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Dossier temático: Ética de la Información

Information Ethics

Ética de la información

Ética da Informação

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Abstract

Information ethics is a branch of applied ethics that focusses on web applications, information management, and the general use of computers. It is concerned with questions of a just and free distribution of information, with questions of autonomy and power on the internet or a value-oriented design of Information Technology (IT) systems. Information technologies shape many of the essential factors of interaction in a data-driven society. The implementation of values such as privacy, freedom from discrimination or participation in the development of a digital society is therefore a necessary prerequisite for a democratic and sustainable course of action. Digital information technologies make it possible to disseminate information in two ways: via the users, and about the users. Increasingly, information about the behavior and the communication of users can be collected through digital platforms. The vast amount of economically used data and also the exchange of information on social media platforms calls for evaluation, orientation and governance. Only in this way can we ensure that freedom of information is not a privilege, but a shared resource in a lively pluralistic and democratic society.

Keywords: INFORMATION ETHICS; PRIVACY; TRANSPARENCY.

Resumen

La ética de la información es una rama de la ética aplicada que se enfoca en aplicaciones web, gestión de la información, y el uso general de computadoras. Guarda relación con cuestiones vinculadas a la distribución justa y libre de la información, la autonomía y el poder en Internet, y el diseño de sistemas de Tecnología de la Información orientados por valores. Las tecnologías de la información dan forma a muchos de los factores esenciales de interacción en una

sociedad manejada por los datos. La aplicación de valores tales como la privacidad y la libertad, sea que se utilice para la discriminación o para la participación en el desarrollo de una sociedad digital es, por tanto, un prerrequisito necesario para cursos de acción democráticos y sustentables. Las tecnologías digitales de la información hacen posible diseminar información de dos maneras: a través de los usuarios, y acerca de los usuarios. En forma creciente, la información relativa al comportamiento y la comunicación entre usuarios, puede ser recogida a través de las plataformas digitales. La enorme cantidad de datos usados económicamente y también el intercambio de información en los medios y en las plataformas sociales, está pidiendo evaluación, orientación y gobernanza. Solo de esta manera se puede asegurar que la libertad de la información sea, no un privilegio, sino un recurso compartido en una sociedad viva, democrática y plural.

Palabras clave: ÉTICA DE LA INFORMACIÓN; PRIVACIDAD; TRANSPARENCIA.

Resumo

A ética da informação é um ramo da ética aplicada que se concentra nas aplicações web, na gestão da informação e na utilização geral de computadores. Preocupa-se com questões relacionadas com a distribuição justa e gratuita da informação, a autonomia e o poder na Internet e a concepção de sistemas de Tecnologias de Informação (TI) orientados para o valor. As tecnologias da informação moldam muitos dos fatores essenciais da interação numa sociedade orientada pelos dados. A implementação de valores como: a privacidade, a liberdade, quer seja utilizada para a discriminação ou a participação no desenvolvimento de uma sociedade digital é, portanto, um pré-requisito necessário para cursos de ação democrática e sustentável. As tecnologias de informação digital permitem divulgar informação de duas formas: através dos utilizadores e sobre os utilizadores. Cada vez mais, a informação sobre o comportamento e a comunicação entre os utilizadores pode ser recolhida através de plataformas digitais. A enorme quantidade de dados utilizados economicamente e também a troca de informação sobre os meios de comunicação e plataformas sociais exige avaliação, orientação e governança. Só dessa maneira, se pode garantir que a liberdade de informação seja, não é um privilégio, mas sim um recurso compartilhado numa sociedade viva, democrática e plural.

Palavras-chave: ÉTICA DA INFORMAÇÃO; PRIVACIDADE. TRANSPARÊNCIA.

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1. Information ethics and concepts of information

Information ethics is a branch of applied ethics that focuses on web applications, information management, and the general use of computers. For example, it addresses questions of human-computer interaction like the demand for transparency in using information technology systems and its value-based design. More concretely, information ethics also focuses on topics like the surveillance of internet communication and algorithmic discrimination. The term »information ethics« was originally coined in library science (cf. Capurro 1988; Froehlich 2004; Hauptmann 1988). Here, the main focus was on the right to information access and copyright conflicts (for more details on the whole spectrum of information ethics see Kelly/Bielby 2016).

Information and media are inseparable: Media ethics, a close relative to information ethics, historically focuses on journalism and sender-receiver communication (television, movies, radio, press, books). Their shared objective can be summarized as follows: Both media ethics and information ethics are concerned with evaluating and guiding individual, societal, and institutional action, aiming for a socially acceptable design of information and communication technology. They also address the responsibility of the individual in their development, distribution and application (cf. Heesen 2016, p. 3).

While mathematically-based information theory is primarily concerned with the technical aspects of message transmission, from the societal point of view the ways in which information can contribute to social communication and to the generation of knowledge are at the center of attention. Originally, the Latin word *informare* means »to provide information«, as well as »to form« and »to shape«. Information technology systems are not simple transmitters of information. They also generate new information which would not exist or be accessible without this particular technology. This is especially apparent concerning methods for data analysis (big data), or personal information on social media. The, so to speak, technologically multiplied freedom of information is additionally reflected in the context of civil society by the demand for free access to information concerning public administration (open access, open data) and new modes of participation (e-democracy). However, multi-faceted modes of information not always lead to an increase of knowledge or an improvement of the bases of decision-making.

Instead, the sheer quantity of information, together with the difficulty of assessing its quality and the lack of transparency in the flow of information and data, can result in an increase of uncertainty.

The difficulties of properly adjusting and assessing information mainly have to do with a general feature of information technologies and media: to enable communication even where people are far away from each other or, in fact, live in separate times. Communication between absentees is an essential prerequisite of communication in complex societies, where people can no longer interact with all others directly. At the same time, information technologies as media generate their own specific logic for transmitting communication (cf. McLuhan [1964] 2003). Detaching information from its spacial and temporal context, i.e. its decontextualization, increases the effort required for its interpretation, for understanding its new parameters and modes of operation, as well as for taking on responsibility in the respective transmission contexts. Yet, the reconfiguration of information also expands the potential for communication and for the generation and dissemination of knowledge.

2. Information brokerage in different contexts of interaction

Roughly, we can distinguish three different areas in which information technologies are used: *social interaction*, i.e. the exchange of information between humans; *human-machine interaction*, e.g. via computer interfaces; and the exchange of data between different information carriers as pure *machine-machine interaction*. In everyday language, however, »information« commonly refers to the transmission of a linguistic unit semantically significant for humans. This understanding will be at the center of what follows. I will assume that technologically induced information (e.g. through automatic face detection) is an expression and part of human communication relations, as well.

Technologically mediated information can be found in print media, TV and radio, on the internet and in databases. We can access it through numerous services and applications. At the turn of the 21st century, a new technology arrived on the scene, the so-called internet of things, which pursues the miniaturization of information technology and its implementation into the realm of »things«, i.e.

concrete objects. Information from the environment can be read via mobile devices (context-awareness) or directly through devices which are part of the environment (ambient intelligence).

A dense mesh of information emerges from the interplay between technological possibilities like data mining or genetic diagnostics, political guidelines (e.g. requirements to store data, biometrical databases), and the use of social media, online shops, and location services by individuals. Digital information technologies thus make it possible to disseminate information in two ways: via the users, and about the users. Increasingly, information about the behavior and the communication of users can be collected through an analysis and evaluation of digital platforms (clickstreams, metadata, social graphs, etc.).

The vast amount of information available might, at first glance, seem like an expression of a widespread adherence to the principle of freedom of information. Transparency, access to information, and information brokerage are essential parts of any democratic society. The right to freedom of information – »freedom … to seek, receive and impart information and ideas through any media and regardless of frontiers« (UN Declaration of Human Rights, Art. 19) – is on the same level as the right to freedom of opinion and expression. Free availability of information as such, however, does not yet tell us if this information is handled prudently, effectively, or in an ethically justified way. The protection of the freedom of information thus demands the (self-)commitment to specific, ethically justified parameters. Only in this way can we ensure that freedom of information is not a privilege, but a shared resource in a functioning pluralistic society (cf. Heesen 2016b).

3. Information as a means of societal self-organization

Freedom of the media, freedom of information, and freedom of expression are essential requirements for the establishment and the continued existence of a constitutional democracy. Thus, on the level of the state, fostering a general public is fundamentally important for the articulation of individual and joint interests and points of view, as well as for critical communication between the citizens, politicians, and the administration (cf. Habermas 1962/1996). A public

which considers itself a critical and supervising authority for politics and governmental institutions depends on a shared pool of knowledge for orientation. Knowledge differs from information in that it involves an individual process of evaluation and contextualization. Knowledge, thus, is always attached to persons who generate knowledge, by means of examining information and acknowledging it as justified and true.

This is where skeptical positions come in, claiming a so-called information overload (infobesity). The interactive and individualized opportunities of the internet – each user can simultaneously be a sender and recipient of media content – result in a tremendous increase of published content. The whole communication infrastructure is more and more adjusted to subjective interests and needs. Social networks, personalized services, as well as „all-rounders« like smartphones, open up private and individual perspectives on the relevance of information. Such a super-plurality of information calls for structuring and selection, both to make certain topics available for social discourses, as well as to exclude specific content, e.g. for the legal protection of minors or privacy.

Problems of coping with information therefore refer on the one hand to these questions of evaluation and contextualization of information. On the other hand, what is at stake here is the issue of securing a common basis of information for society (cf. Dahlgren 2005). This issue is commonly being discussed under the heading of »fragmentation«. The fragmentation-thesis claims that an increasing spectrum of media services results in a decreasing overlap in the use of media (cf. Celikates 2015).

Given all this, there is an increasing need for sources of information which have a high reputation and, at the same time, are easily accessible and comprehensible. However, the purpose of information transmission in digital networks is more and more driven by individual needs, not to the creation of a public sphere. One reason for this is that private platform operators, who pursue commercial interests, dominate information transmission. Technologically, the personalization of information technology is reflected in the deployment of adaptive systems. Such adaptive technologies are primarily used by search engines and social media. They process information about the respective interests and generate a user

stereotype in order to offer specifically fitting results and services in future searches. In particular, social media commonly offer information selected through algorithmic computation of user stereotypes and thus do not offer orientation on general shared knowledge (cf. Birkbak/Carlsen 2016).

Another question concerning the democratic relevance of information is not associated with the ways in which information is assessed and stored, but has to do with a just distribution of the information available as well as with a just representation of content on the internet. The democratic potential of the internet can be exhausted to its full extent only when its passive modes of reception as well as its active modes of participation can be used easily and barrier-free. Information is a basic good, like food, housing, or safety. In many cases, it is a condition for any potential improvement of primary care and political development: The question of a just distribution of information and the corresponding communication infrastructure is discussed under the heading »digital divide« (cf. Wade 2002). To strengthen civil society, it is especially important to include the local level in establishing the corresponding infrastructure and skills. Only in this way can the plurality of the internet adequately reflect the plurality of the world society. Without implementation in the local identities of the internet users, the digital divide – even if we remove it on the technological level – amounts to a digital colonization by an information elite on the content level (cf. Pantserev 2015; Schopp et al. 2019, on intercultural information ethics see Capurro 2008).

4. Free information about everything and for everybody?

Freedom of information is frequently linked to a demand for transparency. Transparency, here, is understood as a means of publication or, so to speak, of liberation of information. Which person, however, is freer: she who discloses and shares everything, or she who has control over what she would rather want to conceal? Consequently, which kind of freedom is more socially desirable: a freedom where neither individuals nor states conceal information, or a regulated freedom, where personal rights, copyrights, and the right to secrecy are considered necessary conditions for a liberal order? The problems connected to a demand for

absolute transparency can be illustrated when looking at the so-called whistle-blowing platforms. On the one hand, the unrestricted publication of documents not originally intended to go public (video recordings, bank data, etc.) can be of public interest, for example when exposing fraud or actual – and not just assumed – political motives. On the other hand, such publication can potentially damage socially desirable processes, where a certain degree of confidentiality is necessary for the success of these processes. Additionally, unrestricted publication can expose governments and individuals to the danger of enemy attacks.

In the context of concepts of transparency, we need to distinguish between public and private data – although such a distinction is not always easy to draw, especially with regard to social media and the organization of communication via platform operators. In the General Data Protection Regulation (GDPR), the European Union has specified various requirements for the use of data which strengthen in particular individuals' control over their data and their self-determination. A first requirement states that the elicitation and processing of personal data is permissible only if the person concerned explicitly agrees. In case of agreement, the use of this data needs to conform to requirements of transparency, appropriation, necessity, data reduction and data economy. Regarding transparency, this implies that the elicitation of the data should happen directly with the individual concerned, that the individual should be informed about the process, and that he has means of access to the data gathered about him.

With personal data, the concern is not only protection against unauthorized access, but also that the individual has autonomous control over the sharing of her data. Information, here, is a means of identity management. In the social relations of our so-called information society, the formation of the self via information control is part of self-fulfillment.

In this light, is there also a right, for a governmental institution or politics in general, to communicate covertly and thus non-transparently and free from control by observers? While this idea might seem plausible at first glance, a thoroughly participatory approach fundamentally calls it into question because governmental and political administration are themselves part of civic self-organization and do not stand in opposition to it. Thus, concerning legitimacy,

both governmental and political administrations are obliged to the public. Given this, information about and by governmental institutions should principally confirm to an imperative of transparency. A partial non-transparency to deliberate the freedom of action of agents within political and public institutions can be legitimate, but needs to be justified.

Conflicts of interests in matters of transparency pervade numerous other areas of society. Information technologies, for example, facilitate the rating of consumer products. The guiding idea here is a concept of the well-informed citizen, who, in his consumer behavior, pursues his own interests and is in principle able to direct markets, while providers commonly tend to keep the details of the production processes opaque.

Another exemplary conflict of interest lies in the area of safety. Information technologies are frequently used as safety technologies, such as e.g. biometrical data recognition through intelligent video surveillance. Such modes of data elicitation and information procurement can indeed serve safety. At the same time, however, they generate a form of information asymmetry: The individual is no longer aware of who knows what about her and, as a consequence, might feel unsafe. Thus, added information for safety authorities competes here with a limitation of the freedom of action for the individual through a feeling of being constantly watched. Further significant cases where the restriction of information is controversial can be found in discussions on the right to exploitation and commercialization of information, in the debates on the right not to know in medical matters, or in the discourse on so-called whistle-blowing, i.e. the exposure of misconduct in one's own working environment.

To conclude, the fundamental structural problems of modern information technologies can be summarized under the headings »information selection« and »information justice«. Both challenges arise from certain characteristics of information technologies, like interactivity, computation rate, and almost unlimited capacities for exact reproductions. They can be controlled and, alternatively, made fruitful, by a set of activities. Among these are improving computer literacy through governmental and civil institutions, accompanying the advancements in information technology with a critical public discourse and, last

but not least, creating and upholding transparency in the information and data management of governmental and, in part, private institutions. Here, transparency, in a broader sense, refers to free access to information, to questions of system architecture, to control of algorithmic decision making, as well as to information about the kind and scope of the gathering of (personal) data.

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