Variations in Kinship Networks Across Geographic and Social Space

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Families form one of the most important domains in people’s lives. At the individual level, having good social networks, of which relatives are a major component, is highly beneficial for well-being. At the macro-level, levels of contact with kin is a key component of family systems and frequently used as an indicator of wider social variables such as degree of modernization. Kin contact can involve a range of interactions, ranging from “just keeping in touch” to regular family events and provision of care. Such contact with people outside one’s household reflects choices about whether to meet or telephone, whereas other indicators of family systems such as levels of coresidence with kin do not necessarily reflect preferences, but may be due to lack of suitable housing or the ability to maintain a separate household.

Recent changes in family life have increased the value of kin networks and contacts outside the household. For example, in Britain around 2005, there were over 4 million divorced people, the great majority with living former spouses and children; 4.5 million children under age 17, over one-third of the total, were not living with both natural parents; and a similar number of people aged 65 and over were living alone, and many of them relied on living kin for social contact and support (Murphy 2007, p. 65). Individuals move through a variety of life course states, and many of the relationships made remain critical long after they were formed.

Views about the importance and future direction of kinship roles and trends in contemporary societies are highly divergent. A longstanding tradition in the sociological literature, from Le Play and Durkheim through Parsons to Giddens (2005, p. 212), interprets modern societies as having replaced or reduced many of the family’s former roles in such areas as employment, education, child socialization, and welfare activities and views these trends as accelerating with globalization.

Sociological functionalist theorists argued that as the economy became increasingly removed from family activities, isolated nuclear family organi-
zation, with fewer obligations to wider kin, developed as a response to the needs of modern industrial society for a socially and geographically mobile labor force (Parsons 1956). Adams (1970, p. 575) referred to the implicit assumption in the 1940s that “kin are relatively unimportant to the functioning of modern society and the nuclear family is comparatively isolated from its kin.” The existence of such clear-cut and deterministic trends has been challenged from the late 1950s with studies by Bott (1957), Firth (1956), Young and Willmott (1957), Litwak (1960), and Sussman and Burchinal (1962), which showed that wider kin ties remained salient at least up to that time. Litwak (1960) designated the kinship system as a “modified extended family” in which the wider kin group remained critical, especially for emergencies. Contemporary family theory often assumes that adults living in developed societies prioritize their kinship activities with members of their immediate family, concentrating on ties with close primary kin such as parents, children, and siblings, with whom people are likely to have lived for many years and to have at least 50 percent of genes in common, at the expense of ties with relatives for whom both conditions are unlikely, such as grandparents, aunts, uncles, cousins, in-laws, and the like as family structures move toward a “beanpole” rather than an “extended” family model (Bengtson, Rosenthal, and Burton 1990).

During the 1970s, while interest in kinship appeared to decline (Lee 1980), valuable sources of kinship data became available. The 1986 round of the International Social Survey Programme (ISSP) collected information on social networks in seven countries from 10,746 respondents and showed substantial differences in kin contact between, for example, Italy and Australia (Höllinger and Haller 1990; Finch 1989; Farkas and Hogan 1995; Murphy 2004a). Historical evidence also showed that very different family forms existed in parts of pre-industrial Europe and elsewhere. Hajnal (1965, 1982) identified a north-western European marriage pattern with a clear distinction between countries lying to the West and East of a line from Trieste to St. Petersburg; Hammell (1972) summarized information on the large size of households in the Balkans; and Goody (1976, 1983) presented evidence of differences with non-European societies.

In recent years the importance of kin contact has been reinforced with recognition of the key role of kin and other social networks in maintaining health (House, Landis, and Umberson 1988). Cohesion within families tends to promote trust in society, although the possibility has been noted that emphasis on “bonding” social capital with a small group, especially family members, may be less beneficial for promoting civic engagement than “bridging” capital with wider networks (Putnam 2000). Nevertheless, the study of kinship in contemporary societies has received less emphasis in recent years than some other aspects of family functioning. Consider two examples. The index of the Blackwell Companion to the Sociology of Families (Scott, Treas, and
Richards 2004) contained two index references to kin/kinship, but 53 to the
topic “lesbian and gay families.” The review essay on kinship in the Journal of
Marriage and Family in 2000 was the first such treatment in 20 years (John-
son 2000). This lack of interest in kin relations compared with emphasis on
emerging nuclear family forms such as lone parenthood, cohabiting, and
same-sex families is surprising since changing family patterns and wider de-
mographic trends such as population aging are making the existence of, and
interaction with, kin beyond the household of increasing salience to social
trends and public policy.

Lack of comparable data and of an agreed framework for analysis means
that the interpretation of data on contemporary kinship systems remains
controversial. Segalen’s (1997, p. 1) opening sentence in Family and Kinship
in Europe, which stated that “[f]amily patterns in Europe are becoming in-
creasingly indistinguishable,” and that “[t]here will come a time when we
shall lose our national and regional distinctions and uniformity will reign
with European families,” is situated centrally within convergence theory
(Langlois et al. 1994). Such interpretations of trends have not gone unchal-
 lenged. Others have argued not only that differences in family organization
persist across Europe as measured by familial coresidence and kin contact, but
also that these differences are longstanding and likely to be highly resistant
to change. Intermediate positions are also held (e.g., Glaser, Tomassini, and
Grundy 2004). In a particularly clear-cut formulation of the role of culture in
family systems, Reher (1998) draws a sharp distinction between “weak-fam-
ily” societies—Scandinavia, Great Britain, the Low Countries, North America,
parts of Germany and Austria—and Mediterranean “strong-family” societies.
He identifies a major discontinuity between such societies: “The elderly who
do not maintain regular contact with their children are a small minority of the
population [in strong-family societies such as Spain], much as are the aged
in weak-family societies who receive regular weekly or daily visits from their
children” (p. 212), although he cites no evidence for such a bold claim.

Considerable attention has been devoted to analysis of differences
between countries in one key indicator of family organization, interaction
with kin. Much of the discussion is based on broad generalizations between
more modern and less modern societies within western Europe. Some de-
tailed comparisons, usually of small numbers of developed countries (Shanas
1973; Börsch-Supan et al. 2005; Finch 1989), have been based on coordi-
nated studies, and other studies have drawn on opportunistic data sources
to investigate the extent of convergence, for example for France, Germany,
Quebec, and the United States (Langlois et al. 1994), or to analyze specialized
non-representative populations such as university students (Georgas et al.
2006). However, the evidence on convergence or divergence in family forms
is mixed. In part, the different conclusions obtained may reflect selection of
data,2 and Inkeles (1998, p. 146) concluded that “if one is satisfied by the
citation of merely illustrative evidence, either position may seem to have been proved correct."

These Europe-centered discussions are sometimes augmented by countries of overseas settlement such as the United States and Australia. Reher (1998) points out that there has been little information available even for eastern Europe; thus it has not been possible to investigate explanations for observed contemporary differences related to factors such as the role of political systems or the contemporary relevance of Hajnal’s classic line or later elaborations of historical European household patterns (Kaser 2001; Mitterauer 2003; Szołtysek 2007). The explanations for such enduring patterns tend to be based on the assumed role of longstanding historical and cultural patterns. Lesthaeghe (1995, p. 51) found that the variable “historical role of Protestantism” had greater power in explaining the emergence of a modern partnership and reproductive system in Europe than female education/employment or per capita income. Similar explanations have been advanced by Höllinger and Haller (1990) and Reher (1998, p. 213) emphasizing the role of, for example, the influence of Islam in the Mediterranean area: “Even where the Muslim occupation was short-lived, the geographical proximity of Oriental family systems in North Africa could not help but influence the development of the family in southern Europe.” Another hypothesized explanatory factor is inheritance systems (Micheli 2004, following from analyses of Le Play 1879). The existence of distinct family patterns in northern and southern Europe has been associated with a well-defined geographic boundary reflecting the limits of Latin and Germanic tribal influences along the Alps and Pyrenees (e.g., Höllinger and Haller 1990; Reher 1998; Goody 1983). Dalla Zuanna and Micheli (2004) refer to such boundaries as “cut-off points” or “cleavages.” The extent to which well-defined discontinuities also exist within countries such as Spain, France, and Italy, where they might be, and what explanations might be advanced are still topics of debate (Micheli 2004; Reher 1998; Holdsworth 2004).

Much of the recent discussion about the role of wider kin contacts has concerned whether kinship is weak or strong in particular contemporary industrialized societies—adjectives that have been in use since at least the 1930s in a synopsis of Le Play’s (1879) classic work (Zimmerman and Frampton 1935), and especially in discussions of Italian society (Granovetter 1973). However, since weak and strong are rarely quantified, such labeling is arbitrary, particularly in the absence of comparable data across societies (Adams 2004). Clearly these terms are not value-free since “weak” is rarely used to indicate a positive characteristic. Sometimes strong and weak are used as pithy labels for a set of behaviors and sometimes to reflect an underlying organizing principle that manifests itself as different behaviors, as in Reher’s (1998, p. 203) definition of strong family societies as those where the family group has priority over the individual, and weak family societies where the reverse is the case.
This debate has often been structured around discussion of northern–southern European demographic differences. From the mid-1960s, patterns began to diverge. In northern and western Europe partnerships became more varied and fragile, with declining marriage rates, later marriage, and increases in cohabitation, divorce, and extramarital childbearing; whereas there was much less change in these behaviors in southern European countries. These differences between northern and southern Europe appear to be robust and part of a larger social and economic “package.” Southern European countries tend to have high unemployment, especially for young people, and high proportions in informal jobs, self-employment, and employment in small, often family-based enterprises; barriers for young people to establishing independent households; social policies based around the family rather than the individual; and low levels of secularization as compared with northern Europe. The result is a “familistic” system in the south with low fertility but simultaneously high levels of multigenerational living arrangements, such as young adults remaining in the parental home, and high value placed on the institution of marriage and close kinship ties (Jurado Guerrero and Naldini 1997; Dalla Zuanna 2004). Although there is no single southern European family model, there are distinctive characteristics in the magnitude of provision of support to family members compared with northern Europe (Vaiou 1996, p. 69), where collective welfare systems have more important roles—a longstanding pattern stretching back in the case of England to at least the Elizabethan Poor Law of 1601.

Other disciplines have emphasized the role of political, institutional, and cultural factors in maintaining differential family organizations within countries having broadly similar levels of economic development. The role of social policies is highlighted in Esping-Andersen’s (1990) work on welfare regimes, although its extension to southern Europe remains a subject of debate and the classification of countries varies. Most often, some consistent groupings such as the Nordic countries and those in southern Europe emerge from analyses designed to identify countries with similar social policies. Welfare regimes have been used by Holdsworth (2004), Glaser, Tomassini, and Grundy (2004), and Hagesstad and Herlofson (2007) as an explanatory factor influencing family forms in Europe. Initially Italy was the only southern European country included, but later typologies have extended the number of southern countries. There are considerable difficulties in extending the classification not only to developed countries such as Japan, but also to eastern Europe, which is usually ignored or allocated to a separate category.

Research question and data

In assessing potential explanatory factors for observed differences in kinship networks, we need to augment “modernization” variables such as real gross domestic product per head or level of urbanization with competing explanato-
There is also the question of the appropriate variables to measure family functioning. Scholars often have to use imprecise household-based indicators of family forms such as intergenerational coresidence, whose utility is increasingly questionable since rates are now so low and have declined rapidly in recent decades especially in developed societies. The debate about whether the role of economic structure or culture is predominant has been hampered because of the extent to which data on household structure reflect competing influences. For example, both the increased desire for independence and population aging are associated with lower household size. Information on interactions with kin in general is a more appropriate indicator, since it might be expected to be less influenced by such factors.

The International Social Survey Programme of comparable cross-national surveys included a module on Social Networks in 2001 that collected information about contact of random samples of adults with nine types of relatives, namely close primary kin (parents and adult children and sibs), secondary kin who are blood relatives (aunts, uncles, cousins, nephews/nieces), and secondary affinal kin (parents-in-law, brothers- or sisters-in-law)—for 27 countries. Included are the whole range of European strong and weak family societies together with a number of non-European societies, covering all the other main developed regions, North America, Australasia, and Japan, as well as such developing countries as Brazil, South Africa, and the Philippines. The total sample size is 37,188; the average sample size is about 1,400 persons per country, ranging from 1,000 to 2,600, thus making it considerably more comprehensive than the 1986 round of seven countries.

Information was collected from respondents who had living relatives on both face-to-face contact and other types of contact (telephone, mail, e-mail, etc.) with close relatives and on all forms of contact with other types of relatives. The main indicators of the strength of kin networks used here are (1) whether respondents with non-coresident adult primary kin had any form of contact with them at least several times a week or (2) had two or more contacts of any type in the previous four weeks with secondary kin (who are not necessarily living elsewhere, nor adults). These levels of contact with kin outside the household, which are referred to in this article as “frequent contact,” are the main indicator of family organization used here because levels of contact are a key component of how families organize themselves, are widely used in both national and cross-national surveys, are assumed to be relatively straightforward to collect and interpret across cultures, and are more likely to produce valid cross-national indicators than questions on topics such as attitudes to family life (Shanas 1973). Contact as measured here does not imply provision of care or other forms of assistance. It does not measure such variables as feelings of loneliness, although, as noted earlier, interpretation of this variable in relation to family structure is problematic (see endnote 2). Respondents may overestimate contact: parent/adult child
contact levels reported by parents are somewhat higher than those reported in the survey by adult children, even allowing for the fact that parents were asked about contact with the adult child with whom they had most contact. And such biases may be culture-specific (Kelly Raley and Rindfuss 1999).

The questions I address in this study are:

1. What are the main levels and differentials in kin contact across countries, and how do these compare to differences between socioeconomic groups within countries?

2. Do the observed differences relate to geographical, socioeconomic, demographic, political, and cultural factors at the national level?

3. Do the findings support the emergence of a kinship system that increasingly concentrates on primary kin (parents and adult children) at the expense of secondary kin (cousins, in-laws, etc.), and, if so, do siblings fit more naturally with close or distant kin?

The main variables used in the analysis are:

1. age group and sex of respondent (demographic factors)
2. educational level (socioeconomic factor)
3. country and religious participation (cultural factors)
4. GDP per head, life expectancy at birth, and the Human Development Index (modernization factors)
5. welfare regime and level of corruption (organizational factors)
6. latitude and longitude (in Europe) (geographical factors)

While such a typology is simplified, it indicates which of these broad domains are likely to provide useful explanations of differentials in patterns of kin interaction. I use educational level, measured by number of years of schooling, as the individual-level socioeconomic variable for a number of reasons. It is available for all countries (apart from Northern Ireland and South Africa); there are very few missing variables compared with occupationally derived measures such as social class; it is essentially fixed across a person’s adulthood; and it is positively correlated with indicators of social status such as social class and income, and, because of higher geographic mobility of the higher educated, negatively correlated with proximity of kin. Because number of years of schooling varies substantially between age groups and countries, the same number of years of schooling could indicate a highly educated older person but a poorly educated young person, since the overall level has increased over time. Therefore, the education variable was defined by dividing respondents within each country, sex, and age group into two groups of approximately equal size, those at or below the median number of years spent in education and those above it. This provides a measure of the value relative to comparable groups rather than the absolute level. This method of constructing the education variable has the added advantage of ensuring that
education is uncorrelated with age and country of residence. Country is used as the principal indicator of culture in this analysis.\textsuperscript{8}

**Descriptive results**

Having living kin is a necessary but not sufficient condition for kin contact. The existence of kin is determined solely by long-term patterns of fertility, mortality, and nuptiality (including marital breakdown) (Bongaarts, Burch, and Wachter 1987; Murphy 2004b) and is therefore often outside the control of the individual. These demographic determinants of kinship structures relate to very extended time periods. For example, the existence of an uncle or aunt of a 40-year-old person is determined by the fertility of that person’s grandparents some seven to eight decades ago and by subsequent mortality. Figure 1 shows the proportions of people in different countries who report having each of nine types of kin.\textsuperscript{9} Because patterns vary considerably by age, these data are broken down into younger and older sample members. Younger members, those under age 50, are more likely than older people (those 50 or older) to have living kin from earlier generations, and the reverse is true for relations from later generations. In total, about 80 to 90 percent of the sample have living sibs, cousins, and nephews or nieces. Broadly similar proportions are found to have adult children among respondents aged 50 and over and to have living parents among respondents under age 50. There is some variation between countries in availability of kin: Russia and neighboring countries have the fewest kin and Brazil, Cyprus, and the Philippines have the most. The level of an individual’s overall contact with kin depends on two factors: whether a member of the relevant kin group exists and whether the individual has contact with the relation, which is largely a matter of choice (Grundy and Murphy 2006).

The primary focus of this analysis is on contact of adults with kin outside the household, that is, excluding coresident relatives. Contact with a person outside the household will require a specific choice in most cases, unlike contact with members of the same household, and therefore represents a clearer indicator of preferences for kin contact. However, contact with members of the household is also important in terms of overall levels of contact, and Figure 2 shows the proportions of adults who are coresident with close kin (for those who have such kin) by age. The survey only asked respondents about coresidence with primary kin—parents, adult children, and siblings. Although coresidence with secondary kin is much rarer, the figures for contact with secondary kin include a small number of cases where people are living in the same household. Figure 2 shows that coresidence with adult siblings is rare everywhere: only 2 percent of the sample above age 50 do so, and even at younger ages, the figure is 11 percent, many of whom are young adults living with their siblings in the parental home. About one-third of those with an
FIGURE 1  Proportions by age having a living relative in specified category

**Source:** ISSP 2001.
adult child had such a child living in their household, but since only about
half had an adult child, the total proportion of respondents having an adult
child living with them was under 20 percent, and most of these are young
adult children who have not yet left the parental home. Coresidence is least
common in the Nordic and North American countries, and most common in
southern Europe and the developing countries in the sample.
Figure 3 shows contact by country and sex for those who have the relevant relative. In most cases the relative is not coresident with the respondent, so an explicit decision to make contact is required. Rates of frequent contact, defined earlier as at least several times a week, with the adult child with whom parents have most contact range from about 90 percent in Italy, Israel, and Slovenia to about 40 percent in Japan (Figure 3a). Patterns of contact with living parents as reported by children are broadly similar across countries (as would be expected since both report parent/child contact, but by different generations). However, reported levels of contact by parents with children are higher than those reported by adult children with their parents (Figures 3b and 3c). In part, this may reflect the fact that parents were asked for levels of contact with the adult child with whom they have most contact, whereas an adult child respondent is random within the sibship, thus giving an average rather than maximal level of contact with parents. These rates of contact are similar to those in a range of other surveys that have asked similar questions (e.g., Inkeles 1998; Cowgill 1985; and SHARE [Hank 2007] where the proportions are based on contact by parents aged 50 and over). Adult daughters are more likely to maintain contact than adult sons, and levels of contact of adult persons with mothers are greater than with fathers. Frequent contact with sibs was less common, ranging from over 60 percent in Israel, Cyprus, and Brazil to below 20 percent in Australia, Finland, New Zealand, and Japan. In most countries, women had more frequent contact than men (Figure 3d). For other types of relative, overall levels of contact are lower, even though the threshold is less demanding: about one in six respondents had at least two contacts in the previous four weeks with uncles/aunts or cousins and one in three with other relatives. Two main points can be identified from these figures: first, that there is no clear division into well-defined country groupings, but rather a steady gradation; and second, that variation across countries is much greater than variation between the sexes.

Some studies use face-to-face contact as the key indicator of levels of kin contact, whereas others include all types of contact. Ability to use other means of contact may vary by, for example, education and income. Persons living away from relatives are less likely to meet them, but these groups are more likely to contain higher proportions of highly educated people who have better access to telephones and e-mail (Wames 1984; Litwak and Kulis 1987; Mok, Wellman, and Basu 2007). This will also be the case for more affluent societies compared with less affluent ones: for example, the number of telephone lines per 1,000 population in 2004 was 710 in Switzerland and 42 in the Philippines (http://hdrstats.undp.org/indicators/120.html). It would thus be possible for face-to-face contact to fall while all forms of contact rise. In particular, the comparative levels of kin contact by population subgroups, such as social class groups, may depend on whether contact is defined in a broad or a narrow sense. For parent/adult child and sib contact, information
FIGURE 3 Proportions of respondents by sex having frequent contact with:

- **Adult son or daughter**: Male 61%; total 66%
- **Father**: Male 44%; total 51%
- **Mother**: Male 28%; total 28%
- **Brothers- or sisters-in-law**: Male 26%; total 28%
- **Uncles or aunts**: Male 15%; total 15%
- **Cousins**: Male 26%; total 28%
- **Parents-in-law**: Male 28%; total 28%
- **Nieces and nephews**: Male 28%; total 28%

SOURCE: ISSP 2001
on face-to-face and all types is available. The averages of the estimated four values in each country are shown in Figure 4.\textsuperscript{11} Average estimated values at the median age for parents of respondents in each country who have the corresponding relative for frequent contact with adult children and sibs and other relatives are presented (based on regression estimates as in endnote 11). The majority of contact is face-to-face and the patterns are similar for both measures. Although the levels in any country differ by about 10 percentage points, this difference is largely independent of the overall level of

\textbf{FIGURE 4} Frequent face-to-face contact and all types of contact with primary relatives (parent and adult child or sibling)

NOTE: Estimated proportion for person of median age of the respondents in each country who have the corresponding relative.

contact. It is lower in less affluent countries such as the Philippines, South Africa, and Brazil, probably for economic reasons such as lack of telephones. The role of technology and affluence may be important in substitution between different types of contact, both between societies and over time within societies.

Figure 3 also suggests that respondents in countries who report high levels of contact with one type of relative are likely to do so for contact with other types of relative as well. Figure 5 confirms this suggestion. The trends across countries for frequent contact with parents/adult children and with other relatives are similar, but levels for the former are typically twice as large, whereas contact with adult sibs shows greater variability between low-contact and high-contact societies. Countries that score high on contact with one type of relative score high with others as well. This is to be expected since it is likely that those adults who see their mothers frequently also see their fathers frequently if they visit the couple, and their siblings may also be present at such gatherings.

There has been considerable discussion in the literature of the differentials within countries in kin contact. Figure 6 shows estimated values for contact of all types at the median age of the respondents in each country who have the corresponding relative with primary and secondary kin by higher and lower educational groups. For contact with primary kin, respondents with less education (defined earlier as those at or below median years of schooling within their reference group) tend to have more contact than those in the higher group, in agreement with most other studies, although the differences averaged across all countries are small, 1.5 percentage points for contact with secondary kin and 2.9 percentage points for primary kin. Tomassini et al. (2004, Tables 2 and 3) found that educational-level coefficients were statistically significant at the 1 percent level in only two out of 16 cases when included in models to predict contact of parents with their adult children in four European countries, and Hank (2007, Table 6) found only three out of 12 coefficients significant in models using a different set of controls for nine countries. In contrast, differences between countries are much greater, with a maximum difference of 50 percentage points for contact with primary kin and 25 percentage points for secondary kin by the higher education group compared to the low education group (see also Hank 2007). If narrowing of these differences between countries is anticipated, this does not appear to be foreshadowed by behavior among a vanguard group such as the more highly educated, although educational differences are greater if specific groups such as those with degree-level qualifications are considered (see, e.g., Grundy and Murphy 2006). While more highly educated societies may have lower levels of contact in general, this does not translate into similarly lower levels of contact by the better-educated groups within societies.
To investigate the structure of kin contact across countries, I fitted logistic regressions of frequent contact with nine types of relatives, with country unit and sex as covariates and age as a common linear covariate. I use the estimated value of contact for a respondent of each sex in each country at the median age of respondents with the relevant relative as an age-standardized indicator of kin contact (in practice, there is a high correlation with the unstandardized results shown in Figure 3). Separate values for men and women...
were estimated because societies might exhibit sex differences in kin contact. In each of the 29 countries there are 18 indicators of kin contact (apart from Norway, for which only 16 are available since information on contact with parents-in-law was not collected). These data were included in a principal components analysis based on their variance/covariance matrix. The first two (out of 18) principal components account for 80.9 percent of total variance (65.8 percent and 15.1 percent respectively). Therefore they capture a sub-
ststantial fraction of the information contained in the 18 separate measures. The first component has positive weightings on all variables, therefore it indicates the overall level of contact and produces values that are closely proportional to a simple average of the 18 observations for each country. The second principal component distinguishes between contact with parents/adult children and sibs and all other types of relative. The remaining 16 components account for a relatively small proportion of overall variance and will be ignored. The sign of such components is arbitrary, but the key point is that all weights of the first component have the same sign, so it differentiates countries with generally high values on these 18 indicators from those with generally low values. The second component has positive values for contact with secondary kin and negative values for contact with primary kin. Therefore it distinguishes between countries that have relatively high values of contact with secondary as compared with primary kin from those countries where the pattern is reversed, that is, it is concerned with difference in level of contact with primary and secondary kin rather than absolute levels. Positive values of this indicator indicate countries that give more emphasis to contact with secondary kin, irrespective of the overall level of contact. Note that by construction these two variables are uncorrelated. The two main dimensions of variation are concerned with overall values and a primary/secondary kin orientation. While the role of adult siblings is ambiguous in some definitions of primary/secondary kin (see endnote 1), these results confirm that national patterns of contact with sibs fit more naturally with contact with parents/adult children rather than with other relatives.14

One form of kin interaction or many?

The fitted values of these two indicators for the 29 countries are shown in Figure 7. These are further subdivided into the set of welfare regimes identified in endnote 3, which I discuss later, but initially I concentrate on the overall patterns. Rates of kin interaction are highest in countries around the Mediterranean (with the exception of France), irrespective of whether they are part of the European mainland, an island (Cyprus), or in Asia (Israel) (Figure 7a). Other high-contact countries include those with an Iberian colonial background and/or heritage, such as Brazil, the Philippines, and, to a lesser extent, Chile, which are close to their Mediterranean roots in patterns of kin contact as well as language, together with Northern Ireland. At the other end of the scale, low-contact countries include Nordic and Anglo-Saxon countries with a British colonial history. Canada, Australia, and New Zealand have levels of contact similar to Great Britain, whereas the United States and South Africa, although also former colonies, show a different pattern, perhaps unsurprisingly given that their population structures are more diverse and their political and social systems more dif-
FIGURE 7  First and second principal components affecting level and orientation of kin contact, by type of welfare regime

(a) Overall contact level

Welfare regime
- Other
- Nordic
- Liberal
- Conservative
- Eastern
- Southern

(b) Primary/secondary contact orientation

Primary kin orientation

Secondary kin orientation

ferentiated from Britain than the others. Possibly the most anomalous case is Northern Ireland, which has many of the characteristics and experiences of a colony, but has levels of kin contact much closer to those of southern Europe than to those of the former British colonies or indeed the rest of the United Kingdom. The remaining countries, which largely consist of those from the rest of Europe (western, central, and eastern), have intermediate values for overall contact. The similarities in values for countries of central Europe, irrespective of which side of the former Iron Curtain they fell on, are noteworthy, since they include countries with different social and economic experiences over the majority of the lifetimes of most respondents. Slovenia, which borders the Mediterranean, falls more naturally in the Mediterranean group, whereas its neighbor Austria fits with the central European group. Hungary, which borders Austria and Slovenia, might be expected to have values similar to the Czech Republic if 50 years of similar government were influential, but Hungary, which falls to the east of Hajnal’s line, has much higher levels of kin contact than the Czech Republic, which falls to the west of it. The apparent lack of influence of political systems is also seen in the case of the former East and West Germany, which have similar values of kin contact (the difference between West and East Germany of the average value of the three indicators shown in Figure 5 is 2.3 percent, one-fifth of the standard deviation of 10.9 percent of the distribution using all countries). Japan appears to fit most naturally with countries of central Europe. However, there is no evidence of well-defined groups of countries, but rather of a continuum of behavior.

A high score on the second principal component suggests that people in a particular country are likely to maintain wider kin networks at a given level of overall contact than those in low-score countries, that is, contact with primary kin forms a smaller proportion of total kin contact in high-score countries. However, the patterns on the second component are less clear-cut (see Figure 7b). Although Spain and Italy are both high-contact societies, Spain scores high on primary kin orientation, whereas Italy has the highest score for secondary kin contacts, lending weight to assertions that the southern European family system is not homogeneous. To gain further insight into these patterns, especially the extent to which they are associated with economic and cultural factors, I now relate values of these two main summary indexes of kin contact to national macro-level indicators (see Table 1). Because some variables are only appropriate to European countries, the table also presents separate results for Europe.

Economic conditions

The most widely used index of economic development is real GDP per head. Here I employ the purchasing-power-parity-adjusted measure used in the
UNDP Human Development Index (HDI) (all macro-level data apart from religiosity refer to 2004). The literature theorizes a negative correlation between the strength of kinship ties and income levels, and indeed this is the case in the present sample (see Figure 8a). Income level explains 16 percent (i.e. \(-.42\)) of cross-national variation in overall kin contact. But it explains only 6 percent of the variation when Europe is considered, which indicates that income level by itself explains only a small fraction of variation between European countries. Mediterranean countries such as Spain and Italy have higher levels of kinship interaction than would be expected given their income levels, and eastern European countries have lower levels than expected given their income levels in relation to the regression line showing the expected linear relationship between these variables.

The magnitude of the correlation between real GDP per head and nuclear family orientation is smaller for the whole sample of countries, although this correlation does not reach statistical significance even at the 10 percent level. However, the sign of the correlation indicates that wealthier societies are more oriented to secondary kin than to primary kin—the opposite of what would be expected under modernization theory applied to the nuclear family.

Human development

A more comprehensive index of development is the Human Development Index. There is a weaker relationship with HDI than with GDP per head (note that GDP per head is a major component of the HDI, and, of course, is correlated with the other indicators included in the HDI), suggesting that the non-directly economic aspects of human development, such as life expectancy
or educational level, are not necessarily more closely related to patterns of kinship interaction. This may be investigated by examining the relationship with mortality, which plays a substantial role in the HDI calculation.

**Life expectancy and total fertility rate**

Population structure and trends are largely determined by fertility and mortality, which are usually measured by life expectancy at birth, $e_0$, and the total fertility rate (TFR). As with GDP per head, life expectancy at birth is a major component of HDI. Unsurprisingly, a negative relationship between
kin contact and life expectancy is found (data not shown), but the very small magnitude indicates a weak relationship. Because mortality is much higher in South Africa than in the other countries considered, owing to that country’s high levels of HIV/AIDS ($e_0 = 48.8$ years), calculations excluding South Africa were also undertaken, but this had little effect on the relationship of kin contact with life expectancy.

Fertility is related to development globally, but its relationship in the set of countries analyzed here is more ambiguous. This set does not include any of the least developed countries and under-represents developing countries. In Europe some of the lowest levels of fertility are found in the strong family societies of southern Europe (a number of authors have argued that low fertility is consistent with strong family systems in current contexts, e.g. Dalla Zuanna 2004) and in lower-income countries in parts of central and eastern Europe. However, the relationship with TFR is weak apart from Europe, where, once more, nuclear family orientation is positively associated with low rather than high fertility, that is, strong rather than weak family systems, the reverse of the expected relationship.

**Corruption**

Corruption is a societal indicator reflecting adherence to legal norms in public offices and institutions; it has also been linked to governance (Kaufmann, Kraay, and Mastruzzi 2003) and social capital (Bjornskov 2003). I hypothesize that strong family societies are likely to be related to weak governance since “amoral familism,” a term used by Banfield (1958, p. 10) in his study of a southern Italian village that reflects “the inability ... to act together for their common good ... transcending the immediate, material interest of the nuclear family,” may both promote corruption and be a response to it. The Corruption Perception Index, based on expert rating and published by Transparency International, ranks countries by the degree to which corruption is perceived to exist among public officials and politicians (www.transparency.org). The index may be interpreted as an indicator of trust in public institutions. For each country, the index estimates levels of corruption on a scale from 0 (high) to 10 (low). Level of corruption is positively associated with kin contact, and rather more strongly than the variables considered above such as GDP per head (Figure 8b), suggesting that negative aspects of strong family societies such as amoral familism may be relevant.

**Religiosity**

The religious/secular divide has been used as an indicator of modernization, but it also is an important variable in its own right, as in discussions of the Second Demographic Transition (Lesthaeghe 1995), and a component of the
strong/weak family divide. The index of religiosity used here is the estimated proportion of the national population at the median age who attend religious services at least monthly based on responses by survey respondents in 2001. This figure ranged from 80 percent in Cyprus to 10 percent in East Germany. Religious denomination was also examined, but this had a high correlation with religious attendance, with mainly Catholic, Jewish, and Greek Orthodox countries having higher attendance than countries where other religious denominations (or no religious affiliation) predominate. Religiosity shows as strong a relationship with kin contact as does corruption, with the more religious countries having higher levels of kin contact than nonreligious ones. But even after allowing for religious attendance, Mediterranean countries had high levels of contact, and Anglo-Saxon countries and Poland had low levels (Figure 8c). Religiosity has no clear relationship with primary versus secondary kin orientation.

Geographical axes

The north/south divide in Europe has attracted much discussion, although this is not usually considered as primarily a geographical division, but rather as a proxy for other social and economic factors. Arguments by Lesthaeghe and Reher that situate the homeland of the Second Demographic Transition in north-western Protestant Europe, or the southern European family system as influenced by Muslim attitudes in the Mediterranean, have a geographic component. Although the remote causes may be the religious systems in place many centuries ago, the exigencies of the then-current technology and forms of transportation meant that their effects were localized in particular geographical regions. Geography may have a more direct effect: temperature, itself related to geographic position, affects infant care, a key family function (Whiting 1981). The primacy of environmental and ecological factors in all aspects of human development has been strongly argued in historical studies (Diamond 1997; Fernández-Armesto 2000). An added benefit of using a spatial location variable is that the direction of association is clear—geography may affect family ties (presumably by reflecting remote determinants), but not the reverse—whereas establishing direction of causality between such variables as corruption and kin contact is much more problematic.

For societies outside Europe, we would not expect any clear geographical patterns; therefore I calculated the correlation between indicators of kin contact with latitude and longitude of the capitals of the 19 European country units (London and Berlin respectively for Great Britain/Northern Ireland and East/West Germany) in the ISSP 2001 data set (Table 1 and Figure 8d). There is indeed a north/south axis, with a high correlation of 0.8 between overall levels of kin contact and latitude: kin contact is greater the farther south in Europe one goes. There is no evidence for the existence of an east/west axis,
since the correlation with longitude is close to zero. However, the correlation between longitude and the second principal component is larger, suggesting there may be a weak east/west difference in the relative emphasis given to primary as compared with secondary kin, with a nuclear family orientation being more prevalent in eastern than in western Europe.

Welfare regime

Emphasis has been given to welfare regime as an explanation for differences in family forms across Europe (and sometimes in English-speaking countries such as Australia and the United States). While alternative classifications are used to define welfare regimes (endnote 3), there is a broad consensus about classification of most countries; for example, the Nordic countries almost always form a well-defined group, although sometimes the Netherlands may be included with them. However, Figure 7 shows that classification of countries by welfare regime does not add any insight into cross-national differences in patterns of kin contact. It is difficult to differentiate between welfare regime and other classifications, such as geographical ones, since both tend to treat northern and southern countries as forming natural groupings. And there are problems in how to incorporate the former Communist European countries, which have had very different welfare regimes but tend to have values on kin contact similar to those of neighboring western countries. Thus there is no clear empirical evidence that typologies of welfare regimes have an independent role in explaining societal-level differences once other competing explanations and the historical context by which countries arrive at a particular situation (or “path dependence”—Mayer 2001; Billari 2005) are taken into account.

Conclusions

This article has documented patterns of a key aspect of family functioning, that of kin contact, in contemporary societies, using a larger set of countries than possible hitherto. Substantial differences in kin contact between countries do exist at the start of the twenty-first century. The two main dimensions of differences relate to overall levels of contact and the emphasis given to primary as compared to secondary kin. Differences between countries are more substantial than between subgroups within countries. The assumption that differentials are narrowing cannot be substantiated: the differences are so large that it is difficult to see how they could have been substantially greater in the past.

Macro-level factors likely to be associated with differences in kin contact were examined. These variables are correlated to some extent, making it impossible to identify a single or a small group of variables as crucial, even
with a large number of country observations. Of the variables examined, the clearest relationship with the full sample of countries was found with religious attendance and, within Europe, with a simple north/south geographical measure. If latitude were acting as a proxy for some other variable included here, one would expect that its correlation with kin contact would be less substantial than with the underlying variable. The fact that this is not the case indicates that differences between geographical areas in Europe do not simply reflect the different levels of economic development or religiosity. While kin contact is weakly associated with variables related to the economic system such as GDP per head, it is far more strongly associated with variables that reflect other aspects of society, such as religiosity, that may be regarded as cultural. There is no evidence of countries forming well-defined clusters with respect to kinship interaction, nor of any well-defined fault line associated with such factors as religion, inheritance patterns, Germanic/Latin, Catholic/Protestant/Muslim influences (largely but not exclusively north/south) or a north-western European marriage pattern (largely east/west in orientation). Rather there is a steady gradation stretching from Mediterranean countries at one extreme to Nordic countries at the other. While the existence of substantial north/south European differences in kin contact is clear-cut, no single explanation for this pattern can be established. These results support the existence of a distinction between emphasis on primary and secondary kin as the second main aspect of differences in contact between countries, but they do not offer evidence that these are related to modernization as is frequently suggested.

If contact with kin is accepted as a key component of the functioning of family systems, then neither of the extreme assumptions—homogenizing pressures toward a nuclear family model or persistent well-defined groupings arising from historical contexts—can be substantiated. Rather, there is a continuum in family behaviors over a substantial range, related to a number of explanatory factors.

Notes

1 This distinction between primary and secondary kin is the most commonly used one (Allan 1996), although Adams (1999) combines siblings with grandparents as a separate category.

2 For example, Reher (1998) used recorded suicide rates, which are higher in northern Europe, as an indicator of greater loneliness. There is evidence that respondents in northern Europe report lower levels of loneliness than in the south (Stack 1998).

3 Arts and Gelissen (2002) include seven classifications with five main groupings of countries (although the labels attached to these vary between authors). None of these includes former Communist countries of Europe or developing countries. In most cases, the countries analyzed in this article appear in one of the five groups, and I use this consensus classification later. I include Cyprus with the southern group, but two countries that could not be allocated were Japan and Swit-
The countries included in the ISSP are Australia, Austria, Brazil, Canada, Chile, Cyprus, Czech Republic, Denmark, Finland, France, Germany (separately for former West and East), Hungary, Israel, Italy, Japan, Latvia, New Zealand, Norway, Philippines, Poland, Russia, Slovenia, South Africa, Spain, Switzerland, United Kingdom (separately for Great Britain and Northern Ireland), and the United States. Random samples of adults were obtained in each country using sampling methods including mail and telephone interviews, but 20 countries used face-to-face interviews with one representative household member, in most cases identified using the Kish grid method. In 23 of the countries included, the sampled population was aged 18 and over (the minimum age was 15 in Finland and Switzerland, and 16 in Japan and the Netherlands; four countries had an upper age limit for interviews, 74 in Finland, 75 in the Czech Republic, 79 in Norway, and 85 in Latvia). Further details of survey design, response rates, and questionnaires etc. are available at «http://193.175.239.100/en/data_service/issp/data/2001_Social_Networks_II.htm».

Results shown later include former East and West Germany and Great Britain and Northern Ireland separately, giving 29 “country units.” For convenience, I use the term “country” to refer to these 29 units when discussing survey results. These two subnational samples were large enough for separate analysis and could provide potentially interesting insights. The Northern Ireland sample was 50 percent larger than that for Great Britain, although Northern Ireland accounts for under 3 percent of the UK population, so it would have a trivial contribution in a nationally weighted sample. Ireland has been identified as a noteworthy exception to the north/south European divide: “Ireland is an excellent example of this: a decidedly Catholic country in northern Europe whose forms of familial organization often fit quite poorly with our north–south comparisons” (Reher 1998, p. 214). But Northern Ireland is predominately Protestant (see endnote 16), and therefore allows the assumption that Catholicism is the key factor to assess in its anomalous patterns. Germany presented two geographical areas with similar cultural backgrounds but different political and administrative systems for most of the lifetime of survey respondents, whereas in the United Kingdom the reverse was the case.

5 The difficulty of investigating alternative explanations of kinship interactions is illustrated by Höllinger and Haller’s (1990) analysis of the 1986 ISSP round of seven countries in which they formulated four hypotheses concerning family patterns.

6 Information was obtained about frequency of contact with the particular adult child and brother or sister with whom the respondent had most contact. No such restriction was placed on contact with other relatives. The analysis therefore underestimates the total volume of contact of parents with their children, since there will usually be other adult children in the family. This article is concerned with frequency of contact, which is not affected by the presence of kin with whom the respondent has less contact.

7 The main alternative for comparable and objective measures of family forms is household structure, but this is less meaningful as coresidence declines and other factors may affect the interpretation of results. For example, Shanas et al. (1968) found that much higher proportions of married people aged 65 and over in Britain lived with a child in 1962 than did so in Denmark or the United States. This finding might suggest much greater family solidarity in Britain, but it is incompatible with the longstanding assumption of residential isolation of the elderly there (e.g., Wall 1984, 1995). But living arrangements in Britain likely reflect the major housing shortages after World War II, when over half of married couples started off married life sharing accommodation, usually with in-laws (Holmans 1981), rather than indicating increased family solidarity at that time. On balance, contact with a range of kin, which should be less subject to the problems of interpretation than data on household structure, is the best set of measures available on representative samples for a large number of countries.

8 Hammel (1990) discusses the role of culture in demographic studies, arguing that too much reliance has been placed on structural-functional approaches that assume
universalistic common outcomes irrespective of context. He contends that cultural institutions shape the behavior of social actors in the short run and that individuals shape culture in the long run, so leading to persistent differentials. Culture as identifier, such as a shared language, has been found to be powerful factor explaining the onset of fertility declines in Europe.

9 To improve readability of the figures, the data by country have been sorted by magnitude of the variable displayed (in Figure 5, e.g., by using the average of the values found).

10 The exclusion or inclusion of co-resident relatives makes little difference to rankings, since countries with high levels of coresidence generally have high levels of contact with non-coresident relatives. The exception is Japan, which has one of the highest levels of coresidence but one of the lowest levels of contact with non-coresident relatives. If coresidents were included in measures of frequent contact, contact with primary kin in Japan would be around the lower quartile rather than the lowest value. Other countries are not so affected.

11 To standardize for the different age structures of the countries concerned, the values used are the estimated proportions at the median age of respondents with the relevant relative having face-to-face and all types of contacts with adult children, mothers, fathers, and sibs, derived from logistic regressions with contact as dependent variable and country and age as covariates. Similar age-standardized values are used in the remainder of the article.

12 The same relative lack of difference within countries is found with other variables such as self-defined social class. This is not to conclude that no differentials exist within countries: for example, unsurprisingly and as found elsewhere, there are substantial differences by age of relatives and their proximity (Kalmijn 2006; Smith 1998). Of greater relevance is the substantial difference between Northern Ireland and Great Britain, although formally part of the same nation-state since 1801. See later discussion.

13 The loadings of first and second principal components on indicators of kin contact are as follows:

<table>
<thead>
<tr>
<th>Contact with</th>
<th>First component</th>
<th>Second component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Brother or sister</td>
<td>0.32</td>
<td>0.36</td>
</tr>
<tr>
<td>Adult child</td>
<td>0.25</td>
<td>0.24</td>
</tr>
<tr>
<td>Father</td>
<td>0.29</td>
<td>0.30</td>
</tr>
<tr>
<td>Mother</td>
<td>0.33</td>
<td>0.34</td>
</tr>
<tr>
<td>Aunts/uncles</td>
<td>0.11</td>
<td>0.11</td>
</tr>
<tr>
<td>Cousins</td>
<td>0.13</td>
<td>0.13</td>
</tr>
<tr>
<td>Parents-in-law</td>
<td>0.11</td>
<td>0.11</td>
</tr>
<tr>
<td>Brothers-/ sisters-in-law</td>
<td>0.18</td>
<td>0.19</td>
</tr>
<tr>
<td>Nephews/nieces</td>
<td>0.21</td>
<td>0.22</td>
</tr>
</tbody>
</table>

Note that contact estimates are the estimated proportion of respondents at median age of men and women having frequent contact with the relevant kin member.

14 This finding may be due in part to the fact that parents, adult children, and sibs may live closer to one another than to other relatives. The analysis was repeated controlling for respondent’s proximity (in terms of journey time) to his/her mother—the only relative for whom proximity is available (cases where the mother was dead were included as a separate category)—but the results were similar to those reported above.

15 This is not to say that the other countries are wholly British in origin: Canada has a substantial French heritage, and Australia has a substantial population of southern European origin, among whom high rates of kin contact are found. For a discussion of how migrants’ fertility behavior in Australia is related to their country of origin, see Khoo et al. (2002).

16 As Reher suggested, Ireland might be expected to be close to the southern European pattern (see endnote 4), although Northern Ireland contains more Protestants than Catholics; in the ISSP sample, only 38 percent reported themselves as Catholic, compared with 50 percent Protestant (unlike the Irish Republic, which is predominantly Catholic).
References


