

## Spaces Across Europe: Where People Use Media

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This article focuses on the various spaces hosting the communication activities of European citizens in nine different countries. In contemporary societies, characterized by the pervasiveness of mobile devices and other media, space is key to understanding the everyday uses of media. Where people use media holds important implications for not only the daily routines of media usage but the meaning-making processes that media enable and sustain. On a theoretical level, this article introduces two interrelated concepts of domesticity and mobility to account for the contemporary configuration of private and public spaces of media use. On an empirical level, the article characterizes these configurations in the nine countries of the European study, identifying five patterns of media use across social spaces, and relating these patterns to sociodemographic as well as cross-national factors.

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### **Introduction**

Media and audience studies have focused on the transformation of space and place in the experience of modernity as a consequence of the widespread diffusion of communication technologies. Innis (1950) and McLuhan (1962, 1964) studied how distinctive spatial features of media influenced culture, power, and social relations through human history, driving globalization processes; Meyrowitz (1985) and Thompson (1995) deepened the understanding of the complementary phenomena of "privatization of the public sphere" and "publicization of the private sphere" connected with the entrance of electronic media into households; Castells (1996) proposed the notion of "space of flows" to describe the new global dimension of the network society, where the contingencies of geography seem to be less relevant in the face of growing connectedness to the Internet. Along with these macro-level approaches to the mediated experience of space and place, many scholars have focused on the everyday, framing audiences and their media uses and practices in the temporal and spatial structures of their lives. In these micro-level approaches, where people use the media became a relevant question to understand both the daily routines of media usage and the meaning-making processes they are able to sustain. Two key concepts, in such a perspective, are those of domesticity and mobility.

### **Domesticity**

With regard to domesticity, relations between media and the household are at the core of different research traditions. This began with Lull's work on family viewing and social uses of television in the 1980s, when it was observed that "structural uses" of television contribute to shape domesticity. Lull's ethnography showed that "viewers . . . construct the situations in which viewing takes place and the ways in which acts of viewing, and program content, are put to use at the time of viewing and in subsequent communications activity" (Lull, 1990, p. 148). On the one hand, the ethnographic turn in audience studies and the focus on the family as the "natural audience" of television led scholars to examine the spatial organization of the household connected with the presence of electronic media devices such as TV sets and videocassette recorders (Bausinger, 1984; Gray, 1992; Morley, 1986). On the other hand, media historians used written documents and oral memories to give an account of the early entrance of both radio and television sets into households (Moore, 1988; O'Sullivan, 1991; Spigel, 1992).

Shifting from television to ICTs, a main contribution to this ethnographic approach to media and domesticity came, in the 1980s and 1990s, from Roger Silverstone with David Morley, Eric Hirsch, Leslie Haddon, and Sonia Livingstone. The "domestication paradigm" (Berker Hartman et al, 2006) describes

how the entry of ICTs into the home is managed, how these technologies are physically (and symbolically) located within the home, how they are fitted into our routines and hence time structures and how we display them to others, and by so doing give out messages about ourselves. (Haddon, 2007, p. 26)

Inside the household, ICTs mainly have been located in teenagers' bedrooms (Livingstone, 2002), rooms that place adolescents beyond the pale of parental vigilance and allow them to develop their own specific "bedroom cultures."

As both Morley and Silverstone have argued, reflecting on the concept of domestication and its history, by the end of 1990s, Western societies were faced with another change toward different patterns in time/space relations (Giddens, 1990; Harvey, 1989), affecting and being affected by changes in the media and ICT system.

### **Mobility**

The second key concept, mobility, became increasingly relevant with the interaction of four key factors: the emergence of new social spaces transcending national territorial limits and local constraints, characterized by the mobility of flows of people, information, goods, money, and so on (Appadurai, 1996; Urry, 2000); the intensification of processes of individualization and the emergence of what Manuel Castells (1996) has named "network sociability" (Rainie & Wellman, 2012); the spread of communication technologies adding personal portability to networked infrastructures; and increased media digitalization, allowing content mobility between many media platforms. Media systems and media production and consumption were reshaped, simultaneously reshaping the relations between presence and absence, the material and the incorporeal, synchrony and asynchrony, and public and private (Couldry & McCarthy, 2003; Katz & Aakhus, 2002; Silverstone & Haddon, 1996).

From the late 1990s, the concept of mobility has been addressed by scholars interested in mobile communication (Brown, Green, & Harper, 2001; Ito, Okabe, & Matsuda, 2005; Katz, 2003; Katz & Aakhus, 2002) or in other forms of "nomadic" media (Bull, 2000). However, as soon as the new paradigm of "networked communication" (characterized by globalization, networking of mass and interpersonal media, and different degrees of interactivity) began to overcome the hegemony of the mass media paradigm (Cardoso, 2008), mobility became a core concept in media and audience studies. The concept of mobility allowed scholars to address deep changes in media content distribution and media consumption patterns (see, e.g., Deuze, 2006; Jenkins, 2006).

In this perspective, if the 20th-century public space had entered the household through the media, the new mobility paradigm starts "domesticating" the public sphere by making it familiar and intimate. In turn, the relationship between the media—as technologies of time-space distancing (Thompson, 1995)—and everyday life (Morley, 2005) were made even more complex and layered.

### **Where People Use Media: Public and Private Space**

Analysis of the spaces of media consumption is crucial for achieving a deeper understanding of the contemporary transformation of space. In particular, different authors have stressed the relevance of the distinction between public and private spaces (Ford, 2011; Madanipour, 2003; Moores, 2004; Sheller & Urry 2003). We will describe how these changes are occurring in Europe on the basis of a 2013 cross-country survey in nine countries. Our research questions are based on the premise that the evolution of

mobile devices and new consumption habits are reconfiguring the spaces of media consumption, contributing to a redefinition of public and private spaces. In particular, we address the following research questions:

*RQ1: How is media consumption distributed among different spaces of everyday life?*

*RQ2: Is it possible to identify patterns of media consumption on the basis of places where people consume media?*

*RQ3: How do sociodemographic variables influence patterns of media consumption?*

*RQ4: Do European countries differ regarding the most popular places of media consumption?*

Before we present our analysis of the results of the survey, we need to outline our definitions of public space and private space. Sheller and Urry (2003) identified different levels of public space: the public sphere, the public interest, public life, the publicity of personal life, and public physical space. Our focus is on what Sheller and Urry (2003) call physical spaces—in particular, spaces of media consumption. We define public spaces as “those areas and locales, especially in towns and cities, outside the private space of the home and workplace,” as Sheller and Urry (2003) suggest, in accordance with the distinction made by Sennett (1977) and Meyrowitz (1985). Although the definition of public spaces sometimes includes the workplace (e.g., Ford, 2011), we follow Sheller and Urry (2003), who distinguish “non-private” spaces into the workplace and the public space. Madanipour (2003) refers to them as, respectively, “institutional space” (the workplace or the school) and “public interpersonal space.” The interpersonal spaces are defined by both their sociality and the fact that they are interstices, including modes of transportation (buses, cars, subways) and fixed locations (coffee houses, shops, and malls).

Even the private space of the home can be divided into different places. As Livingstone (2007) states, the home is divided between the collective space of the living room and the bedroom, which is an increasingly central location of media use. According to Livingstone, in the second half of the 20th century, there emerged a “shifting balance between communal family life and private life” (p. 303) as symbolized by the growing significance of the “bedroom door” (p. 303), fostering a shift from “family television” (Morley, 1986) to individualized media lifestyles (Flichy, 2006).

In accordance with these premises, our examination of media consumption across private and public spaces will include four spaces: (1) the intimate and individualized space of the bedroom, (2) the domestic space of the house, (3) the public and interpersonal space outside the home, and (4) the institutional spaces of the workplace and school. The description of spaces of media consumption will contribute to a discussion of the individualization and privatization of media consumption and to a description of the privatization or domestication of public spaces. Furthermore, we will discuss how the trajectories of media consumption across public and private space redefine, as Bull (2013) states, the public space as mediated and commoditized, a new kind of nonspace where people build their own experience.

### Methods and Measures

Data analyzed in this article come from the European media audiences survey conducted in nine countries during spring 2013.

*User characteristics.* Respondents included a wide range of sociodemographics. Regarding gender, the sample is almost equally divided (males 50.7%, females 49.3%). Age spans 14 to 90 years old. However, because respondents under age 18 are scarce (2.2% in total), the present analysis was conducted only on respondents 18 years of age or older.<sup>2</sup> The sample includes the following age ranges: 18–24 (16.3%), 25–34 (24.9%), 35–44 (22.2%), 45–54 (19.1%), and 55 or older (17.5%). Most respondents are employed (59.3% identify as full-time or part-time workers). The remaining respondents are almost equally divided between students (11.3%), retired individuals (10.5%), and those unemployed or working unpaid jobs (13%).<sup>3</sup> Overall, the sample is constituted by people with a medium or high level of education; only 10.7% have not received upper secondary school qualification, 48.4% have upper secondary school qualification or have completed higher education access courses, and 40.9% have a university degree. Regarding marital status, respondents were categorized as “single without children”<sup>4</sup> (36.2%), “married without children” (13%), “married with children” (36.1%), and “single with children” (14.4%). Finally, almost half of the respondents (45.7%) resided in big cities or suburbs, 30.8% in a town or small city, and 22.9% in a country village or in the countryside.

*The spaces of media use.* All variables concerning spaces of media use were selected for the analysis and reworked to create indicators of media use in different kinds of spaces. The questions relevant for our analysis were the following:

- Q11. *Where do you read printed newspaper and magazines?*
- Q12. *Where do you listen to radio—either on a radio set or on the Internet?*
- Q13. *Where do you watch TV—either on a TV set or on the Internet?*
- Q14. *Where do you use the Internet?*

Possible answers considered for the analysis were:

1. at home—in the living room,
2. at home—in the bedroom,
3. at home—in other places than the living room or the bedroom,
4. at work,
5. at school or other place of study,
6. during transport (such as public transportation),

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<sup>2</sup> Sample size after age filtering is 10,492.

<sup>3</sup> A remaining 5.9% chose “other” or did not specify their occupational status.

<sup>4</sup> Single includes those who are single, divorced, or widowed.

7. in public places (cafe, supermarket, hair salon, etc.).<sup>5</sup>

These variables were reworked to create eight indexes of spaces of consumption according to the distinctions made in the introduction. Answer 2 ("at home—in the bedroom") was used as an indicator of consumption happening in the intimate and individualized space of the bedroom, and answers 1 ("at home—in the living room") and 3 ("at home—in other places than the living room") were used as indicators of consumption in the domestic space of the house. Regarding public spaces, answers 4 ("at work") and 5 ("at school or other place of study") were used as indicators of consumption in public institutional spaces; answers 6 and 7 were used as indicators of consumption in public spaces outside the home and the workplace.

Following this logic, we created four indexes accounting for the *degree* of media use in each space: domestic private, domestic, public institutional, and public interpersonal. These indexes account for the *number* of media (see questions Q11, Q12, Q13, and Q14) and locations (see answers 1 to 7) for each type of place of consumption. A normalization process was implemented to make the indexes comparable: The number of media/locations of each type of place was divided by the theoretically maximum number of media/locations for that type of place. The indexes have a minimum value of 0 (when no medium is consumed in any location of that space) and a maximum value of 1 (when every medium is consumed in each location of that space).

Finally, four indexes accounting for the *distribution* of media consumption across space for each individual user were created: domestic private focus, domestic focus, public institutional focus, and public interpersonal focus. These indexes account for the *proportion* of consumption that happens in each place compared to all places in which an individual consumes media.

*Media use.* The questionnaire contained several items about media consumption, ranging from traditional mass media to digital social media. Four kinds of media use will be explored: traditional mass media consumption, mass media consumption through digital media, mobile phone use, and Internet use.

Traditional and digital mass media consumption were addressed through 11 questions that asked respondents to report minutes spent consuming different media the day before the interview. Four items focused on traditional mass media consumption: "Watched television on a TV set" (86.8%,  $M = 130$ ,  $SD = 112$ ),<sup>6</sup> "Listened to the radio on a radio set" (60.1%,  $M = 80$ ,  $SD = 142$ ), "Read newspaper or magazine in their printed versions" (53%,  $M = 19$ ,  $SD = 22$ ), and "Read books in their printed version" (39.9%,  $M = 27$ ,  $SD = 56$ ). Seven items focused on digital mass media consumption: "Watched television on a computer" (25.6%,  $M = 28$ ,  $SD = 80$ ), "Watched television on a mobile phone" (7.6%,  $M = 4$ ,  $SD = 34$ ), "Listened to

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<sup>5</sup> Other options proposed in the questionnaire, such as "at the home of a friend or family" and "other places," were not taken into consideration due to their ambiguity regarding the aim of the analysis.

<sup>6</sup> Percentage values indicate respondents who have spent at least 1 minute on the relevant medium. Respondents who reported that they had not spent time on a medium the previous day were marked as having 0 minutes of consumption. Respondents who reported that they did not remember were not considered and counted as missing values. The same procedure was used for each variable.

radio on a computer" (18.5%,  $M = 23$ ,  $SD = 79$ ), "Listened to radio on a mobile phone" (10.6%,  $M = 6$ ,  $SD = 30$ ), "Read newspaper or magazine on the Internet" (61.6%,  $M = 26$ ,  $SD = 43$ ), "Read books in electronic version" (10.2%,  $M = 6$ ,  $SD = 30$ ), and "Listened to audiobooks" (3.2%  $M = 2$ ,  $SD = 21$ ). The variables regarding minutes of consumption through digital media have a high consistency according to the Cronbach's alpha method: They score a value of 0.719, above the 0.7 threshold often used as a discriminant for reliability (Kline, 1999). Even if additional tests are made to assess reliability (Sijtsma, 2009), the items could be cautiously interpreted as forming an index of "mass media consumption from digital devices."

Mobile phone use was addressed through 19 items in which respondents specified whether they used certain features of their mobile phone. A principal component analysis with Varimax rotation was conducted on 12 of the 19 items<sup>7</sup> to identify different types of mobile phone use. The model, run with the criteria of eigenvalues greater than 1, suggested a two-factor solution with 52.71% of the total variance explained. Factor scores were computed by calculating a mean of media items belonging to each factor. Both factors show an acceptable level of reliability ( $\alpha = 0.66$  and  $\alpha = 0.87$ ). The first factor, labeled "simple functions," included four items: taking photographs (0.721), SMS (0.689), MMS (0.623), and recording video (0.576). The second factor, labeled "smart phone functions" due to the fact that it includes a higher number of more advanced features and requires an Internet connection, included eight variables: e-mail (0.780), viewing websites via browser (0.780), viewing websites via apps (0.766), social network sites (0.753), GPS and maps (0.728), instant messaging (0.654), games (0.545), and phone as music player (0.454).<sup>8</sup>

Internet use was addressed through 10 items in which respondents reported online activity and its duration during the previous day. Another principal component analysis with Varimax rotation was conducted with all the items recoded as dichotomous variables (activity done/not done). The model showed a four-factor solution that explains 57% of the total variance. "sociable Internet use" included three main variables: e-mail (0.801), using social network sites (0.673), and using websites concerning my hobbies (0.562). The second factor, "proactive Internet use," is composed of three variables: writing entries on debate sites, blogs, etc. (0.786), reading entries on debate sites, blogs, etc. (0.677), and using chat and IM (0.529). The third factor, "functional Internet use," includes online shopping, banking, and travel reservations (0.713), news (0.571), and reading entries on debate sites, blogs, etc. (0.440). Two variables load high in the fourth factor, "entertainment Internet use": playing games (0.741) and downloading music film podcasts (0.738).

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<sup>7</sup> Items regarding mobile phone features, such as alarm clock and calendar, were excluded. The use of a mobile phone for TV or radio also was not considered because these variables were analyzed in the previous set of items about mass media consumption through digital media. Mobile use for talking purposes was not used because the saturated level of mobile use for talking does not create enough variability to make a key difference in extracting components (see also Jong Hyuk & Junghyun, 2014).

<sup>8</sup> The last two variables (games and instant messaging) also load on the first factor (0.300 and 0.378), and video also loads on the second factor (0.425). This means the scales overlapped and correlated.

## Results

### *Spaces of Media Consumption in Everyday Life*

The first research question concerned where people consume media and how media use is distributed across domestic and public spaces. The eight indexes of spaces of media use offer a quick overview.

**Table 1. Indexes of Media Consumption Across Spaces (N = 10,492).**

|      | <b>Degree of media consumption per space</b> |             |                    |                       | <b>Distribution of media consumption per space</b> |                |                          |                             |
|------|--|-------------|--------------------|-----------------------|--|----------------|--------------------------|-----------------------------|
|      | Domestic private                             | Domestic    | Public institution | Public interper-sonal | Domestic private focus                             | Domestic focus | Public institution focus | Public interper-sonal focus |
| Mean | <b>0.30</b>                                  | <b>0.46</b> | <b>0.16</b>        | <b>0.23</b>           | <b>15%</b>   | <b>50%</b>     | <b>15%</b>               | <b>20%</b>                  |
| SD   | 0.29   | 0.20        | 0.16               | 0.10                  | 16   | 22             | 14                       | 15                          |

The highest degree of media consumption occurs in the domestic spaces of the home (0.46), with the second most common space being the private space of the bedroom (0.30). Public spaces, both institutional and interpersonal, have lower values, indicating less varied media use outside the home (0.16 and 0.23, respectively).

Table 1 also provides data on how media consumption is distributed across spaces. The indexes show the percentages of use of each media space in relation to the overall media consumption. It is important to note that these percentages are not an aggregate of how many (different) media people consume in each type of place, but rather indicate how individual consumption is distributed through different spaces (see Measures section). The home is again confirmed as the principal space of consumption, with 50% of media consumed in domestic areas and 15% in the bedroom. However, 20% of consumption is in public interpersonal spaces, a value that exceeds bedroom consumption. The remaining 15% of media use occurs in a place of work or study.

Table 2 reports more detailed information of how many survey respondents consume media in each type of space. The living room is the most common place: 82.4% of respondents watch TV, and 68.7% use the Internet in this shared space. A medium heavily used in public places is radio (51.2%), even if it is probably primarily consumed in the private space of the car. Additionally, 33.8% of respondents read newspaper in public places, and almost 22% use the Internet during transport and in public places.

**Table 2. Percentages of People Consuming Media in Different Types of Space (N = 10,492).**

| <b>Spaces of media consumption</b>                      |      |
|---|------|
| <b>Domestic private</b>                                 |      |
| Printed newspapers and magazines—in the bedroom         | 21.4 |
| Radio on a radio set or the Internet—in the bedroom     | 21.0 |
| TV on a TV set or the Internet—in the bedroom           | 39.8 |
| Internet—in the bedroom                                 | 39.3 |
| <b>Domestic</b>   |      |
| Printed newspapers and magazines—in the living room     | 55.4 |
| Radio on a radio set or the Internet—in the living room | 42.2 |
| TV on a TV set or the Internet—in the living room       | 82.4 |
| Internet—in the living room                             | 68.7 |
| Printed newspapers and magazines—other room             | 27.9 |
| Radio on a radio set or the Internet—other room         | 30.2 |
| TV on a TV set or the Internet—other room               | 15.6 |
| Internet—other room                                     | 45.1 |
| <b>Public institutional</b>                             |      |
| Printed newspapers and magazines at work                | 23.3 |
| Radio on a radio set or the Internet at work            | 29.3 |
| TV on a TV set or the Internet at work                  | 4.3  |
| Internet at work  | 48.8 |
| Printed newspapers and magazines at school              | 6.7  |
| Radio on a radio set or the Internet at school          | 2.4  |
| TV on a TV set or the Internet at school                | 0.9  |
| Internet at school                                      | 14.0 |
| <b>Public interpersonal</b>                             |      |
| Printed newspapers and magazines during transport       | 24.1 |
| Radio on a radio set or the Internet during transport   | 51.2 |
| TV on a TV set or the Internet during transport         | 1.6  |
| Internet during transport                               | 21.8 |
| Printed newspapers and magazines in public places       | 33.8 |
| Radio on a radio set or the Internet in public places   | 19.0 |
| TV on a TV set or the Internet in public places         | 8.6  |
| Internet in public places                               | 21.9 |

### ***Spatial Patterns of Media Consumption***

This section answers the second research question concerning whether it is possible to identify patterns of where media consumption takes place. The results of a cluster analysis conducted with data from the eight indexes of degree and distribution of media use in different spaces are presented. A k-means cluster analysis with repetitive partitioning was conducted. To assure that data fit the assumptions of the k-means procedure, we used normalized variables (the indexes were on the same scale: from 0.00 to 1 and 0 to 100), and we reran the analysis several times, randomizing initial cluster centers. The result that best fit the data for variance (explaining 52.4% of total variance) and intelligibility of the groups was a five-cluster solution.<sup>9</sup> To verify the solidity of this solution, we performed the same clustering technique on different randomized subsamples (each corresponding to 20% of the whole sample), and the profiles were confirmed.

Table 3 describes the cluster profiles, showing each cluster's values for the indexes. The highest value among the five groups is reported with (++), and values above the mean scores are noted with (+). The profiles identified with the cluster analysis—Flexible, Ubiquitous, Secretive, Hardworking, and Homebody—have different patterns of media consumption regarding both the *extent of media* consumption in each type of space and how personal media consumption is *distributed* across spaces.

**Table 3. Cluster Profiles: Indexes of Spaces of Media Consumption Mean Values (N = 10,492).**

|              | <b>Degree of media consumption per space</b> |              |                      |                      | <b>Distribution of media consumption per space</b> |                |                            |                            |
|--------------|--|--------------|----------------------|----------------------|--|----------------|----------------------------|----------------------------|
|              | Domestic private                             | Domestic     | Public institutional | Public interpersonal | Domestic private focus                             | Domestic focus | Public institutional focus | Public interpersonal focus |
| Flexible     | 0.14   | 0.47 (+)     | 0.17 (+)             | 0.41 (+)             | 6%   | 42%            | 13%                        | 38%<br>(++)                |
| Ubiquitous   | 0.65<br>(++)                                 | 0.62<br>(++) | 0.27 (++)            | 0.46<br>(++)         | 20% (+)  | 38%            | 15%                        | 27% (+)                    |
| Hard-working | 0.13   | 0.40         | 0.27 (++)            | 0.12                 | 7%   | 47%            | 32% (++)                   | 13%                        |
| Secretive    | 0.58 (+)                                     | 0.29         | 0.11                 | 0.13                 | 39%<br>(++)  | 34%            | 13%                        | 15%                        |
| Homebody     | 0.09   | 0.50 (+)     | 0.03                 | 0.06                 | 6%   | 81%<br>(++)    | 3%                         | 9%                         |
| <b>Total</b> | <b>0.30</b>                                  | <b>0.46</b>  | <b>0.16</b>          | <b>0.23</b>          | <b>15%</b>   | <b>50%</b>     | <b>15%</b>                 | <b>20%</b>                 |

<sup>9</sup> Analyses were also conducted with standardized variables to confirm the obtained group classification.

Mass media consumption was then analyzed in each cluster with the purpose of describing groups; it was not used as a criterion for clustering. Table 4 shows mean values for daily minutes of mass media consumption through both traditional and digital platforms. The last two rows report total minutes of media use on traditional and digital platforms, respectively.

**Table 4. Minutes per Day Spent Consuming Mass Media.**

|                        | <b>Flexible</b> | <b>Ubiquitous</b> | <b>Hardworking</b> | <b>Secretive</b> | <b>Homebody</b> | <b>Mean</b> |
|------------------------|-----------------|-------------------|--------------------|------------------|-----------------|-------------|
| TV                     | 130             | 119               | 117                | 121              | 155 (++)        | <b>130</b>  |
| Radio                  | 72              | 76                | 103 (++)           | 58               | 88 (+)          | <b>80</b>   |
| Newspapers             | 17              | 21 (+)            | 17                 | 17               | 22 (++)         | <b>19</b>   |
| Books                  | 27              | 32 (++)           | 23                 | 27               | 26              | <b>27</b>   |
| TV at the PC           | 23              | 41 (++)           | 24                 | 32 (+)           | 20              | <b>28</b>   |
| TV on mobile           | 3               | 9 (++)            | 3                  | 4                | 2               | <b>4</b>    |
| Radio at PC            | 20              | 36 (++)           | 31 (+)             | 20               | 10              | <b>23</b>   |
| Radio mobile           | 7 (+)           | 11 (++)           | 5                  | 5                | 2               | <b>6</b>    |
| News online            | 29 (+)          | 32 (+)            | 26                 | 25               | 19              | <b>26</b>   |
| E-book                 | 6               | 10 (++)           | 5                  | 7 (+)            | 4               | <b>6</b>    |
| Audio book             | 1               | 4 (++)            | 1                  | 1                | 2               | <b>2</b>    |
| Mass media traditional | 246             | 249               | 260 (+)            | 223              | 292 (++)        | <b>256</b>  |
| Mass media digital     | 88              | 143 (++)          | 94                 | 94               | 59              | <b>94</b>   |
| <i>N</i>               | 1,967           | 2,012             | 2,065              | 1,932            | 2,516           | 10,492      |

Respondents belonging to the first cluster were labeled Flexibles (18.7%) because of the high degree of media use in all places except the bedroom (0.14) and the distribution of their media use with the highest value for media consumption in public places and during transport (38%) (see Table 3). Interestingly, they are not heavy mass media consumers. As shown in Table 4, they are below average for almost all types of mass media regardless of platform (except online newspapers and mobile radio). Flexibles are interested in the practicality of being able to consume media in different places (especially on the move) to better organize their daily lives, not in consuming more.

Respondents in the second cluster are defined as Ubiquitous (19.2%) because they consume high quantities of media in many different places. They score the highest values for all the indexes of degree of media consumption. This means that compared to the other groups, they consume a substantial number of media types in each type of space. The distribution of their consumption is also the most diversified. They do not favor a particular place; in fact, they do not score the highest value in any specific place. However, they use more than the average public interpersonal spaces (27%) and domestic private spaces (20%).

Different from the Flexible profile, Ubiquitous consume high quantities of media in the bedroom (see Table 3) and have a heavy mass media consumption (see Table 4); in particular, they are avid consumers of mass media through digital devices. Ubiquitous seem to exploit digital media as a way to amplify and extend their media use outside the home. However, this does not lessen the importance of their domestic media consumption.

The third cluster was named Hardworking (19.7%) for its top scores in indexes of media use in the workplace, from both an absolute (*degree* of media use) and a relative perspective (*distribution* of media use). People in this group may spend many hours a day in their place of work (or study) and consume media here. At home, they prefer the shared rooms, not the bedroom, and they also use public spaces. Overall, 45% of their media use is focused in public places.

People in the fourth cluster are labeled Secretives (18.4%) because they rate quite high for degree of media consumption in the bedroom (0.58) and have the top value for distribution of media consumption in the domestic private space (39% of their media use happens in the bedroom) (see Table 3). They also have the highest value for minutes spent watching TV on a computer and a value above average for e-book reading. However, different from Ubiquitous users, their interest in digital media is limited, and they are not inclined to consume media in public places (see Table 4).

Finally, users who consume 81% of their media in the living room or other places in the home are called Homebodies (24%). This group has the strongest preference for a specific place, with scarce media use in public places (11%) (see Table 3). They are heavy mass media consumers regarding time spent. However, they rely on traditional platforms and are not likely to use digital devices (see Table 4).

**Table 5. Internet and Mobile Media Use and Patterns of Media Consumption.**

|                       | <b>Flexible</b> | <b>Ubiquitous</b> | <b>Hardworking</b> | <b>Secretive</b> | <b>Homebody</b> | <b>Mean</b> |
|-----------------------|-----------------|-------------------|--------------------|------------------|-----------------|-------------|
| <b>Mobile phone</b>   |                 |                   |                    |                  |                 |             |
| Simple functions      | 0.25 (+)        | 0.65 (++)         | -0.17              | -0.11            | -0.49           | <b>0</b>    |
| Smart phone functions | 0.20 (+)        | 0.36 (++)         | -0.04              | -0.06            | -0.36           | <b>0</b>    |
| <b>Internet use</b>   |                 |                   |                    |                  |                 |             |
| Sociable              | 0.18 (+)        | 0.32 (++)         | -0.1               | -0.17            | -0.19           | <b>0</b>    |
| Proactive             | 0.03 (+)        | 0.28 (++)         | -0.12              | 0.05 (+)         | -0.18           | <b>0</b>    |
| Functional            | 0               | 0.03 (++)         | 0.03 (++)          | -0.05            | -0.01           | <b>0</b>    |
| Entertainment         | -0.02           | 0.20 (++)         | -0.04              | 0.05 (+)         | -0.15           | <b>0</b>    |
| <i>N</i>              | 1,967           | 2,012             | 2,065              | 1,932            | 2,516           | 10,492      |

Among these five patterns, digital media use varies (see Table 5). Whereas Ubiquitous and Flexible users—exhibiting the most media consumption in public spaces—have above-average mobile phone use, Ubiquitous users are more inclined toward smart phone functions. Regarding Internet use, Ubiquitous users are the only group with above-average values in all types of use, whereas Flexible users are above average only in “sociable” and (to a very small extent) “proactive” activities. The other types are characterized by use of the Internet focused on certain activities. Secretive users have above-average values for “proactive” and “entertainment” uses, and Hardworking users are slightly above average in “functional” uses. Both results are in accordance with the preferred consumption spaces of these groups, respectively: the bedroom and the workplace. The Homebody pattern seems to be embraced by people who do not use digital media, scoring below-average values for all types of Internet and, especially, mobile phone use.

### ***User Characteristics of Patterns of Media Consumption by Space***

To examine whether sociodemographics influence the way people consume media across spaces, a logistic regression for each cluster was performed with the same set of sociodemographic variables as predictors. Table 6 reports the odds ratios and their statistical significance.

The modest values of Nagelkerke  $R^2$  (see Table 6) are explained by the fact that the models do not have a predictive purpose. Their main goal is to verify the relevance of sociodemographic variables, not to predict whether an individual might choose one pattern instead of another. However, it is noteworthy that the Homebody group shows the highest Nagelkerke  $R^2$  value; apparently, sociodemographic variables influence the probability of adopting this pattern more than the other use patterns.

**Table 6. Logistic Regression Results:  
Odds Ratio of Adopting a Pattern of Media Consumption (N = 10,492).**

|   | <b>Flexible</b> | <b>Ubiquitous</b> | <b>Hardworking</b> | <b>Secretive</b> | <b>Homebody</b> |
|---|-----------------|-------------------|--------------------|------------------|-----------------|
| <i>Gender (compared to female)</i>                |                 |                   |                    |                  |                 |
| Male  | 1.158**         | 1.046             | 1.246***           | 0.901*           | 0.736***        |
| <i>Age (compared to Young 18 to 24 years old)</i> |                 |                   |                    |                  |                 |
| Young adult (25 to 34 years old)                  | 1.253**         | 0.625***          | 1.301*             | 1                | 1.300*          |
| Adult (35 to 54 years old)                        | 1.231*          | 0.396***          | 1.674***           | 0.704***         | 2.354***        |
| Mature (54 years and older)                       | 0.837           | 0.242***          | 1.273              | 0.675**          | 4.917***        |

| <i>Level of education (compared to lower secondary school)</i> |          |          |          |          |          |
|--|----------|----------|----------|----------|----------|
| High school  | 1.552*** | 1.429**  | 0.984    | 1.064    | 0.577*** |
| University   | 1.854*** | 1.535*** | 0.925    | 1.001    | 0.498*** |
| <i>Family status (compared to single no child)</i>             |          |          |          |          |          |
| Single with child  | 1.054    | 0.829*   | 1.302**  | 0.768**  | 1.220**  |
| Married no child   | 1.340*** | 0.906    | 1.176    | 0.505*** | 1.441*** |
| Married with child   | 1.307*** | 0.953    | 1.355*** | 0.480*** | 1.244**  |
| <i>Occupational status (compared to employed)</i>              |          |          |          |          |          |
| Student  | 1.009    | 1.452*** | 0.575*** | 0.978    | 0.848    |
| Unemployed   | 1.005    | 0.906    | 0.111*** | 1.372*** | 2.842*** |
| Retired  | 0.589*** | 0.559*** | 0.043*** | 0.983    | 5.104*** |
| <i>Area of living (compared to countryside)</i>                |          |          |          |          |          |
| Town   | 0.987    | 1.233**  | 0.971    | 1.053    | 0.838**  |
| City (urban area)  | 0.998    | 1.611*** | 0.990    | 1.040    | 0.616*** |
| Constant   | 0.106    | 0.247    | 0.198    | 0.369    | 0.214    |
| <b>Nagelkerke R<sup>2</sup></b>                                | 0.028    | 0.103    | 0.151    | 0.050    | 0.264    |

\*  $p < 0.05$ . \*\*  $p < 0.010$ . \*\*\*  $p < 0.001$ .

Gender is a determinant factor for four of the five patterns of media consumption: Homebody and Secretive patterns (the more domestic ones) are more probable among women, whereas Hardworking and Flexible are more probable among men. Interestingly, the pattern Ubiquitous is not influenced by gender (see Table 6).

Age is an important predictor of spatial media consumption patterns, but its significance varies greatly for each pattern. For Ubiquitous, the relevance of age is strong. This pattern is more common among those 18 to 24 years old, and the likelihood of adopting it declines dramatically as age increases (the odds ratio reaches the very low value of 0.242 among respondents age 55 and older). Conversely, the likelihood of embracing the Homebody pattern is greater among mature (4.917) and adult (2.354) individuals compared to the young (see Table 7). Flexible media use is only moderately influenced by age

and is more probable among young adults and adults. Although the Hardworking pattern is predominant among adults, both young and young adults are equally disposed to adopting the Secretive pattern.

The level of education matters only for three patterns. The likelihood of developing a Ubiquitous or Flexible pattern increases with level of education, whereas the Homebody profile is strongly connected with a low level of education.

Family status matters for all patterns except Ubiquitous. The likelihood of embracing a Flexible pattern is higher if one is married instead of being single without children, whereas having children seems to be the most important predictor for the Hardworking pattern. The Secretive and Homebody patterns are at opposite ends of the spectrum regarding family status. Whereas the former is more probable among singles without children, the latter is more probable among people with children or married individuals.

Occupational status is a meaningful predictor and has remarkable odds ratios in all patterns. The patterns with higher levels of consumption in public spaces are, without doubt, less likely to be found among retired people. Additionally, Ubiquitous (but not Flexible) media use is more likely among students than workers. The pattern Hardworking is probable only among employed individuals, and we can assume that media consumption is more common in workspaces than in universities and schools (as our sample is composed of those age 18 years and older). Interestingly, only one category for Secretive users is statistically significant: the unemployed. Overall, being out of the job market seems to increase the likelihood of having a domestic pattern of consumption; the Homebody pattern is also more probable among unemployed and retired individuals.

Area of living is relevant only for two patterns and in a contrasting fashion: Ubiquitous users are more prevalent in towns and cities, and Homebody users are more prevalent in villages and the countryside.

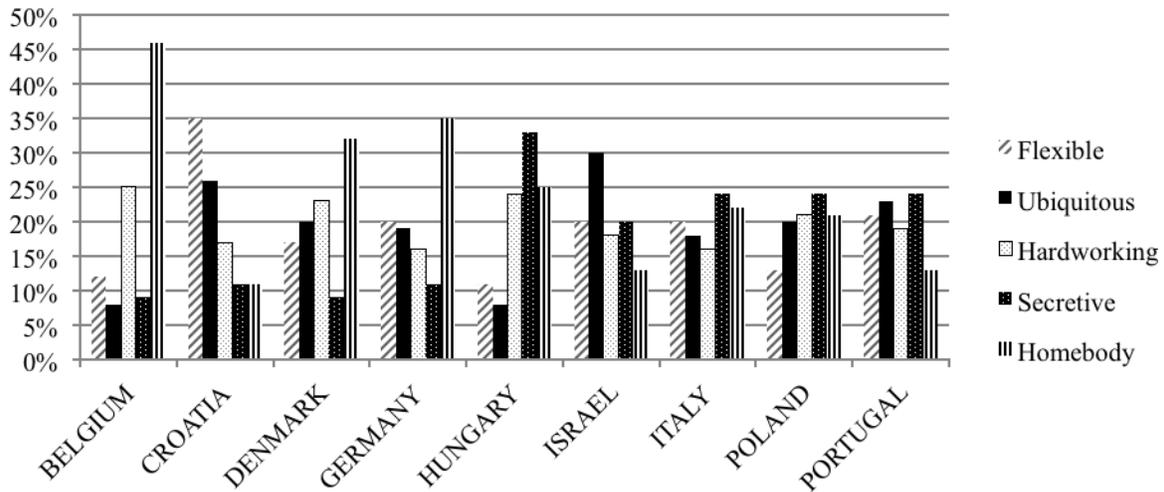
### ***The Spaces of Media Consumption in Different Countries***

Finally, we examined the presence of the different media consumption patterns across the nine countries of the sample. The entire sample is representative of each country's Internet users (age 18 and older), so it is possible to make comparisons and to identify country-specific configurations. As shown in Figure 1, notable dissimilarities emerge regarding the distribution of the five patterns in the participating countries.<sup>10</sup> Croatia shows the highest ratio of Flexible media consumers (35%) and the second highest for Ubiquitous (26%) (the first is Israel, with 30%). Countries in which media use in public spaces is especially low are Belgium and Hungary: Belgium has more Hardworking and Homebody media consumers (25% and 46%), and Hungary has the highest ratio of Secretive (33%) and above-average values for Homebody (25%) and Hardworking (24%). In Denmark, Germany, and Italy, consumption in public places is close to mean values. Portugal, in comparison, has an above-average value in both Flexible and Ubiquitous patterns. Finally, in Israel, Italy, Portugal, and Poland, the Secretive pattern is more manifest than the

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<sup>10</sup> The significance of the relationship between the two variables (i.e., country and pattern of media consumption) was validated by a  $\chi^2$  test:  $\chi^2$  1,481, significance 00.

Homebody pattern. In northern European countries (such as Belgium, Germany, and Denmark), the Homebody group is notably larger than the Secretive group.



**Figure 1. Patterns of media consumption in each country (N = 10,492).**

## Conclusions

### ***How Is Media Consumption Distributed Among Different Spaces of Everyday Life?***

The analysis of the spatial distribution of media consumption not only indicates innovations being introduced by mobile media but confirms some traditional spatial patterns of media consumption. First, we clearly see a diffusion of media consumption outside the home. General spaces of mobility and specific social spaces constitute a second space in which media consumption occurs (Berry, Harbord, & Moore, 2013), which might suggest that media are colonizing public spaces. However, we cannot say that media consumption has permeated all areas of everyday life, because the spaces of work and school are still partially exempt from media activities. Moreover, if we look at how many different media are used within a given space we see that most media are still being consumed in a domestic setting.

Another confirmation of established spatial patterns of media consumption comes from the privileged relationship between particular spaces and particular media uses. For example, listening to the radio continues to be strongly linked to personal mobility (Bull, 2004)—for example, commuting by car—and to public spaces of urban life, whereas TV viewing remains an eminently domestic form of consumption performed in the living room, which is the most public (as in shared) space of the household.

In addition to confirming established relationships between spaces and media types, our findings show that Internet consumption has spread across different areas of public, private, and institutional life, functioning as a communicative infrastructure connecting and crossing all spheres of everyday life.

### **Is It Possible to Identify Patterns of Media Consumption on the Basis of the Places Where People Consume Media?**

The findings elucidate how different places are permeated by different media uses and by different devices. In particular, the spatial pattern of media consumption that we have termed Ubiquitous represents a configuration of pervasive use of media typified by: intense and varied media use in all spaces; intense use of digital devices, also supporting traditional media consumption; and intense use of the mobile phone, including television viewing and radio listening. The Ubiquitous pattern cannot be identified with a single place; it is rather a mode of inhabiting space where (digital) media are always present and constitute a permanent "second space" (Moore, 2004), alternatively in the foreground or the background.

Two spatial patterns of media consumption relate to public places: the public interpersonal space and the institutional space (Madanipour, 2003). For the Flexible pattern, the distribution of media consumption is focused on public interpersonal spaces—transfer (train, underground); social life (cafés); and shops and malls—where the mobile phone is the preferred device. Public interpersonal spaces, for Flexible users, are connected places filled with digital media where people read news online, engage in social activities and Web surfing, and listen to music "doubling spaces" (Moore, 2004), although they rarely consume traditional media on mobile devices.

The pattern Hardworkers is characterized by a distribution of media consumption privileging institutional spaces, such as workplaces or schools, in which a variety of media and devices are used. The use of radio, both on radio sets and on computers, is above average in this pattern. Computers and the Internet are used, above all, to surf the Web and the blogosphere, read news, and use services such as home banking and travel booking. The institutional space, for the Hardworkers pattern, is a place where media build a "sound space" and a "textual space." The physical space is doubled (Moore, 2004), and the workplace is privatized (Bull, 2000, 2013), crossed by individualized sound flows and personal paths of reading or acting that are mediated by the Web.

Two other spatial patterns of media consumption relate to private places: the domestic space and the bedroom. The Homebody pattern concentrates media use in domestic spaces (except the bedroom), where this profile consumes the highest number of media, particularly TV and radio on TV and radio sets. Indoor consumption also includes newspapers, magazines, and books in their printed versions. Domestic spaces, for Homebodies, are traditional media spaces. In the space of "family television" (Morley, 1986), different media are used (television, radio, print), privileging specific devices (TV sets for television and printed books and newspapers). The Secretive pattern, in turn, is focused on the private space of the bedroom, where the highest number of media is concentrated. The computer is used to watch television, and books are intensively read on digital devices. Media consumption in the bedroom includes uses of the Internet for not only media entertainment purposes (including the downloading of music, film, and podcasts) but proactive activities (communicating through writing and reading posts on blogs or debate

sites). The bedroom space can be described, for Secretives, as a rich media niche comprising personal and digital devices for individualized and diversified media consumption, including significant reading activities.

### ***How Do Sociodemographic Variables Influence Patterns of Media Consumption?***

Sociodemographic features contribute to sketching a portrait of European media audiences in their everyday spaces. A quick look at spatial patterns shows that Ubiquitous users are more likely to be young people (age 18 to 24 years), including students, or individuals with a high level of education, especially if they are residents of a city or town; being a young adult (age 25 to 34 years) or adult (age 35 to 54 years), a man, married, and with a high level of education is more probable among Flexibles. Although Hardworkers are also likely to be adult and men, they are more likely to be married with children. Conversely, more Secretives seem to be women, frequently young or young adult (age 18 to 34 years), single without children, and unemployed. Finally, Homebodies are commonly adults and mature adults (ages 35 to 54 and 54 years and older), women, married with children, and retired and with a lower educational level, often living in villages or the countryside.

On the basis of this sketch, we can argue that spatial uses of media still tend to reproduce some traditional patterns of inequality in mobility, which are directly affected by sociodemographic differences: Women, unemployed or retired people, and the elderly and the less educated seem to be less mobile than working men, young people, and the well educated. The same is true for their media habits, which tend to be more private and domestic in the former group, and more diffused into public and out-of-home spaces in the latter group.

At the same time, this sketch does not necessarily entail a classic digital divide. On the one hand, it is a truism that more traditional media uses, located in traditional domestic spaces, are more common among less empowered people, whereas more differentiated, mobile, and innovative uses of media are typical of more dynamic and socially included individuals. On the other hand, both the massive introduction of digital devices into domestic spaces and their personal portability, unhampered by wired connections, also allow those who are less mobile to access various media and the Internet, as is well represented by the rich digital media habits of the Secretives.

From a sociodemographic perspective, the digitalization of media and the mobile Internet seem to supply a communicative infrastructure for everyday life, and their uses tend to sustain everyday needs and habits, still in accordance with the social and cultural capital (Bourdieu, 1984) of their users and the "moral economies" (Silverstone, Hirsch, & Morley, 1992) adopted in different households.

### ***Are There Differences Between European Countries on the Most Common Patterns of Media Consumption?***

Cross-country differences in spatial media consumption patterns suggest that some country-specific variables are at work. Of course, our findings do not provide a definitive answer or explanation, but

previous studies have demonstrated that broader social factors contribute to shaping the uses and experiences of media in different countries.<sup>11</sup>

Obviously, infrastructural, technological, and economic factors play a role. For the Ubiquitous and Flexible patterns, for example, the diffusion of mobile devices, WiFi connections both indoor and outdoor, and the cost of mobile broadband services and content are crucial. As Thomas and Haddon (2011) note, country-specific cultural influences and differences are related to: (1) social-structural factors (the degree of homogeneity in a society, more or less hierarchical societal structures, different gender roles, and, of course, education, language, religion, and ethnicity); (2) value systems (e.g., as found by diffusion studies, the degree of openness toward technological innovation); (3) communication cultures; (4) time structures; and (5) factors related to material culture. If the first two factors mentioned by Thomas and Haddon may shape cross-country specificities in the use and experience of media at large, the last three (alongside technological factors) seem particularly central in shaping spatial patterns of media consumption.

Different value orientations toward media, and different communication cultures, are important in shaping both the social images of media and the system of social control circumscribing the adoption and use of media in different spaces. For example, such orientations and cultures affect the perceived suitability of media use in institutional spaces, such as schools or workplaces, and country-specific styles of parental control and monitoring of minors' media and ICT consumption. This might imply different uses of space, such as keeping all media devices within the shared spaces of the home. Time structures are also obviously related to different uses of space. Not only do different countries differ in house/school/work routines and leisure activities, but the socially constructed individual experience of time also exhibits some country-level specificity (Levine, 1997, quoted in Thomas & Haddon, 2011). Such differences might, for example, foster either a highly instrumental use of media (as in the Flexible pattern) or a more entertainment-oriented use of media both indoors and outdoors. In closing, we note that material culture and how it is "embedded in the physical world" (Thomas & Haddon, 2011, p. 26) is absolutely central. For example, urban/rural organization, the spatial structures of communicative infrastructures (both media and transport), the diffusion and collocation (or not) of big shopping/entertainment/dwelling places, and the characteristics of housing may help to explain the country-specific cultures regarding the spaces of media consumption that we have found in this study, and on which further research is needed.

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<sup>11</sup> See, for example, the cross national analysis conducted within the organization COST (European Cooperation in the Field of Scientific and Technical Research) Action: Participation in the Broadband Society ([www.cost298.org](http://www.cost298.org)) or the analysis conducted within the EU Kids Online project ([www.eukidsonline.net](http://www.eukidsonline.net)).

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