (1972) on Russian surnames; Red'ko (1966) on Ukrainian surnames; and Merku (1982) on Slovenian surnames in north-east Italy. Mention may also be made here of Maciejauskienė (1991) on Lithuanian surname history and Siliņš (1990) on the vocabulary of Latvian surnames.

15.4 STUDIES OF JEWISH FAMILY NAMES

As Jewish family names belong to members of a large religious community, rather than the people from a particular country, Jewish family name study requires the analysis of records from many parts of Europe and the Near East. Jewish family name studies tend to focus on particular countries or particular Jewish ethnic divisions (notably Ashkenazic vs. Sephardic), which helps to keep them down to a manageable size. Major works on Jewish surnames are Beider (1993, 1995, 1996) and Menk (2005). Jewish names are also well represented in Hanks and Hodges (1988) and DAFN.

15.5 FAMILY NAMES IN ASIA

15.5.1 China

Chinese surnames are much older than those from other countries, in some cases reputedly dating back to the third millennium BC, to the time of the legendary 'Yellow

Emperor' Huang Di, and before. The earliest known account of Chinese surname origins is written in *Shi Ben*, from the Warring States period (475–221 BC), but it is not clear whether the names in this, and other such early writings, were borne by people who lived at the time or have simply been drawn from characters of Chinese myths and legends. Even so, it seems clear that surnames emerged in China during the Western Zhou dynasty (1046–771 BC) and the Spring and Autumn period (770–476 BC). Most of today's Chinese surnames have their origin in the Han people, an ethnic group originally from North China, who migrated across much of the country and whose culture was adopted by many other ethnic groups.

The most comprehensive reference work for Chinese surnames available today is by Yida and Jiaru (2010). It includes a collection of 23,813 surnames from historic sources, also containing names that do not have their origin among the Han Chinese people. Corresponding English spellings are also provided alongside the ideographic Chinese surnames. It is worth noting, however, that the central core of conventional Chinese surnames consists of only a few hundred items. An extensive work on the genealogical origins of Chinese surnames is by Chao (2000), which also provides information on etymology and the geographical distribution of surnames in China today.

15.5.2 Japan

Two scholarly and comprehensive works on the names of Japan are Niwa's (1981) etymological study and his (1985) dictionary of Japanese surnames.

15.5.3 Korea

While studies of the etymologies and histories of Korean family names are few, genealogical information has been published by clan organizations for the majority of the 260 or so Korean surnames, and is available in collections such as *Han'gukin ūi Sōngbo: Chōidae Sōngssi wa pon'gwan* (Korean Genealogies: updated surnames and clan seats).

15.5.4 The Indian Subcontinent

The contributions of Professor R. V. Miranda to DAFN and FaNBI have given a tantalizing glimpse of the rich variety of historical, cultural, religious, and linguistic facts that can be gleaned from the study of family names in the countries of the Indian subcontinent. Regrettably, however, there does not seem to be any immediate prospect of either a scholarly or even a popular study of family names in India, Bangladesh, or Sri Lanka. Names in Pakistan are accounted for by Ahmed (1999) insofar as they are of Muslim religious affiliation and therefore Arabic or Persian etymology. Schimmel (1989) offers a richly informative discursive study of Muslim names and culture.

15.6 INTERNATIONAL AND COMPARATIVE SURVEYS

A Dictionary of Surnames by Hanks and Hodges (1988) is a dictionary with different aims and different scope from any of the works mentioned so far. Rather than taking medieval records as the starting point for compiling a list of surnames, Hanks and Hodges used modern data collected from selected 1980s telephone directories. They also attempted systematic coverage of European surnames. Their target audience was the whole English-speaking world and beyond, not just the UK. People migrate; they move around; so a modern study of family names must not be insular or parochial. It must contrast local stability with national and international patterns of migration. Therefore, this dictionary was the first to contain entries for surnames from all over the European continent, including extensive comparative lists of cognates and derivative forms in different languages. This work was well received in North America, where the majority of surnames are of non-English origin. This led ultimately to a larger and better-focused project, the *Dictionary of American Family Names* (DAFN), which is the standard reference work for family names in the USA. Because the USA has a great mix of names from many different countries, this dictionary included contributions by onomastic and linguistic scholars from all around the world. As a result, it is not just a source of information for those interested in the names of the USA, but also a reference work with worldwide relevance. It is published in three volumes, and contains over 70,000 entries drawn from the computational analysis of over 88 million names of US telephone subscribers.

15.7 DATA ANALYSIS—DOCUMENTS AND DISTRIBUTION

15.7.1 Geographical Distribution of Surnames

An important new approach to the study of surnames was developed by Guppy (1890), whose work showed that there was often an enduring connection between a surname's present-day distribution and its place of origin. Guppy's approach was an important precursor to the present-day analysis of surname distribution, as in Archer's (2011) *19th Century Surname Atlas*, which has necessitated revision of what is considered the most likely origin of many UK surnames, as well as enhancing understanding of how migration within Britain has affected surname distribution patterns.

Archer's atlas is available as a CD. It shows the distribution and frequency of each surname recorded in the 1881 British census. Distributions can be viewed both by county and by poor law union (PLU), both in actual numbers and proportionally (per 100,000 of population). An advanced search option allows the distribution of a selected group

of names to be shown, so that patterns of a certain surname feature, rather than just an individual name, can be plotted. This approach can be used to further our understanding of the distribution and origins of regionally specific naming features and patterns in the UK.

A comparable CD resource for the names of Ireland is Grenham (2003), which gives the distribution of surnames drawn from a variety of nineteenth-century sources. Most of the data are organized by household, and so distribution maps are not quite as detailed as those in Archer's (2011) British atlas, although Grenham's Irish atlas is still a valuable onomastic and genealogical resource.

The distribution of a family name is information that is not just of use to genealogists, who can sometimes uncover the probable geographical origin of a surname through such information, but can also inform linguistic study. Medieval dialect lexis and phonology is preserved in many present-day surnames, so an analysis of their national distribution can aid investigation of historical dialects. By comparing family name data from different periods, the continuity or change of dialect distribution can be studied. Barker et al. (2007) show the value of this approach in their analysis and comparison of surname distribution using records from the sixteenth century to the present day.

15.7.2 Computational Analysis of Large Databases

There is an ever-increasing availability of large digitized surname databases from different periods, which are only just beginning to be systematically analysed. Resources such as the International Genealogical Index (IGI) (FamilySearch 2012), which contains hundreds of millions of UK parish register entries, could in principle be used for the statistical analysis of surname frequency, geographical distribution, and the frequency and distribution of particular surname features. Such analysis could, for example, lead to a more accurate account of distributional contrasts, of which an already known example is that between patronymic surnames ending in *-son*, which tend to be characteristic of Northern England and Scotland, and patronymic surnames ending in *-s*, which are more typical of the South Midlands and Wales. Another known example concerns the distribution of locative surnames ending in *-er*, such as *Chalker* and *Streeter*, which are characteristic of Kent, Sussex, and Hampshire. Many similar linguistic features of surnames are no doubt waiting to be discovered as more and more data become available for computational analysis.

Certain historical records with representative national coverage have only recently become available, such as the English fourteenth-century poll tax returns (see Fenwick 1998–2005) and the Irish Fiants (see Nicholls 1994). The large amount of data these records provide can be analysed computationally, so that national family name distribution patterns and changes over a number of centuries can be discovered, which will fill a large hole in our knowledge of surname development. Rogers (1995: 224) recognized the importance of the fourteenth-century poll tax returns specifically for this purpose, stating 'it is . . . clear that, the rarer the name, the less likely it is that the distribution of

its early examples will be visible in the fourteenth-century sources until the Poll Tax becomes widely available.

Now that these records, and other large collections of family name data, are accessible, and historical records are being continually digitized, computerized systematic analysis of family name characteristics can be carried out on a much larger scale than has been previously possible, to give a more complete picture of surname development than is currently available. To this end, medieval and early modern spellings of surnames will need to be linked, drawing on the expertise of philologists, historians, and demographers.

Demographic studies of, for example, the rates of surname death over time and the effects of migration from region to region, as well as from country to country, on surname development and change, will also become possible, but only when even larger quantities of machine-readable data from many different periods are available for comparison.

Such approaches will require careful consideration of many different sources of varying onomastic value, but this kind of research will greatly improve our understanding of family name distribution and history, for example through tests for statistical significance in the relationship between a surname's geographical origin and its distribution at different periods, in order to determine the extent to which its distribution can be taken as a reliable indicator of its geographical, historical, and linguistic origins. It is therefore hoped that future work in the field of family name studies will systematically analyse very large digitized datasets, using techniques that have been developed in corpus linguistics among other subject areas, potentially leading to important new discoveries on many different aspects of family names and naming.