

The personal information sphere: An integral approach to privacy and related information and communication rights

Sarah Eskens 

Institute for Information Law, University of Amsterdam, Amsterdam, The Netherlands

Correspondence

P.O. Box 15514, 1001 NA Amsterdam, The Netherlands.

Email: s.j.eskens@uva.nl

Funding information

H2020 European Research Council, Grant/Award Number: 638514

Abstract

Data protection laws, including the European Union General Data Protection Regulation, regulate aspects of online personalization. However, the data protection lens is too narrow to analyze personalization. To define conditions for personalization, we should understand data protection in its larger fundamental rights context, starting with the closely connected right to privacy. If the right to privacy is considered along with other European fundamental rights that protect information and communication flows, namely, communications confidentiality; the right to receive information; and freedom of expression, opinion, and thought, these rights are observed to enable what I call a “personal information sphere” for each person. This notion highlights how privacy interferences affect other fundamental rights. The personal information sphere is grounded in European case law and is thus not just an academic affair. The essence of the personal information sphere is control, yet with a different meaning than mere control as guaranteed by data protection law. The personal information sphere is about people controlling how they situate themselves in information and communication networks. It follows that, to respect privacy and related rights, online personalization providers should actively involve users in the personalization process and enable them to use personalization for personal goals.

1 | INTRODUCTION

More and more online news services provide news to users in a personalized manner (Kunert & Thurman, 2019; Thurman & Schifferes, 2012). Simply put, a personalization system first collects personal data of users and constructs user profiles. Based on these profiles, a recommender system predicts which items a user is most interested in and delivers these to them. After that, the system measures how users interact with the recommended items and uses this information to refine the user profiles (Adomavicius, Huang, & Tuzhilin, 2008).

Implicit personalization relies on the collection and analysis of user data, whereas explicit personalization is based on direct user input (Thurman & Schifferes, 2012), such as ticking boxes to indicate interests. The latter type of personalization thus allows users more control. In a focus group study, Harambam, Bountouridis, Makhortykh, and van Hoboken (2019) found that people value options to influence recommendation algorithms, especially when they can do so to achieve personal goals. Furthermore, an experiment by Eslami et al. (2015) suggests that users become more engaged and feel they have control when they are made aware of the personalization algorithms. At

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2020 The Author. *Journal of the Association for Information Science and Technology* published by Wiley Periodicals, Inc. on behalf of Association for Information Science and Technology

the same time, the topics that people say they are interested in do not always match with the topics that their clicking behavior shows they are actually interested in Sela, Lavie, Inbar, Oppenheim, and Meyer (2015). Full and unlimited user control might thus not be in the user's interest.

In the European Union (EU), online personalization is in part regulated by the EU General Data Protection Regulation (GDPR). The GDPR sets conditions for the processing of personal data and gives people various rights to control their personal data and some aspects of the personalization process (Eskens, 2019). However, the GDPR and similar data protection frameworks based on the fair information practice principles (FIPPs) provide only simple and reductive forms of control, such as consent to data collection or not, objecting to data processing or not, or rectifying some data (in very limited cases). Seeing that online news users generally appreciate personalization (Lavie, Sela, Oppenheim, Inbar, & Meyer, 2010; Thurman, Moeller, Helberger, & Trilling, 2019), it is worth thinking through what kinds of control news users should be provided over personalization.

To rethink user control over news personalization, we should look at the GDPR in its larger fundamental rights context. As Leenes et al. (2017) state, the common heritage of European fundamental rights and values can serve as an anchor point for regulatory discussions. The GDPR is a secondary legislation giving expression to the fundamental right to personal data protection, which is protected by Article 8 of the Charter of Fundamental Rights of the EU (Charter).¹ In the European legal system, the fundamental right to data protection is closely connected with, but not identical to, the fundamental right to privacy (Kokott & Sobotta, 2013). Privacy is protected by Article 8 of the European Convention on Human Rights (Convention) and Article 7 of the Charter.

The fundamental right to privacy has led to a rich body of case law by various European courts. In contrast, the fundamental right to data protection is developed through more functional and to-the-point case law regarding the Data Protection Directive (the predecessor of the GDPR) and, as of May 2018, the GDPR. For the purposes of this article, I use case law on the fundamental right to privacy and related rights to supplement understanding of the right to data protection. The scope of this article thus excludes fundamental rights case law on the right to personal data protection itself (for information on the fundamental right to data protection, see Fuster, 2014; Lynskey, 2015; Zuiderveen Borgesius, 2015). The article also does not discuss in detail other instruments of EU secondary legislation, such as the e-Privacy Directive. My focus is on fundamental rights and the interests and values that are embedded in these

fundamental rights, not on rules that regulate in detail specific aspects of data processing.

This leads to the main research question for this article: "What form of control does the European fundamental right to privacy, read together with the other fundamental information and communication rights, require for the use of online news personalization?" With my article, I aim to provide a new understanding of control and fundamental rights in order to contribute to a discussion on news personalization. That said, my fundamental rights analysis might be useful for other areas of personalized recommendations, such as music, film, and shopping. Furthermore, my analysis further develops current legal doctrines of fundamental information and communication rights.

An important principle for the interpretation of European fundamental rights agreements is that they must be read as a whole and interpreted in such a way as to promote harmony between their various provisions (*Stec and Others v. the United Kingdom*, 2006). European case law and theory does not show such an integral approach toward the fundamental rights to data protection and privacy and other Convention and Charter rights. Scholars of European law have pointed out, but not thoroughly theorized, the connection between privacy and freedom of expression (for authors who do connect privacy and freedom of expression, see Burke & Molitorisová, 2017; Helberger, 2016; Koops et al., 2017; Mead, 2017). In contrast, in the United States, the legal and social sciences have a long tradition of extensively theorizing and defending the connections between privacy and freedom of expression as protected by the First Amendment (Allen, 2011; Ard, 2013; Blitz, 2006; Cohen, 1996, 1998; Gangadharan, 2016; Kaminski, 2017; Shiffrin, 2010), most notably captured with the notion of "intellectual privacy" (Richards, 2008, 2015).

If we read the rights to data protection and privacy together with the other fundamental rights that protect information and communication flows, namely, confidentiality of communications; the right to receive information; and freedom of expression, opinion, and thought, we see how these rights and freedoms together enable what I call a "personal information sphere" for each individual citizen. The notion of a personal information sphere shows how privacy interferences affect other fundamental rights that enable people to develop their sense of self and relate to the world. Most importantly, by uncovering the personal information sphere in European case law, we see how the interconnectedness of these fundamental rights is ingrained in European jurisprudence and is not just an (American) academic affair. The notion of a personal information sphere also gives more concrete meaning to the fundamental rights discussed in this article as these rights are not further developed

through secondary EU law—with the exception of the right to data protection, which is made more concrete through the GDPR, and the right to confidentiality of communications, which is developed through the ePrivacy Directive. For a discussion about recommenders and personalization, the notion of a personal information sphere accordingly sets conditions for the design of these systems, conditions that do not follow from simple data protection law or other specific legal frameworks.

To answer the main question, I first describe the European fundamental rights of privacy, confidentiality of communications, freedom of thought, freedom to hold opinions, the right to (not) receive information, and freedom to impart information. Thereafter, I show that these fundamental rights together make up what I call the personal information sphere. Within the personal information sphere, the fundamental rights as discussed are all interconnected and reinforce each other. Finally, I conclude that the personal information sphere requires online personalization systems to involve users in the personalization process in ways beyond just asking for consent.

2 | THE EUROPEAN FUNDAMENTAL RIGHTS FRAMEWORK: PRIVACY AND FREEDOM OF EXPRESSION, OPINION, AND THOUGHT

As mentioned in the introduction, in Europe, privacy is protected by Article 8 of the European Convention on Human Rights and Article 7 of the Charter of Fundamental Rights of the EU.² These provisions are interpreted and further developed by the European Court of Human Rights in Strasbourg (Strasbourg Court or ECtHR) and the Court of Justice of the EU in Luxembourg (Luxembourg Court or CJEU). This article concentrates on judgments of the Court in Strasbourg, which has produced the most important case law on the right to privacy. Furthermore, Charter rights that correspond to Convention rights have the same meaning and scope as those laid down by the Convention (Article 52, paragraph 3, of the Charter). The Convention rights and case law are thus most important to understand these fundamental rights.

In this section, I shine a light on the “prism” of the fundamental rights of privacy; confidentiality of communications; the right to receive information; and freedom of thought, opinions, and expression. Gerards (2012) describes fundamental rights as prisms: A fundamental right is transparent and looks like a clearly defined object, but as soon as light shines on it and passes through, the right disperses into a spectrum of interests,

values, and even more rights. Over time, courts and legal scholars might discern new interests, values, and rights within a particular fundamental right, even if these aspects were previously hidden from our perception.

3 | RIGHT TO PRIVACY

Article 8 of the Convention and Article 7 of the Charter protect, among others, the right to privacy. The Convention and Charter use the term “private life” instead of “privacy,” but these terms are commonly assumed to be the same. “Private life” is a broad notion, and the Strasbourg Court finds it impossible and unnecessary to define it exhaustively (*Niemitz v. Germany*, 1992). Instead of providing a static definition, the Court has brought different interests and rights under the notion of privacy. For this article, I distinguish three groups of interests in the case law on privacy: protection against unwanted attention, personality and identity, and integrity of the person. Personal data protection is a group that hovers over all the other groups (Koops et al., 2017).

To begin with, in an early case on the right to privacy, the Strasbourg Court considered that privacy can be understood as “the right to live, as far as one wishes, protected from publicity” (*X. v. Iceland*, 1976, p. 87).³ The Court reformulated this later as “the right to live privately, away from unwanted attention” (*Smirnova v. Russia*, 2003, p. 95). The Court recognized that online anonymity helps to avoid unwanted attention and promotes the free flow of ideas and information on the Internet (*Delfi A.S. v. Estonia*, 2015). Furthermore, receiving unwanted communications can interfere with privacy (*Muscio v. Italy*, 2007).⁴ Privacy thus enables people to live peacefully on their own and perform the normal activities of their daily lives undisturbed by unwanted attention from others.

In *X. v. Iceland*, the Strasbourg Court further considered that privacy also comprises “the right to establish and to develop relationships with other human beings, especially in the emotional field for the development and fulfilment of one’s own personality” (1976, p. 87). The Court further developed the personality aspect of the right to privacy in later cases, up to the point that people now have an actual right to personal development, whether in terms of personality or personal autonomy (*Reklos and Davourlis v. Greece*, 2009). The right to develop and fulfill one’s personality includes the right to identity (*Burghartz v. Switzerland*, 1992). The case law shows the importance of others recognizing your identity and how you self-identify (Marshall, 2009, p. 95). Furthermore, negative stereotyping of a group might impact a group’s sense of identity and feelings of self-worth and -confidence of group members (*Aksu v. Turkey*, 2012). In

that sense, negative stereotyping can affect the privacy of members of a group (*Aksu v. Turkey*, 2012).

Finally, in another set of cases, the Strasbourg Court held that privacy includes the physical, moral, and psychological integrity of the person (*Botta v. Italy*, 1998; *X. and Y. v. the Netherlands*, 1985). From this perspective, the right to privacy can be engaged in cases where authorities interfere with someone's body and decisions about their body, such as forced medical examination, the prohibition of abortion for medical necessity, or acts of violence. The integrity of the person also covers matters where, for example, someone is maliciously misrepresented and consequently bullied on the Internet (*K. U. v. Finland*, 2008), harassed and beaten by classmates (*Durdevic v. Croatia*, 2011), covertly filmed while naked at home (*Söderman v. Sweden*, 2013), or subjected to racist verbal abuse (*R.B. v. Hungary*, 2016). The integrity of the person is thus about physical and mental well-being.

Overall, the right to privacy has a wide scope of application and “goes beyond concealed personal information” (Purtova, 2010, p. 186). The right protects people against unwanted attention in the form of publicity or unwanted communications, it enables people to develop their personality and identity, and it contributes to the integrity of the person. The case law of the Strasbourg Court reflects the idea that it is important for people “to retain an ability and capacity that is each person's domain to enable them to think reflectively without interference; to be in control of their own faculties” (Marshall, 2015, p. 381). Many elements of privacy are strengthened through their connection with other fundamental rights, such as the right to receive information and the confidentiality of communications.

4 | CONFIDENTIALITY OF COMMUNICATIONS

Next to privacy, Article 8 of the Convention and Article 7 of the Charter protect the right to respect of correspondence, also called the confidentiality of communications.⁵ Confidentiality of communications covers letters, telephone calls, e-mails, Internet use, communications metadata (*Copland v. the United Kingdom*, 2007), data stored on hard disks (*Petri Sallinen and Others v. Finland*, 2005) or computer systems (*Wieser and Bisoc Beteiligungen GmbH v. Austria*, 2007), and online instant messaging services (*Barbulescu v. Romania*, 2017). Confidentiality of communications also protects the use of radio transceivers on private wavelengths (*X. and Y. v. Belgium*, 1982) but not on public wavelengths (*B.C. v. Switzerland*, 1995). In conclusion, the confidentiality of communications is protected regardless of the communication

technology used, except if someone uses a medium that is public in nature.

An interference with the confidentiality of communications might consist of the interception of communications content or the collecting and storing of metadata. Impeding someone from even initiating communication is the most far-reaching form of interference with confidentiality of communications (*Golder v. the United Kingdom*, 1975). This holding fits with the Strasbourg Court's concerns of chilling effects on freedom of expression (see previously).

The right to confidentiality of communications, as it currently stands, is of limited value for online personalization. The right ensures that information exchanged between a sender and a recipient is not revealed to third parties who are not involved in the communication. When news organizations try to learn which news articles their audiences consume, they could be characterized as both the sender and the eavesdropping party. Confidentiality of communications does not prohibit the sender of the communication from knowing what it communicates to others. Nevertheless, the limitations of this right in the context of interactive media are partly accounted for by other rights, including the right to receive information and freedom of expression, opinion, and thought.

5 | FREEDOM OF THOUGHT, CONSCIENCE, AND RELIGION

Article 9 of the Convention and Article 10 of the Charter protect the right to freedom of thought, conscience, and religion, which includes freedom to change one's religion or belief and freedom to manifest one's religion or belief. The three freedoms of thought, conscience, and religion are related but separate freedoms (Loucaides, 2012). The freedoms have an internal and external dimension (*C. v. the United Kingdom*, 1983). The internal dimension is the freedom to hold or change personal beliefs, while the external dimension is the freedom to manifest one's beliefs in worship, teaching, practice, and observance.

The majority of case law on the right to freedom of thought, conscience, and religion concerns religious beliefs. Still, the Strasbourg Court has remarked that the right is also important for “atheists, agnostics, sceptics and the unconcerned” (*Kokkinakis v. Greece*, 1993, p. 31). Various philosophies and belief systems fall within the ambit of the right. For beliefs to attract the protection of freedom of thought, conscience, and religion, they should attain a certain level of cogency, seriousness, cohesion, and importance (*Campbell and Cosans v. the United Kingdom*, 1982). Accordingly, freedom of thought has been applied to, among others, pacifism (*Arrowsmith v. the United*

Kingdom, 1978), views on abortion (*Knudsen v. Norway*, 1985), veganism (*W. v. the United Kingdom*, 1993), views on alternative medicines (*Nyssönen v. Finland*, 1998), and secularism (*Lautsi and Others v. Italy*, 2011).⁶ Even the wish of parents to give their child a particular name can fall under freedom of thought (*Salonen v. Finland*, 1997).

The Strasbourg Court held that freedom of thought, conscience, and religion protects against “indoctrination of religion by the State” (*Angeleni v. Sweden*, 1986, p. 48). I presume this includes the prohibition of indoctrination of nontheistic and atheistic philosophies and beliefs systems. Furthermore, freedom of thought, conscience, and religion implies that a state cannot dictate what people should believe or force people to change their beliefs (*Ivanova v. Bulgaria*, 2007). Other ways to interfere with the internal dimension of these freedoms, next to indoctrination and physical force, are also prohibited. The freedom to hold and change a belief is unqualified and absolute (*Eweida and Others v. the United Kingdom*, 2013). In contrast, the freedom to manifest one's religion or belief may be limited under Article 9, paragraph 2, of the Convention because manifestation through certain actions may have an impact on the lives of others.

Freedom of thought, conscience, and religion has a negative dimension. The Strasbourg Court determined that people have the freedom not to hold certain beliefs (*Buscarini and Others v. San Marino*, 1999). Furthermore, people have the right not to be obliged to disclose their beliefs or to act in such a way that it is possible to conclude which beliefs they do (not) hold (*Alexandridis v. Greece*, 2008). The negative dimension of freedom of thought, conscience, and religion is closely connected to the right to privacy. In the case of *Folgero and Others v. Norway*, the Grand Chamber of the Strasbourg Court considered that information about religious beliefs and personal convictions concerns “some of the most intimate aspects of private life” and that the obligation to disclose detailed information about your religious beliefs or philosophical convictions may constitute a violation of both privacy and freedom of thought, conscience, and religion (2007, p. 98).

This overview shows that freedom of thought protects against indoctrination and encompasses more than freedom of religious beliefs. Freedom of thought strengthens other fundamental rights. Without freedom of thought, freedom of expression is meaningless. One cannot speak freely if one cannot think freely (Loucaides, 2012). At the same time, freedom of thought is reinforced by other fundamental rights. Freedom of thought is possible only with effective freedom to receive information. Freedom of thought also overlaps with freedom of opinion; if a belief is not sufficiently serious and coherent to attract protection of freedom of thought, at least it is protected by freedom of opinion.

6 | FREEDOM TO HOLD OPINIONS

Article 10 of the Convention and Article 11 of the Charter guarantee the freedom to hold opinions as a component of freedom of expression. The wording of Article 10 suggests that freedom of opinion may be restricted, just like limitations on freedom of expression might be legitimate under certain conditions. Nevertheless, as an official expert committee on the Convention remarked, holding an opinion is “a psychological moment, which exists in the individual” (Committee of Experts on Human Rights, 1968, p. 4). From that perspective, holding an opinion is similar to holding a religious or philosophical belief, which is protected by Article 9 of the Convention and may not be restricted (see previous section). The expert committee therefore concluded that freedom of opinion as protected by Article 10 is also absolute (Committee of Experts on Human Rights, 1968, p. 4). An interference with freedom of opinion can thus never be legitimized.

The right to freedom of opinion is rather underdeveloped in terms of European case law. The Strasbourg Court established that requiring people to prove the truth of their value judgments infringes freedom of opinion (*Lingens v. Austria*, 1986). In addition, there is some international human rights case law on freedom of opinion as protected by Article 19 of the International Covenant on Civil and Political Rights. The United Nations Human Rights Committee found that an ideology conversion system used by the Republic of Korea on inmates violated freedom of opinion (*Yong Joo-Kang v. Republic of Korea*, 2003). Accordingly, freedom of opinion “requires freedom from undue coercion in the development of an individual's beliefs, ideologies, reactions and positions” (Kaye, 2018, p. 11).

News personalization systems have a significantly lesser effect on opinion formation than ideology conversion systems because personalization systems do not punish people for not changing their opinion. Furthermore, it is part of the public task of the news media to inform people, and it is insurmountable that they influence public opinion. The question is at what point news recommender systems interfere with free opinion forming and become coercive. The information and technologies that news media use for personalization give them the power to influence our opinions (Helberger, 2016). For example, if you are presented with a personalized news feed, you might think that “what you see is all there is” and jump to conclusions (Kahneman, 2011, p. 85).

One factor to distinguish legitimate influence on public opinion from coercion of opinions is transparency. People often do not know that their social media news feeds are tailored to their interests and preferences (Eslami et al., 2015). The lack of transparency reinforces

the risks of selective exposure. Overall, most people are not in a “filter bubble” or “echo chamber” (see Barberá et al., 2018, for a recent literature review on filter bubbles; see also Dubois & Blank, 2018; Fletcher & Nielsen, 2018; Haim, Graefe, & Brosius, 2018; Nechushtai & Lewis, 2019; Zuiderveen Borgesius et al., 2016). Still, some groups might be more vulnerable to end up in a filter bubble (Bodó, Helberger, Eskens, & Möller, 2019), and people might be more susceptible to receive less diverse online news on certain issue topics, such as refugees (Mertens, d’Haenens, & De Cock, 2019).

Freedom of opinion overlaps with freedom of thought. These freedoms protect the inner workings of the mind against coercion and indoctrination. In principle, protection under freedom of thought requires that the belief has a certain level of “cogency, seriousness, cohesion and importance” (see previous section), yet this threshold seems mainly important for the freedom to manifest one’s beliefs. In so far as freedom of thought and freedom of opinion focus on the internal workings of the mind, their scope of application and degree of protection are similar and absolute. Thought and opinion formation are inviolable. This inviolability also affects how we understand other related fundamental rights.

7 | RIGHT TO (NOT) RECEIVE INFORMATION

Article 10 of the Convention and Article 11 of the Charter guarantee the right to receive information and ideas as another component of freedom of expression. The Strasbourg Court generally sees the public’s right to receive information as a corollary of the media’s task to impart information and ideas (*The Sunday Times v. the United Kingdom (no. 1)*, 1979). Furthermore, the right to receive information mainly prohibits states from restricting people from receiving information that others want to impart to them (*Leander v. Sweden*, 1987). The right does not entitle people to receive information from private parties, such as online news media, that they do not wish to impart (Eskens, Helberger, & Moeller, 2017). A right to receive information from private media would interfere with the freedom of media to determine what to produce and publish (Richardson, 2004).

That said, the Strasbourg Court determined that it follows from the right to receive information that the public should have access through the media to “impartial and accurate information and a range of opinion and comment, reflecting inter alia the diversity of political outlook within the country” (*Manole and Others v. Moldova*, 2009, p. 100). In another case, the Court considered that “citizens must be permitted to receive a variety of

messages, to choose between them and reach their own opinions on the various views expressed” (*Cetin and Others v. Turkey*, 2003, p. 64). Here, we see the connection between the freedom to hold an opinion and the right to receive information.

The Strasbourg Court has invoked various rationales for upholding the right to receive information, ranging from democratic political participation and the finding of truth to social cohesion and personal self-development (Eskens et al., 2017). To enable personal self-development, the right to receive information covers news, cultural expressions, and even entertainment (*Khurshid Mustafa and Tarzibachi v. Sweden*, 2008). The case concerned immigrants who wanted to stay in touch with the culture and language of their country of origin via cultural and entertainment television programs. Studies have found that people sometimes learn about politics and public affairs through entertainment content such as political satire and comedy (Becker & Waisanen, 2013) and that reality television may cause political discussion online (Graham & Hajru, 2011). These findings provide another argument to include such entertainment content in the range of information people are entitled to receive.

Earlier in this article, I explained that the right to privacy protects people against unwanted communications—although, according to the Strasbourg Court, people do not enjoy such protection once connected to the Internet. I have not found any judgments in which the Court based a negative right to not receive information on the right to receive information.⁷ In contrast, German courts have derived a *negatives Informationsfreiheit* (negative informational freedom) from the German constitutional right to freedom of expression and information in a series of cases about ad blocking (Miller, 2018). Furthermore, on an EU level, the right to receive information has acquired a negative dimension through secondary legislation. The EU e-Privacy Directive protects people against communications for direct marketing purposes with the use of, among others, automatic calling machines (robocalls) or e-mail (spam). Article 13 of the Directive stipulates that organizations may contact only people who have given their prior consent or previously purchased a product or service from the organization. Likewise, Article 5 of the EU Unfair Commercial Practices Directive regulates “persistent and unwanted solicitations by telephone, fax, e-mail or other remote media.” Such unwanted solicitations are considered to be aggressive commercial practices, which are prohibited.

The rules on unsolicited communications do not aim to regulate the processing of personal data, which are required to perform the communication (Fuster, Gutwirth, & De Hert, 2010). Instead, the rules on unsolicited communications aim to contribute to the

protection of privacy. Recital 40 of the e-Privacy Directive frames unsolicited communications as an intrusion of privacy. The idea is that people should be able to use all kinds of communication devices, including mobile phones and computers, without having to be bothered by third parties who reach out to them in their private space unasked and unwanted.

Fuster et al. (2010) connect the EU's regulation of unsolicited communications with EU rules on television advertising. The authors argue that the rationale behind the latter type of regulation is to protect the enjoyment of watching television, "without suffering the burden of excessive advertising" (Fuster et al., 2010, p. 110). In other words, EU regulations on unsolicited communications and television advertising guarantee a sphere in which people are protected against unsolicited and unwelcome intrusions into their daily lives. The devices that we use to communicate with other people and to enjoy media products should not become an entry port into our private sphere. The discussion of the right to not receive information, as expressed in secondary legislation, again shows how the fundamental rights are all connected.⁸

8 | FREEDOM TO IMPART INFORMATION

Finally, Article 10, paragraph 1, of the Convention and Article 11, paragraph 1, of the Charter protect freedom to impart information, the most well-known component of freedom of expression. For this article, I focus on the freedom of expression rights of news users, not of journalists and other media actors.

In one of its first cases on the right to freedom of expression, the Strasbourg Court firmly established that the right is one of the essential foundations of a democratic society (*Handyside v. the United Kingdom*, 1976). The Court further stressed the importance of media pluralism for freedom of expression and democracy (*Handyside v. the United Kingdom*, 1976). The second paragraph of Article 11 of the Charter codifies this idea by providing that the freedom and pluralism of the media shall be respected.

The Strasbourg Court has made the scope of freedom of expression very broad. Freedom of expression protects the substance of communication and the form in which it is expressed (*Oberschlick v. Austria*, 1991). Freedom of expression protects all modern means of communication. In the case of *Times Newspapers Ltd v. the United Kingdom (Nos. 1 and 2)*, the Court confirmed that the Internet "plays an important role in enhancing the public's access to news and facilitating the dissemination of information in general" and that freedom of expression thus protects communication via

the Internet (2009, p. 27). A few years later, the Court put it in stronger terms and acknowledged how the Internet provides an "unprecedented platform for the exercise of freedom of expression" (*Delfi A.S. v. Estonia*, 2015, p. 110).

There are three widely accepted theories that explain why freedom of expression is important. Freedom of expression enables (a) participation in democracy and self-government, (b) finding of truth, and (c) self-development and self-fulfillment (Barendt, 2005). The Strasbourg Court relies on all three theories interchangeably. The Court has noted that "freedom of political debate is at the very core of the concept of a democratic society which prevails throughout the Convention" and that media freedom provides people with one of the best means to discover and form an opinion of the ideas of politicians (*Lingens v. Austria*, 1986, p. 42). The Court also confirmed that freedom of expression is a basic condition for personal self-development and fulfillment (*Handyside v. the United Kingdom*, 1976; *Lingens v. Austria*, 1986, p. 41). Finally, in cases where the Court condemned Internet blocking and its consequences for academics to do their work, it implicitly justifies freedom of expression with truth finding (*Ahmet Yildirim v. Turkey*, 2012; *Cengiz and Others v. Turkey*, 2015; Randall, 2016).

As mentioned in the introduction, U.S. legal scholars have long thought through the relationship between privacy and freedom of expression. As Richards notes, "if we care about free speech, we should care about speakers having something interesting to say" (Richards, 2015, p. 98). People develop these interesting things to say by consuming and experimenting with controversial ideas in private. The Luxembourg Court, which interprets the Charter, also linked the two rights by remarking that retention of data by telecom providers (which is a privacy interference) might affect how people use communication technologies and, consequently, how they exercise their freedom of expression (*Digital Rights Ireland*, 2014, p. 28; *Tele2 Sverige AB and Watson*, 2016, p. 101). The Luxembourg Court has not, however, further explored the relationship between privacy and freedom of expression.

9 | PERSONAL INFORMATION SPHERE

If we shine a light on the prism of the fundamental rights of privacy; the right to receive information; and the freedoms of expression, opinion, and thought, we see a wide spectrum of interests, values, and rights arising from these fundamental rights. Together, these rights protect what I call the personal information sphere. The personal information sphere is the domain where people can

determine for themselves how they interact with information about the world and how other people may interact with information about themselves. This is a form of control that is different from the kind of control enabled by data protection law, which focuses on consent, transparency, and data access rights.

The notion of a personal information sphere resembles the concept of “intellectual privacy” (Cohen, 1996, 1998; Richards, 2008, 2015). Intellectual privacy is “a zone of protection that guards our ability to make up our minds freely” so that we can prepare ourselves to exercise our freedom of expression rights (Richards, 2015, p. 95). The difference between the two concepts is that the personal information sphere arises from European fundamental rights, whereas intellectual privacy is built on the U.S. First Amendment. Furthermore, due to the elaborate European fundamental rights framework, the personal information sphere encompasses more rights and freedoms and is more inward-looking than intellectual privacy, which is more outward-looking and focused on the following exercise of First Amendment expression rights. The personal information sphere is also relevant if people decide not to communicate or express themselves.

Next to that, the notion of a personal information sphere is reminiscent of personality rights.⁹ In private law, personality rights are the bundle of rights that protect the integrity and inviolability of the person (Resta, 2014), such as the right to reputation, privacy, and publicity. Personality rights provide people control over their public image, in addition to control over their private self. van der Sloot (2015) has identified a growing focus of the Strasbourg Court on personality rights and argues that this might prove useful in the age of big data. Still, the difference between personality rights and the personal information sphere is that the latter encompass all kinds and directions of communication about all kinds of private and public matters, whereas personality rights are mainly about the communication of one's image from the rights holder to the outer world.

We can visualize the personal information sphere as a circle around the individual. The right to receive information protects information flows *into* the circle. People use these inflowing streams of information to inform themselves on political, scientific, and personal matters and to explore different perspectives and viewpoints on these issues. Freedom of thought and opinion protect information flows *within* the circle, where people process the information and develop their own original thoughts and opinions. Freedom of expression and confidentiality of communications consequently protect information flows *out of* the circle. By communicating with the outer world, people position themselves in the world, contribute to discussions on matters that they care about, and

show their personal identity toward others. Finally, the right to privacy marks the boundary between private and public communication activities, and it protects the mere existence of the circle and the freedom of people to determine the radius of their circle. Furthermore, privacy reinforces the freedom of people to gather information undisturbed, develop their thoughts and opinions, experiment with different ideas before they partake in public debate, and decide which beliefs they share with others and which ones they keep to themselves.

Within the personal information sphere, all the fundamental information and communication rights are strengthened and depend on each other. A range of empirical findings from the social sciences support the integration of these fundamental rights in the notion of a personal information sphere, with its inward, outward, and inner information flows. Studies suggest that receiving and processing information from online news media in private, that is, undisturbed, is important for cognitive information processing. People learn a bit from the news by simply being exposed to it, yet other cognitive information processes contribute more to learning than news exposure. Attention and “elaboration” determine effective learning from news (Eveland, 2001, 2002; Eveland, Shah, & Kwak, 2003). Elaboration is the connecting of new information to other information stored in memory or the connecting of new pieces of information (Eveland, 2001). If people are interrupted by unwanted communications while they try to attend to and elaborate on the news they receive, their learning process might be disturbed.

Freedom of expression relies on a traditional communication model consisting of a sender, message, and recipient. Accordingly, freedom of expression aims to ensure that a message arrives at its audience so that the sender can participate in democratic self-government, help to find truth, or feel self-fulfilled because they have expressed who they are. However, the sender also learns from a face-to-face or online discussion in which they participate by composing and releasing messages (“sender effects” or “expression effects”; Cho, Ahmed, Keum, Choi, & Lee, 2018; Pingree, 2007; Shah, 2016; Valkenburg, 2017). That is, people form their ideas and gain understanding in part by formulating and expressing their thoughts, and not just by hearing the ideas of others. Expressing oneself is to some extent a form of reasoning. These studies about the effect of communication on the sender support the connection between freedom of expression, privacy, and freedom of thought and opinion.

Empirical privacy research confirms the relationship between the right to develop and fulfill one's personality, which follows from privacy, and freedom of expression.

Studies indicate that people fulfill their need for self-identity by managing their privacy on social media and also by disclosing personal information on social media (Wu, 2019). Wu therefore concludes, in line with the Strasbourg Court's doctrines on privacy, that "privacy is not only about information protection" (2019, p. 214). Instead, to some extent, privacy is also about expressing oneself and giving away information about oneself to define and establish personal identity. People click, like, share, and comment on news articles in part to communicate their personal identity to others; these activities of engagement are about both the right to privacy and the right to freedom of expression. The case law of the Strasbourg Court thus contains many correct intuitions about how people engage and interact with online content and information about themselves; by further showing the interconnectedness of the fundamental information and communication rights, I uncovered a framework that can guide our thinking about recommender systems and personalization technologies in the news sector and beyond.

10 | CONCLUSION

In this article, I analyzed the European fundamental right to privacy together with the right to confidentiality of communications; to receive information; and freedom of thought, opinion, and expression. The right to privacy ensures people a (metaphorical) space or zone where they are protected against unwanted attention in the form of publicity or communications. Next to that, privacy includes a right to personal development and identity, and it covers the physical, moral, and psychological integrity of the person. The right to confidentiality of communications protects communication between a sender and recipient against intrusive third parties and is not useful where news media are both the sender and, in a sense, the third party. The freedom of thought, conscience, and religion safeguards absolute protection against indoctrination of religious and philosophical beliefs. Similarly, freedom of opinion provides absolute protection against coercion of the mind. Under the right to receive information, the general public should be assured of diverse and truthful information via the media. The law also recognizes a right to not receive certain communications in order to provide people privacy when consuming media. Finally, the freedom to impart information guarantees free expression via offline and online media so that people can participate in democratic self-government, find truth about personal and societal matters, and feel self-fulfilled by communication of who they are.

Together, these rights protect the personal information sphere. The essence of the personal information sphere is control, yet this is a different kind of control than control in the form of notice and consent enabled by data protection law. In other words, the kind of control that follows from a contextual fundamental rights analysis is different from the kind of control that is the core of data protection law. The personal information sphere is about controlling how you situate yourself in networks of information and communication and how you are involved in algorithmic communication processes such as personalization. This fundamental rights context can supplement the data protection lens when we are thinking about online personalization and user rights.

If we assess the use of online recommender systems for news personalization from the perspective of the personal information sphere, it becomes clear that news media should not only ensure compliance with the GDPR or similar data protection frameworks that are based on the FIPPs. As Helberger observed, news media are now competing with search engines and social media for the users' attention and have adopted personalization as part of their new strategy (Helberger, 2016). In this competition for attention, news users' freedom to find, receive, process, and engage with information should be ensured, next to their privacy and data protection rights. That is, the solution to respecting the personal information sphere is not simply limiting the amount of personalization that takes place. Rather, online news providers should develop ways to involve news users in the personalization process beyond just asking for consent to process their personal data. As mentioned in the introduction, various studies indicate that explicit personalization, in which the user has control and is involved in the personalization process, enhances the user experience (Eslami et al., 2015; Harambam et al., 2019), while at the same time, users do not always click what they actually like (Sela et al., 2015). Therefore, the best approach might be a mixture of implicit and explicit personalization (Sela et al., 2015).

The essence of the personal information sphere is control over how people situate themselves in networks of information and communication and how they interact and engage with online news media, how they shape their personal relationship with the news media that inform them and help them become the citizen, family member, professional, neighbor, or partner they want to be. The personal information sphere thus redirects regulatory attention to the process and interactivity of online personalization systems, to which active user engagement is an essential element.

ACKNOWLEDGMENT

This work was supported by the European Research Council under Grant 638514 (PersoNews).

DATA AVAILABILITY STATEMENT

All ECtHR and ECommHR cases are available via <http://hudoc.echr.coe.int/>.

ORCID

Sarah Eskens  <https://orcid.org/0000-0003-2925-0559>

ENDNOTES

¹ The relationship between the GDPR, the Data Protection Directive (DPD, the predecessor of the GDPR), and the fundamental right to data protection is not straightforward. The DPD existed already before the Charter was drafted and elevated data protection to a fundamental right. For more on this relationship, see Lyskey (2015, pp. 132–133). One point of contention is the relationship between the fundamental rights to privacy and data protection and these two instruments of secondary law. The GDPR refers only to the fundamental right to data protection and not (explicitly) to the fundamental right to privacy. This suggests that there is no formal legal connection between the GDPR and the right to privacy. However, the recitals and the substantive provisions of the DPD refer to the right to privacy several times, which establishes a clear link between the DPD and the fundamental right to privacy. Seeing the similarities between the DPD and the GDPR, it could be argued that the GDPR still partly gives effect to the right to privacy—With thanks to an anonymous reviewer for this suggestion.

² This paper focuses on the law of the EU. In the EU, there are two overlapping systems of fundamental rights protection: the Convention, as adopted by members of the Council of Europe, a human rights organization, and the Charter. Article 52, paragraph 2, of the Charter provides that, in so far as the Charter contains rights that are similar to rights guaranteed by the Convention, the meaning and scope of those rights are the same as those laid down by the Convention. Therefore, case law of the European Court of Human Rights is an integral part of EU law.

³ To be more precise, the judgment in *X v Iceland* was delivered by the European Commission of Human Rights (ECommHR), which used to be a separate body but has now merged with the Strasbourg Court.

⁴ The Strasbourg Court added that people no longer enjoy protection against unwanted communications once they connect to the internet because, by going online, people expose themselves to such communications. However, an important doctrine of the Court is that the European Convention should be a living instrument. The Court might be willing to reconsider its strict view that people give up their right to be protected against unwanted communications once they connect to the internet.

⁵ Article 5(1) of the EU ePrivacy Directive also protects the confidentiality of electronic communications. As mentioned in the introduction, for this paper, I focus on the fundamental rights.

⁶ In a separate opinion in the case of *Chassagnou and Others v. France*, a judge of the Strasbourg Court even argued that

environmentalist or ecological beliefs are protected by freedom of thought in so far as they are informed by a societal stance (1999).

⁷ The fact that there are no such judgments might be because applicants before the Strasbourg Court simply have never invoked such a negative right. The Court usually does not invent new rights if people do not ask for it.

⁸ As my discussion shows, the secondary rules on not receiving information aim to serve the fundamental right to privacy and are not directly derived from the fundamental right to receive information. However, from a systematic point of view, it would make sense to see the negative right not to receive information as part of the fundamental right to receive information. For this reason, I discussed the right not to receive information in this section on the right to receive information and not in the section on the right to privacy.

⁹ With thanks to an anonymous reviewer for this suggestion.

REFERENCES

- Adomavicius, G., Huang, Z., & Tuzhilin, A. (2008). Personalization and recommender systems. In Z.-L. Chen & S. Raghavan (Eds.), *State-of-the-art decision-making tools in the information-intensive age* (pp. 55–107). Hanover, MD: INFORMS.
- Ahmet Yildirim v. Turkey, 3111/10 (ECtHR, 2012).
- Aksu v. Turkey, 4149/04 and 4129/04 (ECtHR [GC], 2012).
- Alexandridis v. Greece, 19516/06 (ECtHR, 2008).
- Allen, A. L. (2011). First amendment privacy and the battle for progressively liberal social change. *University of Pennsylvania Journal of Constitutional Law*, 14(4), 885–928.
- Angeleni v. Sweden, 10491/83 (ECommHR, 1986).
- Ard, B. (2013). Confidentiality and the problem of third parties: Protecting reader privacy in the age of intermediaries. *Yale Journal of Law and Technology*, 16(1), 1–58.
- Arrowsmith v. the United Kingdom, 7050/75 (ECommHR, 1978).
- B.C. v. Switzerland, 21353/93 (ECommHR, 1995).
- Barberá, P., Tucker, J. A., Guess, A., Vaccari, C., Siegel, A., Sanovich, S., ... Nyhan, B. (2018). *Social media, political polarization, and political disinformation: A review of the scientific literature*. Menlo Park, CA: Hewlett Foundation. Retrieved from <https://hewlett.org/library/social-media-political-polarization-political-disinformation-review-scientific-literature/>
- Bărbulescu v. Romania, 61496/08 (ECtHR [GC], 2017).
- Barendt, E. (2005). *Freedom of speech* (2nd ed.). Oxford, United Kingdom: Oxford University Press.
- Becker, A. B., & Waisanen, D. J. (2013). From funny features to entertaining effects: Connecting approaches to communication research on political comedy. *Review of Communication*, 13(3), 161–183. <https://doi.org/10.1080/15358593.2013.826816>
- Blitz, M. J. (2006). Constitutional safeguards for silent experiments in living: Libraries, the right to read, and a first amendment theory for an unaccompanied right to receive information. *UMKC Law Review*, 74(4), 799–882.
- Bodó, B., Helberger, N., Eskens, S., & Möller, J. (2019). Interested in diversity: The role of user attitudes, algorithmic feedback loops, and policy in news personalization. *Digital Journalism*, 7(2), 206–229. <https://doi.org/10.1080/21670811.2018.1521292>
- Botta v. Italy, 21439/93 (ECtHR, 1998).
- Burghartz v. Switzerland, 16213/90 (ECommHR, 1992).
- Burke, C., & Molitorisová, A. (2017). What does it matter who is browsing? ISP liability and the right to anonymity. *Journal of*

- Intellectual Property, Information Technology and Electronic Commerce Law*, 8(3), 238–253.
- Buscarini and Others v. San Marino, 24645/94 (ECtHR [GC], 1999).
- C. v. the United Kingdom, 10358/83 (ECommHR, 1983).
- Campbell and Cosans v. the United Kingdom, 7511/76 and 7743/76 (ECtHR, 1982).
- Cengiz and Others v. Turkey, 48226/10 and 14027/11 (ECtHR, 2015).
- Çetin and Others v. Turkey, 40153/98 and 40160/98 (ECtHR, 2003).
- Cho, J., Ahmed, S., Keum, H., Choi, Y. J., & Lee, J. H. (2018). Influencing myself: Self-reinforcement through online political expression. *Communication Research*, 45(1), 83–111. <https://doi.org/10.1177/0093650216644020>
- Cohen, J. (1996). A right to read anonymously: A closer look at copyright management in cyberspace. *Connecticut Law Review*, 28(4), 981–1040.
- Cohen, J. (1998). Intellectual privacy and censorship of the internet. *Seton Hall Constitutional Law Journal*, 8(3), 693–702.
- Committee of Experts on Human Rights. (1968). *Comparative study of Article 19 of the UN Covenant on Civil and Political Rights and of Article 10 of the European Convention on Human Rights* (DH/Exp (68) 8 Revised). Strasbourg, France: Council of Europe. Retrieved from <https://rm.coe.int/09000016806748a0>
- Copland v. the United Kingdom, 62617/00 (ECtHR, 2007).
- Delfi A.S. v. Estonia, 64569/09 (ECtHR [GC], 2015).
- Digital Rights Ireland, C-293/12 and C-594/12 (CJEU, 2014).
- Dubois, E., & Blank, G. (2018). The echo chamber is overstated: The moderating effect of political interest and diverse media. *Information, Communication & Society*, 21(5), 729–745. <https://doi.org/10.1080/1369118X.2018.1428656>
- Durđević v. Croatia, 52442/09 (ECtHR, 2011).
- Eskens, S. (2019). A right to reset your user profile and more: GDPR-rights for personalized news consumers. *International Data Privacy Law*, 9(3), 153–172. <https://doi.org/10.1093/idpl/ipy2007>
- Eskens, S., Helberger, N., & Moeller, J. (2017). Challenged by news personalisation: Five perspectives on the right to receive information. *Journal of Media Law*, 9(2), 259–284. <https://doi.org/10.1080/17577632.2017.1387353>
- Eslami, M., Rickman, A., Vaccaro, K., Aleyasen, A., Vuong, A., Karahalios, K. ... Sandvig, C. (2015, April). “I always assumed that I wasn’t really that close to [her]”: Reasoning about invisible algorithms in news feeds. Paper presented at the 33rd Annual ACM Conference on Human Factors in Computing Systems, Seoul, Republic of Korea.
- Eveland, W. P. (2001). The cognitive mediation model of learning from the news. *Communication Research*, 28(5), 571–601. <https://doi.org/10.1177/009365001028005001>
- Eveland, W. P. (2002). News information processing as mediator of the relationship between motivations and political knowledge. *Journalism and Mass Communication Quarterly*, 79(1), 26–40. <https://doi.org/10.1177/107769900207900103>
- Eveland, W. P., Shah, D. V., & Kwak, N. (2003). Assessing causality in the cognitive mediation model: A panel study of motivations, information processing, and learning during campaign 2000. *Communication Research*, 30(4), 359–386. <https://doi.org/10.1177/0093650203253369>
- Eweida and Others v. the United Kingdom, 48420/10, 59842/10, 51671/10 and 36516/10 (ECtHR, 2013).
- Fletcher, R., & Nielsen, R. K. (2018). Are people incidentally exposed to news on social media? A comparative analysis. *New Media & Society*, 20(7), 2450–2468. <https://doi.org/10.1177/1461444817724170>
- Folgerø and Others v. Norway, 15472/02 (ECtHR [GC], 2007).
- Fuster, G. G. (2014). *The emergence of personal data protection as a fundamental right of the EU*. Cham, Switzerland: Springer International Publishing.
- Fuster, G. G., Gutwirth, S., & de Hert, P. (2010). From unsolicited communications to unsolicited adjustments: Redefining a key mechanism for privacy protection. In S. Gutwirth, Y. Pouillet, & P. de Hert (Eds.), *Data protection in a profiled world* (pp. 105–117). Dordrecht, the Netherlands: Springer.
- Gangadharan, S. P. (2016). Library privacy in practice: System change and challenges. *I/S: A Journal of Law and Policy for the Information Society*, 13(1), 175–198.
- Gerards, J. (2012). The prism of fundamental rights. *European Constitutional Law Review*, 8(2), 173–202. <https://doi.org/10.1017/S1574019612000144>
- Golder v. the United Kingdom, 4451/70 (ECtHR, 1975).
- Graham, T., & Hajru, A. (2011). Reality TV as a trigger of everyday political talk in the net-based public sphere. *European Journal of Communication*, 26(1), 18–32. <https://doi.org/10.1177/0267323110394858>
- Haim, M., Graefe, A., & Brosius, H.-B. (2018). Burst of the filter bubble? Effects of personalization on the diversity of Google news. *Digital Journalism*, 6(3), 330–343. <https://doi.org/10.1080/21670811.2017.1338145>
- Handyside v. the United Kingdom, 5493/72 (ECtHR, 1976).
- Harambam, J., Bountouridis, D., Makhortykh, M., & van Hoboken, J. (2019). *Designing for the better by taking users into account: A qualitative evaluation of user control mechanisms in (news) recommender systems*. Paper presented at the Proceedings of the 13th ACM Conference on Recommender Systems (pp. 69–77).
- Helberger, N. (2016). Policy implications from algorithmic profiling and the changing relationship between newsreaders and the media. *Javnost - The Public*, 23(2), 188–203. <https://doi.org/10.1080/13183222.2016.1162989>
- Ivanova v. Bulgaria, 52435/99 (ECtHR, 2007).
- K.U. v. Finland, 2872/02 (ECtHR, 2008).
- Kahneman, D. (2011). *Thinking, fast and slow*. New York, NY: Farrar, Straus and Giroux.
- Kaminski, M. E. (2017). Intellectual and social freedom. In D. Gray & S. E. Henderson (Eds.), *The Cambridge handbook of surveillance law* (pp. 470–490). New York, NY: Cambridge University Press.
- Kaye, D. (2018). *Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression (A/73/348)*. United Nations. Retrieved from <https://freedex.org/wp-content/blogs.dir/2015/files/2018/10/AI-and-FOE-GA.pdf>
- Khurshid Mustafa and Tarzibachi v. Sweden, 23883/06 (ECtHR, 2008).
- Knudsen v. Norway, 11054/84 (ECommHR, 1985).
- Kokkinakis v. Greece, 14307/88 (ECtHR, 1993).
- Kokott, J., & Sobotta, C. (2013). The distinction between privacy and data protection in the jurisprudence of the CJEU and the ECtHR. *International Data Privacy Law*, 3(4), 222–228. <https://doi.org/10.1093/idpl/ipt017>
- Koops, B.-J., Newell, B., Timan, T., Škorvánek, I., Chokrevski, T., & Galič, M. (2017). A typology of privacy. *University of Pennsylvania Journal of International Law*, 38(2), 483–576.
- Kunert, J., & Thurman, N. (2019). The form of content personalisation at mainstream, transatlantic news outlets:

- 2010–2016. *Journalism Practice*, 13(7), 759–780. <https://doi.org/10.1080/17512786.2019.1567271>
- Lautsi and Others v. Italy, 30814/06 (ECtHR [GC], 2011).
- Lavie, T., Sela, M., Oppenheim, I., Inbar, O., & Meyer, J. (2010). User attitudes towards news content personalization. *International Journal of Human-Computer Studies*, 68(8), 483–495. <https://doi.org/10.1016/j.ijhcs.2009.09.011>
- Leander v. Sweden, 9248/81 (ECtHR, 1987).
- Leenes, R., Palmerini, E., Koops, B.-J., Bertolini, A., Salvini, P., & Lucivero, F. (2017). Regulatory challenges of robotics: Some guidelines for addressing legal and ethical issues. *Law, Innovation and Technology*, 9(1), 1–44. <https://doi.org/10.1080/17579961.2017.1304921>
- Lingens v. Austria, 9815/82 (ECtHR, 1986).
- Loucaides, L. G. (2012). The right to freedom of thought as protected by the European Convention on Human Rights: Case notes and analysis. *Cyprus Human Rights Law Review*, 1, 79–87.
- Lynskey, O. (2015). *The foundations of EU data protection law*. Oxford, United Kingdom: Oxford University Press.
- Manole and Others v. Moldova, 13936/02 (ECtHR, 2009).
- Marshall, J. (2009). *Personal freedom through human rights law? Autonomy, identity and integrity under the European Convention on Human Rights*. Leiden, the Netherlands: Martinus Nijhoff.
- Marshall, J. (2015). S.A.S. v France: Burqa bans and the control or empowerment of identities. *Human Rights Law Review*, 15(2), 377–389. <https://doi.org/10.1093/hrlr/ngv003>
- Mead, D. (2017). A socialised conceptualisation of individual privacy: A theoretical and empirical study of the notion of the ‘public’ in UKMoPI cases. *Journal of Media Law*, 9(1), 100–131. <https://doi.org/10.1080/17577632.2017.1321227>
- Mertens, S., d’Haenens, L., & De Cock, R. (2019). Online news consumption and public sentiment toward refugees: Is there a filter bubble at play? Belgium, France, the Netherlands, and Sweden: A comparison. In L. d’Haenens, W. Joris, & F. Heinderyckx (Eds.), *Images of immigrants and refugees in Western Europe: Media representations, public opinion and refugees’ experiences* (pp. 141–158). Leuven, Belgium: Leuven University Press.
- Miller, R. A. (2018). The legal fate of internet ad-blocking governing the internet: Public access, private regulation. *Boston University Journal of Science and Technology Law*, 24(2), 299–371.
- Muscio v. Italy, 31358/03 (ECtHR (dec.), 2007).
- Nechushtai, E., & Lewis, S. C. (2019). What kind of news gatekeepers do we want machines to be? Filter bubbles, fragmentation, and the normative dimensions of algorithmic recommendations. *Computers in Human Behavior*, 90, 298–307. <https://doi.org/10.1016/j.chb.2018.07.043>
- Niemitz v. Germany, 13710/88 (ECtHR, 1992).
- Nyssönen v. Finland, 30406/96 (ECommHR, 1998).
- Oberschlick v. Austria, 11662 (ECtHR, 1991).
- Petri Sallinen and Others v. Finland, 50882/99 (ECtHR, 2005).
- Pingree, R. J. (2007). How messages affect their senders: A more general model of message effects and implications for deliberation. *Communication Theory*, 17(4), 439–461. <https://doi.org/10.1111/j.1468-2885.2007.00306.x>
- Purtova, N. (2010). Private law solutions in European data protection: Relationship to privacy, and waiver of data protection rights. *Netherlands Quarterly of Human Rights*, 28(2), 179–198. <https://doi.org/10.1177/016934411002800203>
- R.B. v Hungary, 64602/12 (ECtHR, 2016).
- Randall, M. H. (2016). Freedom of expression in the internet. *Swiss Review of International and European Law*, 26(2), 235–254.
- Reklos and Davourlis v. Greece, 1234/05 (ECtHR, 2009).
- Resta, G. (2014). Personnalité, Persönlichkeit, Personality. *European Journal of Comparative Law and Governance*, 1(3), 215–243. <https://doi.org/10.1163/22134514-00103002>
- Richards, N. (2008). Intellectual privacy. *Texas Law Review*, 87(2), 387–446.
- Richards, N. (2015). *Intellectual privacy: Rethinking civil liberties in the digital age*. Oxford, United Kingdom: Oxford University Press.
- Richardson, B. (2004). The public’s right to know: A dangerous notion. *Journal of Mass Media Ethics*, 19(1), 46–55. https://doi.org/10.1207/s15327728jmme1901_4
- Salonen v. Finland, 27868/95 (ECommHR, 1997).
- Sela, M., Lavie, T., Inbar, O., Oppenheim, I., & Meyer, J. (2015). Personalizing news content: An experimental study. *Journal of the Association for Information Science and Technology*, 66(1), 1–12. <https://doi.org/10.1002/asi.23167>
- Shah, D. V. (2016). Conversation is the soul of democracy: Expression effects, communication mediation, and digital media. *Communication and the Public*, 1(1), 12–18. <https://doi.org/10.1177/2057047316628310>
- Shiffrin, S. V. (2010). A thinker-based approach to freedom of speech. *Constitutional Commentary*, 27(2), 283–308.
- Smirnova v. Russia, 46133/99 and 48183/99 (ECtHR, 2003).
- Söderman v. Sweden, 5786/08 (ECtHR [GC], 2013).
- Stec and Others v. the United Kingdom, 65731/01 and 65900/01 (ECtHR [GC], 2006).
- Tele2 Sverige AB and Watson, C-203/15 and C-698/15 (CJEU, 2016).
- The Sunday Times v. the United Kingdom (No. 1), 6538/74 (ECtHR, 1979).
- Thurman, N., Moeller, J., Helberger, N., & Trilling, D. (2019). My friends, editors, algorithms, and I: Examining audience attitudes to news selection. *Digital Journalism*, 7(4), 447–469. <https://doi.org/10.1080/21670811.2018.1493936>
- Thurman, N., & Schifferes, S. (2012). The future of personalization at news websites. *Journalism Studies*, 13(5–6), 775–790. <https://doi.org/10.1080/1461670X.2012.664341>
- Times Newspapers Ltd v. the United Kingdom (Nos. 1 and 2), 3002/03 and 23676/03 (ECtHR, 2009).
- Valkenburg, P. M. (2017). Understanding self-effects in social media. *Human Communication Research*, 43(4), 477–490. <https://doi.org/10.1111/hcre.12113>
- van der Sloot, B. (2015). Privacy as personality right: Why the ECtHR’s focus on ulterior interests might prove indispensable in the age of “big data”. *Utrecht Journal of International and European Law*, 31(80), 25–50. <https://doi.org/10.5334/ujiel.cp>
- W. v. the United Kingdom, 18187/91 (ECommHR, 1993).
- Wieser and Bicos Beteiligungen GmbH v. Austria, 74336/01 (ECtHR, 2007).
- Wu, P. F. (2019). The privacy paradox in the context of online social networking: A self-identity perspective. *Journal of the Association for Information Science and Technology*, 70(3), 207–217. <https://doi.org/10.1002/asi.24113>
- X. and Y. v. Belgium, 8962/80 (ECommHR, 1982).
- X. and Y. v. the Netherlands, 8978/80 (ECtHR, 1985).
- X. v. Iceland, 6825/74 (ECommHR, 1976).

- Yong Joo-Kang v. Republic of Korea, CCPR/C/78/878/1999 (Human Rights Committee, 2003). Retrieved from <https://undocs.org/CCPR/C/78/D/878/1999>
- Zuiderveen Borgesius, F. J. (2015). *Improving privacy protection in the area of behavioural targeting*. Alphen aan den Rijn, the Netherlands: Kluwer Law International.
- Zuiderveen Borgesius, F. J., Trilling, D., Möller, J., Bodó, B., de Vreese, C. H., & Helberger, N. (2016). Should we worry about filter bubbles? *Internet Policy Review*, 5(1). <https://doi.org/10.14763/2016.1.401>

How to cite this article: Eskens S. The personal information sphere: An integral approach to privacy and related information and communication rights. *J Assoc Inf Sci Technol*. 2020;1–13. <https://doi.org/10.1002/asi.24354>