The English version of the chapter:

**Il Controllo della Comunicazione.
Imposizione di limiti all'uso del telefono**

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CHAPTER 4: THE CONTROL OF COMMUNICATION
Imposing limits on telephony

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Recent research on information and communication technologies (ICTs) has stressed that there is a good deal more to the process of consuming artefacts and the services they deliver than just buying and using them (Silverstone et al, 1992). Such goods are also symbolic. Their presence is the subject of negotiation amongst household members, while access to them is regulated and sometimes contested. Their arrival can raise issues or create problems according to the domestic politics of the household, especially the politics of gender and age.

The process by which ICTs find a place in the home has been characterised in that research as being one of 'domestication', with it connotations of taming the wild, bringing it under control. This is precisely the concern of this chapter. To the extent that ICTs threaten to get out of control their presence or ownership remains problematic. This has a bearing on people's receptiveness to related ICTs and services. For example, in a recent British study of managers' and professionals' relationship to TV a key reason that many resisted having cable TV was that they thought that if they acquired the new service then they, or more likely their children, would find themselves watching more TV - and this was considered to be a bad thing (Silverstone and Haddon, 1996). Even though TV was by now an old technology, there was still a problem of control: TV was too tempting and was considered already to occupy too much of the children's time.

In the case of the phone, also an established technology, the issue of control comes in various guises (Haddon, 1994). There is control of the telephone bill, the cost of telephony under conditions where we rent rather than buy a service. There is control over who other people in the household can communicate with, a theme that has been noted since the first days of the telephone (Marvin, 1988; Meyrowitz, 1985) and which regularly re-occurs as in the case of children's access to sex-lines or the Internet. There is control of the intrusive phone, of the phone calls which can arrive at unwanted times. In the case of the mobile phone (Ling, 19977), there is control of the calls which arrive when we are in social spaces inappropriate to take them, thus

disrupting both our other activities and those people around us. This also means not just controlling the technology, but avoiding having the circumstances of our communications dictated to us by others so that we are not at their beck and call. In this sense control is an exercise in power relations, not just control over a technology. Finally, there is control over the conditions of communication in terms of our ability, when appropriate, to make calls in some privacy away from the surveillance of others.

  The desire to control, or to stay in control, provides one framework for understanding both usage and the acquisition of new telephonic technologies and services. It shapes communication practices (Haddon, 1997). In fact, many current scenarios promise that in some future we will be able to access so much through telecoms and been universally contactable. In the light of such visions it becomes important to ask how much constraint people already experience in relation to the use of the phone and how much they already resist being accessible. In those same scenarios it seems as if the place in which communication occurs no longer matters: the important point is that we can communicate anywhere. But place does matter. It matters because of the other people around us and it matters because of unseen social rules that govern the appropriateness of communications in different social spaces (Fortunati, 1995). So we also have to ask how much place matters.

  Throughout one question that will be repeatedly be asked concerns the extent to which can we speak of a European experience in this exercise of control. How similar are the various national patterns? This becomes important question for several reasons. The survey is taking place against the backdrop of moves towards greater European integration, including the ending of national telecoms monopolies and an interest in European-wide markets and policies. For various reasons it becomes important to have a sense of how European we are, how much we have in common. In fact, in what cases would it be wrong for policy makers or for those same telecom companies to assume that the experience of telecoms is more or less the same across Europe. And where there is national variation, how do we account for it? It is common to cite national stereotypes, but to what extent do we have to resort to explanations in terms of such culture differences? Or can any of the variation be explained by the factors examined in this survey: for example, the distribution of households of different size or composition in different countries, differences in

educational levels, differences in income or differences in the rates of adoption of equipment in homes.

  As regards the structure of the chapter, the first section deals with communications made out of the home using the plain old telephone. This is where we encounter the key theme of constraint on the use of telephony. Control strategies in this respect involve not just individual actions but interaction amongst household members as phone use becomes an issue, sometimes a problem to be resolved. Hence, in exploring the reasons for imposing such constraint the section also examines typical complaints which household members experience concerning their phone use. Obviously, since the costs of out-going calls is inevitably going to be a key motivation for exercising control, this section examines in more depth people's sensitivity to the costs of telephony as well as the financial circumstances influencing their choices.

  Controlling incoming calls is the theme of the next section. This is where we deal with the key theme of contactability. Qualitative studies already tell us that even now people do not want to be reachable all the time and that the telephony can be experienced in a negative fashion not just because of its cost but also because it can be disruptive and intrusive at times (Haddon, 1994, Julsrud et al, 1996). To varying degrees and at particular times, many people want to control the terms under which communication takes place. In this light strategies for avoiding communication[1], or at least somehow channelling calls to a more suitable time, are as interesting a phenomenon as actually making or receiving calls. Two technologies beyond the plain old telephone allow us to explore this particular thematic further: namely the answerphone and the mobile phone.

  The final section looks at two distinct dimensions of communication in public and private times and spaces. On the one hand, it examines the creation of private or personal communication spaces within and outside the home and the strategies used to make calls free from the surveillance of other household members: in other words, how people seek privacy. On the other hand, it looks at how notions of private and public come into play in relation to the use of mobile telephones

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[1] The is referred to as 'decommunication' in some continental writing (e.g. de Gourney and Mercier1997) and might be best translated as 'non-communication' in English.

outside the home, where different social spaces have associated norms about the appropriateness of making private communications.

 Throughout this discussion the quantitative results of this survey will be related to previous qualitative analysis conducted in the UK (Haddon, 1994 ; Haddon and Silverstone, 1993, 1995, 1996)

Controlling   outgoing   communications: The   widespread experience of constraint

1. Strategies of control

Three questions in the survey dealt with the way respondents attempted to keep some control over out-going communication. These asked interviewees:
1. if they made their own calls at the times when cheaper tariffs operated
2. if they limited their own use
3. if they tried to persuade other people in the household to limit their calls[2] (applicable in households with two or more members)

  The first point to make is that most of those surveyed did exercise some control over outgoing calls. For example, if we combine the figures for partly and completely agreeing then in the European sample overall 64% agree they used cheaper tariffs and another 64% limited their own use (see Table 4). Even, the least popular strategy (limiting the calls of other) was still followed by 42%. Clearly while the various national telephone companies are usually interested in encouraging greater use of the phone or related services a high proportion of consumers are already exercising some restraint upon their usage.

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[2] These questions were posed as part of a battery of questions (used elsewhere to develop psychological constructs of the interviewees). They asked whether the respondents agreed or disagreed (partly or completely) with various statements. A neutral response was not offered and hence the form of question encouraged either a positive or negative answer.   In interpreting these response, it is reasonable to argue that the most important decision made by interviewees is whether they agree or not, so this aspect is reported first. Their degree of agreement is noted in the accompanying table and discussed where it is more relevant.

For each of the three strategies for controlling communication, there were statistically significant differences between countries.. Arguably the national differences that exist are not so important as they fact that in all of these countries the pursuit of these strategies was fairly widespread: a radically different finding would have been if only minorities ever tried to control their phone use.

As noted above, limiting the calls of others was noticeably the least common strategy in all countries, with either a majority or roughly a half in each country not attempting to control communication in this way. But that means that in households containing two or more people this strategy was still followed by between about a third (35% in the UK) and a half (51% in Italy, 48% in Spain) of those surveyed (even if partial agreement to the statement might be interpreted as suggesting that a proportion of these only followed the strategy some of the time)[3]. In general, this indicates the extent to which regulating phone use is not just an individual exercise in control but also an issue in households as some members try to influence the behaviour of others.

The other two strategies involving different forms of individual self-control were more popular, but the countries were divided as to which was the most common strategy. In Germany and France there was little difference between people limiting there own use of cheaper tariffs (61-65% did so). Italians and Spaniards[4] favoured limiting their own use (70% and 69% respectively compared to 63% and 57% for using cheaper tariffs) whereas the reverse was true in the UK (72% for tariffs, 55% for their limiting own use).

The next step was to explore the variation between individuals and households in the different countries, since this enables us to address three points:

1. to what degree there is common European telephone behaviour in terms of common patterns within the countries
2. to the extent that there are variations according to such demographics, how these relate to our understanding of processes in the home as reflected in qualitative studies and debates

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[3] Loglinear analysis shows that, at the two extremes, the percentages of British completely disagreeing and the Spanish completely agreeing were both significant.

[4] Again using loglinear, the Spanish figures for completely agreeing were significant

3. to the extent that there are such variations, these might help to explain the degree of difference between the overall statistics for the various countries surveyed

  Gender was one obvious starting point given that previous feminist analysis had suggested differences between male and female communication practices - e.g. the women make more of the social calls that bind households into social networks (Rakow, 1988; Moyal 1989). The main gender differences in all countries related to cheaper tariffs: females were more likely to channel their calls to cheap times than males, with at least a 10% difference in all countries except Italy[5] (see Table 5). As regards limiting one's own calls and limiting the calls of others, for most countries there was little or limited overall gender difference, much of the statistical significance being accounted for by differences between answers stressing complete or partial agreement[6]. So to a degree here is some commonality and at this first stage in the analysis while it is women who exercise more control it is only as regards one particular strategy.

  However, these figures are for all women of all ages, whereas much of the research on gender has focused specifically on the case of adult men and women sharing a household. This is the key site where, in the course of their interaction, a division of roles often emerges. For example, a range of gender studies had pointed to women taking responsibility for much of the domestic sphere. So would this extend to the management of communication practices? Looking at the overall European data concerning households where the interviewee is 18 or over and there are two or more adults, differences concerning the use of cheaper tariffs and, to a lesser extent, limiting ones own calls remained, although there were still no differences between these men and women as regards limiting the calls of others.

  What about when children are present? In general, interviewees in European households with children were more likely to report limiting the calls of others, and previous research would suggest that this is because it is the children's behaviour which is more likely to be limited than adults (Haddon, 1994). So are women who are mothers any more likely to limit (children's) calls than fathers? Here the

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[5] All figures except for Italy being statistically significant.
[6] Furthermore, loglinear analysis reveals that two of the cross-tabulations that achieved statistical significance had no particular figure which was significant: for Germans limiting their own calls and limiting those of others.

critical households to consider are nuclear families where the
interviewees are 18 or over and hence likely to be the parents[7]. Only
differences in the use of cheaper tariffs remained for this group, so on
the whole we must conclude that there are no vast gender differences
as regards limiting the calls of others.

  The other key factor within countries is age. One possible
hypothesis would be that children are less likely to restrict their own
calls since they do not usually pay the phone bills. Certainly the
research mentioned earlier suggests that fears of children running up
bills can be an important issue within households (Haddon, 1994).
Yet we will see later that there is more pressure, in the form of
complaints from other members of the household, on children to
restrain their calls. So there is a specific question concerning how we
evaluate the behaviour of the youngest group. But there is further
reason for examining age. While in part the telephone behaviour and
attitudes reflect the current circumstances of particular age groups,
they might also reflect the extent to which different age cohorts or
generations have developed a different relationship to the phone. Do
we have any evidence that younger generations are adopting new
practices? If so this could provide us with some clues about the future
interest in telephone facilities and options.

  Turning first to the strategy of using cheaper tariffs, there was a
common pattern in the European sample as a whole, as well as across
the countries, with statistically significant differences between age
groups everywhere except for Spain (see Table 5). The transition in
behaviour comes mainly between the 25-44 and 45-64 groups. The
two older groups were more likely to use cheaper tariffs, the 65 plus
group usually being slightly more likely of two to use them (roughly
two thirds of the elderly used them in Spain, about three quarters in
France, Germany and Italy and 82% in the UK). Although in many
countries there are more poor to be found amongst the elderly which
may restrain telephone behaviour this would not explain why the
major division comes with the 45-64 age group. Therefore we have
some tentative evidence which suggests a cohort effect - that those of

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[7] Although some of these will be older children still living at home

45 or more years had learnt to use cheaper tariffs when they were younger and the behaviour continues today[8].

  Do the youngest groups have a distinctive behaviour? This really depends on who they are compared with. If we compare them to the adults aged 25-44 (some of whom are of an age when they could be parents of children aged 14-17) then in the European sample there is a 6% difference, and nationally only in Italy and Spain did the 14-17 year olds use cheaper tariffs distinctly less (i.e. by a margin of 14% and 7% respectively). In France, Germany and the UK they used it less but only by a few percent. On the other hand, since we have seen that the major divide comes with the 45-64 year olds (some of whom could also be parents of children aged 14-17) we find a considerable difference between these older adults and the youngest group (a difference of 16% for Europe, ranging from 11-20% by country). So this older generation would probably perceive a difference between their behaviour and that of the teenagers whereas the younger adults might not. Having emphasised differences in order to answer whether the young are distinctive, it is important to add that a majority of 14-17 year olds did actually claim to exercise some control: usually half or more, rising to two thirds in the UK, did say they used cheaper tariffs.

  If we now move on to the second strategy involving self control, that of limiting one's own use, a very similar pattern emerges in the European sample as a whole and across countries. Once again the major divide comes between the three younger and the two older groups[9]. So again we have evidence of a possible cohort effect. This time there were no great differences between the behaviour of 14-17 year olds and 25-44 year olds[10] but compared to 45-64 year olds the youngest group limited their own use less. Once more to get this behaviour into perspective, for most countries in the order of two thirds of these teenagers claimed to limit their use, dropping to a half in the UK.

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[8]Although one qualification to bear in mind is that the option of cheaper tariffs has been available in some countries (e.g the UK) for many years whereas it is relatively more recent in others (e.g. Italy)

[9]Those of 65 or more exercising slightly more control except in the case of Spain where the 45-64 year olds were far more likely to limit their own use.

[10] Except in Germany where the 14-17 year olds limited themselves more.

To sum up so far, from the above comparisons it is clear that there was some common age pattern across the European countries with some suggestion of a cohort effect. Half or usually more of the youngest group at least claimed that they did exercise some form of self-control when phoning, questioning any stereotype that they were carefree in their telephone behaviour. But if we evaluate that self-control from the perspective of adults a different picture can emerge. For the younger adults (25-44) with some exceptions there is not much difference between their own phone strategies and those of teenagers. But for older adults (45-64), the gap is larger, and hence from their perspective the younger generation may well appear less constrained than themselves.

Finally, there is the strategy of limiting other people's calls. It is not surprising to find that in the European sample as a whole and across countries the majority of the youngest groups did not do this, since we might expect them to lack authority within the household. Perhaps the more unexpected finding here is that as many as 28% of both these groups said that in fact they did limit the calls of others - presumably of siblings. Apart from that pattern, it was not surprising to find a substantial difference between 18-24 year olds and 25-44 year olds. We noted early that individuals in households with children were more likely to report that they followed the strategy of limiting others, and the 25-44 year olds are simply more likely than the younger age cohort to have children.

Yet again in the European sample as a whole and for all countries there is a large gap between 25-44 year olds and 45-64 year olds. That large gap remains even when comparing only households with children. Part of the explanation may lie in the fact that the older parents are more likely to have teenage, rather than young, children and these teenagers may make more calls. And we have noted that from the perspective of older parents the youngest age group may well appear to be exercising less self-control than themselves and hence might provoke the parents into exercising control over them. Lastly, those elderly living with other people were less likely than both the 25-44 year olds and 45-64 year olds to use this strategy - reflecting the fact that often children have left by this stage. .

2. Complaints about telephone behaviour: Gender and age differences

In order to explore why people might control outgoing calls the survey examined the various complaints interviewees received about their phone behaviour. Previous research had suggested a range of possible complaints, even if on the whole cost appeared usually to be the key issue. For example, in one study teleworkers had complained about other household members blocking the phone line with their calls when the teleworkers wanted to keep the line free for incoming calls relating to their work (Haddon and Silverstone, 1993).

In part based on this previous research, the survey asked interviewees whether others in the household complained about the their phone use:
1. because of the cost of their calls,
2. because they made or received too many calls,
3. because they blocked the line
4. because they made too many unnecessary calls .

This was a new set of questions not common in previous quantitative surveys. Hence, while qualitative studies might provide some clues as to the possible gender and age patterns we might expect, there was no basis for anticipating either how important a phenomenon these complaints would be nor whether to expect much national variation.

In all countries, the majority do not receive any complaints (see Table 6). However, while only a minority in each country noted any specific complaints, these were sizeable minorities of 13-32%. Furthermore, the data can be used to construct a measure of whether interviewees received at least one of the above complaints. In most countries about a third did, rising to 41% in the UK. Given that some might find it humiliating to admit that they received complaints, we might also speculate whether the actual level of complaints is higher than shown in the data. There are some statistically significant differences between countries, with the chief pattern being that the British were more likely to receive all forms of complaint[11]

Reflecting previous research findings (Haddon, 1994), the same complaint, about cost, was the most important for all the countries, being reported by between 21-32% in the various countries. The other complaints were experienced by 13-22% of interviewees. Finally we might observe that, like the strategy of persuading others to limit their calls, this level of complaint indicates that telephony is an issue

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[11] Using loglinear analysis

within many households in contrast to the claims the telephone itself has become an invisible, taken-for-granted technology that we no longer think about.

  If we now consider the details of patterns within countries, previous research again suggested that the gender and age of household members might be key factors in determining who received complaints (Haddon, 1994). In the European sample, females received far more of every complaint compared to males - the difference was 27% for males compared to 40% for females according to the combined measure of complaints. Turning to the details, in most of the countries studied female respondents received between 7-17% more complaints then males[12] (see Table 7, which takes the example of complaints about cost). Arguably this would fit in well with feminist discussions of the way males make more instrumental calls than females and the role of women using the phone for nurturing work and maintaining social contacts with the outside world. The gendered social use of the phone is liable to affect male and female perceptions of what counts as 'justified' telephone calls, and previous feminist research would suggest that females receive more complaints because males deem their calls to be less necessary. To make the connection with the previous section on the strategies people use to control the phone it would appear that this extra pressure on females in the form of complaints does not lead to the latter limiting calls more but to a greater use of cheaper tariffs[13].

  There was once again a common European pattern in that there was a huge difference between the age groups, this time with the main division being between the two younger groups and the three older ones[14]If we take the example of complaints about the cost of calls (see Table 7), as a base line typically about 15% of the elderly received complaints (less in Italy and Spain). The figures were in the order of

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[12]The exception was Italy where there was little difference for all forms of complaints and Spain were there was little difference as regards making unnecessary calls

[13] In fact, this is a more general pattern. If we take the whole European sample, there is no relation between receiving complaints and limiting one's own calls and those who receive complaints are slightly more inclined to use cheaper tariffs.

[14] Loglinear analysis underlines the fact that these two groups received significantly more complaints of all types

three times greater for the 14-17 year olds in each county. Hence from 42% (France, Spain) to about a half (Germany 53%, Italy 49%) of the children received complaints, with the UK being even more extreme. Nearly two-thirds (65%) of British 14-17 year olds received complaints about cost - which is perhaps why the British youth were more likely than their peers to use cheaper tariffs

  In general then, there are differences based on gender but even more dramatic ones based on age. The finding about children might have been anticipated from the previous research cited above, but the scale is perhaps a little surprising - that so many children across Europe receive complaints. Clearly the reception of complaints did not transfer neatly into restraint in the sense that the older groups who received less complaints exercised more control. But nevertheless we also noted that the youngest group do exercise a good deal of control which may well be influenced by the pressure demonstrated here. The data on complaints, and particular those received by children, provide perhaps the strongest evidence that access to telephony remains an issue within many households and one which telecom companies may need to think about addressing.

4. Economic considerations: A concern for many

  So far we have already seen that cost has figured prominently in complaints. The next step in the analysis of the importance of economic considerations involved examining people's subjective evaluation of telephony costs[15].

  In fact, a substantial proportion, 66% in the European sample, agreed to some extent with the statement that telecoms costs were too high, with at least 30% in all countries agreeing completely. We have to be careful about interpreting that overall level to the extent that the question is perceived as inviting a positive response. But we can make some comparisons. The British had the least cost sensitivity (57%) , slightly below the French (65%) and the Germans (63%)[16]. 70% of Italians thought costs were too high, although figure 1 below

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[15]Within the same battery of questions as in the case of strategies to control outgoing calls we asked about the extent to which interviewees agreed of disagreed with the statement that they considered telephone call charges to be too high.

[16] There were no significant differences between East and West Germany.

shows that this is based on those who partially agreed with the statement. Those agreeing rose to 77% in the case of the Spanish - and the vast majority of Spaniards expressed strong views, completely agreeing, which was distinctly more than for the other countries.

Figure 1: Cost Sensitivity: 'The telephone call charges really are too high' (percentages)
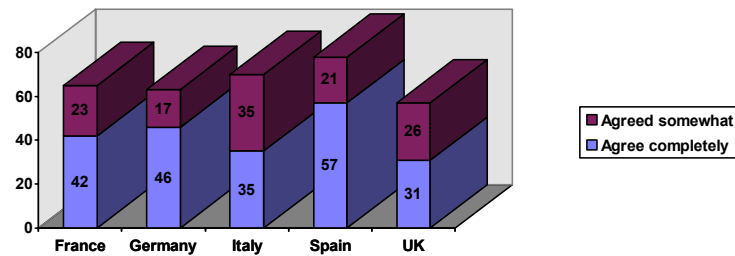
If look at the European data as a whole, those who are more cost sensitive use all control strategies more. The national variations in cost sensitivity would also match up with some of differences in behaviour[17]. For example, we see above that the Italians and Spaniards were a little more inclined to say that telephony was too expensive and they were the ones also a little more likely to limit their own calls and those of others. This logic did not always apply. While the British were least critical of phone costs (which might well reflect the fact that telephony was relatively cheap at the time of the survey and the telecom companies had been trying to emphasise this) the British were also the main users of cheap rates. Perhaps the fact that they do use cheaper tariffs reinforces the perception of many (though not the majority) that telephony is not too expensive.

  Over and above these perceptions of costs, in principle we might expect there to be some relation between the household's income and the degree to which its members want to control the costs of telephony. Unfortunately, the income data are not so strong since a substantial proportion of interviewees refused to answer this question.

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[17] There were some slight gender differences in some countries, but nothing consistent across the countries and for the most part there were no age group differences

However, tentatively we might note that the data from the general European sample show that the lower income groups use more strategies overall.

If we consider the specific modes of control in relation to low, medium and high income households, the statistically significant results[18] were that the high income group tended not to limit their own or other people's calls, while at the other end of the scale the low income group used cheaper tariffs and limited their own calls   At the national level there was some variation[19], but in general it is perhaps not surprising that lower incomes lead to the use of one or more control strategies.

One final general observation concerns the relation between income, perceptions of telecom costs and complaints relating to those costs. We might have speculated that lower income households might be more inclined to see costs as being too high and that it is in such households that we might find more complaints about cost. In fact, and counter to expectation, neither in the European sample as a whole nor in any of the countries did income make any difference to either cost sensitivity or to the level of complaints about the costs of calls. This observation leads to a theme developed in the rest of this section: that the cost of telephony is important for a wide range of people across the income spectrum: not just for those on low income.

Returning to the question of actual control strategies, there is the question of how much income affects behaviour - bearing in mind that we must be a little cautious about these data[20]. In particular, how constrained did the very poorest feel in their use of telecoms and at the other end of the income scale how free of constraint were the wealthier? This level of analysis involves looking at the more detailed breakdown of income groups into 5 bands and focusing especially on the poorest and wealthiest quintile.

If we take the European sample data, roughly three quarters (76%) of the poorest said that they used cheaper tariffs compared to 64% of the wealthiest groups. In the individual countries the response for the

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[18] According to loglinear analysis

[19] There were no significant differences in Italy and Spain.

[20] For example, some findings may become statistically significant in part because of the lower numbers answering compared to the other parts of the survey

poorest was similar, but there was a little more variation as regards the wealthiest[21]. The range is perhaps surprisingly limited.

If we look first at the poorest group, the pressure of finances on telephone behaviour is obviously high, but previous research suggests some reasons why it is not even higher (Haddon and Silverstone, 1995, 1996). Some of those on a low income only use the phone for emergencies, and if there are times when they really need to use the phone to sort something out, these occasions do not necessarily occur when cheap rates operate. Some of those living on state benefits or seeking employment, for example, use the phone in an instrumental fashion to contact the relevant organisations which are only open during the standard working day. Yet others arrange for people to call them whenever they want to talk socially - and justify this because they are on a lower income. Hence the fact that nearly a quarter do not feel the need to resort to control strategies does not seem so unusual.

On the other hand, it is the high proportion of wealthier households, a majority, that still time-shift their calls to cheaper rates which was probably the more unexpected result. Of course some of these will have been upwardly socially mobile during their lives and British research has noted the extent to which people retain many of the values and orientations from the earlier periods of their life - even after their circumstances change (Haddon and Silverstone, 1995). In other words, some, at least in the British case where cheap rate has existed for many many years, carry on the pattern of using cheaper tariffs from when they were younger. But even so, that proportion is large and the behaviour would appear to reinforce the previous data on perceptions - that wealthier groups are in practice also sensitive to telephone costs. From a telecoms company's point of view even some of the wealthiest could be expected respond to attempts at demand management using the tariff structure.

There was no common European pattern as regards persuading other to limit their calls. In some countries the difference between the lowest and highest income groups was negligible, in others they were more noticeable. For the whole European sample 46% of the poorest group limited the calls of others compared to 40% for the wealthiest - so there was not a vast difference. If anything, the more interesting

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[21] Because the actual numbers in these groups were small in the national samples, some categories had to be aggregated.

point to note is that so many in wealthier groups try to limit other family members, just as they were willing to use cheaper tariffs.

However, there was more of a common pattern across countries as regards limiting ones own phone calls and here the differences between the wealthier and poorer were larger. From the European data, while 71% of the poorest group tried to control their own calls, 48% of the wealthier groups did so - a difference of 23% . So this is where the income gap seems to be most influential, although yet again we might note that perhaps a surprisingly high proportion of the wealthier groups nevertheless exercise some form of self-restraint, especially those with higher bills[22]. While other sources indicate that telephone use has increased generally, telecoms companies would, of course, like us all to use the phone more. However, our survey data tentatively suggest that even those who might be expected to best afford to increase there use are likely to show some degree of resistance.

Constraint: A summary

While a proportion of European households feel little need to contain their use of the phone, the use of strategies to control outgoing calls is nevertheless widespread across the countries surveyed and signals the extent to which we experience constraint in the use of telephony. Overall there is much in common across Europe both in terms of patterns within countries and the broad degree to which strategies are employed. Some, but only some, of the variation that does exist is related to sensitivity to the costs of telephony in the different countries. The importance of constraint in the use of telephony is underlined by the specific data on income. Yes, income makes a difference with more constraint being experienced by those on a lower income, but a majority of the more wealthy are also careful in their use of telephony, more so when they already have large telecoms bills.

Gender and age remain key socio-economic factors. Females receive more complaints about their phone use which appears to lead them to use cheaper tariffs more than males. However, this does not actually lead them to limit their calls more than males: in this respect, income

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[22] Those who have higher bills also show more cost sensitivity and experience more complaints.

counted more than gender. The picture for age is a little more complex. The degree to which teenagers received complaints about their phone use was unexpected, yet they by no means fit a stereotype or irresponsible consumers. They certainly claim to be as sensitive to the costs of telephony as other age groups and to exercise restraint in their use to a degree - even if slightly older adults may see a larger gap between the behaviour of these youth and their own exercise of control. Perhaps the more interesting patterns are those suggesting a cohort effect such that older generations - mainly 45 plus - use more of the strategies for controlling outgoing calls. One can only speculate, in cases like Britain but maybe others too, that this is a legacy from their experience of telephony when they were younger.

Controlling incoming communications: On being contactable

1. Strategies of control

  To recap on the introduction, this aspect of communications behaviour has a particular salience in the light of scenarios which portray a future where we are all constantly available for receiving communications. The first issue covered is how people react to and handle incoming calls on a daily basis. The survey examined four strategies for dealing with incoming calls which were available to everyone because they concerned the basic telephone. These were:
1. blocking incoming communication in some way (e.g. by leaving the phone of the hook so that the call cannot arrive, turning the ringer off etc.)
2. not answering calls
3. getting someone else to answer calls
4. asking people who phone into the home to avoid calling at certain times.
  In contrast to the case of controlling outgoing calls, only a very small proportion of people in all the countries used any of the strategies frequently (see Table 8). In the European sample as whole on average 4% used each strategy often, and roughly 20% used each strategy sometimes - with a little variation between the exact percentages for the different strategies. But there is another way to get an impression of the scale of this behaviour: by combining the measures to have three categories (i) where they use at least one strategy often (ii) where they do not use any one often but use at least

one occasionally and (iii) where they never use any strategies. For the European sample as a whole, 13% used one often, and up to 46% used at least one of them sometimes[23].

Turning now to the detail, in general the most preferred strategy across all the countries was to redirect calls to different times - only in Italy was 'not answering' an equally popular response. Roughly a third of people in all countries redirected calls at some stage (more usually 'occasionally'), between 5% and 8% doing so often and there was limited variation between countries as regards the take up of this specific strategy. The relative preference for this particular strategy is of interest in that it signals the principle of making an effort to time-shift rather than to totally avoid communication - in other words, to 'manage' calls, a principle which we will later see is embodied in a range of related communication technologies like the answerphone.

There were more national differences as regards the uptake of the other strategies of control. If we take a rough average of the data in order to group the different countries, those who blocked calls at least occasionally[24] ranged from about 15% (UK 15%, Spain 14%, Germany 17%) to 35% for Italy; those not answering ranged from 14%(Spain) to 27% (Germany); and those getting someone else to answer ranged from 16% (Spain) to 29% (UK). In other words, the particular means of controlling these calls varied. If we look again at the measure combining the strategies there was little national difference as regards the highest level of control, i.e. using at least one strategy often. This reinforces the earlier point that no one country's inhabitants made major efforts to control incoming calls. The Spanish were distinct as regards to the extent that they never controlled incoming messages.

While there was little variation between the countries overall, it is worth looking at the sharp divisions within Germany. Basically the

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[23]The first observation is that the difference between the combined score and the score for any particular strategy noted above must reflect the fact that it is to some extent it is different individuals who are using the different strategies often or occasionally. When answering the survey questions the participants have not answered an identical way when assessing their use of each strategy. The second observation is that it is this second measure, the higher combined score, which perhaps best indicates the principle that in some way, and to different extents, a substantial proportion of the sample are trying to exercise some control over incoming calls.

[24]The following figures combine 'occasionally' and 'often'.

scores for the East Germans were roughly similar to those of the Spanish - they were less likely than West Germans or other nationalities to exercise these controls, over half never doing so. Until German reunification there were far fewer domestic phones in East Germany, (and here we may not a parallel in that many Spanish households still have no phones). In the old East Germany many people used the work telephone to make their private calls. Hence the East Germans, like many Spanish households, have not experienced the many years during which the phone gradually entered the home and had to be integrated into everyday life in the West, which included coming to terms with and learning to manage its negative aspects such as the intrusiveness of telecommunications. The East German data would suggest that it takes some time to develop, or feel the need to develop, appropriate control practices.

Looking first at the European sample, the only strategy where there was a statistically significant gender difference was with regard to blocking incoming calls, where more men never resorted to this (80%:74%). The only country where this difference was also significant was the UK.

There were distinct differences as regards age groups in the European sample as a whole and within each of the countries (see Table 9). There was a degree of commonality across strategies in that those of 65 years or over were virtually always the group least willing to adopt any form of control and the second oldest group were the next least likely to do so[25]. In fact, there was often a general decline in the use of strategies with increasing age from the 18-24 age group.

When we look at age patterns within the countries, while there are some minor variations, the same pattern broadly emerges, the key statistically significant findings being that the elderly usually do not use strategies. This provides the possible indication of another cohort effect whereby younger generations had learnt to exercise more control. The other factor may be that the older groups receive less phone calls and hence feel less need to control them. Whatever the reason, the overall outcome is that the pattern is the opposite to the case of out-going calls where the older groups exercised more control.

There were differences across these European countries as regards which of the younger age groups was the more frequent user of

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[25]The only exception was that it was other way round in Italy as regards not answering

particular strategies. Further variation between countries can be illustrated specifically with the case of the youngest group. 14-17 year olds in the different countries were fairly similar to each others as regards redirecting calls - they all fell within a band of 9%. However, while only 10% of the British youth used the strategy of blocking the phone at least occasionally, the percentage was roughly double this in Germany and Spain and triple that proportion in France and Italy. As regards not answering when the phone rang, this time it was the British youth who used this strategy the most, nearly half not answering occasionally compared to a third in Germany and Italy and a fifth in France and Spain. A similar result occurred for getting someone else to answer: in the UK about 60% using this strategy occasionally. A half of the Italian youth used this, compared to a third of the French and a fifth of the Spanish and German youth. Clearly there were very different national patterns in this respect, making it difficult too to comment on how future generations might behave.

 Previous research in the UK had suggested a particular reason for examining household composition (Haddon and Silverstone, 1993, 1995). In that research a number of families with children had noted that they specifically did not want incoming calls at certain times either because it interfered with what little 'quality' family time parents had with children or because the phone might disturb sleeping children, or because they might be busy with the children, for example getting them ready for school in the morning. So a first question was to ask whether this was a widespread sentiment in the UK and also in other parts of European: did those in households with children try to control the phone more, especially by blocking or redirecting calls, but also perhaps by not answering?

  To answer this question first be looking at the British case, the earlier research noted above was supported in that households with children were far more likely to redirect calls (39% compared to 27%) and to do so often, and slightly more likely to block calls and even not answer. The French and German results were similar. In Italy it was only as regards redirecting calls and blocking calls that there differences between households with and without children, and there were only differences as regards redirecting calls in the case of Spain. So to respond to the initial question, the presence of children leads to at least the strategy of redirecting calls in all countries, and sometimes leads to other control strategies as well.

One other observation relates to household composition and the strategy of getting someone else to answer: perhaps unsurprisingly this was more common in households with children in all countries except Spain - often with a 10-15% difference. While it may result from children themselves using this strategy more than adults, this may equally be indicative of the degree to which children have some role acting as gatekeepers on the part of other household members, taking part in this strategy to control communication

The last issue to explore as regards the general control strategies concerns how the general telephone behaviour of those surveyed relates to their attempt to control communication. One plausible hypotheses might be that those who received more calls would be more likely to develop strategies for controlling them. Dividing the respondents into quartiles for each country it was possible to confirm that this was the case. In the European sample, those in the highest quartile were statistically more likely to use at least some strategies often, those in the lowest and second lowest were more likely never to use them. Although the general pattern was similar at country level, it only reached statistical significance in France and Italy. When we look at particular strategies the pattern tended, though not universally, to be in the same direction, sometimes being statistically significant, sometimes not.

At the start of this section we referred to four strategies of control open to everybody. But of course there is a fifth strategy for controlling calls available to those with an answerphone, which, as was noted in an earlier chapter, is a technology which is currently becoming something of a norm in many European countries[26]. The strategy involved using the answerphone when at home to filter calls - i.e. to hear who was calling before deciding whether or not to answer or instead let the caller leave a message. Note that this application is not the basis upon which the technology is marketed. Arguably to do so might infringe public understandings about a duty (of at least someone) to answer the phone if they are present - to hide behind the answerphone is in this sense deceitful. So to the extent that the practice has been adopted it is an unintended, or at least not promoted, appropriation of the technology, one learnt through experimentation, but probably also through informal channels of

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[26] See the chapter of Gérard Claisse, 'The Multimedia Galaxy'

personal communication (i.e. people tell each other what they have learned to do with the device).

  Filtering calls is also quite a radical change in practice, in a sense which leaving the answerphone on when we are outside the home is not. We have learnt to answer the phone when it rings - and people talk about the psychological difficulty of ignoring that communication. But this filtering is also a version of a very specific form of control - checking who calls before answering - which can also find other manifestations such as with the caller line identification service.

Table 1: Using the Answerphone to Filter Calls[27]

	France	Germany	Italy	Spain	UK	East G.	West G.	Europe
Often	25	16	12	14	19	13	17	18
Occasionally	30	35	33	21	34	21	37	32
Never	44	49	54	64	47	65	46	49

  A first observation is that the practice is widespread. In the European sample, half of those with answerphones use the machines at some time to filter calls, as shown in Table 1 above. Across the various countries, between 35%(in Spain) and roughly a half (in the other countries) of those with answerphones used them to filter calls[28]. The particular pattern of lower Spanish usage (and indeed, lower East German usage) would fit in the tendency, noted earlier, for Spaniards to utilise control strategies less than the other countries. But the more important point is that in all the countries, Spain included, this usage has been incorporated into the control strategies of a substantial numbers of people, especially when we reflect that that the mass market for this technology is only a few years old. Indeed, 12% of answerphone owners in Italy, 14% Spain and 16% in Germany, 19% in the UK and a quarter in France used the technology often for filtering calls. Hence the practice it is even more common in at least

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[27] The percentages are rounded to the nearest whole figure and so do not necessarily total 100%

[28] There were differences also within Germany, with the West Germans being more likely to use their machines to filter calls

two of the countries where the overall market for the technology is most developed.

Looking at the European sample, there were no significant differences by gender, but as with the other strategies of control, there were by age: the elderly being least likely to filter their calls in this way.

One final note which indicates the importance of this role for the answerphone is that those who often used it to filter calls gave the technology a better score when evaluating the technology as a 'tool for organising everyday life'[29]. It would appear that this covert use of the technology was appreciated, which provides a further clue that there is potential interest in facilities which do not enable communication so much as manage it.

2. Varying perceptions of the disruptive phone

To explore why people might attempt to control incoming calls we asked them whether they generally perceived calls to be disruptive[30]. First looking at the European data as a whole, the majority (60%) did not find incoming calls to be disruptive, indeed 39% disagreed completely with the statement, which again may well reflect the fact many people receive only relatively few calls. But looked at another way, this means that a substantial minority, 37[31]%, did find calls to be disruptive, although many only to a limited extent judging from the fact that 21% agreed only partly with the statement that the phone was disruptive.

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[29] A difference which was statistically significant according to loglinear analysis

[30] Again, this was part of the battery of questions discussed earlier asking respondents either to agree or disagree with a statement (partly or completely). Once again the emphasis is on the qualitative difference between those who find incoming phone calls disruptive of not.

[31] The remaining 3% did not respond.

However, there was a wide range in responses to the perception of disruptiveness across the countries, perhaps reflecting some cultural differences in the extent to which different nationals value domestic life uninterrupted by intrusiveness of the outside world. About a fifth of Germans (21%) agreed that they felt they often received disrupting calls, roughly a third of the French (33%) and Spaniards (37%) felt so, while in the order of a half of Italians (45%) and British (53%) expressed this view. The picture looks even more complex when considering whether the interviewees partially of completely disagreed: the more detailed figures show that the Italians and British tended to only partially agree; on the other hand, the Germans, French and Spanish were more likely strongly disagree with the statement. So here there is no common European pattern, which is perhaps a little surprising given that there were so few differences in the overall use of control strategies.

It is interesting to look at the differences between East and West Germany which were statistically significant - very few of the East Germans, 14%, perceived calls to be disruptive, whereas 23% of West Germans did so. Arguably this reflects the novelty of having a domestic telephone in the East: in West Germany the increasing use of the phone in everyday life may well have meant that more people have also perceived that it can have negative aspects. Here, at least, negative perceptions of the phone did relate to action in that the East Germans were less willing to control communication, as noted earlier.

One hypothesis from the literature on gender would be that if the home is more of a haven from the outside world for men they might resent incoming disruptive calls more. But an equally valid hypothesis from that same literature might be that if women have more responsibilities for domestic labour and are busier in the home they might find such calls to be more disruptive. In fact, the overall European data show that males were slightly more likely to find calls to be disruptive (38% compared to 35%, with males also being slightly more likely to agree completely about the disruptive phone, and females to disagree completely). At a national level, this pattern reached a level of statistical significance in Germany and Italy, and in each the result was different: it was German males and Italian females who were more likely to find the phone disruptive.

As regards age, the overall European data show most age groups were very similar apart from the most elderly who were slightly less likely to find the phone disruptive (31%, when the figure for the other

age groups was 37% or 38%). Looking in more detail at the degrees of agreement with the statement on disruptiveness, this reinforced the elderly's distinctiveness from the other groups: the elderly were more likely to disagree completely. At a national level, only in Germany were there significant age differences, with the elderly being more likely to say that they completely disagreed that the phone was disruptive.

  If we look at the whole European sample, there is a relationship between evaluating calls as being disruptive and control strategies. Basically, those who found calls to be disruptive at all were about 10% more likely to use each of the strategies either occasionally or often. And if we take the measure combining strategies, the gap widens to 15%. In addition those with answering machines who thought the phone was disruptive were more inclined to use the device to filter calls.   So these perceptions do translate into action to some extent, but obviously not enough such that the differences in evaluations between countries produces widely different degrees of controlling the phone. The other observation to make is that there are still many people who do not in general find calls to be disruptive, but who nonetheless are willing to employ strategies to control them.

3. Reactions to other people's control of communication: The answerphone

  So far we have looked at people's disposition to control the conditions of communications. But how do the callers react to this? One of the questions in the survey concerned people's reactions when encountering an answerphone: both in terms of what they felt (e.g. satisfied, annoyed because they had to leave a message, annoyed at encountering machine) and the actions they normally took. These data provide a measure of the acceptance of asynchronous communication and indicate the extent to which people are currently willing to adopt what may become an increasing common communication practice.

Table 2: Feelings on encountering an answerphone

	France	Germany	Italy	Spain	UK	Europe
Satisfied	23	28	6	11	16	18
No feelings	17	19	27	19	26	22

Annoyed: Leave a message	17	12	23	24	14	17
Annoyed: Waste of time	9	7	12	8	9	9
Annoyed: Machine	31	30	24	30	30	29

The most interesting finding was the extent to which resistance to answerphones still exists: the overall European data in Table 2 above show that over half (55%) were annoyed for one reason or another. Looking across the countries, between roughly a half and two thirds felt some kind of negative feeling, a third to a quarter were neutral while a minority felt positively satisfied. There was more national variation for those with a positive response. The highest proportion expressing positive feelings was about a quarter (23% France and 28% Germany), and this decreased progressively in the UK, and then Spain reaching the lowest level of satisfaction (6%) in Italy. Hence there were slightly more positive responses in the three countries with the greatest market penetration.

The various negative reactions were at a similar level in all these countries. In the European data, 29% objected to talking to a machine. Next came objections to leaving a message, while 9% felt that this was a waste of a call. At least this means that only a limited proportion of the sample totally reject the role of the answerphone - the greater problem would appear to be discomfort at interfacing with this machine.

If we now consider people's actual actions when encountering an answerphone, usually those surveyed had a distinct policy on this matter: very few said that it 'depends' when characterising their response to the answering machine of either strangers or acquaintances. According to the overall European data, interviewees were more likely to hang up when encountering the answerphone of a stranger as opposed to that of an acquaintance and more likely to leave a message with the latter rather than with the former. For example, 48% would hang up in the case of a stranger, 27% in the case of an acquaintance. And 66% would leave a message for an acquaintance compared to 44% on the answerphone of a stranger. This general pattern was repeated across all countries.

Again taking the European data as a whole, as might be expected, more of those with negative feelings would hang up. Nevertheless half of even these interviewees do leave messages for acquaintances

and about 30% do so for strangers, even if they are obviously less than happy with the encounter.

Moving on now to national variations and starting with the answerphone of acquaintances, about a half in Spain (54%), two thirds in France (66%), Italy (62%), and the UK (68%) or three quarters in Germany (73%) would normally leave a message. Moving on to the case of strangers, a third to a half would leave a message, Spain (33%) and Italy (38%) being at the low end, France (47%), Germany (49%) and the UK (50%) being at the upper one[32]. So the first observation is that message leaving is becoming a standard practice. Second, we have some evidence that people are more likely to leave messages in the countries where the answerphone is more common[33]. Now in part this reflects the fact that owners of answerphones and are more likely to leave messages on other people's answerphones. But if we compare the non-owners in each country then the French, Germans and British who do not have answering machines are still more inclined than they counterparts in the other countries to leave messages - at least in the case of calling strangers. So the fact that people encounter answerphones more in these countries appears to have had some effect on practices.

When we consider demographics, in the overall European data the main gender difference was a slightly greater tendency for females to show some negative feeling or other towards the answering-machine (53% for males, 57% for females) There were no vast differences by gender at national level[34]. As regards action, there were no significant differences at a European level between males and females encountering the answering-machine of acquaintances, and only a very small one in the case of strangers (males being more inclined to leave messages: 46% compared to 43%)

The differences by age group were perhaps a little surprising. In the overall European data, those aged 14-17 felt the most negative responses to the answering machine: for the five age groups the

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[32]Using loglinear analysis, the French and German figures represented statistically significant differences in the case of acquaintances, and same applied the French and British figures in the case of strangers.

[33] To an extent this was also true comparing East and West Germany. There was a slightly higher proportion of phones in the West and they West Germans were more likely to express satisfaction and leave messages.

[34] Although some of the patterns reached a level of statistical significance.

percentages showing negative feelings were 65:60:51:57:54. These same teenagers, along with the next youngest group, were more inclined to listen and hang up when meeting the answerphones of acquaintances, and along with the elderly were more inclined to hang up immediately in the case of strangers. Hence the youngest group are by no means always the ones to embrace the potentialities of newer technologies.

 The group most satisfied were the 25-44 year olds and in keeping with this the groups more likely to leave messages were the 25-44 year olds for acquaintances and 25-44 and 45-64 year olds for strangers. Meanwhile the elderly did not have particularly different feelings about meeting answerphones compared to other adults, although they were more likely to hang up immediately in the case of strangers. While the answerphone may not be any more or less acceptable to the elderly than for younger adults, dealing with the machine was still less a part of their communication repertoire.

4. Controlling access to mobile telephone numbers

  In addition to the issue of how people handle specific calls on a daily basis there is the more general question of how they manage who can contact them. Although the survey collected data on the adoption of 'ex-directory' numbers (i.e. where the telephone number is not listed in the phone book) the problem with interpreting this is that any European differences reflect in large part the differences in the administration of this practice[35]. We can, however, ask the question about control over accessibility in relation to the mobile (and car) phones. How willing are these particular phone users to tell other people their mobile phone number? This time the question has a wider relevance beyond the mobile phone as we now know it. How we handle contactability by mobile phone provides some clues about how we might deal with (and whether we would be interested in) personalised communications technology in the future. It gives us an indication of people's willingness in principle to accept communications from people we know, either those socially closer to

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[35]For example, the percentage of unlisted numbers is higher in Germany than in France - but it is free in Germany and has to be paid for in France.

us (family and friends) or those with whom we have a more functional relationship (work colleagues)[36].

 The European data showed that mobile and car phone users were far more likely always to give out their numbers to family and friends (61%) than to colleagues (36%). There were no significant differences between countries as regards colleagues It follows then that the majority do try to restrict access as regards work-related calls: they are being selective and decreasing the chance of being universally contactable.

  In the case of family and friends there were significant differences. The French were the most likely to give out numbers (77%), followed by the British (64%) and Italians (61%) and then the Germans (52%) and Spanish (49%). So in contrast to work, the picture that emerges is that this time the majority, or nearer to half in some countries, are in principle willing to allow family and friends the means to reach them - even if they can ultimately control this at any particular time by switching off the phone.

5. Being contactable on the mobile phone: Different strategies of accessibility

  To what degree do people take their mobile phone with them when they go out of the home? This question specifies their relationship to the technology: is it to be always carried with them, or only occasionally and selectively. Obviously if they do not even take the phone with them, the question of contactability does not arise.

  On the whole the interviewees indicated that they carried their mobile phones with them a good deal of the time: 44% in Spain carried their mobile phone with them all or most of the time[37] rising to 69% in the UK[38]. Only a small minority carried their phones selectively (i.e. sometimes): from 6% (Germany) to 16% (France). On the other hand, a more substantial minority never or rarely carried

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[36]Previous   research has already indicated that some want to restrict their mobiles for only certain purposes, using fixed telephony for others (de Gournay,Tarrius and Missaoui, 1995).

[37]Combining the scores for 'always' and 'often'.

[38] The British and Italians were significantly more likely to carry their mobiles all the time compared to interviewees from other countries. The Spanish were more likely never to carry them.

their phones outside of work: 21% in Italy and 18% in the UK rising to 47% in Spain. So we would appear to have some kind of polarisation here, with one section of the population integrating the mobile phone into their non-work lives, carrying it with them so they can at least call out if not receive calls while others restrict the mobile to the world of work (a pattern also noted in earlier research on the early years of the mobile phone in France: de Gourney, Tarrius and Missaoui, 1995).

  A second issue concerns how often people switch mobile phones on outside of work hours. Obviously to the extent that the phone is acquired for emergency use, people may carry it but not switch it on unless they feel they need to. Switching the phone on means allowing themselves to be contacted. One of the questions in the survey concerned how much people switched the phone on in different locations (e.g. always, often sometimes, never). The details from this will be discussed below when evaluating the different norms that appear to apply in the different countries concerning the appropriateness of communication in various social space. But it is also possible to combine that information to provide a more general measure of how much people have their phone switched on[39].

  Those who never switch on their mobile phone in the various locations presumably carry it for emergencies or to make calls out but they are not making themselves contactable. In fact, only a minority of mobile phone users did this, the average for the European sample being 6%. There were no significant differences by country.

  If we now consider only those who did switch on their phones and look first at the whole European sample then 47% did so rarely, 32% did so sometimes and 21% did so often; with no significant differences as regards how long the mobile phone had been owned nor between the countries. Thus it would appear that at the moment a clear majority of users are by no means making themselves

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[39] If 'sometimes' receives a score of 1, often '2' and always '3' and we combine the scores for the 7 types of location, than any individual can get a maximum score of 21. The minimum score of 7 is exceptional implying that the mobile is never switched on (in the various locations) Then we can divide the remaining scores into 3 bands such that with a score of 8-12 the interviewee has it rarely switched on (i.e. in few locations),with 13-17 the interviewee has it switched on some of the time and with 18-21the interviewee has it switched on often (i.e. in many locations).

universally contactable. On the other hand, if just over a fifth do make themselves contactable much of the time and mobile telephony has only been a mass market for a few years then it is equally possible to take the perspective that for many people there has been a substantial shift in communication practices in a relatively short time.

   Neither gender, age nor education was a significant factor. Nor was the perception of the basic phone being disruptive - which means that while evaluations of the plain old telephone may affect our use of this particular technology, they do not necessarily carry over into out how we control the mobile phone. .

Contactability: A summary

  Strategies for controlling incoming calls are at the moment less widespread than those for controlling outgoing ones, but they are still important. If indeed there is a cohort effect such that younger generations utilise such strategies more, then we may expect their use to grow in the future. One particular sign of the increasing desire to control contactability is the increasing ubiquity of the answerphone and its covert use for filtering calls. While this technology still meets some resistance, there are indications that we are becoming used to the idea of leaving messages, more so in the case of contacting friends and family.

  There is also more national variation as regards the use of these strategies compared to controlling outgoing calls: involving variation in the degree of control, the socio-demographic patterns of control within countries and negative perceptions of incoming calls. For once one of the variables examined - perceptions of the disruptiveness of the phone - is not differentiated by gender and age, nor does this variable directly account for the national variations in the use of control strategies. The presence of children can, at least in the Northern European countries, lead to a greater perception that the phone is disruptive.

  Over an above the control of communication on a daily basis there is the control through allowing access to the mobile telephone number. It would appear that we are more willing to grant access to mobile phone numbers to friends and family than to work colleagues. In terms of daily practices, a minority of mobile phone users, but still a noticeable one, restrict the technology to work and do not carry to phone with them after work has finished. For those who do take the

phone with them outside work, it is normal to switch on their mobile at least sometimes, the question being how selective this is. While a majority remain selective, there are signs that younger generations may be more willing to make themselves contactable more of the time.

Controlling communication in public and private spaces

1. The importance of privacy

  The home is commonly referred to as the private sphere in contrast to the public world outside. But the notions of 'private' and 'public' spaces are social constructions that operate at other levels, including within the home. For example, we have the more communal areas of the living room and kitchen compared to the more personalised ones of bedrooms. The latter are the areas where household members create private spaces away from the surveillance of others. The arrival of more and more information and communication technologies into the home, in particular their multiplication, has both enhanced the ability to create personal spaces and raised issues about the 'freedom' that this entails. The personal TV, VCR or sound system can give a child's bedroom its own technological infrastructure, enabling children to consume media away from others if they so wish. But equally, research shows how parents can express concern over what their children may be seeing, or indeed how much TV they may be watching, when they are out of sight, unsupervised in their rooms.
  Until relatively recently the telephone has not followed this trend towards the development of more personalised technologies. Phones have traditionally been communal resources, often located in the more public areas of the home where conversations could be overheard. Previous research has shown how this certainly suited some parents (Haddon, 1994). Although they might be more concerned about the bills their children might be running up, some also wanted to know who their children were communicating with. On the other hand, those adults liked having more privacy for themselves and some noted that when it became possible to have phone extensions, second handsets in the parents bedroom provided this option of privacy.
  The options for keeping communications private are now starting to grow. A limited number of households have second phone lines, but far more now have multiple handsets. The mobile phone provides

new possibilities, as does e-mail from the home where clearly communication is not 'overheard' in the same way as voice communication. So this seemed an appropriate juncture in time to ascertain how important privacy was and for whom.

The survey dealt with three strategies for maintaining privacy when using the basic telephone:
1. making a call from another room
2. calling when nobody else was home
3. calling from somewhere else outside the home[40].

We can get some idea of the importance of maintaining privacy by examining the most common strategy: going to another room (see Table 10). The proportion of interviewees who sometimes resorted to this ranged from 28% in Spain to 44% for the UK - in fact, apart from Spain most countries were near the 40% mark. So clearly the strategy is fairly common and resorted to if not by a majority then by a substantial minority. It is also common in the sense that in all the countries about a third of those who went to another room did so often. This was the only strategy for maintaining privacy where there was a significant difference between East and West Germany, East Germany having a level similar to Spain and West Germany one similar to the UK.

Phoning when nobody was home was the second most popular approach. The proportion of people who kept their calls private by calling when no-one was at home varied from about a quarter (Spain 25% and Germany 27%) to nearer a third (France 30%, Italy 34%, the UK 37%) and so this strategy was still followed by a substantial number. Here there was less national variation with responses for each country being spread within roughly a 10% band[41]. The third strategy, phoning from outside the home, was distinctly less common, ranging from nearly a quarter in Italy (24%) to about 15% for the other countries (Germany 13%, UK 16%, France and Spain 17%). Again, the variation between countries was limited[42].

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[40]Two questions were posed: the first asked if those surveyed ever used these strategies and the second whether those who used them did so often or occasionally.

[41] Loglinear analysis showed that the Italian and British figures were significantly different in proportion to the numbers involved.

[42] Although once again loglinear analysis shows the Italian figure was significantly different in proportion to the numbers involved

The first of these strategies deserves further attention because we need to take into account the extent to which it is shaped by opportunity and facilities. The option to go to another room depends on whether there is another room to go to, or indeed how many rooms there are. In other words, the size of the home might be a consideration. When we look at the data we can see that (a) the strategy is more prevalent in larger homes and (b) there are different distributions of house size in the different countries (including between East and West Germany). If we compare similar sized homes in just the Continental countries since they have a common measure of house size (i.e. in terms of square meters), then certainly much of the difference between France, Germany and Italy is reduced.

The second consideration is the number of telephone handsets. While people might be able to go to another room by literally taking the handset with them, especially if it has a long telephone cord, we might expect the strategy of going to another room to be more common were there are multiple handsets. In fact, the pooled European data show that this is the case. As with house size, these data also indicate a substantial national variation as regards the proportion of households with multiple handsets, ranging from a third for Germany to nearer 70% for the UK, with also substantial differences within Germany (with half as many households with multiple handsets in the East). If we only consider households with more than one handset, although statistically significant differences remain the range of variation between countries is substantially reduced. In addition the difference between East and West Germany was no longer significant. In sum, it is the size of houses and the presence or absence of multiple handsets which explains much of the differences between the countries in the use of this strategy.

Moving on to the more detailed patterns of behaviour within countries, the main reason why we might speculate about gender differences based on the analysis of the data so far relates to the fact that women received more complaints about their calls. So does this incline them to seek more privacy when communicating?

Considering first the European sample, females call from another room more than males (37%: 42%). But at national level there were, in fact, usually very similar results as regards going to another room for males and females: only in Germany were there significantly more females who pursued this strategy (34% compared to 49%) (see Table 11). Phoning when nobody was home was (significantly) more

common among females, 26% for males compared to 35% for females in the European sample. Females phoned by about 10% more than males in most countries[43]. Meanwhile phoning from outside the home was more common for males, (20% compared to 16%), but the results were only statistically significant at a national level for Italy and Spain.

  Both results in part probably reflect opportunity. There are more women who have the opportunity to call when nobody is home due the spending more time in the home[44]. The fact that more males work full-time gives them more opportunity to call from work. To check further evidence for this, when we compare just those working males and females in the Italy and Spain the differences are no longer significant. On balance, what gender differences exist can in part be explained by the options open to males and females.

  There were substantial differences between age groups, with the two youngest groups using all the strategies much more[45] in the European sample as a whole and across all countries and with use of all strategies subsequently declining with age (see Table 11). If we take the case of phoning from another room, which of two youngest groups did this most varied by country: it was 14-17 year olds who did this more in the UK and France, 18-24 year olds who did this slightly more in Spain while the two groups had similar results in Italy and Germany. But perhaps the more interesting point is the sheer scale of the behaviour. 70-80% of 14-17 year olds phoned at least sometimes from another room in most countries - except Spain where it was nearer to a half[46]. Moreover, between three quarters (in the UK) and about a half (in the other countries) of these teenagers noted that they used this strategy often. In other words, privacy is really quite important for these younger groups.

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[43] The difference was not so strong and not significant for Italy

[44] Considering here not just housewives but also the higher proportion of part-time female workers - which was not measured in this survey.

[45] And significantly more in proportion to their numbers according to loglinear analysis

[46] This difference in part reflects the availability of multiple handsets. If we only consider the households with multiple handsets in these countries, statistically significant differences still remain but they are less strong since the difference in percentage points between countries is reduced.

This pattern may well reflect the current circumstances of the different age groups. For instance, the fact that these younger people are just starting personal, and maybe intimate, relationships with peers. But we also have to ask whether there is also some cohort effect as well. Whereas in the overall European sample 40% of 25-44 year olds phoned from another room, only 20% of those aged 65+ did so. Roughly the same pattern was to be found for calling when nobody was home, but all the percentages were slightly lower. And once again the same pattern occurred for phoning from for outside the home but here the percentages were lower still. This general pattern was true across countries. In other words, older generations seem to be less interested in making an effort to maintain the privacy of calls.

  Could part of the differences be explained by the experience of complaints? We noted earlier that the youngest group also received far more complaints about the telephone calls, so it would be reasonable to speculate that their greater search for privacy in part reflects an effort to avoid being seen to use the phone - and hence avoid further complaints. If we pool the European data this is verified in relation to receiving all types of complaint. For example, those people who receive complaints (about costs) are twice as likely to resort to all strategies, and more likely to do so often . And if we consider just the 14-17 year olds, again receiving complaints almost always relates to using these privacy-seeking strategies. Hence we can appreciate why the British youth, who received the most complaints, were among the more frequent users of these strategies. Yet the pattern of who receives complaints does not explain everything. Pooling the European data and considering only those who receive no complaints, the general age patterns described above remains: with the youngest two groups being far more likely to seek all forms of privacy, and there is a decline in the use of these strategies the older the age group.

  So far we have focused on which individuals seek privacy, but we can also ask whether some quality of the household has a bearing on an individual's use of these strategies. The educational level (of household heads) had a bearing on whether people called from another room or when no-one was there, the higher the level, the more likely people were to use these strategies. So there was some potential evidence of a culturally learnt practice.

  Household composition also made a difference to the use of all strategies. Taken in isolation, the fact that couples phoned least from

another room could partly by explained by the fact that they might have smaller houses, with less rooms. But that does not explain the consistent pattern across all strategies, with couples using them all least compared to other types of household. For example, in the case of phoning when nobody was home, 20% of couples used this strategy[47], a third of nuclear and 'other households' (usually households with several adults) used it while lone parent households reported slightly more use at 41%. However, we must take into account the fact that the figure for all the households with children will be boosted because some of the people being interviewed from those households will be the 14-17 year olds and 18-24 year olds themselves who - we noted earlier -receive more complaints. If we examine households where the respondents were 25 or more years old the pattern remains but the gap between couples and the other groups diminishes. Also, lone parent households are no longer different from the others. So the fact that children and young people were the ones answering in the original analysis did explain some of the difference by household composition. Nevertheless, couples do seem to need slightly less privacy in their phone behaviour.

  So one final question on household composition is whether these couples have slightly less need for privacy because there are no children or because there are fewer people? The salient comparison here is between couples and lone parents with just one child, since both are two-person households[48]. In fact, the findings are mixed. As regards phoning from another room or when there is nobody home, there is no difference, suggesting that it is actually household size rather than children which is the main factor. However, these lone parents are still more inclined to phone from somewhere else.

  The very last question concerning privacy relates not to the domestic phone but to the mobile one. One the whole privacy has not been a major consideration in visions of the future personal phone, nor has it been a sales pitch or representation associated with the existing mobile phone. Yet research in the UK had already noted that the technology can be appropriated for this purpose[49]. To this end, the

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[47] This being a significant difference according to loglinear analysis.

[48] Asking only the adults.

[49] One extreme example we when a husband managed for some time to keep his affair with another women secret by handling all communication via the mobile when he was out of the house (Haddon and Silverstone,1995)

survey asked respondents whether they ever used the mobile (or car) phone specifically to keep their calls private.

  On the whole only a small proportion, 14% of the European sample, had used the phone for this purpose - although in another light this is perhaps surprisingly high give that this dimension of the mobile phone's use is rarely discussed. Using the mobile for privacy ranged from 10% in France, and 12% in Germany and Spain to 14% in Italy and rising to 19% in the UK. Unfortunately, the numbers involved were sufficiently low that these figures did not translate into statistically significant differences between countries. Given the limited number of households in the sample with mobile phones, and the limited number of them who used the technology for private calls, at this stage it was not possible to conduct a very detailed analysis of who might be more inclined to use the phone for this purpose. We can just observe that in the European sample males were more inclined to use the mobile for privacy (16% compared to 10%[50]). There were also differences according to age in the European data as a whole, with 14-17 year olds and 18-24 year olds being significantly more likely to use the mobile phone for this purpose. Only in Italy were the numbers involved large enough for statistical analysis, and here once again, it was the 14-17 year olds who were more likely to use the mobile phone in this way. Furthermore if we take the European sample as a whole and consider the various complaints people receive, for each complaint those who received the complaint were more likely to use the mobile phone for making private calls. It would appear that much of the pattern for the domestic phone carries over to the mobile one.

2. Mobile phone calls in public spaces: Appropriate and inappropriate communication

  The notions of private and public again come into play in relation to mobile phone use outside the home, where different social spaces have associated norms about the appropriateness of making private communications[51].

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[50] p.=0.0235

[51]For example, qualitative research in Norway has explored the expectations of appropriate communication behaviour especially in relation to the particular social space of the restaurant (Ling, 1996).

The first question addressed here is how often people switch on their mobile phones in different public spaces. This in large part measures people's sensitivity to any expectations or norms regarding phone use in these different social spaces as well as their own willingness to be disturbed in these locations. Once again, this has a bearing for the wider issue of whether current behaviour provides clues about the limits to which we would be willing to be universally contactable.

There were both commonalities and some differences across the European countries surveyed (see Table 12). In all countries the location where mobile phone users were least likely to have their phones switched on was when attending some event like a play or show. Clearly in such spaces use of the mobile was most inappropriate as incoming calls can disrupt the spectacle - and in fact use of mobile phones is often forbidden in such circumstances. In all of the countries over 70% never switched on their phone here, this figure rising to 87% in the case of Germany. In contrast the car was where people from all the countries said they were most likely to have the mobile on. 72% of owners in the UK, 67% in Germany, 61%% in Italy and 56% in Spain said they always did so in this space[52]. This is hardly surprising since the car is a relatively private space where strangers, at least, will not be disturbed.

But now if we think about the variation across countries as regards all the other locations we might ask whether this in part reflects the different histories of the mobile phone market apart from any more profound cultural differences.   For example, the most outstanding difference was between Italy and the others. Far fewer Italians could identify locations where they would never switch on their phone and there were several locations where a greater proportion of Italians said that they were always likely to have them switched on. Unlike the earlier observation that there were a higher proportion of Spanish individuals who remained contactable more of the time, this finding suggests that there are more social spaces where Italians in general did not feel constrained in having their phones switched on. In other words, it would appear that social rules governing the acceptability of receiving calls in public were less strong in Italy. For example, those saying they would never switch on the phone in a restaurant ranged from 58% (in the UK) to 49% (in Italy); in a shop from 54% (in Germany) to 35% (in Italy); on a bus or train from 55% in Spain (and

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[52] The French data on this issue was not useable.

roughly a half in all the other countries except Italy) to 35% (in Italy). One possibility is that this reflects the extraordinary growth of the market in that country, where in just a few years Italy has become one of the two biggest markets in Europe. Does this mean that the norms which might regulate public use have not caught up with the sudden transformation of this market?

  One last observation concerns the use of the mobile phone in the home. Again, most of the discussion about the mobile phone and representations of its use refer to spaces outside of the home - i.e. times when we are ourselves mobile. Yet between about a fifth (18% in the UK, 22% in Germany) and about a third (32% in France, 31% in Spain and 29% in Italy) of interviewees always had their phones switched on when they were at home. This, then, might count as a first sign that at least some are adopting the mobile phone as their personal terminal through which they can be contacted at all times - as opposed to just using it when they are out of the home, and reverting to the domestic line when at home.

  Just as we asked about the interviewees' reaction to the answerphone in order to gauge the acceptability of, and sensitivity to, this relatively new technology we asked about their reaction to the use of mobile phones in public spaces. To what extent (and by whom) are such new communication practices resisted, even if only in the sense of provoking negative evaluations?

Table 3: Reactions to seeing someone else use a mobile phone

	France	Germany	Italy	Spain	UK
Think nothing in particular	44	25	29	31	33
Think how useful it is	16	10	11	23	7
It annoys you	6	7	21	6	21
Try to listen	1	1	1	1	1
Think what a 'show-off'	26	50	31	29	30
Think I would like one	0	2	1	5	2
Other	2	4	3	3	5

  Of all the possible options offered, four main ones proved popular (see Table 3 above): one neutral response (nothing in particular), one positive one (that observers felt the mobile was useful) and two

negative ones (it annoyed them or made them think that the user was showing off). Here there was some European variation. A loglinear analysis showed that the statistically significant percentages within this table relating to these four strategies were:
 - the 50% in Germany the main response was negative, thinking users were showing off.
 - the 45% in France where the main response was neutral
 - the 16% in France and 23% in Spain who thought it was useful
 - the 21% in Italy and the UK who were annoyed
 If a neutral response suggests that the technology has stabilised and become invisible and evokes no particular response then for a substantial minority of people, less so in German, more so in France, the mobile phone has settled down to become a taken-for-granted object. But equally clearly, it still attracts a substantial negative response, with from 26% (in France) to a half (in Germany) of on-lookers thinking that the user is showing off. The other negative response, annoyance, was only provoked substantially in Italy and the UK, the countries where market penetration is highest and so where people are likely to encounter others using the technology more often. Here a fifth mentioned this feeling. If we combine the responses this means that in Italy, the UK and Germany over half of those surveyed had some form of negative reaction. In comparison the two actual positive responses (including wanting to have a mobile) ranged from 9% in the UK to 28% in Spain.
 One final point is that it is worth looking at differences between age groups to see if there is any evidence that the mobile phone's use is becoming more acceptable, or at least more invisible, among the younger users (14-17 and 18-24 year olds). The only statistically significant difference relating to these groups was that the youngest of the two were more inclined to say they wanted one, but apart from that the overall their positive and neutral responses are not remarkably different from the averages for each of the individual countries. On the other hand, the three groups over 25 were all more likely to show annoyance with the mobile phone.

Public and private spaces: A summary:

As regards the issue of privacy in the home, we see again much in common across the different European countries. Where differences exist, for example, in relation to phoning from another room, these can in part be explained away by the opportunities available as opposed to any national cultural dispositions. The desire to maintain privacy when telephoning clearly is important. There are some slight, but perhaps understandable, gender differences as regards which strategies are preferred, and more dramatic differences based on age. Only in part do these reflect the fact that the young receive more complaints about their phone behaviour and hence make some effort to conceal it, and once again their may well be generational factors at work. Finally, while only a proportion of mobile phone owners used their mobile to maintain privacy, that proportion was larger in the larger markets and must be seen in a context where that particular potential role of mobile phones has not been the subject of public discourses. This raises the question of whether a more personalised telephony in the future might find some appeal partly because it supports the ability to have private communication.

The other issue covered in this section was the use of mobile phones in public spaces. These data reinforce the argument that, in contrast to the dream of ubiquitous contactability, place does matter and does introduce constraints on telephony. There are some common patterns across countries in terms of where it is more acceptable to use phones and where it is not, with cars being the most acceptable place and public events least like shows being the least acceptable one. But there was some national variation and in particular the fact that Italians switch on mobile phones in more social spaces raises the question of whether social norms regulating use are in any way related to the pattern of growth of mobile telephony in the different countries as well as to any particular national cultural characteristics. Perhaps a surprising result was the degree to which the mobile is switched on at homes, which may provide us with the first sign that at least some people are willing to use the mobile as their general purpose personal phone rather than use it only when they are mobile. To a degree the mobile phone is now accepted by on-lookers in public spaces, more so in some countries than others, but there is still a fair amount of negative response - indeed there is more annoyance in those countries where mobiles phones are more widespread. At the moment there are no signs that phoning in public spaces is becoming more acceptable amongst younger generations.

Conclusions: The importance of control

  First and foremost the data suggest that control of telephony, in its various guises, remains demonstrably important - though to greater and less degrees depending on the aspect considered. While in many households the telephone may have become relatively unproblematic, in others even use of the basic telephone continues to raise issues. Moreover, telephony is itself not static, and the on-going innovations such as new peripherals like the answering-machine or new modes of telephony like the mobile phone, mean that there are always new dimensions of telephony to deal with: implying new options, new problems and further attempts to domesticate these additions.
  The experience of some degree of constraint in making phone calls is widespread. While income makes some difference, it is not the case that there is simply some small minority of 'have-notes' who are the only ones who are concerned about the financial costs of telephony. This is one of the key factors which means that telephony remains an issue in the home, even if the telephone as a technology is relatively taken-for-granted. We see this in attempts to control the communication practices of others and even more dramatically in the level of complaints about telephony.
  While the previous research noted above had suggested that phones could be experienced as disruptive especially for busier households, from our survey data there appears to be relatively less need in general to control incoming calls - perhaps reflecting the fact that on average the number of incoming calls is very limited. However imposing limits on contactability and questions of the privacy and of public nature of some (mobile phone) calls are still issues.
  The question of contactability in particular may become more of an issue if younger generations (i.e. especially those below 45) are inclined to use control strategies more. The use of the answerphone to control communication, as well as signs of the growing acceptability of this peripheral, raise questions as to whether there will be at least as much demand for those technologies that give us more, or perhaps more finely attuned, forms of control as for any technologies that make us more reachable. Some of the practices emerging around the mobile phone, such as controlling who has access to numbers and when and where the terminal is switched off,

testify to the fact that in many circumstances people do not in fact want to be contactable at all times.

  Some of the classic socio-demographic factors such as gender, age, household composition and income do relate to some of the variation in patterns within countries. Although there are some significant gender differences (e.g. in terms of complaints about calls, and the pressure to use cheaper tariffs) at least in this area of controlling communications there are relatively few differences between males and females - or at least differences which are systematically reproduced from country to country. Age, though, clearly remains a very important demarcator of the experience of telephony.

  Finally, it appears that as regards controlling communication we can in many, though by no means all, cases talk of a degree of similar European experience, both in terms of aggregate statistics when comparing countries and in terms of the patterns within countries. Moreover, some of the variation that does exist relates at least partially to the circumstances of the particular countries and is not just based in cultural differences. In particular the history of telephony in the different countries appears at times to have had some influence on communicative practices. The implication is that we can all still learn a good deal from the lessons of our European neighbours.

Acknowledgements

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APPENDIX

Table 4: Controlling outgoing calls: By country
(percentages[53])

		France	Germany	Italy	Spain	UK		Europe
Cheap tariffs	Agree Comp	46	47	35	44	50		45
	Agree Part	19	15	28	13	22		19
	Neither	1	2	4	3	2		2
	Disagree Part	9	13	16	10	10		12
	Disagree Comp	24	22	17	30	13		22
Probability						0.00001		
Limit Self	Agree Comp	38	43	32	50	28		39
	Agree Part	24	18	38	19	27		25
	Neither	1	2	4	1	3		2
	Disagree Part	13	14	14	8	15		13
	Disagree Comp	25	22	11	22	26		21
Probability						0.00001		
Limit Others	Agree Comp	28	27	26	34	21		27
	Agree Part	13	10	25	14	14		15
	Neither	6	3	3	5	3		4
	Disagree Part	10	12	20	7	14		13
	Disagree Comp	43	42	24	38	45		38
Probability						0.00001		

The above table does not show the few non-responses - hence percentages may not total 100%.

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[53] Non-response is not included and all figures are rounded to the nearest whole number and so the totals may not be 100%.

Table 5: Controlling outgoing calls: By country, gender, age (percentages)

		France	Germany	Italy	Spain	UK	Europe
Cheap tariff							
Gender	Male	60	55	60	52	67	59
	Female	71	68	66	62	77	69
	P.	0.00048	0.00001	n.s.	0.00113	0.00022	0.00001
Age	14-17	54	55	47	49	62	53
	18-24	62	52	58	53	69	59
	25-44	57	56	61	56	65	59
	45-64	72	66	67	61	78	69
	65+	77	72	71	62	82	72
	P.	0.00001	0.00001	0.00001	n.s.	0.00001	0.00001
Limit Self							
Gender	Male	60	58	70	68	55	62
	Female	64	64	71	70	55	65
	P.	n.s.	0.04448	0.04363	n.s.	n.s.	0.00665
Age	14-17	59	63	64	62	50	61
	18-24	54	48	62	62	52	57
	25-44	60	55	67	68	51	59
	45-64	64	68	76	80	60	69
	65+	66	70	77	63	62	68
	P.	ns	0.00001	0.00001	0.00001	0.00004	0.00001
Gender	Male	42	37	51	47	36	42
	Female	40	36	50	49	34	42
	P.	0.00103	0.00104	0.01101	n.s.	n.s.	0.00001
Limit Others							
Age	14-17	30	15	33	33	27	28
	18-24	30	23	31	31	24	28
	25-44	43	40	44	47	37	42
	45-64	57	54	72	75	52	62
	65+	38	34	62	47	30	41
	P.	0.00007	0.00001	0.00001	0.00001	0.00001	0.00001

The above table summarises the data from a number of cross-tabulations. Probabilities here refer to the overall degree to which respondents agreed to a statement on a five point scale (agree completely, agree partly, neither agree nor disagree etc.). The percentages refer to the combination of those agreeing completely and

partly. The option of persuading others to limit their calls is only considered for households with two or more people.

Table 6: Complaints about phone calls: By country (percentages)

		France	Germany	Italy	Spain	UK
Cost	P.=0.00001	22	23	21	26	32
Too many	P.=0.00252	20	17	18	21	22
Blocking	P.=0.00001	15	13	18	13	20
Unnecessary	P.=0.00001	16	13	13	15	20

Table7: Complaints about the cost of phone calls: By country, gender and age (percentages)

		France	Germany	Italy	Spain	UK	Europe
Gender	Male	17	15	19	21	23	18
	Female	27	30	24	31	40	30
	P.	0.00012	0.00001	n.s.	0.00063	0.00001	0.00001
Age	14-17	42	53	49	42	65	50
	18-24	44	46	48	48	55	48
	25-44	20	22	19	25	23	22
	45-64	13	16	10	19	28	16
	65+	13	14	7	10	17	12
	P.	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001

**Table 8: Controlling incoming calls: By country
(percentages)**

		France	Germany	Italy	Spain	UK	Europe
Blocking	Often	4	3	7	3	2	4
	Occasionally	23	14	28	11	13	18
Not answering	Often	3	3	3	2	3	3
	Occasionally	18	24	20	9	22	19
Someone else answers	Often	3	1	4	1	3	2
	Occasionally	20	20	28	15	26	22
Redirecting	Often	8	5	5	8	5	6
	Occasionally	25	27	26	22	28	26

**Table 9: Controlling incoming calls: By country and age
(percentages)**

		France	Germany	Italy	Spain	UK	Europe
Blocking	14-17	33	17	32	22	11	25
	18-24	31	17	42	18	17	26
	25-44	32	23	40	16	19	27
	45-64	24	15	34	11	15	20
	65+	16	9	27	7	8	13
	P.	0.00073	0.00016	0.00297	0.00261	0.00282	0.00001
Not answering	14-17	20	32	31	21	49	30
	18-24	31	38	30	15	32	29
	25-44	26	35	24	14	29	27
	45-64	15	25	17	7	17	18
	65+	11	10	22	3	10	11
	P.	0.00001	0.00001	0.01219	0.00001	0.00001	0.00001
Someone else answers	14-17	33	23	50	23	61	38
	18-24	40	32	52	22	54	41
	25-44	23	25	32	19	31	26
	45-64	17	19	23	11	23	19
	65+	10	9	17	6	6	10
	P.	0.00001	0.00005	0.00001	0.00007	0.00001	0.0001
Redirecting	14-17	46	38	43	44	47	43
	18-24	49	40	48	47	48	47
	25-44	39	42	32	34	37	39
	45-64	26	28	24	28	32	27
	65+	22	17	22	11	17	18
	P.	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001

This table again summarises some data. Probabilities here refer to the
question as asking whether they used any strategies often,
occasionally or never. The percentages refer to the combination of
those saying that they did this often or occasionally.

Table 10: Strategies for maintaining privacy: By Country
(percentages)

		France	Germany	Italy	Spain	UK
Another room	P.=0.00001	39	42	40	28	44
Nobody home	P.=.0.00001	30	27	34	25	37
From outside	P.=.0.00001	17	13	24	17	16

Table 11: Strategies for maintaining privacy
(percentages)

		France	Germany	Italy	Spain	UK	Europe
Another room							
Gender	Male	38	34	40	27	44	37
	Female	39	49	41	29	45	42
	P.	ns	0.00001	ns	ns	ns	0.00004
Age	14-17	71	72	70	48	79	69
	18-24	61	70	70	56	66	65
	25-44	35	44	42	27	48	40
	45-64	33	35	25	19	34	30
	65+	23	22	22	8	22	20
	P.	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
Nobody home							
Gender	Male	25	20	32	22	33	26
	Female	35	33	35	28	42	35
	P.	0.00086	0.00001	n.s.	0.04772	0.00898	0.00001
Age	14-17	60	55	65	65	66	61
	18-24	58	45	65	53	65	58
	25-44	28	28	34	21	39	30
	45-64	19	21	21	12	27	20
	65+	15	15	9	7	17	13
	P.	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
From outside							
Gender	Male	20	13	28	21	18	20
	Female	17	13	21	14	14	16
	P.	ns	ns	0.02558	0.01593	ns	0.00142
Age	14-17	28	33	49	41	27	36
	18-24	42	23	51	41	32	39
	25-44	15	14	24	16	18	17
	45-64	15	10	11	6	9	10
	65+	8	4	11	5	6	7
	P.	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001

Table 12: Locations where the mobile phone is switched on: By country (percentages)

	France	Germany	Italy	Spain	UK
Home					
Always	32	22	29	31	18
Often	14	12	16	7	5
Sometimes	20	28	16	18	20
Never	26	34	37	40	55
Restaurant/bar					
Always	13	12	25	33	23
Often	6	6	13	6	6
Sometimes	16	14	19	14	13
Never	52	63	39	42	58
Shop					
Always	15	19	24	30	34
Often	5	8	16	3	4
Sometimes	12	11	21	12	17
Never	54	58	35	48	45
Play/show					
Always	5	5	8	17	11
Often	2	0	7	0	5
Sometimes	7	5	7	4	6
Never	71	87	74	73	77
Bus/train					
Always	21	21	26	29	30
Often	4	12	19	3	4
Sometimes	6	13	14	7	10
Never	50	47	35	55	53
Other Home					
Always	23	21	31	34	32
Often	10	10	22	6	3
Sometimes	15	22	20	13	19
Never	38	44	23	41	44
Car					
Always	35	67	61	56	72
Often	10	8	19	10	5
Sometimes	8	6	10	9	8
Never	35	17	7	21	14