Technology and Regulation

The Right of Access to Personal Data: a Genealogy

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In this paper, I analyze several traditions of data protection to uncover the theoretical justification they provide for the right of access to personal data. I find little support for the claim that the right follows from the German tradition of "informational self-determination" or Westin's idea of "privacy as control". Instead, two other less known theories of data protection appear to offer a direct justification for the right of access. First, Westin and Baker's "due process" view, which access helps to expose error and bias in decision-making, thereby contributing to correct decisions and allowing affected people to be involved in the decision making. Second, Rodotà's "power reversal" view of access which enables social control over the processing of personal data and serves as a counterbalance to the centers of power by placing them under the control of democratic accountability.

> "Ours is a society that has always expected law to define basic citizen rights, and the scope of what American society regards as rights and not privileges has been widened dramatically in the past decade."
>
> – Alan Westin and Michael Baker, *Databanks in a Free Society*[1]

> "The regulation of the right of access imposes a completely new regulation of secrecy and opens up the possibility of new developments in civil rights, expanding the knowledge available to citizens, and thus their power of control over public and private action."
>
> – Stefano Rodotà, *Computers and Social Control*[2]

1. Introduction

The foundations of data protection law were laid down in the 1960s and 1970s. Directly from the start, the right of access to personal data was included in all major data protection regimes in the world,[3] and became a cornerstone of data protection legislation,[4] which it remains until today. The relevance of the right of access is evidenced – among other things – by the fact that it is part of the Charter of Fundamental Rights of the European Union (The Charter).[5] Moreover, its continued importance is confirmed by the fact that strengthening the right of access and other data subject rights was one of the core objectives of the introduction of the European General Data Protection Regulation (GDPR).[6] Yet, while the importance of the right of access to personal data is generally assumed, there is no comprehensive and detailed account in recent literature of why this right is so important and what purposes it is supposed to serve.

Against this background, this article presents an investigation into

1 Alan F Westin and Michael A Baker, *Databanks in a Free Society* (Quadrangle Books 1972) 347.

2 Stefano Rodotà, *Elaboratori Elettronici E Controllo Sociale* [*Computers and Social Control*] (Societa Editrice Il Mulino 1973) 67. No English translation of Elaboratori Elettronici E Controllo Sociale has been published. All translations are by the author, two Italian native speakers specialized in data protection law – Ilaria Buri and Simone Casiraghi –, and with the help of translation service https://www.deepl.com.

3 Colin J Bennett, *Regulating Privacy: Data Protection and Public Policy in Europe and the United States* (1st edn, Cornell University Press 1992) 106.

4 In this article I will use the term "data protection", which is the common terminology in Europe for something that is similar to what in the US is generally called "data privacy". While there is much ado about the differences between these concepts, and the differences between EU and US regulation (See for example generally: Anupam Chander, Margot E Kaminski and William McGeveran, 'Catalyzing Privacy Law' [forthcoming] *Minnesota Law Review* https://www.ssrn.com/abstract=343392> accessed 25 January 2020), these differences seem to have been much less pronounced in the early days of data protection.

5 Charter of Fundamental Rights of the European Union, OJ 2010 C 83/389. The relevant Art. 8(2) of the Charter of Fundamental Rights of the European Union reads: 'Such data must be processed fairly for specified purposes and on the basis of the consent of the person concerned or some other legitimate basis laid down by law. *Everyone has the right of access to data which has been collected concerning him or her, and the right to have it rectified' [Emphasis added].*

6 European Commission, COM(2010) 609 final COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS - A comprehensive approach on personal data protection in the European Union 7-8 (2010), https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52010DC0609&from=EN; Viviane Reding, 'The European Data Protection Framework for the Twenty-First Century' (2012) 2 *International Data Privacy Law* 119, 124-126.

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the politico-philosophical origins of the right of access to personal data. To find justifications for the right of access to personal data, an extensive review of the literature has been conducted. This review included (1) literature on the value of data protection and data subject rights, (2) studies on the right of access, (3) legislative history (on the level of the EU, the Netherlands, Germany, France, and International Organizations, such as the OECD and Council of Europe). Through this broad review, four perspectives were identified, two of which (1) provide a detailed account of the value and purpose of the right of access to personal data, and (2) were developed by scholars that had a considerable influence on European data protection law.

Many academic accounts that consider the justification for data subject rights argue or assume that it belongs to either "informational self-determination" and/or "privacy as control".[7] Norris and L'Hoiry, for example, write that "Access to personal data is the natural pre-condition of data subjects' ability to exercise the remainder of their ARCO rights (access, rectification, cancellation, opposition). Put simply, citizens cannot exercise their rights of *informational self-determination* in an informed manner without knowing what is held about them."[8] In European policy making too, data subject rights are often understood within a narrative of control over data.[9]

However, the relationships between those theories and the right of access are rarely formulated in depth, nor fully convincing. One of the reasons for this is probably that access rights were not a central element in these doctrines of data protection, as a closer look at the historical roots of those theories will show.

Textual interpretation of the laws, even when analyzed in conjunction with their accompanying legislative materials (i.e. policy documents and legislative histories), often provide only a limited view of the functions they fulfill. As other scholars have already noted, this is certainly the case with regards to data protection laws.[10] There are several reasons for this lack of clarity. First, laws are being made in complex institutional structures and are often the result of political compromise, edging off the clarity of the initial ideas which pave the way for the introduction of these laws. Furthermore, the mere fact that the right of access to personal data has already been part of the data protection regimes for such a long time makes it likely for it to be part of any new law without much renewed discussion of the principles and ideas on which it is based.[11]

Two other data protection theories exist in which the right of access did have a central role, and which also had a very direct influence on the development of European data protection legislation. In the United States, Alan Westin, together with Michael Baker developed the view that the constitutional principle of due process should apply to the processing of personal data. In this view, the right of access to personal data is essential for the protection of due process. At the same time, Italian scholar Stefano Rodotà – following a tradition of critical legal theory – developed the view that access to personal data should serve as a general counterbalance to the power asymmetries associated with the accumulation of data. Both gave detailed accounts of the importance of the right of access and placed it at the center of their proposals for data protection regulation. However, while their work had a significant influence on the development of data protection regulation, it has remained broadly overlooked in contemporary debates on data protection and the right of access.

In order to find the politico-philosophical origins and justification of the right of access to personal data, I discuss the four above-mentioned theories of data protection. First (in Section 2), I argue that, for Westin, access rights are not intended to safeguard "privacy as control". Instead, I show how Westin, in his most famous book *Privacy and Freedom*[12], starts to develop the idea that people should have a right to access to data to protect their "due process" rights in an age of electronic data processing, and how he later develops this theory fully, together with Michael Baker, in *Databanks in a Free Society*. Then (in Section 3) I discuss the theory of informational self-determination and show that the right of access does not have a central position in that theory. In Section 4, I discuss Rodotà's "power reversal" view of data protection, in which the right of access – and in particular the collective use of that right – plays an essential role.

In Section 5, I discuss the wider implications of the preceding analysis. In particular, I highlight how the historical analysis shows that access rights are conceptualized as a way to empower people in relations characterized by structural informational power asymmetry. And that while the right enables people to gain access to data (or, in the language of Westin and Baker: "files"), the ultimate aim of the right is

7 See also Antoinette Rouvroy and Yves Poullet, 'The Right to Informational Self-Determination and the Value of Self-Development: Reassessing the Importance of Privacy for Democracy' in Serge Gutwirth and others (eds), Reinventing Data Protection? (2009) 69 https://doi.org/10.1007/978-1-4020-9498-9_2; Jef Ausloos, *The Right to Erasure: Safeguard For Informational Self- Determination In a Digital Society?* (Doctoral Thesis, KU Leuven 2018) section 2.2.2 and 2.3.3; HU Vrabec, *Uncontrollable: Data Subject Rights and the Data-Driven Economy* (Doctoral Thesis, Leiden University 2019) chapter 4 https://openaccess.leidenuniv.nl/handle/1887/68574. Bart Van der Sloot, 'Do Data Protection Rules Protect the Individual and Should They? An Assessment of the Proposed General Data Protection Regulation' (2014) 4 *International Data Privacy Law* 307 http://dx.doi.org/10.1093/idpl/ipu014; ; Orla Lynskey, *The Foundations of EU Data Protection Law* (Oxford University Press 2015).
Most of the authors that relate the right of access to informational self-determination do not make very specific assertions about the nature of this relationship.
Rouvroy and Poullet (2009, 69), for example, remain quite general and state that all the main principles of data protection "might be viewed as a development of the self-determination principle in the area of the personal data flows" and claim that the purpose of access rights is "allowing a better control over the uses and dissemination of personal data". Van der Sloot (2014), for example, who himself does not subscribe to this position, claims that other scholars relate the right of access and control by the individual data subject to informational self-determination he does not point at any specific scholars who do so.
According to Lynskey (Chapter 6) the data subject rights, including the right of access which she sees as "the foundational block on which other rights of control rest" in European data protection law are there to enebale individuals to exercize individual control over personal data, and she relates this to the conception of privacy-as-control as described by Westin. Similarly, Ausloos (p. 73-74) writes that the data subject rights are the material implementation rationale of data subject control, in Westin's sense, in data protection law.

8 Clive Norris and Xavier L'Hoiry, 'Exercising Citizen Rights Under Surveillance Regimes in Europe – Meta-Analysis of a Ten Country Study' in Clive Norris and others (eds), The Unaccountable State of Surveillance: Exercising Access Rights in Europe (Springer International Publishing 2017) 405 https://doi.org/10.1007/978-3-319-47573-8_14.

9 E.g. European Commission (n 6).

10 E.g. Orla Lynskey, 'Deconstructing Data Protection: The "Added-Value" of a Right to Data Protection in the EU Legal Order' (2014) 63 *International and Comparative Law Quarterly* 569, 562. ("However, what is apparent from this scholarly speculation is that the EU has not adequately justified the introduction of the right to data protection in the EU legal order or explained its content."). https://www.cambridge.org/core/product/identifier/S0020589314000244/type/journal_article; https://core.ac.uk/download/pdf/191099366.pdf (open access).

11 Alexander Dix, 'Artikel 15 Auskunftrecht Der Betroffenen Person' in Spiros Simitis, Gerrit Hornung and Indra Spiecker, *Datenschutzrecht* (1st edn, Nomos Verlagsgesellschaft 2019), 651.

12 Alan F Westin, *Privacy and Freedom* (first published 1967, Ig Publishing 2015).

to enable people to understand and contest individual decisions, and even systems of decision-making which are based on personal data. This is relevant for a variety of current debates, such as the questions about the scope of access rights, the extent to which the right entails a "right of explanation",[13] or the collective aspects of that right.[14] Moreover, I discuss the right's emancipatory aim, which can only bear fruit once it is properly recognized. Finally, I reflect on how this historical analysis can contribute to the ongoing discussion on the values that are safeguarded by data protection more broadly.[15]

2. Westin and Baker: From Privacy as Control to Access as Due Process

In *Privacy and Freedom*, published in 1967, Alan F. Westin defined his famous notion of "privacy as control" as "the claim of individuals, groups, or institutions to determine for themselves when, how and to what extent information about them is communicated to others".[16] This idea of "privacy as control" is seen as a fundamental theory of data protection and privacy.[17] Moreover, his work was a key point of reference for the European data protection community, and had significant influence on the development of European data protection law.[18]

According to some authors, the right of access is part of this conceptualization of privacy as individual control over the flow of personal data.[19] In *Privacy and Freedom*, Westin does indeed mention, albeit very briefly, the right of access in relation to "privacy as control".[20] However, more importantly, he also introduces the idea that due process rights should apply to the processing of personal information. The second part of this section discusses *Databanks in a Free Society*, where the idea of applying due process to the processing of personal information is thoroughly developed and discussed in detail, and independently from the principle of privacy.

The wide array of privacy-related questions Westin deals with in *Privacy and Freedom* are mostly focused on surveillance made possible by new technological methods, such as wiretapping, subliminal suggestion, lie-detecting and personality testing. Data processing by electronic means, which has most resonance with what we currently call data protection, is but one of the many elements discussed in one chapter of this book.[21] Within this chapter on processing of data by computers, the elaboration of the right of access to personal data is laid out in just two pages and presented only in embryonic form. Westin's discussion of the right of access in this chapter should therefore be understood more as an initial thought experiment than as a full-fledged theoretical exposition.

Westin writes, towards the end of *Privacy and Freedom*, that "personal information, thought of as the right of decision over one's private personality, should be defined as a property right, with all the restraints on interference by private and public authorities and due-process guarantees that our law of property has been so skillful in designing".[22] In his view, due process as applied to the processing of personal data would include (1) a right to notice when information is put into a file; (2) a right to examine [access] the file; (3) a right to challenge accuracy; (4) a right to have the challenge recorded; and (5) a right to deletion in some cases.[23]

At a glance, the proposed rights could be seen as an extension of "privacy as control", as they follow from making a link between personal data and private property, and property relations conventionally being seen as the epitome legal form for allowing people to exert control. However, this reading would overlook the reason that he defines personal information as property, which is that "so defined, a citizen would be entitled to have due process of law". Thus, due process is not just a mere beneficial side effect of granting property rights. Instead, the fact that due process rights are connected to property – at least in the US Constitution – would be the primary reason for classifying personal data as private property. Moreover, Westin argues that assigning property rights to personal data would bring personal data under a whole range of additional strong legal protections that the US legal system affords to private ownership. It should be stressed that Westin's aim is to provide more protections to people with respect to their personal data, not to create a market for personal data.

There is an important secondary motivation for implementing these rights (now called data subject rights), which is completely unrelated to the logic of "privacy as control". Westin explains it as follows: "When the information keeper knows that the individual will be notified, can see and can challenge the information, all the restraints of visibility of action will be on the keeper. His loss of anonymity will

13 See generally e.g. Andrew D Selbst and Julia Powles, 'Meaningful Information and the Right to Explanation' (2017) 7 *International Data Privacy Law* 233 https://doi.org/10.1093/idpl/ipx022; Margot E Kaminski, 'The Right to Explanation, Explained' (2019) 34 *Berkeley Technology Law Journal* 189 https://btlj.org/data/articles2019/34_1/05_Kaminski_Web.pdf.

14 See generally, e.g. René LP Mahieu, Hadi Asghari and Michel JG Van Eeten, 'Collectively Exercising the Right of Access: Individual Effort, Societal Effect' (2018) 7 *Internet Policy Review* 1 https://doi.org/10.14763/2018.3.927; René LP Mahieu and Jef Ausloos, 'Harnessing the Collective Potential of GDPR Access Rights: Towards an Ecology of Transparency' [2020] *Internet Policy Review* https://policyreview.info/articles/news/harnessing-collective-potential-gdpr-access-rights-towards-ecology-transparency/1487.

15 See generally, e.g. Julie E Cohen, 'Turning Privacy Inside Out' (2019) 20 Theoretical Inquiries in Law 1 https://din-online.info/pdf/th20-1-3.pdf; Orla Lynskey, 'Delivering Data Protection: The Next Chapter' (2020) 21 German Law Journal 80 https://doi.org/10.1017/glj.2019.100.

16 Westin (n 12) 5.

17 Colin J Bennett and Charles D Raab, *The Governance of Privacy : Policy Instruments in Global Perspective* (MIT Press 2006).; Seda Gürses, 'Can You Engineer Privacy?' (2014) 57 *Communications of the ACM* 20, 21 https://cacm.acm.org/magazines/2014/8/177015-can-you-engineer-privacy/.

18 Work by Westin, and particularly *Privacy and Freedom*, is a primary reference for example in the development of the first German and Dutch data protection laws (See respectively: Ruprecht B Kamlah, 'Datenschutz Im Spiegel Der Angloamerikanischen Literatur -- Ein Überblick Über Vorschläge Zur Datenschutzgesetzgebung -- Report for the Ministry of the Interior' (1971) Drucksache VI/3826 Deutscher Bundestag — 6. Wahlperiode. Thijmen Koopmans (ed), *Privacy en persoonsregistratie: interimrapport van de Staatscommissie bescherming persoonlijke levenssfeer in verband met persoonsregistraties* (Staatsuitgeverij 1974), 6-7). Similarly, it heavily influenced the work on the right to informational self-determination as well as that by Stefano Rodotà (See respectively for informational self-determination: Mallmann Christoph Mallmann, *Datenschutz in Verwaltungs-Informationssystemen* (Oldenburg 1976), and for Rodotà: Rodotà (n 2) and section 4 below.

19 Bennett and Raab (n 18), 98-99; Antoinette Rouvroy and Yves Poullet (n 7) 45, 62 and 68-75 https://doi.org/10.1007/978-1-4020-9498-9_2. Bennett and Raab discuss the right of access to personal data, together with informed consent, as the primary privacy principles meant to empower individuals. Rouvroy and Poullet elaborate on the link between informational self-determination, privacy as control and privacy as empowerment. See also Ausloos (n 7); Lynsky (n 7).

20 Westin (n 12) 362 "First, personal information, thought of as the right of decision over one's private personality, should be defined as a property right, with all the restraints on interference by public or private authorities and due-process guarantees that our law of property has been so skillful in devising."

21 Westin (n 12) Chapter 12 "Pulling all the facts together".

22 Westin (n 12) 362.

23 Westin (n 12) 363.

be the best guarantee of fairness and care in the information-keeping procedure".[24] In other words, the right of access, by shedding light on the actions of the data controller, functions as a safeguard against the misuse of this data by the controller.

The theory of applying due process to the processing of personal data is only fully developed in *Databanks in a Free Society*, published by Westin and Baker in 1972, five years after *Privacy and Freedom*.[25] Here, the value of due process is completely independent from the value of "privacy as control", and rid of its connotations of private property. The right of the citizen "to see his record"[26] is no longer one of many policy proposals, but the main focal point.[27] In this book the need for, and purpose of, a right of access to personal data is elaborated in much more detail.

The research for *Databanks in a Free Society* was performed by the "Computer Science and Engineering Board of the United States National Academy of the Sciences", directed by Westin, who was at the time a professor of public law and government at Columbia University.[28] This academic work, as the name suggests, describes the effects that developments in electronic computing and the creation of new databanks have on the foundations of a free and democratic society. While the concluding analysis of the report is theoretical, the study is grounded on empirical and interdisciplinary research concerning the consequences of the introduction of electronic databases across society. Westin and his team visited the sites of databases, conducted in depth interviews with personnel on site and sent questionnaires. The main purpose of doing this study was to find how the introduction of computers affected the creation, sharing and use of files on individuals, in particular in relation to their civil liberties.[29]

Westin and Baker note that there are two fundamental constitutional principles that govern the processing of personal data: (1) privacy and (2) due process.[30] Due process is a doctrine of procedural safeguards that comprises a set of rights for citizens and obligations for the government with regards to decisions that affect citizens.[31] The overall purpose of these rules is to put a check on the arbitrary exercise of power by the state. The right to privacy, as "the right to be left alone", on the other hand is the right to claim a certain element of life as off-limits to private or government intervention, and that personal information – when it is used – should be kept confidential. The important point to note for the present investigations is that, in contrast to the discussion in *Privacy and Freedom*, privacy and due process are being presented as fully independent concepts, and that the right of access to personal data is proposed as a safeguard for due process.[32]

The historical background of the importance of constitutional rights in the US can be found in the birth of that republic. Under the influence of political philosophers like Locke and Montesquieu, the intent was to create a state based on the rule of law in which – contrary to the situation in Europe at the time – laws were made by the people, and power was held accountable and was under their control. Probably the most famous system of checks and balances to keep governmental power under control is the separation of powers. In Montesquieu's version, this model consists of separating the legislative, executive, and judicial branches. Due process is another model to control the arbitrary use of power by government and is one of the most valued concepts in US constitutional law.[33] It is codified in the 5th and 14th amendments of the Constitution and is formulated as follows: "No person shall be deprived of life, liberty, property, without due process of law."[34]

While due process was initially applied only to penal cases, over time it developed into a doctrine that applies to other situations in which the government makes a decision that may negatively affect a citizen.[35] The development of due process into administrative law goes hand in hand with the development of the welfare state and the development of theories of positive freedom.[36]

Due process is not only considered a fundamental principle in the US, but also in Europe and in all liberal democracies around the world. The right to a fair trial, for example, which is protected by Article 6 of the European Convention of Human Rights, is also an expression of the principle of due process.[37] Moreover, due process is intimately connected to the concept of rule of law and has similarities with the German Rechtsstaat principle.[38] In the Netherlands, public decision-making power is regulated through the so called "principles of good administration".[39] While the legal systems of due process in Europe and US differ in terms of the exact principles that they incorporate, they share a general structure, and primary function – the control of state power –, and therefore, analyses of due process made with regard to the US system are also relevant for the European context, and their relevance extends to the European debate on data

24 Westin (n 12) 363.

25 While *Databanks in a Free Society* is arguably a more important foundational text for data protection – and in particular for understanding Westin's views on data protection – than *Privacy and Freedom*, the latter is cited around 15 times more frequently than *Databanks in a Free Society*, which can be partly explained by the fact that the first is still in print and easily available, while the second is much harder to find. (A search on google.scholar.com performed in February 2020 yields 287 citations for *Databanks in a Free Society* and 5491 citations for *Privacy and Freedom*).

26 In the language of Westin and Baker, the right of access applies to "files" or "records". The due process view on access (and data protection law) would suggest qualifying personal "records", or personal "files", as "personal data".

27 Westin and Baker (n 1) 355-378.

28 Westin and Baker (n 1) vii and xvii.

29 Westin and Baker (n 1) 5-6.

30 Westin and Baker (n 1) 14-20.

31 Laurence H Tribe, *American Constitutional Law* (2nd edn, The Foundation Press 1988) chapter 10.

32 See also Paul de Hert & Serge Gutwirth, Privacy, data protection and law enforcement. Opacity of the individual and transparency of power, in *Privacy and the Criminal Law* 61 (E. Claes, A. Duff, & Serge Gutwirth eds., 2006). They argue that there is a similar distinction, in the context of European law, between privacy law, which protects the opacity of the individual, and data protection, which mostly channels power through transparency tools.

33 Westin and Baker(n 1) 15 (referring to Justice Felix Frankfurter in *Green v. McElroy, 360, U.S. 474 (1959)*).

34 Due process rights against the federal government are granted in the 5th amendment, while the 14th amendment guarantees due process with regard to states.

35 Tribe (n 31) chapter 10, paragraph 1.

36 Tribe (n 31) chapter 10, paragraph 1.

37 Katja De Vries, 'Privacy, Due Process and the Computational Turn -- A Parable and a First Analysis' in Mireille Hildebrandt and Katja De Vries (eds), *Privacy, Due Process and the Computational Turn* (Routledge 2013).

38 E.g. TRS Allan, 'Freedom, Equality, Legality' in James R Silkenat, James E Hickey Jr. and Peter D Barenboim (eds), *The Legal Doctrines of the Rule of Law and the Legal State (Rechtsstaat)* (Springer International Publishing 2014) https://doi.org/10.1007/978-3-319-05585-5_11. See generally James Silkenat R, James Hickey Jr. E and Peter D Barenboim (eds), *The Legal Doctrines of the Rule of Law and the Legal State (Rechtsstaat) (Springer 2014)* https://doi.org/10.1007/978-3-319-05585-5 noting that obviously, while there are similarities between concepts such as due process, rule of law, Rechtsstaat and principles of good governance, there are also differences.

39 Peter Hendrik Blok, *Het Recht Op Privacy: Een Onderzoek Naar de Betekenis van Het Begrip 'privacy' in Het Nederlandse En Amerikaanse Recht* (Boom Juridische Uitgevers 2002) 118.

protection.[40]

As a set of rules which aims to guarantee the just application of general laws in individual cases, due process is one of the constitutional rights by which power can be held accountable. Moreover, according to Tribe, a prominent scholar of American constitutional law, there is both an instrumental as well as an intrinsic justification for due process. From an instrumental point of view, these rights are indispensable for the exposure of error and bias in adjudication, and they offer the best chance for a procedure to arrive at the truth.[41] From a substantive point of view, these procedures protect human dignity by allowing people to be part of the decision-making process.

The concrete content of the procedural guarantees of due process is composed of numerous elements.[42] Two elements in particular are relevant in the context of processing of personal data: (1) the right to know in advance the evidence of a criminal or administrative case and (2) the right to contest this evidence.

The central policy proposed by Westin and Baker is that due process should be applied to all cases in which judgments are made about people on the basis of their personal records. Giving the citizen a right to access their record is a way to allow them to know and assess how a judgment about them has been reached. Moreover, giving them the right to challenge the record allows them to contest a decision if it has been made on the basis of false or irrelevant facts. These rights should apply to any systematic use of personal records for the same reason as they apply in criminal cases. For example, these rights should apply to files or reports from caseworkers in the case of welfare proceedings. Similarly, they should apply to files in all contexts such as education, clinical psychology, probation, loan decisions. In all these contexts it is important – both for instrumental as well as substantive reasons – that individuals are put in the position to assess and contest the facts and opinions that play a role in the making of decisions about them.

Perhaps surprisingly, Westin and Baker's argument in favor of the introduction of the right of access to personal data is not based on the increased risks posed to a free and democratic society by new forms of digital data processing. They find, based on their empirical work, that the computerization of data processing was in fact not having a negative impact on the rights of citizens.[43] In most cases, rights such as the right to know that a file exists, or the right to access a file about one self, had remained unaltered.[44] Many file-systems existed in the pre-computer era that did not afford these rights, and when the systems containing these files were automated, the same rights were still not granted. At the same time, in fields where people did already have rights to access files and challenge the accuracy, completeness and propriety of the information, these rights were retained when the files got digitized. This was the case, for example, with the rights of social security account holders with regards to their earning records and for veterans with regards to their service records. These examples also remind us that the right of access to files predates the introduction of the right of access within data protection regulation.

The fundamental reason why Westin and Baker argue for the introduction of new rights is the changed public perception and demands for fairness with respect to the exercise of power that was prevalent at the time they were writing, which they believed to be justified. In the 1960's, various movements, including the Civil Rights movement, were seeking a re-balancing of power in society, and demanded a strengthening of civil liberties. They were fighting against many injustices and demanded social, political and legal systems to live up to their professed values of merit selection, equal opportunity and respect for the individual. The movement was critical of "credential-based gate-keeping", disapproving of the extensive data collection and criteria that were used to make decisions about individuals, for example in getting access to housing, jobs and schools. These practices resulted in discrimination, favoring whites over blacks, rich over poor, straight over gay, and in general in the repression of forms of dis-conformity.

Another practice that was heavily criticized was the widespread practice of compiling lists of people showing "deviant" behavior (such as participating in anti-war or anti-discrimination demonstrations), which were used to suppress dissenting opinions. The social unrest of that time came from many different sides, including long-discriminated groups, such as people of color, new sociopolitical groups fighting for women's rights, sexual liberation etc., but also conservative defenders of constitutional principles, and revolutionary groups. Moreover, while the demand for change was led by a variety of activist groups, Westin and Baker show, on the basis of survey data, that the concern for civil liberties issues in relation to privacy and record keeping were held by large segments of the population.[45] In short, against the background of the demands of the civil rights movements, Westin and Baker argue that citizens should finally get, in practice, those rights that so far had only been acknowledged in theory.[46]

While Westin and Baker's argument for the citizens' right of access to their record is primarily based on due process principles, which in first instance protects *individual* citizens' interests, they also see the potential for the right of access to function as a means to mend injustices on the *societal* level. For example, they argue the right to access files enables people to assess whether discriminatory practices are still used. From this perspective, allowing people to assess and criticize how decisions are being made, and safeguarding people's right to (peacefully) dissent are essential to safeguard the functioning of a democratic society.[47]

Westin and Baker argue that in order to transform the ideals underpinning a free and democratic society into enforceable rights, the

40 In their concrete historical development the doctrines of due process did diverge in US and EU law. However, while Westin and Baker refer to some extent to the concrete implementation of the doctrine of due process in US law (and thus to their historically particular specification), their arguments are exclusively based on the core of the concept as it was already developed in the Enlightenment period, and is therefore also applicable to Europe, where due process is also still a fundament of the legal system. *See also Carol Harlow, 'Global Administrative Law: The Quest for Principles and Values' (2006) 17 European Journal of International Law 187, 191* https://doi.org/10.1093/ejil/chi158.

41 Tribe (n 31) Chapter 10, paragraph 7.

42 Blok (n 39) 248. It should be noted that when Westin and Baker talk about due process they refer to what in US legal doctrine is known as procedural due process. It is important to stress this because in the US, certain areas of privacy have found constitutional protection through the application of substantive due process rights. One of the elements of substantive due process is that some interest are protected to such extent that the government is not allowed to interfere with them at all. It is on this basis that the US Supreme Court has ruled to protect diverse "zones of privacy" (Roe v. Wade, opinion of the Court delivered by Justice Blackmun) such as the right to abortion, and the freedom to choose a wedding partner. However, this differs in crucial aspects from the right of access as due process, where it is fundamentally procedural due process that is at play. See Blok (n 39) 178-189.

43 Westin and Baker (n 1) 269.

44 Westin and Baker (n 1) 258.

45 Westin and Baker (n 1) 345.

46 Westin and Baker (n 1) 341-347.

47 Westin and Baker (n 1) 348.

right of access should be extended in three directions. First, "The general principle that should guide the inspection aspect of access legislation is that *any* record about an individual which is consulted by government officials in the determination of the individual's rights, opportunities and benefits under a government program should be open to inspection".[48] No longer should the right be dependent on the particular regulations governing the individual agencies. Second, the right of access should be applied to data not only at the moment when it is used in decision making, but also when data is merely held.[49] Third, the citizens' right to see their record should ideally apply not only to the relationship between government and citizen, but also to the relationship between people and private organizations.[50]

These extensions take the right of access beyond the realm of government decisions that have effect on the life of citizens to which due process is originally applicable. However, as we have seen, the essential function of due process is to act as a mechanism of control on the use of power. Westin and Baker argue that decisions of private entities such as banks and insurance companies have an enormous effect on people's lives and, therefore, a regime similar to the one applicable to government decisions should apply to them. In this regard, they point out that the Fair Credit Reporting Act, which deals with the private sector, paved the way to access laws in the public sector. Expanding the applicability in this direction is important because private decision making is also relevant in the context of the struggle for civil liberties, such as in the fight against discrimination.

One case taken from the work of Westin and Baker illustrates well the concept of right of access to personal data as due process and is paradigmatic for their perspective.[51] The case concerns a woman, Mrs. Tarver, who was receiving welfare support from a state-run aid program. In that context, a civil servant dealing with her case produced a report which included allegations that she abused her child. This report was subsequently handed over to a juvenile court, which had to decide if Mrs. Tarver would lose custody over her children. Mrs. Tarver was ultimately acquitted. Nonetheless she demanded to get access to the file to be able to contest the derogatory information it contained, but the department that held the file denied her access. Therefore, she went to court, with the support of the American Civil Liberties Union, arguing that the file might still be used by other caseworkers or other departments. Yet, her request was again rejected. Based on their due process view of the right of access, Westin and Baker argue that Mrs. Tarver should have been granted access to her file in such case, and the ability to contest and correct the information contained in it.[52]

To conclude, Westin and Baker argue for the introduction of a general right to access personal files. The primary aim of this right is to bring the citizen in a position that enables them to judge the veracity and relevance of the image painted of them in a file, and to allow them to contest unfair decisions if necessary. In this perspective, this right is an extension of the doctrine of (procedural) due process – the right to see and contest the evidence brought in criminal cases – towards all situations in which decisions are (or can be) made based on the processing of personal data.

48 Westin and Baker (n 1) 364.
49 Westin and Baker (n 1) 356-357.
50 Westin and Baker (n 1) 371.
51 Westin and Baker (n 1) 357-360.
52 Considering that Westin and Baker refer to Franz Kafka's *The Trial* may also help us understand what harm they want to prevent when arguing for the right of access from a due process point of view.

3. Informational Self-Determination: The Right to Freely Develop Your Own Personality

The right of access, and the other data subject rights, are associated by some scholars with "informational self-determination".[53] Informational self-determination was first introduced into data protection case law as a constitutionally protected right by the German Federal Constitutional Court (Bundesverfassungsgericht) in the 1983 Census decision (Volkszählungsurteil).[54] However, the right of access played only a minor role in that decision, and the court did not directly relate the right of access to informational self-determination. By analyzing the theoretical foundations of informational self-determination, I aim to create a clearer understanding of it, and to show that while the right of access is not at odds with this theory of data protection, it is not one of its central principles.

The background of the Census case is a 1982 census law enacted unanimously by the German parliament (Bundestag), allowing the state to collect detailed demographic information about its citizens through a questionnaire containing over 160 questions.[55] Citizens concerned about their privacy, and other possible risks connected to the increasing role of computers in public administration (including many German data protection scholars such as Podlech, Steinmüller and Brunnstein), challenged the constitutionality of the law in court.[56] The court ruled that the census, including the mandatory nature of participation, was in principle constitutional; nonetheless, it struck down the law for two main reasons. First, the data collected was not only going to be used for statistical purposes, which was the main goal of the census, but also for other tasks of public administration and in branches of government (aside from the federal government). Second, the court held that some of the procedural precautions were lacking detail and needed to be strengthened.[57]

The court ruled that the census, in its proposed form, violated the right to informational self-determination. This new right was derived by this court from the general right to personality, which itself had been developed in previous case law, and was grounded on the right to protection of human dignity (article 1(1) Constitution), and the right to protection of personal liberty (article 2(1) Constitution).[58] The purpose of this right to personality is to guarantee each individual the possibility to freely develop their own personality.[59] The court defined

53 See (n 7).
54 BverfGE 65. See also Gerrit Hornung and Christoph Schnabel, 'Data Protection in Germany I: The Population Census Decision and the Right to Informational Self-Determination' (2009) 25 *Computer Law & Security Review* 84 providing a general description of the case in English.
55 Hornung and Schnabel (n 54) 85.
56 Adalbert Podlech, 'Die Begrenzung Staatlicher Informationsverarbeitung Durch Die Verfassung Angesichts Der Möglichkeit Unbegrenzter Informationsverarbeitung Mittels Der Technik' (1984) 1984 *Leviathan* 85, 91; Jörg Pohle, *Datenschutz und Technikgestaltung: Geschichte und Theorie des Datenschutzes aus informatischer Sicht und Folgerungen für die Technikgestaltung* (Humboldt-Universität zu Berlin 2018) 144 https://www.hiig.de/publication/datenschutz-und-technikgestaltung-geschichte-und-theorie-des-datenschutzes-aus-informatischer-sicht-und-folgerungen-fuer-die-technikgestaltung/.
57 See *Census Decision C.III.2* (a) Citizens had to be proactively informed about their rights such, for example regarding the fact that it was not mandatory to answer to all questions; (b) It should be guaranteed that identifying information would be deleted at the earliest possible moment; (c) There should be strict rules to avoid conflict of interest of those executing the survey; (d) The legislature had to make sure that the actual questions that would end up in the questionnaire are in line with the law.
58 See *Census Decision* C.II "Prüfungsmaßstab ist in erster Linie das durch Art. 2 Abs. 1 in Verbindung mit Art. 1 Abs. 1 GG geschützte allgemeine Persönlichkeitsrecht."
59 Hornung and Schnabel (n 54) 86.

this right to informational self-determination, as a derivative of the right to personality in the context of processing of personal information by the state, as: "the authority of the individual to decide himself, on the basis of the idea of self-determination, when and within what limits information about his private life should be communicated to others."[60] In other words, the court seems to say that processing of personal data should be based on the individual's consent. The reader will note that given this definition, informational self-determination appears to be the same as Westin's notion of "privacy as control".[61] However – and this is essential – the court also ruled that citizens have to accept restrictions to their right to informational self-determination if there is an overriding general interest.[62] Such an overriding general interest was found to be present in the case of a national census and, as a result, the court held that the mandatory character of the census in itself did not infringe unlawfully on the right to informational self-determination.[63]

The most important aspect of the case is that the court discusses the data protection principles which need to be in place in order to protect the right of informational self-determination when processing is not based on consent. The court stresses the principles of transparency and purpose limitation, which serve to ensure that people are aware of the information which is being processed about them. The court supports the need for these principles on the idea that people can only develop freely when they know what other people know about them.[64] In other words, the court asserts that when people are in the condition of not knowing which data is held about them, this constitutes a restriction on their freedom of action. This creates a need for the people to be protected against the unrestricted collection, storage, use and transfer of information relating to them.[65]

It is hard to fully grasp the concept of informational self-determination only on the basis of the deliberations of the court. While the court did not refer to any particular underlying theories behind its decision, its interpretation of the German Constitution did not appear out of thin air. In fact, informational self-determination was being discussed actively in the legal literature in Germany at the time and it seems unquestionable that the court was influenced by this debate. According to German data protection scholars Podlech,[66] and more recently Pohle,[67] the court indeed took the concept and many of its deliberations directly from the academic literature.

Much of the German data protection literature from that time shares one characteristic, namely the fact that legal arguments are developed and grounded in sociological analyses of humans in society, and in particular on sociological systems theory.[68] The work of Luhmann, a sociologist who was one of the developers of that theory, was particularly influential on legal scholars at that time. For example, it influenced Podlech, a prominent data protection scholar, and one of the claimants in the Census case, as well as the PhD thesis of Mallmann, which contains the first clear formulation of the need for a right to informational self-determination.[69] Moreover, a report written by Steinmüller and others (1972) for the ministry of the interior titled *The foundation of data protection* [Grundfragen des Datenschutze – Gutachten im Auftrag des Bundesministeriums des Innern] also relied on sociological systems theory, and on Luhmann's theories more broadly.[70]

Two pillars of sociological systems theory constitute the epistemological precondition of the development of informational self-determination. First – the theory of functional differentiation, according to which modern society should be understood as a system constructed out of a collection of different subsystems (e.g. economic, religious, cultural), each with their own rules, norms, and interactions. The theory further claims that society's ability to progress is dependent on the development of this stratification. Second – sociological role theory, which explains how human beings have to play different roles in these different subsystems. People construct a personality within the confines allowed by the combination of various roles they have in various societal sub-systems. In the words of Luhmann, "every human being is expected to be able to relate his actions to several social systems and to unite their unbalanced demands in a personal synthesis of behavior."[71] It follows from these theories that the success of society as a whole is dependent on the ability of individuals to construct a consistent personality.

In *Constitutional Rights as an Institution*, Luhmann applies his sociological analysis of society to explain the function of the fundamental rights in making possible the functionally differentiated society. He explains that dignity and freedom "describe the basic conditions for the success of a person's self-portrayal as an individual personality."[72] On the one hand, freedom means that there must be aspects of action that do not appear to be directly caused by *external* factors, and therefore can be attributed to the person.[73] Luhmann sees dignity, on

60 See *Census Decision* C.II

61 And indeed the theory of informational self-determination was heavily influenced by Westin's *Privacy and Freedom. See for example Mallmann (n 20) 50-53. See for a more detailed account: Pohle (n 56) 34 and p6.*

62 See *Census Decision* C.II.*1.b)*.

63 See *Census Decision C.III.1.*

64 See *Census Decision* C.II.*1.a) :* "Mit dem Recht auf informationelle Selbstbestimmung wären eine Gesellschaftsordnung und eine diese ermöglichende Rechtsordnung nicht vereinbar, in der Bürger nicht mehr wissen können, wer was wann und bei welcher Gelegenheit über sie weiß"

65 See *Census Decision* C.II.*1.a):* "Hieraus folgt: Freie Entfaltung der Persönlichkeit setzt unter den modernen Bedingungen der Datenverarbeitung den Schutz des Einzelnen gegen unbegrenzte Erhebung, Speicherung, Verwendung und Weitergabe seiner persönlichen Daten voraus."

66 Podlech (n 56) 91 note 4; Henry Krasemann and Martin Rost, Interview with Adalbert Podlech, 'Interviews Zur Geschichte Und Theorie Des Datenschutzes in Deutschland: Podlech' (2008) from 20:32 http://www.maroki.de/pub/video/podlech/interview_podlech_pub_v3_transkription_v1.pdf

67 Pohle (n 56) section 2.4.2.

68 Hornung and Schnabel (n 55) 85; See generally Jörg Pohle, 'Social Networks, Functional Differentiation of Society, and Data Protection' [2012] arXiv:1206.3027 http://arxiv.org/abs/1206.3027. Pohle also argues that data protection is currently generally understood from an individualist perspective, while the purposes of data protection regulation would be better served by applying a structuralist approach.
Data protection theory in Germany was also heavily influenced by the development of cybernetics which studies the dynamics (and stability) of systems as they are regulated through relationships of processing and communication of information. See for example Steinmüller and others (n 71) section 2.2.3, who write that a constitutional foundation for data protection cannot be derived from an understanding of the constitution within itself, but instead should be based on cybernetics and sociology.

69 For instance Mallmann (n 20) chapter 3; Krasemann and Rost (n 66) from 30:22.

70 Wilhelm Steinmüller and others, *Grundfragen Des Datenschutzes Gutachten Im Auftrag Des Bundesministeriums Des Innern* (1972) https://dipbt.bundestag.de/doc/btd/06/038/0603826.pdf.

71 Niklas Luhmann, *Grundrechte als Institution. Ein Beitrag zur politischen Soziologie* (Ducker & Humblot 1965) 53.

72 Luhmann (n 71) 61. With this view, Luhmann criticizes the dogmatic idea of freedom and dignity in the German constitutional tradition, which according to him are tautological. If man is free and has dignity intrinsically from the fact of being man, then they would be in no need of constitutional protection. Instead, these values only have meaning when they are understood from a psychological and sociological perspective.

73 Luhmann (n 72) 66.

the other hand, as the *internal* ability of the person to construct a consistent self-representation. According to him, freedom and dignity are enshrined in the Constitution to protect the conditions that people need for successful self-portrayal.

Informational self-determination should be understood against the background of these conceptualizations of human dignity and freedom, as developed in the context of sociological systems theory. These theoretical foundations explain why individual freedom and dignity, which are required to construct a personality, depend on the capacity of individuals to know the information that other actors in society, including the state, have about them. Against this background, we should also read the Census case and, in particular, the following crucial lines of the court's judgment:

> "Anyone who is not able to oversee with sufficient certainty what information concerning him is known in certain areas of his social environment, and who is not able to assess the knowledge of possible communication partners to a certain extent, can be significantly inhibited in his freedom to plan or decide on the basis of his own self-determination. A social order in which individuals can no longer ascertain who knows what about them and when – and a legal order that makes this possible – would not be compatible with the right to informational self-determination."[74]

With respect to the relation of the right of access to informational self-determination it should be noted that this right was not central in the work of the theorists who developed informational self-determination, and it also played only a minor role in the decision of the court in the Census case. The court saw the right of access as a safeguard for "effective legal protection", not as a safeguard for the protection of informational self-determination.

The right to effective legal protection is granted by Article 19(4) of the German Constitution which states that "where rights are violated by public authority the person affected shall have recourse to law". The claimants argued that the census infringed upon this right because citizens would not be able to know which part of the government would get the information and for which purposes it would be used, and would therefore also not have judicial recourse against these further uses of their data.[75] The court ruled that since the statistical offices were bound to record every transition of data and the citizens had the right to access these records (of the data and of the transmission), the right of the citizens to judicial recourse was sufficiently guaranteed.[76] Interestingly, by understanding the right of access as a means to guarantee the right to effective legal protection, the analysis of the German court could be interpreted as a "due process" understanding of access.[77]

In conclusion, following Schwartz, informational self-determination ought not to be seen as a right of control over personal data, or simply as the German version of "privacy as control".[78] "Privacy as control" is primarily focused on keeping information private and allowing sharing only on the basis of consent, whereas informational self-determination protects people's right to freely develop their personality, by keeping data flows limited, transparent, and geared towards what is necessary for a free and democratic society. The right of access to personal data is not central to informational self-determination, and is instead, also in the German court, understood, in line with the due process view, as a safeguard to effective legal protection.

4. Rodotà: Access as Power Reversal

The final (and crucial) theoretical root of the right of access can be found in the work of Italian scholar Stefano Rodotà. In his 1973 book called *Computers and Social Control* [Italian original: Elaboratori Elettronici E Controllo Sociale], Rodotà explores the kind of legal-institutional framework that would be needed in order to regulate the use of computers and the processing of personal data.[79] I discuss this work here because it offers an understanding of data protection regulation in which the right of access plays a central role. Its central proposition is the collective use of the right of access to personal data as a means to bring structures of power in society under social control. While the book has been one of the foundational texts of the Italian data protection literature,[80] it has received rather limited attention in international scholarship (which now, as well as then, is dominated by the English language).[81] Moreover, while *Computers and Social Control* is informed by the main texts on data protection of the time, including those of Westin, Simitis and Steinmüller,[82] it presents a distinctive angle to data protection, based on a different political-philosophical grounding.

Computers and Social Control is currently not widely known. However, this work, or at least the spirit of the text, arguably had a quite substantial influence on the development of European data protection legislation. Rodotà was a key member of the European data protection policy community, and had a strong influence on data protection theory and practice.[83] He was the first chairman of the Italian Data Protection Authority ("Garante") and was later appointed as chairman of the Article 29 working party. In that capacity, he was a member of the committee that drafted the Charter of Fundamental Rights of the EU,[84] and in this role he proposed by amendment to add

74 *Census decision* C.II.1.a): " Wer nicht mit hinreichender Sicherheit überschauen kann, welche ihn betreffende Informationen in bestimmten Bereichen seiner sozialen Umwelt bekannt sind, und wer das Wissen möglicher Kommunikationspartner nicht einigermaßen abzuschätzen vermag, kann in seiner Freiheit wesentlich gehemmt werden, aus eigener Selbstbestimmung zu planen oder zu entscheiden. Eine Gesellschaftsordnung und die sie ermöglichende Rechtsordnung, in der jemand nicht mehr weiß, wer, wann, was und bei welcher Gelegenheit über ihn weiß, ist mit unserer Verfassung nicht vereinbar."

75 See *Census Decision* A.II.

76 See *Census Decision C.V.*

77 See BJ Goold and others, *Public Protection, Proportionality, and the Search for Balance* (Ministry of Justice 2007). This work discusses the right to effective legal protection in the German Constitution and makes the connection with fair trial rights such as those defined in article 6 of the ECHR.

78 Paul Schwartz, 'The Computer in German and American Constitutional Law: Towards an American Right of Informational Self-Determination' (1989) 37 *The American Journal of Comparative Law* 675, 690 https://law-cat.berkeley.edu/record/1113532/files/fulltext.pdf.

79 Rodotà (n 2).

80 Emilio Tosi, 'High Tech Law in Italy' in Emilio Tosi, *High Tech Law: The Digital Legal Frame in Italy* (Giuffre Editore 2015) 5 http://www.dimt.it/wp-content/uploads/2015/11/Estratto-HTL-Cap.1.pdf.

81 At the time of writing *Computers and Social Control* has 60 citations according to Google Scholar, versus 6594 for Westin's *Privacy and Freedom*. Rodotà refers to in the introduction to the book to a German bibliography of the time which cites 392 texts in English, 15 in German and only 4 in other languages, showing this is a long existing situation (Rodotà (n 2) 7).

82 Rodotà refers to Westin's *Privacy and Freedom* as well as *Databanks in a Free Society* throughout the book.

83 See Bennett (n 3) 128; Lee A Bygrave, 'International Agreements to Protect Personal Data' in James B Rule and Graham Greenleaf (eds), *Global Privacy Protection* (Edward Elgar 2008) 18; Gloria González Fuster, *The Emergence of Personal Data Protection as a Fundamental Right of the EU* (Springer Science & Business 2014) DOI 10.1007/978-3-319-05023-2_3. All highlighting his role and influence on several important committees and expert groups.

84 Article 29 Working Party, 'Fifth Annual Report: On the Situation Regarding the Protection of Individuals with Regard to the Processing of

the right of access to personal data to the Charter, thereby having a crucial role in getting the right recognized as a fundamental right in Europe.[85]

In *Computers and Social Control*, Rodotà discusses the question of whether the existing legal framework for the protection of privacy and confidentiality is able to tackle the most pressing societal problem caused by the processing of personal data by automated means, which he clearly identifies – already at the time – as the accumulation of (economic and political) power vested in the public and private organizations which collect and process personal data. According to his analysis, the main negative effect of the increased use of personal data is the shift of power away from people.[86] On the one hand, organizations have an increasing ability to evaluate and control people through the collection and combination of many sources of personal data. On the other hand, people are less capable of exercising control over the organizations which have the power to control them.

Rodotà provides various practical examples of this control over individuals through the use of personal information: credit rating agencies in the US, as well as in Italy, creating profiles on individuals; the car manufacturer FIAT illegitimately creating personal files on employees, journalists, other industrialists, etc.; intelligence agencies collecting information about politically deviant behavior.[87] One of the crucial dangers of this situation is the psychological deterrent effect that the mere existence of these systems exerts on the behavior of people. He explains that, in the context of credit agencies, for example, an individual may be induced to continue the payment of installments on a faulty product even if it would be legitimate to refuse such payment, because the non-payment may be recorded in the system without the reason behind it, and therefore lead to the refusal of credit in the future. Profiling by intelligence agencies causes people to censor their own political speech and stop legitimate political activity. In the words of Rodotà:

> "The inability to know the places where records can be collected, the possibility of errors or inaccuracies in the data used, as well as the relationships that can be established between the most diverse information and the conclusions that can be drawn from it, all these elements contribute to increasing the fear of the individual towards the new power, all the more intrusive as it is more tied, nowadays, to the acts of daily life."[88]

Rodotà notes that problems around the use of personal data, including the institutionalized power imbalance it creates, existed before the advent of the computer, but that these will be exacerbated by the digital transformation. Contrary to Westin and Baker's conclusion that the introduction of computers will not pose new problems to civil liberties, Rodotà concludes that "the computer does not intervene to corrupt a healthy environment, but to increase and multiply the existing possibilities of abuse."[89] This is in particular the case where an increased centralization of power go hand in hand with the loss of the ability to control those systems of power. Following Klaus Lenk – a German scholar of social informatics – Rodotà expects this to happen for example in the political domain.[90] He quotes Lenk stating that "there may be "vertical" shifts from local government to central government, or, for federal political systems, from State (Land) to federal government. Power might be also shifted horizontally, from the legislative to the executive, form parliament to the government, only the latter having access to large integrated data bases and being abler to make full use of them".[91] Furthermore, he argues that highly expert knowledge is needed to use computers and extract meaningful knowledge from databases, which in turn leads to more technocratic forms of power, and a loss of control for the majority of the people.

The way that Rodotà analyses the problem of data protection derives from a more general critical view on the unequal distribution of power in society, and in particular on the role of the law in maintaining that distribution. Throughout *Computers and Social Control,* Rodotà follows a tradition of fundamental critique of the "bourgeois" legal system.[92] According to this analysis, the legal system generally serves the interests of those that are already in a powerful position, thereby fortifying the prevailing inequalities in society. A key problem addressed by Rodotà, which derives from this tradition, is that the law implicitly presupposes an abstract equality of power between the parties involved, while in reality this equality does not exist. Reality offers plenty of examples in which this equality is clearly fictional: the relation between employer and employee, the citizen and the state, the doctor and the patient, the consumer and the producer, the holder of an electronic database and the person whose data is held.

In Rodotà's view, the then current system of protection of personal information, which focuses on notions of "privacy" and "confidentiality", is not fit to deal with these questions of balance of power, because these concepts originate in private law and, in particular, property law, to which the critique of bourgeois law is primarily directed. In practice, the realm of privacy is erected predominantly to allow the rich and powerful to retain some sphere of autonomy, thus

Personal Data and Privacy in the European Union and in Third Countries Covering the Year 2000, Part II' (W P54, 6 March 2002) 23.

85 See Convention, 'CONVENT 35 Amendments Submitted by the Members of the Convention Regarding Civil and Political Rights and Citizens' Rights' 447-468 https://register.consilium.europa.eu/doc/srv?l=EN&f=ST%204332%202000%20INIT. Rodotà was not alone in proposing this. The group included Jean-Luc Dehaene, (personal representative of Belgium), Kathalijne Buitenweg (Dutch MEP for the Greens), Andrea Manzella (representative of the national parliament of Italy), Piero Melgorani (representative of the national parliament of Italy), Elena Omella Paciotti (Italian MEP for PES), Stefano Rodotà (representative of the government of Italy), Johannes Voggenhuber (Austrian MEP for the Greens).

86 Rodotà (n 2) section 1.5.

87 Rodotà (n 2) sections 1.2 and 1.3.

88 Rodotà (n 2) 16 (Italian original: "L'inconoscibilità dei luoghi dove una documentazione può essere raccolta, la possibilità di errori o inesattezze dei dati utilizzati, le relazioni istituibili tra le più diverse informazioni e le conclusioni che possono esserne tratte: tutto concorre a far crescere il timore dell'individuo verso il nuovo potere, tanto più invadente quanto piú legato, ormai, agli atti della vita quotidiana.").

89 Rodotà (n 2) 21 (Italian original: "Cosi, l'elaboratore elettronico non interviene a corrompere un ambiente sano, ma ad accrescere e moltiplicare le possibilità di abuso già esistenti.") Rodotà attributes the less radical conclusion by Westin to "ideological ambiguities" in his thinking.

90 Rodotà (n 2) section 1.5.

91 Rodotà (n 2) 38 (Italian original "vi sono spostamenti verticali dal governo locale al governo centrale o, per i sistemi politici federali, dagli stati al governo federale. Il potere può inoltre spostarsi orizzontalmente dal legislativo all'esecutivo, avendo quest'ultimo un accesso privilegiato ai dati trattati con l'elaboratore elettronico" Quoting Klaus Lenk, *Automated Information Management In PublicAdministration; Present Developments and Impacts., vol 4* (OECD Publications 1973) 104 https://files.eric.ed.gov/fulltext/ED088463.pdf.

92 This tradition, according to which laws tend to protect the pre-existing power structures in a society, derives from Karl Marx. See generally e.g. Gary Young, 'Marx on Bourgeois Law' in Rita James Simon and Steven Spitzer, *Research in law and sociology: an annual compilation of research, vol 2* (Jai Press 1978). Similar lines of thought are driving the critical legal studies movement (See e.g. Duncan Kennedy, 'The Structure of Blackstone's Commentaries' (1978) 28 *Buffalo Law Review* 205 https://digitalcommons.law.buffalo.edu/buffalolawreview/vol28/iss2/2/.

helping to protect their interests. This can be recognized, for example, in cases where a right to privacy is invoked by wealthy people when the tax authorities want to collect more data to determine their level of income.[93]

Similarly, according to Rodotà, consent as form of regulation fails because it ignores power relations.[94] He argues that consent is illusory as a basis for lawful processing, because there are many cases in which individuals have no real choice but to accept the processing of personal data. This is caused by the fact that there is almost always a pre-existing inequality of power, and by the fact that this inequality is exacerbated by the opaque and specialized nature of electronic data processing. Therefore, according to Rodotà, the existing approach to regulating the processing of personal data, which ignores disparities of power, does not work and only aggravates power inequalities.[95]

As an alternative to the existing framework of privacy and confidentiality, Rodotà proposes a new institutional framework which, instead of presupposing an equality between individuals and controllers of data, takes the imbalance as a starting point and aims at re-balancing it. In order to achieve this, he proposes a series of regulatory tools. His central policy proposition is the expansion of the right to access personal data, as this will give people the ability to assess and contest how data is being used. Moreover, it will more generally improve the ability of people to hold power accountable. According to Rodotà, "The regulation of the right of access imposes a completely new regulation of secrecy and opens up the possibility of new developments in civil rights, expanding the knowledge available to citizens, and thus their power of control over public and private action."[96] Moreover, he contends that the use of computers to manage databases, that were previously manual, can actually make it easier to give people access to data. He writes: "In this way, the power to control the management of information can be extended, theoretically, to each member of a community: once the possibilities of access are extended and spread, this can not only result in a more immediate control over the management of information but will above all affect the control over power that is based on that information."[97]

93 Rodotà (n 2) 16-17. Conversely, as Rodotà notes and we still see today, we also see how privacy protection is often less for marginalized people, for example in the extended use of personal information and surveillance in the governance of social security systems.

94 Rodotà (n 2) 45-52.

95 Rodotà says that the focus on the formal equality of power of contracting partners clashes with article 3 of the Italian constitution which holds that the State has the obligation to "remove the obstacles of an economic and social nature which, by effectively limiting the freedom and equality of citizens, impede the full development of the human person and the effective participation of all workers in the political, economic and social organization of the country" (Rodotà (n 2) 47). The finding that there are limits to the protection of privacy based on informed consent is currently still widely discussed. See, for example, Solon Barocas and Helen Nissenbaum, 'On Notice: The Trouble with Notice and Consent', *Proceedings of the Engaging Data Forum: The First International Forum on the Application and Management of Personal Electronic Information* (2009) https://nissenbaum.tech.cornell.edu/papers/Big%20Datas%20End%20Run%20Around%20Procedural%20Protections.pdf; Daniel J Solove, 'Privacy Self-Management and the Consent Dilemma' (2013) 126 *Harvard Law Review* 1880 https://harvardlawreview.org/wp-content/uploads/pdfs/vol126_solove.pdf.

96 Rodotà (n 2) 67 (Italian original: "La disciplina del diritto di accesso, dal canto suo, impone una regolamentazione del tutto nuova del segreto e apre la possibilità di nuovi sviluppi dei diritti civili, ampliando le conoscenze a disposizione dei cittadini, e quindi il loro potere di controllo sull'azione pubblica e privata.").

97 Rodotà (n 2) 79 (Italian original: "In tal modo, il potere di controllare la gestione delle informazioni può essere esteso, teoricamente, fino a ciascun membro di una collettività: una volta ampliate e diffuse le possibilità di accesso, ciò può non soltanto risolversi in un più immediato controllo sulla gestione delle informazioni, ma soprattutto incidere sul potere che su quelle informazioni si fonda.").

In order to expand the possibilities of popular control, Rodotà argues that the right of access should go further than just the right of the person concerned regarding their own data. There should be a right to access anonymous as well as aggregated data, and socially relevant statistical and economic data.[98] These types of data are normally held in powerful centralized institutions, only accessible to certain elites and used to exercise control over society. In his view, expanding access to data would mean: "putting citizens in a position to discuss and challenge a considerable share of public and private decisions, operating in less unequal conditions with respect to the holders of the formal power of decision."[99] In this perspective, there is a strong connection between the purpose of the right of access to personal data and the purpose of general freedom of information rights.

Rodotà emphasizes that the right of access to personal data will not, in itself, solve the problem of informational power asymmetry. On the contrary, access, like consent, could paradoxically undermine the position of individuals, by functioning as a way to legitimize processing of personal data, even when the lawfulness of such processing is questionable. In this regard, he writes there can be the objection that "the right of access ends up appearing just as a means of legitimizing the collection and processing of large quantities of personal information, justified by the argument of the possibility of everyone to know the information collected on themselves."[100] Moreover, there is the problem that individual pieces of information, that can be obtained through access requests, do not provide sufficient knowledge and power to the individual. Rodotà warns that, in these ways, a restricted interpretation of the right of access can lead to a strengthening of these existing power structures.

In order to overcome these pitfalls, Rodotà proposes to embed the right of access in a collective framework, a reoccurring point in many dimensions of his analysis. Three collective solutions, which are all aimed at making the social control over institutions of power more effective, stand out. First, Rodotà argues for the establishment of an institution (similar to the current function of independent supervisory authorities) in charge of checking data controllers and looking beyond the claims originating from specific violation of the rights of individual citizens, i.e. looking at the social dimension.[101] Second, Rodotà writes that individual claims for damages are ineffective means of holding data controllers accountable for multiple reasons.[102] The claim for the individual is often too small to make it worth the effort of a legal action. Moreover, even if an individual starts a claim and wins, the economic effect of the individual's single claim is so minor that it won't act as an effective incentive for the controller to structurally change its behavior.

This problem is made worse by the fact that privacy harms are mostly understood only at the individual level, while the societal

98 Rodotà (n 2) 115-118.

99 Rodotà (n 2) 120 (Italian original "Quest'ultimo tipo di accesso realizza già una forma di partecipazione, mettendo i cittadini in condizione di discutere e contestare una notevole quota di decisioni pubbliche e private, operando in condizioni di minor disparità rispetto a quelle dei detentori del potere formale di decisione.").

100 Rodotà (n 2) 101 (Italian original: "... il diritto di accesso finisce con l'apparire proprio come un mezzo per legittimare la raccolta e il trattamento di grandi quantità di informazioni personali, giustificate poi con l'argomento della possibilità di ciascuno di conoscere le informazioni raccolte sul suo conto ... ").

101 Rodotà (n 2) 114-115.

102 Rodotà (n 2) 53-55.

harm – which is often bigger and qualitatively different from the mere addition of the individual harms – is mostly overlooked. As a potential strategy to overcome these issues, Rodotà speaks favorably of the American system of class action and proposes to introduce the possibility to also claim non-material damages. Third, he also mentions the problem that the systems of data processing are extremely complex, and that understanding these processes and their connected dangers is, therefore, incredibly difficult if not impossible for the individual citizen.

In more recent work, Rodotà argued that NGOs should be allowed to take up claims for citizens and stressed their role in asking supervisory authorities to investigate cases.[103] While this last proposal is not yet concretely mentioned in *Computers and Social Control*, it clearly resonates with the other ideas that he presented in the book for overcoming the problem of atomization through collective efforts.

Many of Rodotà's proposals to attain this social control are now part of the GDPR. Article 80 GDPR, for example, gives data subjects the right to be represented by an NGO. The fact that several organizations, such as NOYB – European Center for Digital Rights and Privacy International and many others, are now using the right of access to investigate practices of data controllers and to substantiate complaints to supervisory authorities is an indication that a framework, which in line with Rodotà's view, strengthens collective practices has now become central to the governance of data protection in practice.[104]

While Rodotà's thinking cannot be easily tied to one specific school of taught, it is helpful to consider the political and intellectual context in which he is working. After the defeat of fascism, Italy was rife with socio-political experimentation. Rodotà was part of the Radicali Italiani, a libertarian movement, and wrote for their journal *Argomenti Radicali*, in which writings by Noam Chomsky were published as well.[105] Later Rodotà became an independent member of parliament for the Italian communist party and subsequently for its successor, the Democratic Party of the left. Given this background and the content of his work, we may call Rodotà a libertarian socialist, if we define the core postulate of this political stance – following Chomsky – as believing that systems of authority always have the burden of proof upon themselves to demonstrate that they are justified.[106] However, Rodotà seems to have been more focused on finding positions that allowed him to effectively change the legal system, than to dogmatically hold to any particular political philosophy[107]

To conclude, the primary goal of the right of access to personal data in Rodotà's framework is to contribute to attaining social control over the processing of personal data. Starting from the fact that personal data is often collected in situations of power imbalance and used to exert control over citizens, he argues that the right of access should serve as a counterbalance, in particular to place the centers of power under the control of citizens. In order to achieve this, Rodotà proposes a framework that supports collective action.

5. Analysis

Bringing together the historical roots discussed in the previous sections -- with regards to the right of access and to the broader foundations of, and values safeguarded by, data protection in general -- accentuates their relevance in relation to many questions we are facing today.

The historical perspective suggests that the right of access to personal data, is not primarily an expression of the idea of "privacy as control" nor of "informational self-determination". Instead, there are two strong alternative theories/explanations, in both of which access operates as a tool to reverse informational power asymmetries. The right of access generalizes the doctrine of due process, which helps to expose errors and bias, and thereby contributes to correct and just decisions. Moreover, it allows people individually, but also collectively, to contest and confront systems of decision making. In line with the words of Westin and Rodotà (as quoted in the opening epigraphs at the beginning of this text), access to personal data should be seen as a "basic citizen right" or "civil right", which establishes and enables a new way of regulating power in a free society. The framing of the right in these terms is most relevant as it may significantly impact some of the fundamental ongoing discussions on the role and scope of the right of access.

From recent academic literature, as well as from court cases, it is clear that there is no consensus about the purpose of the right of access to personal data. In two recent cases, *Nowak* and *YS and Others*, the European Court of Justice (ECJ) discussed this question.[108] In both cases, the reason data subjects requested access was to allow them to assess and possibly contest the validity of a judgment made about them, but the purpose of the requests is not taken into account in assessing the validity of the requests.

In *Nowak*, the claimant requested access to his exam transcript as well as the comments by the examiner. Kokott, the AG in this case, argued that access should be granted because the purpose of the right of access was not limited to "verify in particular the accuracy of the data and the lawfulness of the processing" as "even irrespective of rectification, erasure or blocking, data subjects generally have a legitimate interest in finding out what information about them is processed by the controller."[109] The due process view on access would allow for an even stronger conclusion in this regard. In fact, it can be argued that the legitimate interest to access personal data exists *especially* when the data subject wants to access information with the purpose of being able to assess and contest a decision made about him or her.

In *YS and Others*, the ECJ has ruled that the purpose of data pro-

103 Stefano Rodotà, 'Of Machines and Men' in Mireille Hildebrandt and Antoinette Rouvroy (eds), *Law, Human Agency and Autonomic Computing* (Routledge 2011) 192.

104 See e.g. Olivia Tambou, 'Lessons from the First Post-GDPR Fines of the CNIL against Google LLC Reports: France' (2019) 5 European Data Protection Law Review (EDPL) 80. Tambou, provides an analysis of a fine by the CNIL against Google, which was the result of a collective complaint of around 1.000 users filed by La Quadrature du Net and NOYB); 'Our Complaints against Acxiom, Criteo, Equifax, Experian, Oracle, Quantcast, Tapad' (Privacy International, 8 November 2018) http://www.privacyinternational.org/advocacy/2426/our-complaints-against-acxiom-criteo-equifax-experian-oracle-quantcast-tapad.

105 See Argomenti Radicali (1977) 1 1 http://bibliotecaginobianco.it/flip/ARG/0100/#2.

106 See Noam Chomsky, *On Anarchism* (Penguin 2014).

107 For example, in its Report on the Charter on Fundamental Rights related to technological innovation, the European Group of Ethics in Science and New Technologies of which Rodotà was a member, argued for including the right of access to personal data to the Charter, primarily with reference to informational self-determination.

108 Case C-434/16, *Nowak*, ECLI:EU:C:2017:994; Case C-141/12, *YS and Others*, ECLI:EU:C:2014:2081. See generally on these cases, See generally on these cases, Nadezhda Purtova, 'The Law of Everything. Broad Concept of Personal Data and Future of EU Data Protection Law' (2018) 10 *Law, Innovation and Technology* 40. https://www.tandfonline.com/doi/full/10.1080/17579961.2018.1452176.

109 Case C-434/16, *Nowak* (Opinion of Advocate General Kokott), ECLI:EU:C:2017:582 para 39.

tection law is to guarantee the protection of the applicant's right to privacy with regard to the processing of data relating to him or her, and that, in line with this, the purpose of the right of access should not be understood as a right to access administrative documents relating to them.[110] However, from a due process perspective of data protection and the right of access, their purpose is clearly not limited to safeguarding privacy. Moreover, from this point of view, the right of access may well be understood as a right to administrative documents, to the extent that those documents apply to the case of one individual person.

The current scholarly debate on "the right to explanation" can also benefit from the historical perspective on the right of access. In particular, the analysis shows that the right of access has always been fundamentally about the right to understand and contest decisions made through the processing of personal data. From this point of view, Article 15 of the GDPR is a precondition for "the right to explanation" (and contestation). More significantly, the right of access, from its genesis, aimed at giving data subjects transparency and the ability to hold power to account. In this perspective, the historical analysis strongly supports the argument made by legal scholars Selbst and Powles that a right of explanation is at the core of Article 15 GDPR.[111] Indeed, if we extend the analogy of procedural principles of justice, which are at the core of the due process view of access rights, many algorithms in today's society can be seen as laws which we do not know the content of, or perhaps even the existence of, and for that reason alone they are intrinsically unjust.

Related to this, the analysis also shows that data protection has a long history of considering that concentrated power can be more effectively regulated through collective practices. This is most evident in the work of Rodotà, according to whom rights given to and exercised by the individual alone will not be enough to empower citizens in practice and can even wrongfully legitimize processing practices, by concealing the underlying power asymmetries. He points out the emancipatory potential of collective action, for example, when he argues for introducing a new right to facilitate class action lawsuits. More importantly, Rodotà states that the system of rights should aim to protect the citizens not as individual units, but as a collective citizenry, empowered to create democratic (popular) control.

It should be noted that collective aspects are also present in the other two traditions. The landmark Census case in Germany was led by a collective of data protection scholars including Podlech, Steinmüller and Brunnstein. And even though the due process view is mostly about protecting the rights of individuals, Westin and Baker clearly situate their call for a generalization of the right of access in the collective demands of the civil rights movement. Also, for them, the right of access provides a first condition to acquire knowledge about the processing of personal data, which also could be used for collective goals such as addressing structural discrimination in decision making.[112]

Lastly, this analysis should also inform how we study the right of access in practice. It found that a fundamental goal of the right of access to personal data is to give citizens a legal tool to confront and contest power in as far as such power depends on the use of personal data. The insight that there is a fundamental imbalance of power between individuals and the actors who wield control through data-intensive systems is the underlying reason for the creation of this right. It would be naive to expect that these strong actors would lose their relative position of power as a result of the mere creation of this right or would willingly comply to the fullest extent without any pushing back. Following this insight, in order to assess the effectiveness of the right of access, we must look at how it functions in these spheres of contestation.

Multiple studies analyze the effectiveness of the right of access to personal data in practice, and the conclusion drawn by most is that its effectiveness is questionable. Organizations often do not uphold the law,[113] they use "discourses of denial",[114] and data subject rights do not function well in increasingly complex digital realities.[115] These conclusions, however, follow from a limited view of the position of the right of access within the larger framework of data protection. We *should not* merely ask if the right is working from a formal legal point of view (e.g. the right does not work, because organizations do not respond within the legally required term). Rather, we should ask if and how the right is *functioning* from a socially embedded point of view that takes account of its inherent nature of means of contestation, and the actual functioning of the right of access. Does the right allow people to meaningfully contest decisions made on the bases of their personal data? Did the balance of power shift in favor of the holder of the right of access as a result of exercising the right?

After having looked at some of the implications of the historical analysis on the right of access. I will now turn to some analysis of the foundations of data protection more broadly. To clarify the distinctions between the four theories that have been discussed Table 1 below elucidates the central governing principles (or focal points) I associate with these theories. Still, I acknowledge that on the level of actual regulation proposed, they have more in common than they differ.[116]

Table 1 The theories of data protection and their central principles

Theory	Central principles
Privacy as control	consent
Informational self-determination	transparency + purpose limitation
Due process	access + rectification + erasure
Social control / power reversal	access + collective action

The central claim of the theory of "privacy as control" is that people should be able to determine for themselves when, how and to what extent information about them is shared with others. Consent is the

110 Case C-141/12 , *YS and Others*, ECLI:EU:C:2014:2081 para 46.

111 Selbst and Powles (n 13). Selbst and Powles argue that articles 13-15 GDPR give a right to "meaningful information to the logic involved" in automated decision making, and this should be interpreted as a right to explanation, meaning, an explanation understandable to data subjects, about the system as well as about individual decisions made by those systems.

112 Westin and Baker (n 1) 371. ("For example, disguised or hidden criteria as to race, sex, political or cultural beliefs, and other discriminatory standards have been declared improper by recent legal enactments: with due process protections [i.e. in context right of access and challenge], individuals will be better able to see whether such criteria are really being rejected in practice.").

113 Mahieu, Asghari and van Eeten (n 14) 17.

114 Clive Norris and Xavier L'Hoiry, 'Exercising Citizen Rights Under Surveillance Regimes in Europe – Meta-Analysis of a Ten Country Study' in Clive Norris and others (eds), *The Unaccountable State of Surveillance: Exercising Access Rights in Europe* (Springer International Publishing 2017) 434-449 https://doi.org/10.1007/978-3-319-47573-8_14.

115 Vrabec (n 7) chapter 4.

116 For example, the right of access and other data subject rights such as erasure and rectification were explored in all these traditions. See, for instance, Steinmüller and others (n 70) 123-126; Rodotà (n 2) 67; Westin and Baker (n 1) 360.

main principle associated with this vision.[117] Informational self-determination includes and builds upon that claim, but further acknowledges and stresses that very often people are not in a condition of deciding when, and under which conditions, information about themselves is communicated to others. Consequently, in all cases when data is communicated, people should be able to know who has access to their personal information, and for which purposes it is used. In order to enable people to have this knowledge, informational self-determination relies on the principles of transparency and purpose limitation. It follows, therefore, that while recent scholarship generally conflates "privacy as control" and "informational self-determination", these are in fact *different*.

Moreover, the notions of informational self-determination and individual control over personal data are often conflated with the notion of economic control over personal data. For example, former European Commissioner for Justice Viviane Reding put the notion of informed consent, the notion of the right to erasure of data for which consent is revoked, and the right to data portability all under the banner of "putting individuals in control of their data".[118] Similarly, prominent legal scholar Orla Lynskey argues that both portability and the right to be forgotten promote informational self-determination.[119] But it is important to note that the purpose of consent and erasure is to give people the right to "determine for themselves when, how and to what extent information about them is communicated to others", *and* therefore allow people to self-present. On the other hand, the purpose of portability is very *different*, i.e., to allow people, as consumers, to more easily switch between services, and increase economic freedom and efficiency. This function of giving people control over data in order to enable economic freedom and competition is new in data protection and has no precedent in the historical justifications of data protection.[120]

Probably the most important insight that the historical analysis provides is that the staunchest proponents of control rights argued for control over data because they believed this was a necessary tool to shift power dynamics by creating the possibility to assess and contest individual decisions as well as systems of decision making. Such a connection is often overlooked in the ongoing debates about data subjects' control, which often focus exclusively on the individual's control over the flow of data as such, and even tends to steer in the direction of data ownership, as this is seen as the ultimate form of control over data.

The object of control for "privacy as control" is the personal data as such, and for "informational self-determination" it is the development of individual personality. Meanwhile, for the "due process" as well as for the "power reversal" perspectives, the primary objects of control are the organizations which engage in the processing of personal data, as well as the decisions they make and the processes they adopt. This shift of perspective is crucial. In fact, by focusing on a restricted understanding of the right of access – as exclusively relating to personal data – we may be falling into what Selbst and others have called a "framing trap", i.e. remaining stuck in a "data frame", while losing sight of other more relevant "socio-technical" or "informational power asymmetry" frames.[121]

Informational power asymmetry, which is getting more and more attention in recent works of our field,[122] has always been a core theme of data protection. In particular, Westin and Baker, as well as Rodotà, propose frameworks for data protection regulation which fundamentally aim at providing a system for balancing power. While Westin and Baker write about "databases", Rodotà about "electronic data processing", and technology has obviously developed a lot since the time of their writing, their central concerns – i.e. the protection of civil liberties, keeping discrimination at bay, and keeping the centralizing of power in new social-technical systems under democratic control – are among the core questions of data protection today. It would be no exaggeration to say that balancing of power has been the central justification for data protection and is still the very reason for the existence of the GDPR.

6. Conclusion

A key message of this paper is that the different theories of data protection are grounded in different scientific discourses, which conceptualize the relationships between knowledge, law, technology and power in different ways, and therefore offer significantly different justifications for data protection.

Westin and Baker start from the value of due process, a central aspect of constitutional thinking, rooted in the enlightenment. The central idea is that if knowledge has to be produced about the individual, then the individual has to be part of the knowledge production as a form of counter-power. With the increasing use of data, particularly in the context of the welfare state, the due process procedures, understood as a way of regulating power/knowledge relations, are then used beyond the domain of penal law where they originated. Here we see, in short, how an existing form of truth production is translated into a new socio-technological situation.

The German tradition of informational self-determination, in contrast, originates from the then nascent field of sociology. Here we observe how the concepts of liberty and autonomy evolved when man turned the gaze upon himself. With the development of new forms of knowledge (namely sociology), subjectivity is introduced in defining fundamental rights; people should have the right to know and control which data is held about them, because their free self-development is understood to be conditional on knowing this.

Stefano Rodotà, lastly, looks directly at the effects that technolog-

117 In *Privacy and Freedom*, Westin stresses the importance of consent, and several authors such as Barocas and Nissenbaum associate privacy as control mainly with consent. Barocas and Nissenbaum (n 95) 45 ("allowing information subjects to give or withhold consent maps onto the dominant conception of privacy as control over information about oneself"); See Joris Van Hoboken, 'The Privacy Disconnect' in Rikke Frank Jørgensen (ed), *Human Rights in the Age of Platforms* (MIT Press 2019) 265-269 https://www.ivir.nl/publicaties/download/privacy_disconnect.pdf. It should be noted that these authors criticize a simplistic "privacy as control" understanding of the fundamental right to data protection or privacy.

118 Reding (n 6) 124-126.

119 Lynskey (n 10) 591 ("The additional rights granted to individuals by data protection, such as the right to data portability, allow individuals to better determine how their data is processed, by whom and for what purposes. In other words, they promote informational self-determination.").

120 See generally James Meese, Punit Jagasia and James Arvanitakis, 'Citizen or Consumer? Contrasting Australia and Europe's Data Protection Policies' (2019) 8 *Internet Policy Review* https://doi.org/10.14763/2019.2.1409. This article provides an excellent analysis of the values underlying the introduction of a right to data portability.

121 See generally Andrew D Selbst and others, 'Fairness and Abstraction in Sociotechnical Systems', *Proceedings of the Conference on Fairness, Accountability, and Transparency* (ACM 2019) https://doi.acm.org/10.1145/3287560.3287598.

122 See e.g. Lynskey (n 10) 592-597: Damian Clifford, Inge Graef and Peggy Valcke, 'Pre-Formulated Declarations of Data Subject Consent—Citizen-Consumer Empowerment and the Alignment of Data, Consumer and Competition Law Protections' (2019) 20 *German Law Journal* 679, 682 https://doi.org/10.1017/glj.2019.56.

ical change is having on the structures of power in society. In his analysis, the technological development, when left unchecked and only governed by the existing "bourgeois" private law conception of privacy, reinforces existing power imbalances. However, according to him, technology can also lead to new emancipatory practices when supported by new legislation – It is in fact through the collective right of access to data that knowledge, and thereby power, can be redistributed.

The right of access to personal data historically originates neither from the concept of "privacy as individual control", nor from the related but different concept of "informational self-determination". Instead, seen from the due process view developed by Westin and Baker, the right of access allows people to be involved in and question decisions made on the basis of data about them. Such a right derives from a longstanding western constitutional tradition to empower citizens against unjust and incorrect decisions. According to the critical tradition in which Rodotà was situated, people are in a structural power imbalance with regard to state institutions, as well as corporations. In this view, the right of access is a tool to contest the opacity of systems of power and to bring about a higher level of popular control over these systems.

The introduction of elements in the GDPR that flank the right of access to personal data – such as clearer rules for transparency, stronger enforcement capabilities by data protection authorities, and the explicit recognition of the role of civil society actors – brings European data protection regulation much closer to Rodotà's ideal of setting in motion a reversal of power from hegemonic systems back to citizens.

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