

## Where do social relations come from? A study of personal networks in the Toulouse area

Michel Grossetti

#### ▶ To cite this version:

Michel Grossetti. Where do social relations come from? A study of personal networks in the Toulouse area. Social Networks, 2004, 27, pp.289-300. halshs-00477328

### HAL Id: halshs-00477328 https://shs.hal.science/halshs-00477328

Submitted on 28 Apr 2010

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Michel Grossetti CIRUS-CERS CNRS and the University of Toulouse le Mirail 5 Allées A. Machado 31058 Toulouse Cedex 9 France

tel: 05 61 50 36 69 fax: 05 61 50 38 70

email: Michel.Grossetti@univ-tlse2.fr

# Where do social relations come from? A study of personal networks in the Toulouse area (France)

Social Networks, 27, pp.289-300.

#### **Abstract**

One of the fundamental ideas of structural analysis is that, in order to understand social structures, one must begin with relations. Yet where do relations come from? A survey of personal networks in the Toulouse area (France) allows us to demonstrate the importance of social circles in the genesis of dyadic relations.

\*

\* \*

Network analysts generally find it impossible to directly observe anything other than interactions and relations, thus seeing social networks as the only structures capable of constituting an acceptable starting point for sociological analysis. In their presentation of structural analysis, Wellman and Berkowitz write as follows: "Structural analysts argue that social categories (e.g. classes, races) and bounded groups are best discovered and analyzed by examining relations between social actors. Rather than beginning with an a priori classification of the observable world into a discrete set of categories, they begin with a set of relations, from which they derive maps and typologies of social structures" (Wellman and Berkowitz, 1988, p.3).

Though this methodological choice – beginning with relations – may produce very interesting results, it can sometimes lead to a kind of relational reductionism where families, organisations, groups or communities are reduced into conglomerations of relations. However, each of these collective entities makes up more than the sum of its relations. Each one is composed of ingredients otherwise theoretically lacking in the definition of a social network. These ingredients are very clearly defined by Nicholas Mullins in his study of the development of scientific specialties (Mullins, 1972). Mullins identifies four successive stages in the process by which specialties emerge. Following the second stage, that of the network, where dyadic ties are established between researchers interested in a common problem, comes a third stage, that of the cluster: "A cluster forms when scientists become self-conscious about their patterns of communication and begin to set boundaries around those who are working on their common problem. It develops from recombinations of pairs and triads in response to certain favourable conditions, e.g., luck, leadership, a substantial problem for research, a supporting institution or institutions. These clusters are often identified by name by those inside and outside the cluster, are more stable than the pairs and triads which constitute them, have a distinct culture and are able to draw support and students" (Mullins, 1972, pp.69-70). What distinguishes a cluster from a network according to Mullins? A form of collective conscience, a name, borders, a common culture. A cluster is a collective actor. The same characteristics may be used to define an organization or a family, which then become more than networks. One may call such collective forms "circles", picking up an old expression of Simmel's, as do Degenne and Forsé (1994).

If one separates (dyadic) social relations from circles, it becomes possible to consider each actor as simultaneously involved in relations and in circles (figure 1).

#### FIGURE 1 HERE

Circles and relations interact. In Mullins' model of the development of scientific specialties, circles emerge from networks, themselves constituted on the basis of a common concern (a scientific problem) and on the communication system particular to a given professional milieu. Circles may very well be the matrix within which dyadic relations form. A very simple example of this is the meeting of two people within the context of a company. At the outset, the relation only exists through the involvement of each person in the collective entity composed of the company. It is regulated by the particular rules of the organisation and of the division of labour. Yet the relation may become stronger and more complex to the point at which it may even appear in a survey based on a name generator.

How are personal relations generally formed? What role is played by the different kinds of circles, in which individuals find themselves at various times in their life? In order to answer these questions, I shall begin by presenting a typology of the contexts for creating relations, relying on the work of Fischer (1982) and on that of other researchers. I have used this typology in a study on personal networks in the Toulouse area, transposing the method used by Fischer in his 1977 study. This method uses name generators (questions on the exchange of services, on common activities, etc.), which do not allow one to study the circles directly, but which produce sufficient information to analyse their effect on the constitution and the evolution of relations. The analysis of the resulting data makes it possible to demonstrate the importance of circles in the process of constructing social relations throughout the various periods of our lives.

#### 1. Contexts for creating relations

Any author who has pondered the origin of personal relations has evoked families, organizations, groups – in short, everything which I have brought together under the term "circle." Fischer states this very clearly in the work presenting the results of his study: "Most adults encounter people through their families, at work, in the neighborhood, in organizations, or through introduction by friends or relatives; they continue to know some people met in earlier settings, such as school or the army; only rarely do chance meetings, in a bar, at an auction, or such, become anything other than brief encounters." (Fischer, 1982, p.4). In a more recent book on friendship, Claire Bidart makes a similar statement: "One does not make friends in the street, in a crowd, out of nothing. Certain settings, certain places, certain environments are relatively favorable to the construction of interpersonal ties, whereas others make it very difficult" (1997, p.52).

Let us examine more closely the contexts enumerated by Fischer.

Family: is it a network, a group, an organization or an institution? While we shall not make a final decision here, it is easy to show that the family cannot simply be reduced to the sum of its relations (even if it may also be that). It is something else as well, a totality, of which we feel we are members, even though we may have different relations with the people who consider us other members of the same whole.

Work, school and army organizations: these are organizations, that is to say, collective entities with rules, a name, borders, etc. Organizations can be analysed as networks but cannot be reduced to them as such. In general, people consider their company or their department as an entity, to which they belong, whatever particular meaning they may give to this "belonging".

A neighborhood is not an organization. Neither is it a network. It is a set of concerns and of people linked by these common concerns.

People met through friends or relatives: here, we do see network effects even if the circles are never very far, especially in the case of people met through a spouse (family-in-law) or through children (their family-in-law).

It is possible to regroup the contexts for constructing relations as identified by Fischer into three types of situations:

#### 1) Relations derived from "circles"

Involvement in a circle generates interactions with certain members, possibly becoming relations if sufficiently repeated.

#### FIGURE 2 HERE

A relation may last longer than the circle, which made its initial construction possible. We maintain relations with former school or university companions, former colleagues and former activists in political parties long since disappeared. Yet the relations do not remain prisoner of the context in which they were formed. Fischer becomes useful again here: "The initial relations are given to us — parents and close kin — and often other relations are imposed upon us — workmates, in-laws, and so on. But over time we become responsible; we decide whose company to pursue, whom to ignore or to leave as casual acquaintances, whom to neglect or break away from. Even relations with kin become a matter of choice; some people are intimate with and some people are estranged from their parents or siblings. By adulthood, people have *chosen* their networks. "(Fischer, 1982, p.4).

#### 2) Relations constructed around common concerns

The neighborhood does not necessarily imply a form of collective identification, nor of preexisting relations. It does, however, imply common concerns (shared walls, shared utilities in a building) and facilitates the exchange of services in which distance cost plays an important role (loaning out garden tools, food items, small maintenance favors). Such concerns are obviously a large source of meeting people more generally. Wanting the same thing or according value to the same thing favors interaction. Simply put, in most cases, these concerns structure more or less identified groups, i.e. circles. The neighbourhood has the particular characteristic of generally not being associated to a structured collective entity. Thus, it is directly though common concerns that relations are indeed constituted.

#### FIGURE 3 HERE

#### 3) Relations derived from other relations

Certain people are introduced to us by friends either directly or during recreational or purely social activities (evenings out, suppers, etc.). Of course, one could also see a gathering among friends as a temporary circle, but I prefer to clearly set apart the latter type of context for creating relations, in which relations themselves end up engendering new relations. In a manner of speaking, the network grows on its own.

#### FIGURE 4 HERE

How are these different contexts distributed in everyday networks? What proportion of relations does not arise from a context related to these three configurations?

#### 2. A study of personal networks in the Toulouse area

The target population was composed of 399 adult individuals living in the Toulouse urban area and in the small rural communities located an hour by car from the city. The method relies on name generators from the method used in 1977 by Claude Fischer's team in the San Francisco area. Among the names mentioned, the investigator then selects a maximum of 5 relations, about which he asks further questions. Compared to the Californian questionnaire, we have introduced a certain number of changes, including, in particular, more specific questions about the origins of the relations.

Here is the list of name generators used:

- 1. "When people go out of town for a while, they sometimes ask someone to take care of their house for example, to water the plants, collect the mail, feed the animals or just keep an eye on it. If you went out of town, would you ask someone to take care of your house for that period of time?"
- 2. "Some people never talk about their work or their education with others, neither at work (or university) nor elsewhere. Other people discuss things like decisions they have to make, professional problems they have to solve and ways to improve how they work. Is there someone with whom you talk about your work?"
- 3. "In the last three months, have friends helped you with household tasks like painting, moving furniture, cooking, washing or doing major or minor repairs?"
- 4. "In which of the following activities have you participated in the last three months?"
- Having someone over for lunch or dinner
- Going to someone's house for lunch or dinner
- Having someone over for a visit
- Going to someone's home for a visit
- Meeting someone you know outside the home (e.g. restaurant, bar, park, club, etc.)
- Other activities: .....

If so, can you tell me with whom you may have shared these activities?"

5. "Sometimes, people discuss recreational activities or pastimes they have in common. Do you discuss this type of thing? If so, with whom do you do it <u>regularly</u>?"

6. "Do you have a partner or a best friend, whom you meet very often (outside the home)?"

7. "When you have personal problems – for example, regarding someone close or something important to you –

[...] with whom do you discuss them?"

8. "Oftentimes, people rely on the advice of someone they know in order to make important decisions – for

example, decisions regarding family or work. Is there someone whose advice you would consider seriously in

making important decisions? If so, whose advice would you consider?"

9. "If you needed a large amount of money, what would you do - would you ask someone you know to loan it to

you; would you ask for a loan at a bank; would you do something else? What would you do in an emergency

situation – is there someone (else) whom you would be likely to ask for some or all of the money?"

Once the list of names (first names, last names or pseudonyms) was established, it was submitted to those

interviewed with the question: "Is someone important to you missing here?" Then, we resubmitted the complete

list to the interviewees, asking them to characterise the relations ("family", "friends", "neighbors", etc.). Finally,

for a sub-sample of a maximum of 5 people mentioned for each person interviewed (the names first mentioned in

response to generators 1, 4, 5, 7 and 9), we then asked further questions.

The 399 interviewees named 10932 people, of whom 1624 – who made up the sub-sample constituted by the

above procedure - were the object of further questioning. Though the goal of the present article is not to

compare the two surveys, it is worth noting that, on many points, the results obtained in Toulouse coincide with

those of the study used as a reference.

3. The formation of relations

In the San Francisco survey, for each name retained in the sub-sample, the interviewees were asked, "How did

you meet this person?" We also asked this question, gradually refining the available categories in the process of

testing the questionnaire until we left off at the 11 possibilities recapitulated in Table 1.

TABLE 1 HERE

In this table, I have regrouped the categories into 5 larger types of contexts for meeting people.

The first one associates family and the relations constructed during childhood. Relations induced by the family

are essentially those of the original "nuclear" family (parents, brothers and sisters), which represent 70% <sup>1</sup> of the

total. If we add that children represent 19% of the relations created in the family context, we see that room for

<sup>1</sup> After the fact, we coded familial relations in a more detailed manner, but the information had already been gathered incompletely, making numerical evaluations difficult. They can thus only be taken as a general

indication of size.

6

more distant relatives (uncles, aunts, cousins, etc.) is rather limited (around 11%). The second type groups together relations deriving from the context of organizational activities, through school or work – thus, in the context of organized activities. It represents one fourth of the cases. Together, these first two types make up 59.3% of relations – in other words, almost two-thirds.

Neighbors constitute a complex category associating the existence of common concerns (shared walls, common spaces) with the possibility of exchanging services, in which distance cost plays an important role (picking up the mail, feeding pets).

Next come the relations constructed by network effects. The characterization of the meeting context best suited to these effects is "introduced through a friend", representing 13% of the total. The two other headings "introduced through the spouse" or "through the children", also representing 13% of the total, are ambiguous because they can just as easily mean insertion into an existing family (the family-in-law, for example) or network effects, in which the spouse's or the children's friend ends up becoming a relation. In any case, in both situations, the familial circle is implied in the construction of the relations, at least through the relation with the spouse or with the children. It becomes possible then to relate this way of meeting people to the very first one ("through the family"). If we keep these meetings together with all of those produced by network effects, sociability accounts for one fourth of the situations.

Unclassified meetings, including those that happen by chance, represent only 6.3%. They are therefore practically negligible compared to other types of meeting contexts. We rarely meet people, with whom we may establish a relation, by chance.

The majority of relations thus arise from circles.

Depending on the particular period of life, the circles vary, in which people are involved. To the family we add or substitute other circle as our personal network evolves (Ferrand, 1989). Because we have access to the duration of the relations – in so much as the interviewees stated – we can calculate the age of the individuals at the time of their meeting.

Table 2 recapitulates the proportions of different life periods' roles in the process of creating the relations cited. This division into sections results in a slight underestimation of the role of the later stages. For example, as in the category 18-25, there are eighteen-year-olds, who naturally cannot say they have any relations met after age 18. Despite this, such a division allows one to simultaneously get an idea of the different phases of relation building and of the duration of the relations constructed in these different stages.

#### TABLE 2 HERE

Childhood relations (essentially the family) begin to lose significance in proportion to the other stages once the interviewees pass the age of 25. Then they are maintained until gradually declining after age 65. Relations from

adolescence, important until the age of 25, subsequently weaken, replaced by relations from working adult life, which remain the most significant for those over 65. We thus find a constant turnover in the "stock" of relations, based on a subset of old, stable relations. This stock of old relations increases throughout existence, always leaving room for the integration of new relations.

For those under 25, the family still holds a lot of weight, and the other types of relations only begin to emerge. In this age bracket, differences based on sex, profession, level of education or household composition do not influence the contexts for forming relations.

Between ages 26 and 65, "constructed" relations weigh much more heavily, particularly those resulting from organized frameworks and relations arising from network effects. The contexts clearly vary this time depending on profession and, above all, on educational level (table 3). The proportion of contexts of type 2 (studies, work) increases with educational level, whereas network effects diminish (in particular for those with a degree above a secondary school diploma). Finally, for those with the highest degrees, household composition modifies the layout of meeting contexts. Those living alone have more family ties and fewer ties produced by network effects than those living in a couple, with or without children. Those with children at home visit the neighbours a bit more frequently.

#### **TABLE 3 HERE**

Finally, among those over 65, familial relations originating after reaching adulthood (children, for the most part) take on increased significance, as is the case for neighborhood relations. Organized contexts cover two different groups of relations: those maintained from stage 19-35, mostly arising from studies or work, and the most recent, from stage 46-65, originating mostly in an organizational setting. It is as if the organizational activity is gradually substituted for the circles of education and work in the role of producing relations. Network effects are also a source of two generations of relations: one at the beginning of active adult life (ages 19-35) and one at the end (ages 46-65); the period inbetween remains empty, not because it produces fewer relations, but because the ones it does produce have proven to be less durable than those created earlier. In this age bracket as well, organized contexts hold more significance for those with higher degrees and network effects, for the rest.

In this journey through the different stages of life, the succession of contexts for creating relations becomes visible. We find, first of all, the family "inherited" at birth (parents, some of the siblings) or in childhood (young brothers and sisters, cousins, etc.). Adolescence witnesses the emergence of relations tied to studies or to network effects. Then, during active adult life, higher education and work come into play with their cohorts of relations, as well as with the constitution of a new family (spouse, children, family-in-law) and significant social activity. Yet these constructed relations are less durable than familial relations and are renewed throughout the life course. Such turnover takes place in stages depending on the circles to which one is affiliated. Thus, relations from one's work and studies are partly replaced by organizational relations. Relations arising from network effects seem to be renewed on a more continual basis, but their durability decreases with age, which means that, in the end, only those from the beginning and the most recent ones remain. At the age of retirement,

relations are created much less frequently and take place for the most part through organizations, network effects and one's neighborhood.

#### 4. Evolution of relations

Relations arise out of certain contexts, may eventually free themselves from these contexts and become more and more complex and change in nature. Each one has its own story. The survey data do not allow us to enter into their stories in detail, but certain points of reference do become available. By linking the context for creating relations and the manner in which the interviewees characterize them at the time of the survey, one can get an idea of the process of the evolution of relations.

The categories suggested to characterize the contexts for creating relations and for their current designation were not the same. In the former, contexts appeared which had obviously disappeared by the time of the survey (school, childhood) or which were highly specific (through the spouse, through the children). Furthermore, those interviewed could only use one category to characterize the initial meeting whereas they could check off as many as they wanted for the current characterization of the relations. Nevertheless, one can still roughly compare the characterizations provided for these two different points within a relation.

Family appeared in 44% of the original contexts (family, through children, through the spouse), and we see it used again as a characterization in 43% of the relations. Work was the basis of 10% of the relations, colleagues representing 10% of the current characterizations. We go from 6% to 3% for organizations and from 16% to 12% for all of the "organized contexts" (work and organizations). For neighbors, we go from 8% to 9%. The category which benefits the most from the "disappearance" of certain contexts is that of friends (lacking any other designation), representing 31% of the characterizations, whereas people met "through friends" represent only 14% of the total number of relations. We therefore end up with basically three main groups, the first being the family (42% of the characterizations), the second consisting of friends or acquaintances (32%)<sup>2</sup>, and the third grouping together relations tied to an "institutional" context (organization or neighborhood) (27%).

Many relations, initially attached to "institutional contexts," are reinforced so that eventually the designations include "friend" or "family" (only 16% of the relations included neither of these designations). Family and friends function in fact like a kind of attractor, blending relations together. Becoming part of the family or becoming a friend means in part forgetting the conditions in which the relation was created.

The higher the level of education, the higher the chances that the members of the original family will be considered close relations. This tendency corresponds with the results of a survey conducted under the direction of Catherine Bonvalet at the *Institut français des études démographiques* (the French Institute of Demographic Studies): "The probability of citing one's mother among one's close relations goes from 59% for those without a degree to 85% for those with a higher education degree" (Bonvalet and Maison, p.42). In our data, this

<sup>&</sup>lt;sup>2</sup> "Acquaintances", lacking any other specification, only represent 1% of the sub-sample relations.

probability went from 74% for those without a secondary school diploma to 89% for those with a four-year university degree. Yet the tendency is identical for fathers (69% and 82%) and for brothers and sisters (50% and 80%, though based on small total numbers of subjects). We find the same tendency with children: 75% of the children mentioned are considered close. This proportion varies from 56% (interviewees with a two-year university degree) to 100% (those with the highest degrees). One hypothesis used to explain this difference based on educational level is that those with higher degrees tend to consider family members as individuals, whereas those with lower degrees consider the family as one rather undistinguishable group. In the former case, the relations have become autonomous from the original circle (the family resembling an ensemble of relations, a part of a network) whereas, in the latter, they remain unified.

Between the creation of relations and their current designations, though the contexts and large groups may remain more or less the same size, there is a surprising number of shifts from one to the other, from circle to circle, from circle to relation, from relation to circle, etc. Although the "original" familial relations are still for the most part considered familial, former neighbors make up only 70% of those so characterized, former colleagues 44% and members of organizations 25%. New sections of the families have been created (spouse, children, family-in-law), representing a third of the total. 59% of the colleagues mentioned in response to the name generators were not met as such, 30% of the neighbors either, nor 51% of members of organizations. 81% of friends were not initially introduced as friends. Besides familial relations and relations created during childhood or school, 47% remained in their original context<sup>3</sup>. This proportion diminishes with the duration of the relations (52% for relations of less than 5 years, 37% for those of more than 20 years) and increases with the individuals' age at the time of meeting (43% for relations created between ages 16 and 18, more than 50 % after age 35).

We have no information here on how former neighbors become colleagues, how friends join the interviewees in organizations (or vice versa), etc. We only see how a particular circle – that of the family – develops through the addition of a spouse, children and family-in-law. We have not observed the interviewees in the act of creating organizations or companies, nor as they help their friends "enter" or "join" the organizations, to which they belong. We must be content to imagine the subjects constantly playing with the circles and relations, transforming a simple work acquaintance into a friend, who remains such despite any changes in employment, who may become a family member (a spouse, for example), a member of the same recreational organization or a neighbor or who may simply remain a friend, a relation without any particular institutional reference.

#### **Conclusion: circles and relations**

Most relations by far originate within circles (family, organizations), from which they become progressively independent, losing the traces of their original contexts to eventually lead their own lives. Network effects also indirectly produce a certain proportion of relations, more restricted but not without significance. Certain contexts for creating relations manage to avoid this dichotomy. For example, neighborhood relations are constructed

\_

<sup>&</sup>lt;sup>3</sup> Initial neighbours designated as neighbours, colleagues as colleagues, members of organisations and "met through a friend" becoming "friend".

based on the existence of common concerns and the possibility of reciprocating services at a low cost. Other contexts blur the distinction between circles and sociability, like meeting through a spouse or children, which may be assimilated, depending on the particular case, into one or another of the two kinds of creating social relations. Contrary to what one might think, network effects are not characteristic of the "higher" categories of profession and formal education. Rather, the opposite appears. If the members of these categories have more relations, it is primarily because they are involved in a more diverse array of circles. Basically, in order for a relation to be created, people must be close. Firstly, within social structures (belonging to common circles, common relations). Secondly, most likely within the area of close "interests" (in the broadest sense going from material interests to intellectual orientations or capabilities). What this research shows then is that, without structural proximity, the probability of creating a relation is low.

Once created, relations evolve. Some disappear, while others are reinforced until they incorporate the two main categories of "close" relations, family and friends. Certain stages of life are particularly favorable to the reconfiguration of our entourage. During childhood, we inherit a certain number of imposed relations (original family), and we build ties, some of which prove durable, at school or in various activities. Entry into adult life marks the occasion for a significant renewal of our entourage. Family is relegated to the sideline, and the contexts of our activities (studies, work) generate new relations as well as, most often, the constitution of a new family with its share of associated relations (family-in-law, spouse's friends). With the end of active adult life, an important new reconfiguration appears. Organizations or the neighborhood may be substituted for work as a source of new relations. All the while, more specific events (moving house, mourning, separation, etc.) come along to disturb these greater rhythms of mutual construction of circles and relations.

#### **Bibliography**

Bidart C.

1997 L'amitié, un lien social, Paris, La découverte.

Bonvalet C. and Maison D.

1999 "Famille et entourage : le jeu des proximités," in Bonvalet C., Gotman A., Grafmeyer Y. (eds), La famille et ses proches. L'aménagement des territoires, PUF-INED, Travaux et documents 143: 27-67.

Bonvalet C. and Lelièvre E.

1995 "Du concept de ménage à celui d'entourage: une redéfinition de l'espace familial," Sociologie et sociétés, XXVII, 2: 177-190.

Degenne A. and Forsé M.

1994 Les réseaux sociaux, Paris, Belin.

Ferrand A.

1989 "Connaissances passagères et vieux amis, les durées de vie des relations interpersonnelles," Revue Suisse de Sociologie, 2: 431-439.

Fischer C. S.

1982 To Dwell Among Friends, Chicago, University of Chicago Press.

Grossetti M.

2002 "Relations sociales, espace et mobilités," rapport pour le Plan Urbanisme Contruction Architecture, programme "Mobilités et territoires urbains," 150 pages.

Mullins N.C.

1972 "The Development of a Scientific Speciality: the Phage Group and the Origins of Molecular Biology" *Minerva*, 19: 52-82.

Wellman B. and Berkowitz S.D.

1997 Social Structures: A Network Approach. Greenwich, CT JAI Press.

Michel Grossetti Are Frenchs Networks Different? tables and figures

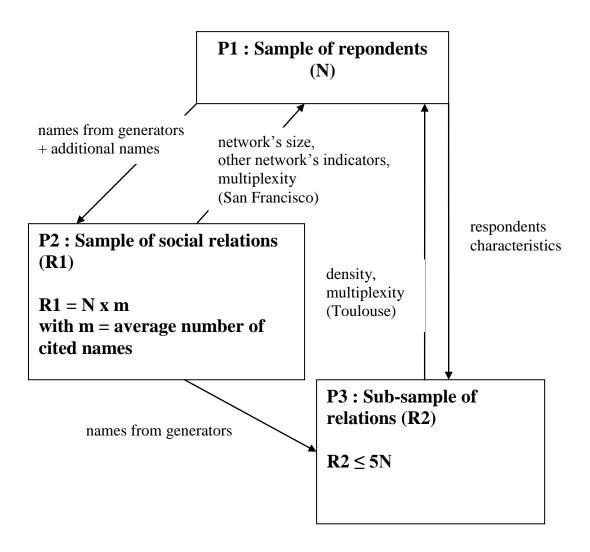


Figure 1 : Structure du dispositif

(ici cartes)

Figure 2 : Lieux d'enquête

Table 1. Size and density

| Characteristics                 | San Francisco 1977-78          | Toulouse 2001              |
|---------------------------------|--------------------------------|----------------------------|
| Sample                          |                                | 399 persons from Toulouse  |
|                                 | region (50 différent places, 4 | region (5 different zones) |
|                                 | types of urban environments)   |                            |
| Mean number of names listed in  | 12,8                           | 14,6 (with correction)     |
| the direct answers to the names |                                |                            |
| generators (before additional   |                                |                            |
| names)                          |                                |                            |
|                                 |                                |                            |
| Mean density <sup>4</sup>       | 0,44                           | 0,46                       |

Tableau 2. Mean number of cited names and level of education

| level of education                                  | Mean number of cited names (corrected data) |
|---|---|
| less than the "baccalauréat" (< 12 years of school) | 13,10                                       |
| "baccalauréat" (12 years)                           | 14,95                                       |
| "baccalauréat + 2" (14 years)                       | 14,94                                       |
| "baccalauréat + 4" (16 years)                       | 16,08                                       |
| Total   | 14,63                                       |

**Table 3. Description of cited relations** 

| Description of cited | Toulouse, corrected data | San Francisco |
|----------------------|--------------------------|---------------|
| relations            |                          | (1982, p.41)  |
| Kinship              | 36%                      | 42%           |
| Co-workers           | 14%                      | 10%           |
| Neighbours           | 5%                       | 10%           |
| Organizations        | 6%                       | 6%            |
| Friends              | 28%5                     | 23%           |
| Other                | 4%                       | 6%            |

**Table 4. Social support** 

| Survey  | San Francisco 1977 | Toulouse 2001            |
|---|--------------------|--------------------------|
|   | (no co-housing)    | (268 respondents without |
| social support indicators                               |                    | co-housing into the 5    |
|   |                    | names of the sub-sample) |
| « Counseling » (discuss personal matters ; seek advice) |                    |                          |
| 0   | 15%                | 9%                       |
| 1   | 20%                | 10%                      |
| 2 and more  | 65%                | 81%                      |
| « Companionship »                                       |                    |                          |
| (social activities, discuss hobbies)                    |                    |                          |

<sup>&</sup>lt;sup>4</sup> repondents with at least 4 relations in the sub-sample, without co-housings.

<sup>&</sup>lt;sup>5</sup> with a specific correction to take into account a difference in coding (exclusive in Fischer's study, non exclusive for our study).

| 1 or 2  | 3%  | 0%  |
|---|-----|-----|
| 2 or 3  | 11% | 1%  |
| 4 and more  | 86% | 99% |
| « Practical support » (care for home + discuss work + |     |     |
| helparound house + lend money                         |     |     |
| 1 or 2  | 6%  | 5%  |
| 2 or 3  | 19% | 15% |
| 4 and more  | 75% | 80% |

Table 5. Spatial dispersion of networks

| Characteristics   | San Francisco 1977-78 | Toulouse 2001   |
|---|-----------------------|---|
| Proportion of relations with persons living within 5 minutes' drive                       | 25%                   | 28%   |
| Proportion of relations with persons living between 5 minutes' drive and one hour's drive | 40%                   | 55%  (43% inside the urban area, for repondents from Toulouse only) |
| Proportion of relations with<br>persons living one hour's drive<br>away                   | 35%                   | 17% (29% outside the urban area, for repondents from Toulouse only) |

Tableau 6. Summary: South-West of United States and South-West of France

| Characteristics  | San Francisco 1977-78   | Toulouse 2001   |
|--|---|---|
| Sample   | 1050 persons from San-Francisco<br>region (50 différent places, 4<br>types of urban environments) | 399 persons from Toulouse region (5 different zones)  |
| Networks indicators  |   |   |
| Mean number of names listed in<br>the direct answers to the names<br>generators (before additional<br>names) | 12,8  | 14,6 (with correction)  |
| Mean density <sup>6</sup>  | 0,44  | 0,46  |
| Kin relations  | 42%   | 35% - 40%   |
|  |   |   |
| Correlations   |   |   |
| Number of listed names and education level   | The number increases with education level   | The number increases with education level   |
| Multiplexity and et age  | Relations are more specialized for older respondents  | Relations are more specialized for older respondents  |
| Educationallevel and kinds of relations  | Lower proportion of kin relations for more educated persons                                       | Stronger proportion of kin<br>relations for lowest levels of<br>education but not different for the<br>others |
| Social support   |   |   |
| 2 and more relations for counseling  | 65%   | 81%   |
| 4 and more relations for companionship   | 86%   | 99%   |
| 4 and more relations for practical support   | 75%   | 80%   |
| Spatial structure of networks  |   |   |
| Proportion of relations with persons living within 5 minutes' drive  | 25%   | 28%   |
| Proportion of relations with persons living between 5 minutes' drive and one hour's drive                    | 40%   | 55%<br>(43% inside the urban area, for<br>repondents from Toulouse only)                                      |
| Proportion of relations with persons living one hour's drive away  | 35%   | 17% (29% ouside the urban area, for repondents from Toulouse only)  |

\_

<sup>&</sup>lt;sup>6</sup> repondents with at least 4 relations in the sub-sample, without co-housings.