Family Inclusiveness and Spatial Dispersion: The Spatial Consequences of Having Large and Diversified Family Configurations

Eric D. Widmer[1], Gil Viry[2]

[1]Department of Sociology, University of Geneva, Geneva, Switzerland
[2]School of Social and Political Science, The University of Edinburgh, Edinburgh, Scotland
Email: eric.widmer@unige.ch, gil.viry@ed.ac.uk

Abstract

This article stresses the critical role of family inclusiveness for shaping the spatiality of families. Some individuals have a rather exclusive definition of their family, focusing on partner, children, siblings and parents. Others develop inclusive definitions of family by considering extended kin, step relatives and friends as significant family members. Family inclusiveness is hypothesized to account for a large share of the dispersion of family members throughout space. Data consisted of a stratified sample of 300 mothers of school-aged children living in the cosmopolitan city of Geneva. The results show that spatial dispersion of families increases with the number of family members considered significant. Inclusion of family members beyond the nuclear family of origin is paradoxically associated with a localised family context. Overall, this study emphasises the importance of family inclusiveness as a key dimension for understanding family spatiality in globalized societies.

Keywords

Kinship, Social Networks, Spatiality, Family, Inclusiveness

1. Introduction

Following the critical assessment of the notion of family conceptualised as a closed group represented by a household [1], there has been an increasing attention given to broader definitions of family space over the last decade (e.g. [2] [3] [4] [5]). Research provided evidence about the networked patterning of family life throughout space. Family ties that matter are not limited to the household or

the nuclear family, but are also composed of voluntary family relationships that are potentially scattered over large distances [6] [7] [8]. In particular, the migration and mobility literature emphasises the skills and resources necessary for individuals to overcome the negative consequences of spatial distance and to spread family relationships beyond cities, regions and nations (e.g. [9] [10] [11]). A sense of family belonging may be built at a distance, without a regular co-presence, but through visits, telecommunication, emotional and material expressions of care (e.g. money transfer, birthday presents) [12] [13] [14] [15]. However, migration and transnationality in families may not translate automatically into more spread-out significant family contexts. Family spatiality may strongly depend on whom is included as a member in the family. Based on participants' self-reported family members, this study examines the link between inclusiveness in family definitions and spatial distance with significant family members. What may be the consequences for the dispersion of family members through space of having large and diversified family configurations?

2. The Spatial Dispersion of Families

Influential researchers argue that the globalization of societies goes hand in hand with a blurring of the spatial constrains of contemporary families and intimate relationships [7] [16] [17] [18]. High-speed mobility systems and the general increase in affluence in the Western world together contribute to making spatially close families less crucial for relationship maintenance and personal well-being. This shift of paradigm from family as a local reality to family as widespread network is illustrated by a growing use of neologisms—living apart together (LAT) relationships, commuting marriages, multilocal households, transnational grannies [19], astronaut parents and satellite children [20]. Research on migration, diaspora and transnational families have established that intimate networks of care, support and affection exist across vast physical distances between individuals and their family members (e.g. [6] [9] [21] [22] [23]). Some migrants maintain strong ties with the family left behind [24] [25] and kinship ties play a key role in migration decisions [4] [26] [27] [28]. Studies on transnational families have documented that the sense of belonging and commitments with family members often persist without a regular co-presence but through emotional and material expressions of care (e.g. [12]). Empirical evidence shows that the extent to which individuals include family relationships over distance depend upon their own sense of family roles and family responsibilities and how they negotiate these within their family [29] [30]. 'Families we live by' in contrast with 'families we live with' [31] are key symbolic elements of this negotiation.

While many individuals have substantial leeway in developing and sustaining family relationships over distance, empirical evidence shows that family life continues to be strongly spatially and geographically embedded [32] [33] [34]. Various studies have documented the local embeddedness of family with a large majority of Europeans living in the same region as their parents [35] [36] [37]. However, a minority of the European population, often highly qualified young

people without children or wealthy retired people, settle permanently to another region or country in great distances from their family members [38] [39]. Overall, this literature suggests that individuals actively shape the spatiality of their family depending on a complex set of constraints, norms, strategies and practices.

3. Family Inclusiveness

Family inclusiveness may be one such practice. Exclusiveness of a nuclear family isolated from wider kin was written into Parsons's [40] influential account on American kinship emphasizing the conjugal unit as the nucleus around which family was formed and sustained in industrialised societies characterised by spatial mobility requirements. Exclusiveness points to a nuclear family that is autonomous in matters concerning its members [41] [42]. The two concepts of procreation family (the focal individual, the partner and the coresident children) and family of orientation (the focal individual in adulthood, the parents and siblings) were key in stressing altogether the importance of the nuclear family, either present or past, for defining significant family contexts [43] [44] [44]. In middle adulthood, an exclusive definition of family refers to the focus on coresident partner and children, but also on parents and siblings as members of the nuclear family of origin.

By contrast, family inclusiveness is about the extent to which the statuses of significant family members deviate from the definition of family as nuclear [45]. It refers to more permeable boundaries around the nuclear family by stressing the family significance of voluntary kin [46] or fictive kin, *i.e.* people considered to be family members despite being unrelated by statuses associated with blood relatedness or marriage. In particular, close friends, neighbours, or colleagues may be considered family members because of the particular history and intimacy that individuals have developed with such people [47]. The concept of family of choice [48] refers to such case. Family inclusiveness makes the boundaries of contemporary families more permeable [49] [50] [51] [52].

Family inclusiveness also concerns the number of family members considered significant. Empirical research has shown that there is a variety of ways in which individuals may differ in the inclusion of siblings [53], uncles, aunts and cousins [8] [54] [55] as significant family members [56] [57]. Some individuals develop or maintain strong relationships with many of them in adulthood, while others disengage from them [29] [49], based on practical and normative concerns. Divorce, remarriage and family blending also contribute to the number of significant family members. Research has found important variation regarding how individuals reconstitute their family relationships after a divorce or a remarriage [46] [48] [59] [60]. Stepparents, stepchildren and stepsiblings, but also previous partners and ex-in-laws, may or may not be included as significant family members, making the size of family networks after divorce highly unequal [42] [45] [61] [62]. Overall, two key dimensions of inclusiveness for spatial distance are considered, *i.e.* the statuses of significant family members (beyond or within the

nuclear family, presence of in-laws, step-relatives and friends), and the number of significant family members (small versus large).

4. Family Inclusiveness and Spatiality of Significant Family Contexts

The literature has stressed the significance of spatial proximity for maintaining active family relationships and meeting family commitments [15] [63] [64]. Spatial proximity facilitates the provision of practical support, and to some extent, emotional support and intimacy, between family members. Various surveys have documented the decay of contact and care with the increase of spatial distance separating family members (for ex. [65] [66]). This is partly because cultivating active relationships with family members living remotely is costly. Providing care to a distant elderly parent by telecommunications and regular visits, for example, requires substantial resources of money, time, physical and mental energy, access and skills [5] [11] [67] [68] [69] [70]. People who lack these resources may face difficulties in staying in touch with relatives who are living beyond their immediate vicinity. In contrast, increased movement may allow for a greater number and more diverse family relationships outside of the community and family of origin. The present crisis of many welfare states and the lack of financial resources among some disadvantaged social groups may accentuate the importance of living in close spatial proximity to family members. Recent studies on youth mobility in Western contexts have showed that the local presence of parents and siblings is a significant barrier to relocation, especially for young people from poor backgrounds and ethnic minorities [71] [72].

Yet, the spatial dispersion of families is not only about connectivity, *i.e.* coordinating and synchronising meetings with family members through individual mobility (for a critical approach, see [2] [73]). It is also about a process by which an understanding of family and who belong to it is developed through family routines and narratives [74], building a sense of togetherness at a broader spatial scale. Some individuals build their sense of family belonging around mobility (e.g. military or seafaring families, diasporas, transnational families, online communities) [26] [75]. Others develop a family culture that is more locally embedded. In that latter case, 'doing family' is linked with regular practices and shared activities in face-to-face interaction, such as family care, family meals, household chores and leisure activities [33] [76] [77].

In increasingly globalized societies, the ability of individuals to develop and maintain far-flung family contexts may strongly depend on mobility practices [11] [70]. Individuals who keep on having regular interactions with many family members may have to maintain connections across larger spaces than those who only have a small family circle. Empirical evidence also shows that peripheral relationships (extended kin, neighbours, co-workers, distant friends) are more vulnerable to physical distance than relationships with close relatives and friends [78] [79]. Evidence also suggests that vertical family relationships (parents and children) are more likely to be maintained despite great spatial distances than

relationships with siblings, which themselves are more likely to be maintained than relationships with friends and collaterals (uncles, aunts, cousins) [35] [60] [80] [81] [82] [83] [84]. The higher resilience of relationships with close relatives to spatial distance may be explained by normative expectations and high density of connections that enforce mutual obligations [10] [68] [85] [86] [86] [87]. Overall, the literature suggests that relationships with parents and possibly siblings are less likely to be broken by spatial distance than relationships with other kinship members or voluntary kin.

5. Hypotheses

We expect that the spatial dispersion of families is significantly shaped by family inclusiveness. The two dimensions of inclusiveness, i.e., the statuses and number of significant family members, are deemed critical for spatial distance from family members. We first hypothesize that individuals defining their significant family members mostly in reference with the nuclear family of origin have more spread out families than those with an inclusive definition of family (Hypothesis H1). Overall, including siblings and parents within one's family boundaries is expected to increase the spatial spread of families. Because of normative expectations and high density of connections, these relationships are more likely to be maintained at distance than relationships with friends, co-workers, in-laws, stepfamily members and extended kin. In contrast, the inclusion of family members "by choice" or "elective" is expected to be associated with spatially concentrated families because such relationships mainly develop and are maintained on the basis of regular face-to-face interactions. As such, and contrary to the view that late modernity is associated with more de-territorialised families [16] [17] [88], we expect that a 'family of choice' is more localised than definitions of family as nuclear.

Second, we hypothesize that the spatial distance from family members increases with their number (Hypothesis H2). Facing increasing distances with parents and siblings due to globalization trends, we expect that respondents who have a large number of significant family members will have more spatially dispersed family contexts than those who perceive their family as being composed of few significant family members. It could be argued that sustaining a large network of family members is a time and energy consuming activity that is more likely to be accomplished if most family members live close to the respondent. However, this would assume that all family relationships are equally demanding in terms of contact and support to be provided. This is unlikely given the normative dimension of some family relationships, such as parents, but not others. Instead, we expect that large families spread beyond the local environment.

6. Data

The data consist of a non-proportional stratified sample of 300 women drawn from the population of mothers with a child aged 5 - 13 living in the Swiss canton of Geneva (Switzerland). All respondents had at least one biological child

aged 5 to 13 years (referred to as the target child) and lived with a partner (cohabiting or married). In one half of the cases (150 women in stepfamilies), the target child was the child of the respondent, but not of her co-resident partner or spouse. The respondent or her partner might have had other children, either together or with another partner, living at home or elsewhere. In the other half of the cases (150 women in first-time families), the target child was the biological child of both the respondent and her co-resident partner. The respondent or her partner had no other children from previous relationships. The two halves of the sample were matched with regard to the age and the sex of the target child, and the educational level of the respondent, for the sake of comparison between stepfamilies and first-time families with some similar characteristics. These sample characteristics insure at the same time enough homogeneity for controlling out the effect of a series of potential confounding variables including family structures (first-time versus stepfamilies). The two matched sub-samples (first time versus stepfamilies) enable us to measure family inclusiveness's effect in both family forms, therefore extending the validity of results on a large number of current family types.

Respondents were selected using a random procedure based on an official register of all households with children in the canton of Geneva and were interviewed between the spring of 2009 and the winter of 2010. They were first recruited through a survey institute and interviewed by the research team. The response rate was 65%. Face-to-face interviews lasted about an hour and a half and were conducted in different settings depending on the respondents' preferences (mostly in their home or at the university). The absence of other family members during the interview was required to ensure confidentiality. Respondents ranged in age from 29 to 55 with a median and average age of 40. Fourteen percent of them had a foreign nationality (other than Swiss) and 32% were born outside Switzerland. A vast majority of them (94%) had lived in Geneva for 10 years or more. Regarding education, 35% of the respondents had a university degree, 12% an upper secondary degree, 20% a high vocational training degree, 20% a low vocational training degree and 3% a lower secondary education degree. The mean number of children was 2.24; 2.35 for women in first-time families and 2.14 for women in stepfamilies. Education and income were first included in the analysis as control variables and then removed because they did not yield statistically significant differences.

The data collected in this study have some limitations. Firstly, it is a case study that is limited to one urban or suburban environment (Geneva) in one specific country (Switzerland). We are not aware of comparative data that include family inclusiveness as a construct, which make validation in other contexts for the time being impossible. This case study is however relevant and informative, because of the highly mixed nature of the Geneva area, in terms of its population. Geneva is indeed a highly cosmopolitan city, with a majority of individuals being born outside the country [89]. The density and reliability of high-speed trans-

port networks (highway, rail and air travel) may facilitate frequent visits to distant family members for individuals residing in Geneva. Moreover, the Swiss urban system, to which Geneva belongs, is comprised of many medium-sized cities located relatively close to one another, favouring inter-regional family visits. Yet, cultural aspects of family and mobility practices in Switzerland foster a comparatively strong geographical concentration of families [90]. Compared with people living in the United States, Northern Europe and France, Swiss people often live in the same region as their parents and are strongly attached to their region of origin. Overall, the large diversity of national backgrounds and degrees of localism in the city makes Geneva a good case study for understanding the interrelation between family inclusiveness and the spatial dispersion of family members.

7. Measurements

This study includes three sets of measurements, one set related with family inclusiveness, another set with spatiality of families, and a third set with control of potentially confounding variables. Table 1 provides summary statistics of these variables.

7.1. Family Inclusiveness

Following previous research on lay definitions of family and inclusiveness [8], respondents first provided a list of persons that they considered to be their significant family members. They were instructed that the term 'significant' referred to living people in their family who had played a role, either positive or negative, in their life during the past year. It was clearly stated that respondents

Table 1. Descriptive statistics.

Statistics	N	Mean	St. Dev	Min	Max
Average dist. with family members	300	2.992	1.873	0.000	6.215
Average dispersion of family members	300	3.331	1.907	0.000	6.020
Family structure	300	0.500	0.501	0.000	1.000
Number of cohabitants	300	3.107	1.080	0.000	8.000
Number family members included	300	9.760	4.461	2.000	29.000
Number of parents included	300	1.323	0.749	0.000	2.000
Number siblings included	300	0.970	1.003	0.000	6.000
Number step relatives included	300	0.923	1.616	0.000	9.000
Number in-laws included	300	1.230	1.782	0.000	9.000
Number of friends included	300	0.787	1.654	0.000	12.000
Number of extend kin included	300	0.740	1.414	0.000	7.000
Distance from place of birth	300	3.456	2.303	0.000	6.215
Recent arrival in Geneva	300	0.063	0.244	0.000	1.000
Age	300	40.390	4.678	29.000	55.000

should not only refer to people they loved and respected, but also to those who had upset them or had made them angry during the last year. The term family was left undefined and respondents were asked to use their own definition of what they mean by family. Respondents therefore focused on a self-definition of significant family members, who were not necessarily members of the household or people related by blood or marriage.

Based on the list of significant family members, we computed a series of indicators related to the composition of personal family configurations (Table 1). On average respondents cited 1.3 parents, 0.97 siblings, 1.23 in-laws (parents and siblings-in-law), 0.93 steprelatives (children of the current partner who are not the respondents' biological children, previous partner, his family of origin and his current partner), 0.74 extended relatives (uncles, aunts, cousins, nephews and nieces), and 0.79 friends considered as family members. The summary index in Table 1 reports the total number of family members considered significant. On average, respondents cited 9.76 significant family members (with a minimum of two family members included, and a maximum of 29).

7.2. Spatiality of Families

Based on the residential postcode of family members (as reported by respondents), the geographical distance on the road (in km) between the respondent and her significant family members was inferred with the help of routing software modelling the Swiss road network. The spatial dispersion of families was computed based on two complementary measurements: 1) the natural logarithm of the average geographical distance between the respondent and her family members; 2) the natural logarithm of the average geographical distance between significant family members, with the respondent excluded from the computation [25]. The first indicator (distance with family members) measures to what extent the family members live close or far away from the respondent. A threshold distance of 500 km was used between respondents and family members living abroad (except those living in the France-Geneva border region), which is about the greatest road distance between any two locations in Switzerland. The second indicator (dispersion of family members) measures how spatially widespread family members are. The distance between two family members living abroad was set to 0 when they lived in the same country and was set to 500 km when they lived in different countries. We used the natural logarithm to reduce the effect of highly dispersed families (including transnational families), as we expect that absolute changes in distance are more important for short distances than long distances. The logarithm was also used to counter deviations from normality. These two metric variables could be examined with linear regression analysis. For robustness checks, we also ran ordinal regression models with the two indicators of spatial dispersion treated as ordinal variables, therefore alleviating the potential misleading influence of the flat codification to 500 km between family members leaving in another country. Main results did not differ from linear regression models and therefore were not presented.

7.3. Control Variables

The distance between the current residence of respondents and their place of birth was computed for controlling for the effect of migration, using the natural logarithm of the road distance as described above. Stepfamily (50%) versus first-time family (50%), respondents' age, citizenship (53% Swiss, 14% dual citizenship, 32% other citizenships) and the respondents' duration of residence in Geneva (94% less than 10 years, 6% 10 years and more) were also included in the analysis, as research suggests that these variables are associated with the spatiality of families. We also added a control for the number of family members living in the same household as the respondent, as such persons have a distance set to zero by definition. Note that all family statuses were present in both first-time and stepfamilies, although in unequal proportions. For instance, there was a significant proportion of step terms in first-time families stemming from divorce and remarriage of the respondent's or her current partner's parents.

8. Results

The analysis develops in three steps. First, bivariate tests of association between all study variables are provided. Second, we present the results from linear regression models using as predictors the inclusion and number of specific family members in the family. These models estimate the extent to which the spatiality of families is associated with specific family statuses, controlling for various potentially confounding variables. Third, we discuss the results of regression models using the total number of significant family members as predictor of family spatiality.

Pearson correlations presented in Table 2 show that the distance from significant family members is positively associated with the number of family members (Pearson correlation R: 0.31, p < 0.01), the number of parents (R: 0.23, p < 0.01), siblings (R: 0.31, p < 0.01), in-laws (R: 0.23, p < 00.01), and, more marginally, with extended relatives (R: 0.18, p < 0.05). This distance was not significantly associated with the number of steprelatives (R: 0.06, p > 0.10) and friends (R: 0.06, p > 0.10). Distance from place of birth was strongly associated with distance from significant family members (R: 0.31, p < 0.01). Citizenship was also associated with distance from family members, with Swiss and dual citizenship individuals having closer family members than individuals of other countries (F = 6.9, *p* < 0.05). Recent migration also had a positive effect on distance with family members. First time families versus stepfamilies and age of respondents were unrelated with average distance from family members.

Similar associations were found for the dispersion of family members. Family members were more spatially widespread when the number of family members increased (R: 0.33, p < 0.01), but also when the number of cited parents (R: 0.23, p < 0.01), siblings (R: 0.23, p < 0.01), in-laws (R: 0.24, p < 0.01) and extended relatives (R: 0.199, p < 0.01) increased. This distance was not significantly correlated with the number of steprelatives (R: 0.08, p > 0.05) and friends (R: 0.10, p > 0.05). Citizenship and recent migration were not associated with the spread of

Table 2. Correlation Coefficients.

	Average log-distance with family members (1)	Average log-dispersion of family members (2)	Family structure (3)	Number of parents included (4)	Number siblings included (5)	Number step-relatives included (6)	Number in-laws included (7)	Number of friends included (8)	Number of extended relatives included (9)	Log-distance from place of birth (10)	Recent arrival in Geneva (11)	Age (12)
Average log-distance with family members (1)	1	0.950***	0.307***	0.229***	0.305***	0.065	0.234***	0.066	0.211***	0.312***	0.205***	0.100.
Average log-dispersion of family members (2)	0.950***	1	0.332***	0.231**	0.266***	0.084	0.236***	0.100.	0.199**	0.259***	0.119*	0.095
Family structure (3)	0.307***	0.332***	1	0.335***	0.354***	0.413***	0.483***	0.392***	0.534***	−0.103***	−0.133*	−0.039
Number of parents included (4)	0.229***	0.231***	0.335***	1	0.129*	0.170**	0.137*	−0.014	0.086	−0.110.	−0.039	−0.174**
Number siblings included (5)	0.305***	0.266***	0.354***	0.129*	1	0.044	0.009	0.038	0.134*	0.130*	−0.061	0.007
Number step-relatives included (6)	0.065	0.084	0.413***	0.170**	0.044	1	−0.014	−0.080	0.110.	−0.079	−0.013	−0.065
Number in-laws included (7)	0.234***	0.236***	0.483***	0.137*	0.009	−0.014	1	0.021	0.074	0.006	0.066	0.007
Number of friends included (8)	0.066	0.100.	0.392***	−0.014	0.038	−0.080	0.021	1	0.063	−0.139*	−0.124*	0.002
Number of extended relatives included (9)	0.211***	0.199**	0.534***	0.086	0.134*	0.110.	0.074	0.063	1	−0.069	−0.059	−0.016
Log-distance from place of birth (10)	0.312***	0.259***	−0.103.	−0.110.	0.130*	−0.079	0.006	−0.139*	−0.069	1	0.249***	0.127*
Recent arrival in Geneva (11)	0.205***	0.119*	−0.133*	−0.039	−0.061	−0.013	0.066	−0.124*	−0.059	0.249***	1	−0.044
Age (12)	0.100	0.095.	−0.039	−0.174**	0.007	−0.065	0.007	0.002	−0.016	0.127**	−0.044	1

Note ***$p < 0.001$; **$p < 0.01$; *$p < 0.05$; .$p < 0.10$.

significant family members, but distance from place of birth again was. Distance from family members and dispersion of family members are two highly inter-correlated measurements (R: 0.95, p < 0.01).

Table 3 first presents a regression analysis of the average distance of respondents from their family members, using the status and number of family members as predictors, while controlling for potential confounding effects (Model 1). Results show that the inclusion of parents strongly increased the average log-distance from family members, as well as the inclusion of siblings, in-laws and extended relatives. By contrast, the inclusion of steprelatives and friends were not associated with such an increase of the average log-distance from family members. Results were identical when family statuses were considered separately in the model. In particular, including more friends or more steprelatives was not associated with more geographically dispersed families, when tested separately. The effects of the distance from the place of birth and recent migration were confirmed, whereas citizenship and first-time vs. stepfamily proved non-significant. Interaction effects between number of family members and first-time vs. stepfamily were also not significant. In other words, the positive effect of the number of parents, siblings, in-laws and extended relatives on spatial dispersion did not significantly vary across family forms (first-time vs. stepfamily). Model 2

Table 3. OLS Regression Analysis of Average log-distance with or of Family Members. Beta coefficients.

	Model 1 Distance with family members				Model 2 Dispersion of family members			
	Estimate	Std. Error	t value	Pr (> | t |)	Estimate	Std. Error	t value	Pr (>|t|)
Intercept	−0.25571	0.92226	−0.277	0.781779	−0.06344	0.99488	−0.064	0.949198
Family structure	−0.25757	0.22110	−1.165	0.245009	−0.35270	0.23851	1.479	0.140302
Number of cohabitants	−0.30542	0.08609	−3.548	0.000454***	−0.17632	0.09287	−1.899	0.058632.
Number of parents	0.54183	0.12484	4.340	1.98e−05***	0.55105	0.13467	4.092	5.57e−05***
Number of siblings	0.42363	0.09233	4.577	7.03e−06***	0.34691	0.09960	3.483	0.000573***
Number of in-law	0.18014	0.05215	3.454	0.000636***	0.18638	0.05626	3.313	0.001042**
Number of step-relatives	0.08494	0.06533	1.300	0.194635	0.13270	0.07048	1.883	0.060740.
Number of friends	0.10315	0.05485	1.880	0.061057.	0.14275	0.05917	2.412	0.016473*
Number of extended relatives	0.21598	0.06370	3.391	0.000795***	0.20077	0.06871	2.922	0.003757**
Age	0.04315	0.01972	2.189	0.029412*	0.03998	0.02127	1.880	0.061159.
Dual citizenship	0.21104	0.20636	1.023	0.307326	0.21188	0.22261	0.952	0.341995
Foreigners	0.32409	0.30661	1.057	0.291399	0.41231	0.33076	1.247	0.213574
Log-distance from birth place	0.21152	0.04405	4.802	2.54e−06***	0.19100	0.04752	4.020	7.46e−05***
Recent arrival in Geneva	1.07576	0.40137	2.680	0.007789**	0.58143	0.43298	1.343	0.180377

Note: R^2 of the Model 1 = 0.3723, Adjusted R^2 of the Model 1 = 0.3438, R^2 of the Model 2 = 0.2958, Adjusted R^2 of the Model 2 = 0.2637, ***$p < 0.001$; **$p < 0.01$; *$p < 0.05$; .$p < 0.10$.

of **Table 3** reports the results for the average geographical dispersion of family members (excluding the respondent). Overall, results are very similar to Model 1. The inclusion of parents strongly increased the average spread of family members, as well as the inclusion of siblings, in-laws and extended kin. The inclusion of steprelatives was not associated with such an increase and the inclusion of friends had only a modest association with the average spatial dispersion of family members. The number of coresidents, the age of the respondent and a recent migration proved non significant, unlike in model 1. First-time vs. step-family was again non-significant.

As for the effect of the total number of family members included (table not reported), regression results support hypothesis H2: the greater the number of significant family members, the larger the average distance with them ($\beta = 0.17$, $p < 0.01$), while controlling for potential confounding variables such as first-time vs. stepfamily, number of family members living in the same household as the respondent, age of respondents and distance from the place of birth. Almost identical results were found for the spatial dispersion between family members ($\beta = 0.18$, $p < 0.01$).

9. Discussion

Global societies compel individuals to actively shape their significant family

contexts for facing the constraints of spatial distance. A large number of family members considered significant are associated with a spatially widespread family. This result supports the claim that individuals in globalised society are compelled to look way beyond the immediate spatial environment to maintain a large number of significant family relationships [7] [16] [17]. Developing a large family configuration now means sustaining family practices in wider space, in particular across national borders. This implies physical and virtual mobility, and an attachment to multiple places. Distant family relationships can be maintained through occasional visits, phone calls, emails and text messages, skype meetings and emotional and material expressions of care (e.g. money transfer, birthday presents) [6] [9] [12] [21] [91].

Developing a large family configuration may however in some cases not trigger larger spread of family members. This research shows that the inclusion of voluntary kin (e.g. friends) and step-relatives less often increases spatial distance compared with the inclusion of people related by blood (family of origin) or marriage (in-laws). In contrast, a focus on parents and siblings makes family more spread out, as the normative component of keeping significant ties despite geographical distance is stronger in their case. Indeed, parent-child and sibling relationships are less dependent on spatial proximity to be maintained than friendship ties, which, in contrast, need more regular interactions facilitated by living in the immediate vicinity [35] [64] [92] [93]. Extended relatives and in-laws fall into the same case of parents and siblings, as their inclusion makes family distance significantly greater.

Therefore, there is a spatial divide between traditional kinship ties (parents, siblings, extended blood ties) and other categories of family members (friends, stepfamily). Individuals, who have an exclusive definition of family by defining it in reference with the household of origin, blood and marriage ties, develop more spread out family contexts than those who include family members beyond the realm of traditional kinship, especially friends and steprelatives. Research, stressing the skills and resources necessary for individuals to overcome the negative consequences of spatial distance to keep family relationships alive (e.g. [9] [11] [18]), actually primarily refers to traditional kin. Mobility skills are heavily used by individuals to keep active ties with family members such as parents and siblings. Normative definitions of family focused on the nuclear family of origin indeed produced significant family contexts spread out across large distances, with a complexity likely to be greater for individuals in their regular family practices and interactions. In contrast, family definitions that include a greater element of flexibility, choice or agency, such as in the case of voluntary kin, may escape from such complexities by promoting a more local organization of family interactions and family practices. This somehow contradicts the view that globalization has promoted de-territorialised families and intimate relationships [7] [16] [17]. Friendship, described as the archetypal form of the "pure" relationship based upon affinity and voluntary commitment [88], is indeed associated with geographically bounded and localised families.

This research focused on the influence of family inclusiveness on family spatiality. Nevertheless, the geographical distance from family members and the ability of individuals to deal with distance may reciprocally impact family inclusiveness, arguing for the possibility of reverse causality. Overall, individuals develop a variety of family practices for dealing with geographic space. Family inclusiveness, which belongs to doing family in its symbolic and normative dimension [31], has consequences for the spatiality of families that have been largely unnoticed so far.

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