

Part 2

Ethical Foundations

Chapter 3

Digital Image Ethics – How it Could be Pursued and What It Might Have to Say

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I. Introduction

Digital ethics is a broad field. It encompasses a wide range of even more specialised ethical disciplines: Information ethics, data ethics, ethics of Big Data, ethics of algorithms, digital media ethics, ethics of digital journalism, ethics of geo-blocking and, last but not least, an ethics of copying which also deals with digital reproductions.¹ Given this breadth, it is not surprising that there is no consensus on what exactly digital ethics is and how it should proceed, nor is its claim to validity clear.

I will therefore start with a snapshot that sheds light on the current state of digital ethics and highlights some of the difficulties that digital ethics currently faces (II.). My overview will be rather subjective and – since the multitude of positions and arguments on very different individual aspects of digital ethics cannot be reproduced in detail – necessarily superficial. It will become obvious, however, that the status and function of digital-ethical conclusions are not yet clear. To remedy this, I will defend the possibility and explain the task of digital image ethics. First, I elaborate on how normative ethics is challenged by both a problem of justification and a problem of application (III.). I then outline the possibility and specific function of an applied ethics (IV.), before defining the task of digital image ethics in more detail (V.) and giving three examples to illustrate what a digital image ethics might have to say (VI.).

Before beginning, however, I would like to make two comments about the terminology used in this chapter. In the law of English-speaking countries, the term “moral rights” has a different, more specific meaning than, for example, the German term “moralische Rechte”. In the context of

¹ See, e.g., Hick/Schmücker (2016); Joerden/Schmücker/Ortland (2018); Dreier (2019). – For the ethics of copying see the 2015–2016 Research Group at the Bielefeld Center for Interdisciplinary Research (ZiF), <https://www.uni-bielefeld.de/en/ZiF/FG/2015Copying/>.

copyright, moral rights (in German: “Urheberpersönlichkeitsrechte”) are understood to be the inalienable rights of the creators of original works which are generally recognised in civil law and differ from the economic rights associated with copyright. Therefore, even if an artist has assigned use rights or, if permitted by national legislation, the copyright in a work to a third party, he or she retains the moral rights in the work. In contrast, in ethics the term “moral rights” today refers to those subjective rights of individuals and groups of individuals that give rise to a moral claim against third parties. In this chapter, I will use the term “moral rights” in the latter sense. I will also use the term “ethics” to refer to normative theories of what is morally right and not in a descriptive or sociological sense such as the epitome of norms established in a particular social group or as a term for theories of the good life.

II. *Digital Ethics Today: A Snapshot*

Digital ethics is a multifaceted field. On the World Wide Web as well as in the relevant literature, one can find definitions that mean very different things. On quite a number of websites you can find – without a reference – the following definition, which apparently enjoys some popularity: “Digital Ethics is the study of how to manage oneself ethically, professionally and in a clinically sound manner via online and digital media”.² This definition was obviously inspired by the idea that ethics is the theory of the good life. Other definitions consider digital ethics to be more of a domain ethics. It can then be understood as a branch of ethics that concerns “moral standards for digitalization and Big Data”. Such an understanding has become increasingly accepted over the last ten years. The book *Digital Media Ethics* (1st ed. 2009) by Charles Ess pioneered this approach because the author broadened digital ethics beyond the area of information and computing ethics and focused on ethical problems that arise in the everyday use of digital media and digital devices.³ Since then, like Ess’ book, many books on digital ethics – at least as far as they come

2 See, e.g.: <https://www.assemblymade.com/2021/12/why-do-we-need-ethics-as-an-it/>; <https://brainly.ph/question/9879339>; <https://www.endnowfoundation.org/all-about-t-the-new-digital-ethics-code-php/>; <https://www.zurinstitute.com/clinical-updates/digital-ethics-101/>; <http://www.losfelizledger.com/cosfyo/importance-of-digital-media-ethics>; <https://www.coursehero.com/file/24313350/Project-3-Ethical-Dilemmasdocx/>.

3 Ess (2009/2020).

from philosophy, theology or media studies – are not aimed exclusively at a specialist audience, but at a broader readership, consisting in particular of end users of digital media and devices. This also applies to the most recent German-language studies that seek to depict the subject area of digital ethics in its full scope, for example the small compendium *Digitale Ethik. Leben in vernetzten Welten* (*Digital Ethics. Living in Networked Worlds*) edited by Grimm, Keber and Zöllner and published in 2019 by Philipp Reclam jun. or the study *Digitale Ethik. Ein Wertesystem für das 21. Jahrhundert* (*A Value System for the 21st Century*) by Sarah Spiekermann.⁴

This focus on a broader readership has at least two consequences:

On the one hand, it leads to a focus on ethical questions that arise for individual actors or that affect the lifestyle and well-being of individuals. It is symptomatic of this tendency that an early book on ethical problems of informatics was entitled *Gewissensbisse* (*Pangs of Conscience*).⁵ In contrast, questions that arise, for example, from an ethical perspective relating to the normative “Richtigkeit” (“rightness”; Jürgen Habermas⁶) of positive-legal norms, are rarely considered.

On the other hand, this is all the more true since the focus on a broader readership also has the consequence that digital ethics is often conducted at a very high operating altitude. Indeed, instead of developing convincing solutions to difficult concrete questions and conflicts of interest, digital ethics often limits itself to ascribing to well-known ethical theories the competence to provide us with appropriate solutions, which they would first have to prove in concrete cases.

Thus, digital ethics often boils down to commonplace wisdom and platitudes, which are presented with a raised index finger, without it always being entirely clear what the ethical authority being claimed is based on. A good example of this are the *10 Gebote der Digitalen Ethik* (*10 Commandments of Digital Ethics*), which were developed in the interest of protecting minors at the Institute for Digital Ethics at Stuttgart Media University (Fig. 1)⁷:

4 Grimm/Keber/Zöllner (2019/2020); Spiekermann (2019/2021).

5 Weber-Wulff/Class/Coy/Kurz/Zellhöfer (2009).

6 Habermas (1973) 220 et passim.

7 https://www.hdm-stuttgart.de/digitale-ethik/lehre/10_gebote.

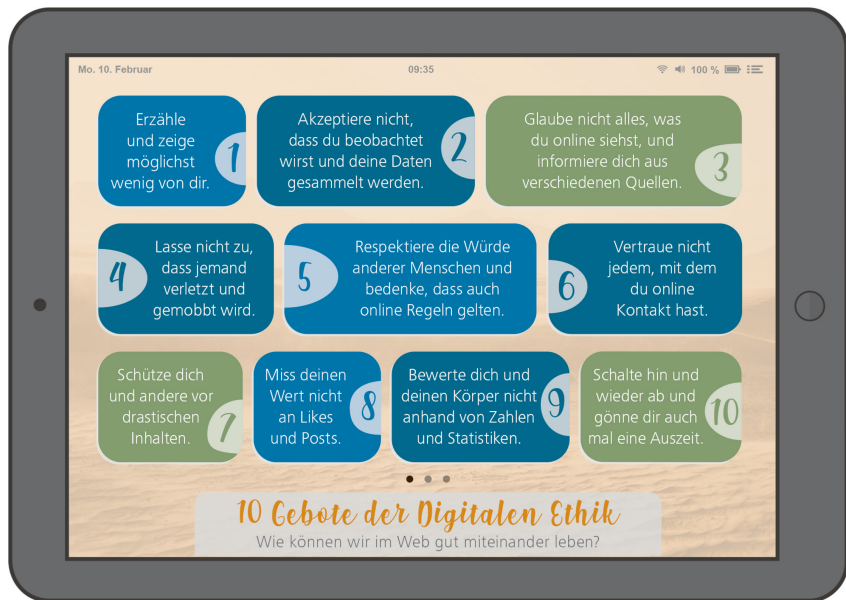


Fig. 1: Institute For Digital Ethics, Stuttgart Media University Stuttgart – 10 Gebote der Digitalen Ethik

1. Tell and show as little of yourself as possible.
2. Do not accept being watched and your data being collected.
3. Do not believe everything you see online and get information from a variety of sources.
4. Do not allow anyone to be hurt or bullied.
5. Respect the dignity of others and remember that rules apply online as well.
6. Do not trust everyone you have contact with online.
7. Protect yourself and others from drastic content.
8. Do not measure your worth by likes and posts.
9. Do not assess yourself and your body based on numbers and statistics.
10. Switch off now and then and allow yourself some time out.

Of course, these are tips that may well be useful for young people. Except for rules no. 4 and 5, however, they are rules that serve a specific purpose: the protection of young people. Kant famously called such rules “hypo-

thetical imperatives”.⁸ Such rules are often very useful – but they are not moral rules in the sense in which we usually speak of moral rules. So, what is being sold here as “digital ethics” is not ethics at all. Evidently, rule no. 3 suggests that the authors themselves may have been aware of this.

But even in recent studies and study materials, digital ethics is often pursued on the level of guidebook literature. In the previously mentioned German books from 2019, for example, there are chapters with headings such as “Tugendhafte Manager für tugendhafte Kunden”, “Werte in der Technik sind das neue ‚Bio‘ im Internet”, “Wertträger sind Firmen mit Herz” (“Virtuous managers for virtuous customers”, “Values in technology are the new ‘organic’ on the Internet”, “Value carriers are companies with a heart”).⁹ A good example of this kind of digital ethics in English is the book *Media Ethics and Global Justice* by Clifford G. Christians, also published in 2019 by Cambridge University Press. Here, everything from Aristotle to Heidegger’s *Dasein* and the Tao is brought into play to develop, as the author claims, “an international, cross-cultural, gender inclusive and ethnically diverse media ethics of justice”.¹⁰

Digital ethics that is pursued like this is limited to advising individual actors, most of whom are end users of digital media and technologies and wish for a good, successful or happy life. Consequently, in the Reclam volume mentioned above, an entire chapter is devoted to the topic of “happiness”. In this way, however, digital ethics capitulates to ethics’ genuine task of finding solutions to conflicts of interest that take into account the widely recognised moral rights of individuals and groups and seem fair from an impartial point of view. It also capitulates to the complexity of its subject matter, which is characterised by the manifold effects of different factors. The interplay of these factors is not easy to grasp, and their consequences and side effects, especially for third parties and society, are not easy to assess.

Digital ethics can shirk the difficult task of developing principles and ideas for regulating the conflicts of interest caused by digitisation. The legal system, in contrast, cannot avoid the regulation of these conflicts and therefore has a far greater awareness of complexity, from which digital ethics should learn. Under pressure from economically powerful actors, however, the legal system does not always succeed in finding morally defensible solutions. It could therefore benefit from a discussion with a

8 Kant (1788/2015) A 37; AA, vol. V, p. 20 (p. 18 of the English translation).

9 Spiekermann (2019/2021) Ch. 2.1, Subheadings.

10 Christians (2019) 329.

digital ethics that is able to argue at eye-level. Thus, though digital ethics is still in its infancy, in order to outgrow it, it could (and should) learn – as explained below – from similar applied ethics such as medical ethics and other domain-specific ethics.

This diagnosis is, of course, somewhat too one-sided: there are several studies, especially from recent years, that address concrete normative questions raised by digitisation. Significantly, however, as bibliometric research has discovered,¹¹ most of them are not the work of philosophical, so to speak full-time ethicists, but rather of computer scientists and lawyers. The *Research Handbook on Human Rights and Intellectual Property*, edited by Christophe Geiger, is one of the most important of these contributions.¹²

Regarding this branch of digital ethics from the outset, questions about the scope of morally required data protection and the preservation of the privacy of users of digital media are on the agenda. An example is the volume *Towards a Digital Ethics* by the European Data Protection Supervisor (EDPS) Ethics Advisory Group (2018).¹³ In order to indicate the broad spectrum of topics that digital ethics deals with today, I would like to also mention some more recent instructive works: Luciano Floridi (*The Ethics of Information*, 2013) as well as Jonathan Beever, Rudy McDaniel and Nancy Stanlick (*Understanding Digital Ethics. Cases and Contexts*, 2020) are working on the foundation of a digital ethics.¹⁴ Data ethics, as formed by Floridi and Mariarosaria Taddeo, analyses the moral issues that arise regarding the acts of generating, collecting and processing of data, access to them, their use and algorithmic evaluation.¹⁵ The ethics of Big Data¹⁶ and the ethics of algorithms¹⁷ can be assigned to them. The area of data ethics also includes studies on the moral responsibility of online service providers¹⁸ or the ethics of the design of interfaces and online platforms.¹⁹ The Ethics of Information Warfare is the focus of several recent studies.²⁰ Ess' book on *Digital Media Ethics* has already been mentioned; the volume

11 Mahieu/van Eck/van Putten/van den Hoven (2018).

12 Geiger (2015).

13 European Data Protection Supervisor (EDPS) Ethics Advisory Group (2018).

14 Floridi (2013); Beever/McDaniel/Stannick (2020). See also Luciano/Taddeo (2018 et seq.); Otto/Gräf (2018).

15 Floridi/Taddeo (2016).

16 Mittelstadt/Floridi (2016a) and (2016b).

17 Mittelstadt/Allo/Taddeo/Wachter/Floridi (2016).

18 Taddeo/Floridi (2016).

19 See, e. g., Reyman/Sparby (2020).

20 See, e. g., Floridi/Taddeo (2014); Taddeo (2016); Lukas (2017); Christen/Gordijn/Loi (2020).

Ethics for a Digital Era, edited by Deni Elliott and Edward Spence (2018) is devoted to basic problems of digital journalism ethics.²¹ The anthology *Digital Ethics. Research and Practice*, edited by Don Heider and Adrienne Massanari in 2012, discusses among other issues ethical problems of computer gaming such as the moral status of grieving, but also permissible piracy.²² Last but not least I should mention two volumes on image ethics: *Image Ethics. The Moral Rights of Subjects in Photographs, Film, and Television*, and *Image Ethics in the Digital Age*, both edited by Larry Gross, John Stuart Katz and Jay Ruby.²³

It is worth noting that the above-mentioned studies (and many other studies on digital ethics which cannot be mentioned here) do either not address the underlying reasons supporting the validity of their normative statements or determine them in very different ways. Therefore, the status and function of digital-ethical conclusions remain unclear and it is this ambiguity that leads me to the core of my contribution to the present book.

III. Ethics: Challenged by Both a Problem of Justification and a Problem of Application

How can digital ethics be pursued in such a way that its statements can claim normative rightness? Such claims are fundamental to any ethics. For anyone who cannot claim normative rightness for his statements is not practising ethics. At best, as a moral sociologist, one could put the term “ethics” in quotation marks and speak of an “ethics” that someone holds. But even that is difficult if the conviction of its normative rightness cannot be attributed to the person or group who holds it.

1. The problem of justification

Because ethics is about normative rightness in practical questions, it is challenged by both a problem of justification and a problem of application. Ethics faces a problem of justification because it does not only exist

21 Elliott/Spence (2018).

22 Heider/Massanari (2012).

23 Gross/Katz/Ruby (1988) and (2003). To my knowledge, the most recent book on image ethics is Schicha (2021).

in the singular. In modern, ideologically pluralistic societies, there are a multitude of partially incompatible systems of moral belief. Perhaps such an ethical plurality existed, albeit under a non-individualistic sign, even before the modern age. However, there is a lack of a generally accepted procedure that would allow the correct moral view to be filtered out from the multitude of empirically available moral views. It therefore appears difficult to justify the normative rightness or – as it is often said in German literature – the validity of ethical statements in such a way that they appear to be normatively right not only to those who share certain fundamental values.

However, if it is assumed to be a conceptual truth that ethical statements should not only be valid for like-minded people, this problem of justification seems to generally endanger the possibility of ethics. Is there a way to justify it at all? The most promising way seems to be to refer to those moral beliefs which are shared, if not by all, at least by the great majority. Such beliefs, however, can only be identified either in very general moral norms or with regard to very specific situations. For example, it is plausible to assume that at least most of the ten moral rules stated by Bernard Gert – such as “Do not kill” or “Do not cause pain” – are accepted to be moral rules by the vast majority of people. However, this is true only if they are restricted by a proviso: “except when a fully informed, impartial rational person can publicly allow violating it [this rule]”.²⁴ Likewise, it can be assumed that hardly any person who is familiar with the meaning of the term “moral” would contradict the following judgement: It is morally forbidden to use force to prevent a person risking his or her own life when saving a two-month-old child from drowning in deep water from coming ashore with the child and thereby causing the person to drown along with the child.

Apparently, there are some very general moral norms that are very widely accepted, and some actions that are very widely considered morally required or forbidden. This indicates that there is a universal, linguistically and culturally invariant core of the meaning of “morality”. This finding is also indicated by the fact that there are areas of overlap between all ethics, despite their partial divergence, which allow them to arrive at some unanimous judgements from partially different premises.

24 Gert (1998) 216 (italics removed).

2. *The problem of application*

However, ethics seeking an answer to the problem of justification is also confronted with a fundamental problem of application. For the universal, culturally and linguistically invariant core of meaning of the term “morality” (if it exists) is very abstract; indeed, so abstract that it often seems almost impossible to derive practical orientation from moral norms whose universal recognition can plausibly be assumed. At the same time, it is rarely possible to relate an action to this core of meaning in such a way that an unambiguous judgement can be made about its morality that is shared by almost all speakers who are language competent.

A particularly promising candidate for such a norm, belonging to the universal core meaning of the term “morality”, is undoubtedly the norm: “Do not kill an innocent person!” Another candidate would be the rule: “Save the innocent in distress whenever possible!” But even these two seemingly simple norms raise considerable problems of definition: Does the concept of killing include letting others die? Under what conditions is someone guilty by omission? Does the talk of innocent or innocently refer only to human beings? When is it possible for someone to rescue someone else and when is it not? Would a rescue action still be moral if it were, at the same time, harming innocent third parties?

Without answers to such questions, even such norms, which we are inclined to assume being part of the universal core of the concept of morality, cannot be applied to concrete actions. But even the widely accepted norm “Do not kill an innocent person” shows how difficult their practical application can be. The interpretation of terms that play a central role in such norms is already controversial. Obviously, a decision cannot always be made between conflicting views based on generally understandable reasons. This is all the more true when members of different cultures or citizens of different states disagree on the interpretation of normatively relevant terms. For example, without a specific concept of attribution – which some neurobiologists in our culture would probably already refuse to agree to today – it would not even be possible to decide who is innocent or guilty.

But that is not all. Even if it were possible to unambiguously and indisputably define the terms essential to abstract principles of universal morality, it would not be possible to pass a judgement on the morality of a concrete action whose claim to universal validity can only be disputed with obviously unfounded objections. The reason is that most given situations of action can be viewed from different angles and therefore described very differently. Thus, it will often remain contentious which of

several possible norms is to be applied with priority. Even if it is possible to reduce such divergences by establishing moral principles of medium range – as I will describe in more detail below – there will still be dissent about the completeness, adequacy or normative rightness of descriptions of concrete situations of action. This is so, because every description of a concrete situation of action always incorporates the perceptual perspective of the person making that description, and every such description is hence shaped by that person's experiences, interests and desires. Several people therefore often disagree on how to describe a situation of action correctly.

IV. The Possibility of Applied Ethics

1. The need for applied ethics

However, technological progress, and today digitisation in particular, raise normative questions for which two things can be said: firstly, these questions have not yet become the subject of legal regulation at the time they arise, nor is it immediately clear what such legal regulation should look like. Secondly, they cannot be answered convincingly by potential actors simply asking their conscience. This is either because the situation in which we are supposed to act is so complex that we cannot easily relate it to our moral beliefs and intuitions, or because it mobilises different moral beliefs or intuitions that suggest different and incompatible actions.

“Applied ethics” attempts to provide answers to normative questions of this kind. The term is often used to describe domain-specific ethics that claims to specify moral norms tailored to a particular sphere of action. However, the term “applied ethics” is not a mere misnomer only if it denotes an attempt to understand moral judgements as the application of principles or norms, i.e. by analogy with the application of law. This chapter argues that applied ethics is in many ways characterised by projecting processes characteristic of the legal system onto moral judgement.

Such an understanding of moral judgement analogous to the application of law has several implications. In particular, it presupposes that it is possible to determine a set of norms applicable in situations in which moral judgement is required. This assumption is not trivial. For such norms can neither be obtained through meta-ethical reflection, nor does it seem possible to simply deduce them from any of the normative-ethical theories established in philosophical discussion. Certainly, if the question arises in a concrete situation whether one should overtake a vehicle in a blind curve, one can be guided by the moral norm that it is immoral

to unnecessarily endanger other road users. And this norm, which refers to a particular domain of everyday human activity, can also be traced back to the more fundamental moral principle: “Do not endanger a third party unless you have a justifying reason for doing so!” This principle can then be understood as one that can be justified by an ethical theory – for example, by the Kantian ethics of the categorical imperative or a variant of utilitarianism.

However, this principle cannot be derived from one of the relevant ethical theories without reference to an object of moral reflection. For as a conclusion it only arises when a certain description of action – which in turn is abstracted from a concrete situation in a suitable manner and usually to a very high degree – is added as a minor premise. In our example case, such an abstract description of action could read: “endangering a third party without sufficient reason”. However, this description cannot be deduced from an ethical theory, but only by an abstraction – possibly in stages – of concrete circumstances of an actual or possible action. Such an abstraction, in turn, always includes normative judgements about which aspects of a concrete situation of action should be abstracted from a moral standpoint, and it is conceivable that such judgements are in turn influenced by ethical theories on which the person making the judgement is guided. However, this does not mean that our everyday moral judging could be characterised as the application of an ethical theory.

This finding is confirmed when we consider where and how the law is applied. Legal norms are applied on the one hand in jurisprudence, and on the other hand in the administrative actions of the state and its subsidiary institutions. In both contexts there is an institution judging given actions or situations in a normative sense, and doing so on the basis of a description, or more precisely: of either a single description or a plurality of descriptions of one and the same action or situation, which can diverge and, under certain circumstances, also contradict each other. The institution itself is not usually affected by the consequences of its decisions. Further, it can base its decisions on a more or less clearly defined canon of norms whose validity is secured by institutionalised procedures.

The procedures that guarantee the validity of the norms to be applied by legal practitioners in court or in public administration are, moreover, of such a nature that they guarantee a certain minimum degree of social acceptance of the norms in question. In democratic societies, the validity of positive law is thus a manifestation of a normative consensus of a society, which, although not absolute, is broad enough to guarantee a degree of acceptance that makes it rational for potential actors to assume the validity of the norm in question when planning their actions.

Moreover, the application of law is usually done from the point of view of an impartial third party whose decisions relate to acts or situations that have been carried out by or that affect others. Furthermore, the impartial third party is usually not affected by the consequences of his or her decisions. If this expression also includes the perspective of decision-makers in public administration institutions, the relevant perspective can be characterised as the point of view of a judge. From such a judge's point of view in the broad sense, a more or less clearly identifiable canon of norms is applied, the validity of which is at least indirectly supported by a social consensus. We can therefore characterise the application of law as (1) an evaluation of (2) actions or facts given by descriptions, and which (3) is carried out from a judge's point of view in the light of a more or less clearly identifiable canon of norms, the validity of which is at least indirectly supported by a social consensus.

With regard to the consideration of processes of moral judgement, it is natural to speak of the standpoint of a moral judge. This term also expresses that it is a point of view that implies a very high degree of impartiality of the judging person as well as unaffectedness from the consequences of an action to be judged, which differs from the point of view of a potential actor considering an action. Since applied ethics can only be understood as the application of moral norms, we can now add a fourth condition. Thus, in ethics, we would be dealing with an application if the following four conditions were fulfilled: (1) an action or fact is assessed (2) on the basis of descriptions (3) from the standpoint of a moral judge and (4) in the light of a more or less clearly identifiable canon of moral norms whose validity is supported by a sufficiently large social consensus.

Note that the condition formulated here as the fourth necessary condition of an application of ethics does not contain any statement about the reason for the validity of a moral norm. It merely expresses that one can meaningfully speak of application in ethics only in relation to those moral norms whose validity is supported by a sufficiently large social consensus. Indeed, if the foundations of morality are controversial, then applied ethics can only refer to those moral norms about whose validity there is a consensus, regardless of how controversial the reason for them is. This fact allows us to assume their validity as a factual given and it is a central prerequisite for the possibility of applied ethics. For it would not seem reasonable to speak of an application of norms whose validity cannot plausibly be assumed.

In my opinion, this understanding of applied ethics has two consequences. First, it allows us to distinguish applied ethics from the kind of reference to moral norms and ethical theories that is characteristic of

moral reflections of potential actors in everyday life. Second, it allows us to identify contexts within which applied ethics can have a specific function.

2. *Applied ethics is different from everyday moral judging*

Obviously, our everyday referencing to moral norms is not limited to applied ethics in this sense. For in the moral evaluation of actions and facts, we do not have to orientate ourselves to a canon of moral norms whose validity is supported by a sufficiently large social consensus. Rather, we usually orientate ourselves to norms that we consider to be valid moral norms, regardless of whether our belief in them is shared by many or only a few others. This applies in particular to the assessment of one's own actual and potential actions. Because what counts in front of our conscience is our own moral beliefs – regardless of whether they are supported by a broad social consensus or not. Insofar, applied ethics is a normative practice that differs significantly from our everyday moral judging. As a solution to the problem of the application of normative ethics, it is only suitable for non-ordinary, especially scientific and law-political contexts of moral judgement.²⁵

3. *The “seat in life” of applied ethics*

If the everyday forms of moral reflection and moral thinking are clearly different from applied ethics, the question naturally arises as to the “seat in life” (as the theologians call it) of applied ethics. Where, if not in everyday life, does this form of moral judgement have its place? And what is its function? In my view, there are indeed (non-ordinary) contexts of a certain type in which moral judgements can and should take the form of applied ethics. Contexts of this type are characterised by the following features: (1) The objects of moral judgement are matters that could in principle also be normatively regulated by positive law, but for the judgement of which positive law cannot be resorted to, either because no corresponding legal norms exist or because the corresponding positive law is not or no longer regarded as normatively right by a sufficiently large part of the respective

25 Carissa Véliz (2019) has therefore already expressed the view that digital ethics can and should learn from medical ethics; in doing so, however, she only has in focus the forms in which a domain ethics can and should institutionalise itself.

society. Moral evaluation takes place (2) on the basis of descriptions (3) from the impartial standpoint of a moral judge and (4) in the light of moral norms whose validity is supported by a sufficiently large social consensus.

V. *The Task of Digital Image Ethics*

Applied ethics, in the sense explained here, has a specific function: it provides practical orientation in non-ordinary, particularly scientific and legal-political contexts in which the four conditions mentioned above are met. It also serves as an argumentative test of the normative rightness of legal norms that relate to specific domains. In my view, both are the two central tasks of *digital ethics* in general and *digital image ethics* in particular. They deal with domains for which it can be assumed that either sufficiently specific legal norms do not yet exist or that the relevant positive law is not completely regarded as normatively right by a sufficiently large proportion of people who, for example, frequently use digital reproductions of copyrighted images without asking the rights holders for permission.

However, digital image ethics cannot be performed by simply applying generally accepted moral rules belonging to a specific domain. For there are no such moral rules that are widely accepted and considered uncontroversial. The moral rules we have are so abstract that it is *not* possible to simply *derive* from them judgements regarding conflicts about digital images.

How can digital image ethics deal with this result? In medical ethics, e.g., one considers concrete problems of a certain domain in the light of general moral norms and, conversely, concretises general moral norms with regard to concrete problems of the certain domain. In this way, ethical principles of a certain kind can be developed. These principles are often called mid-level principles because they do not claim general validity but validity for typical cases of the respective domain and cannot be easily transferred to another domain. Such principles are of course themselves open to change. This already follows from their relation to the specifics of their domain, which, on the one hand, can change, e.g., through technological developments, and whose moral evaluation by a sufficiently large number of people, on the other hand, can also change in the course of time, due to changes of the context, which suggest the consideration of new points of view.

In the last part of the chapter, as examples, I now present three such mid-level principles of a digital image ethics.

VI. *What Digital Image Ethics Might Have to Say: Three Examples*

How are digital images different from analogue images? For our present purpose, it is sufficient that we consider three obvious differences. Firstly: digital images can usually be produced, passed on to third parties and made public with much less effort than analogue images. All that is needed is a simple smartphone (or similar electronic device) which is now commonly available all over the world. Secondly: digital images, as Thomas Dreier has succinctly stated, “unlike content in analogue form, can be reproduced without loss of quality and at marginal cost – that is, at the pure cost of copying”²⁶. To copy them, all that is needed is a storage facility and a very simple mini-computer, as is now integrated in smartphones and other electronic devices. And thirdly: digital images can be changed much more easily than analogue images, in such a way that the change can only be detected as such with considerable technical effort – if at all. They are therefore much easier and more effective to forge.²⁷

No defining characteristic for digital images can be derived from any of the three differences. This is because all three differences are only of a gradual nature. They refer to characteristics that analogue images also possess. Analogue images are also produced, passed on to third parties, published, copied and forged. However, doing so with regard to analogue images involves greater effort, and the result is usually less “perfect” in the sense of the intended purpose – be it the possibility of easy distribution, the largest possible audience to be reached by publishing the images, the aimed-for accuracy of a copy, or the intended deceptive effect of a forgery.

Does the merely gradual difference that separates digital from analogue images in these three respects really call for a digital image ethics? One might doubt it. For the ethical principles I am about to propose could all be applied to analogue images as well. In the analogue age, however, there was no need for such principles. For they all refer to social practices that as such either only emerged in the digital age because they were only made possible by the difference in degree between digital and analogue images, or it is only in the digital age that they have become so widespread raising normative problems which did not play an important role before.

²⁶ Dreier (2019) 62; translation by the author.

²⁷ Without doubt, the development of Non Fungible Tokens (NFTs) results from the desire to counter this unprecedented ease and effectiveness of forging digital artefacts.

1. *The Principle of Unconditionally Permissible Use of all Vocabulary of a Visual Language*

Brought about by the digital transformation of sharing and reproducing, these social practices raise normative questions that digital image ethics should aim to answer. Think about pictures, especially extraordinarily successful ones, which we know from postcards or because they have been copied millions of times and distributed widely if not globally on the Internet – haven't they taken on the status of vocabulary of a visual language? Can it be right that such images, if copyrighted, cannot simply be used without permission by anyone in any situation as media of visual communication? Shouldn't such images be in the public domain even if their creators have been dead for less than 70 years? It seems to me that digital image ethics must answer this question in the affirmative and thus critically question the copyright laws of most countries. Those who think this is an absurd assumption should ask themselves how they would answer the same question if it referred not to the vocabulary of a visual language but to the vocabulary of a written language. Would it be morally acceptable to legally require people to pay compensation or even seek permission for the use of words from their mother tongue or a foreign language that they use to express something? And if you think that we are comparing apples and oranges here and that the comparison is limp, just realise that in the digital age we are dealing in both cases with information that can be copied: with data.

Image ethics, which, as outlined above, starts with normative intuitions of which most people are highly confident, and examines new cases in particular to what extent they resemble cases for which we have clear moral intuitions, will therefore hardly be able to come to a different conclusion here. This conclusion is also supported by the fact that – without any awareness of wrongdoing – we freely use even words that are registered as trademarks and legally protected in everyday language contexts, i.e., we talk about having put on Nivea cream and needing a Kleenex tissue to clean the lenses of our glasses. Moreover, it does not violate any fundamental ethical requirement of fairness. For a picture can only be granted the status of a visual vocabulary if it has achieved an extraordinarily high popularity. It must therefore already have been used quite unusually often. An image to which this applies will, however, as a rule have already earned its creator such high usage fees that he can be expected to forego this income in the future, if he has not generally waived the collection of royalties already in advance.

Provided what has been said is convincing, a mid-level principle of a (digital) image ethics can be formulated: It is morally permissible to make free use of all vocabulary of a visual language for (digital) visual communication without obtaining permission and without paying a fee. We can call this the *Principle of Unconditionally Permissible Use of all Vocabulary of a Visual Language*. Following from this principle copyright must be limited to ensure that digital images that have become vocabularies of a visual language in which people communicate in the digital age through the transmission of images can be used (i.e., copied, sent, posted, varied, etc.) by anyone without permission, without cost, and without threat of sanction.

2. *The Principle of the Legitimacy of Taking Photographs in Museums*

The social practices that have established themselves in the course of the digital transformation also include the photographic documentation of one's own life. Because digital photographic images are much easier to produce than analogue images, and almost easier to produce than a written note or short text, the smartphone has become the new note-taking pen. Many people use their smartphone camera to record a variety of perceptions they make and thus document a multitude of events that happen to them. Today, it is no longer necessary to record what you find noteworthy and memorable about your life and your experiences in (hand)written form in a diary because you can keep a visual diary that manifests itself in a plethora of image files. If we consider this not only legitimate but a contemporary form of a principally desirable way of forming a stable self-identity by remembering and reflecting on one's own biography, one will have to acknowledge a fundamental moral right to record one's own perceptions photographically. However, such a moral right can only be a *prima facie* right; it has its limits where the photographic documentation of one's own perception threatens to violate genuine moral rights of third parties. This will have to be assumed not only in many cases where third parties have unintentionally and through no fault of their own ended up in a situation in which they would never present themselves willingly to someone observing them. Photographing an accident victim is therefore probably not legitimised in most cases by the moral right to record one's own perceptions photographically.

In other cases, on the other hand, one will be able to assume that the photographic documentation of one's own perception would not infringe any genuine rights of third parties. A particularly clear example of such

a case seems to be the photographic documentation of those impressions that the visitor of a publicly accessible museum gains of the exhibits on display while walking through the exhibition rooms. In this case, the moral right to record one's own perceptions photographically is particularly important because the perceptions made there form an essential part of the life of the visitor who visits the museum for the sake of gaining these impressions. Above all, however, the enabling of such perceptions is a vital part of the purpose of every museum open to the public. We can therefore state as a further mid-level principle of (digital) image ethics that it is morally permissible for anyone to take photographs of cultural objects on display in publicly accessible museums, if this does not damage them. I call this the *Principle of the Legitimacy of Taking Photographs in Museums*.

One might consider this principle to be too far-reaching a principle of permission that does not sufficiently consider the interests of the creators and owners of museum objects. But this is not the case. For as long as the photographed object is not damaged, the creators and owners of museum objects do not suffer any damage when museum visitors photograph them.²⁸ At most, they could suffer damage from the exploitation of photographs that visitors have taken of museum objects. However,

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- 28 The photographing itself would only be morally problematic if it created a substitute for the photographed item. This can be derived from the ethical *Principle of Permissible Non-substitutional Copying*. According to this principle, acts of copying are morally permissible if they do not result in an entity that could substitute the template to at least one of its principal purposes. I first proposed this principle in 2016 (Schmücker [2016] 367 et seq.), and I justified and defended it in detail elsewhere (Schmücker [2018]). I will therefore assume here that it is a well-founded principle of copying ethics. As such, it is relevant for digital image ethics as well because photographing artefacts can be seen as a form of copying or reproducing: every camera can be used to produce a photocopy. At the same time, however, the principle also shows why the possibility of substitutional copying cannot call into question the Principle of the Legitimacy of Taking Photographs in Museums. Photographing does not, as a rule, produce new instances of an artefact, but only images. Photographing is therefore, apart from very special cases, not a form of generating an entity that could substitute the template to at least one of its principal purposes. It is worth noting that the Principle of Permissible Non-substitutional Copying does not imply that there are no further moral restrictions for copying. It only permits the production of copies that cannot substitute the template to one of its principal purposes. This does not mean that the production of copies that could substitute the copied object is always morally forbidden. There might be reasons for allowing the production of copies that could be used instead of the template. The principle also does not allow for any production of copies that cannot substitute the template. The principle rather includes two important restrictions: it does not permit acts of non-substitutional copying that

the Principle of the Legitimacy of Taking Photographs in Museums only morally permits the taking of photographs of museum objects, not the exploitation of the photographs.²⁹

This conclusion could be countered by arguing that mere permission to photograph harms museums (or the creators or owners) because museum visitors who want to be reminded by photographs of the perceptions they made during their visit to the museum might take such photographs themselves, in other words, because they are no longer forced to purchase the photographs sold by the museum (or the creator or owner of a museum object). I consider this to be an implausible view. If one were to regard the non-establishment of a prohibition norm that would create an economic monopoly as harming those who therefore cannot profit from a monopoly position, every non-granting of privileges and economic advantages by the legislator would have to be understood as resulting in economic harm and hence as an injury.

However, the counterargument is not a suitable objection to the Principle of the Legitimacy of Taking Photographs in Museums, even if one does not agree with this assessment. Morally, even if the non-establishment of a monopoly were an injury, it would have to be weighed against the injury suffered by a visitor who, in the case of a ban on photography, cannot document his or her own perception of the museum items for his or her own visual diary, but can only be reminded of a place he or she visited for the sake of his or her own perception of certain objects by images of these objects that show them from a perspective chosen by someone else. It is obvious that this weighing will not be in favour of those who would profit from a monopoly position. For we would consider it morally reprehensible if the making of notes and sketches were forbidden in a museum in order to promote the dissemination of those descriptions or interpretations of the exhibited objects which the museum director (or whoever) considers to be the only correct ones and therefore wishes to enforce.

would damage the template – and it does not allow acts that would entail a serious violation of generally accepted moral rules.

- 29 The Principle of the Legitimacy of Taking Photographs in Museums is therefore not sufficient for the ethical assessment of most of the conflicts over the use of photographs of museum objects that have become the subject of legal proceedings in recent years. For a profound analysis and assessment of the most prominent recent litigations that has ensued, see Petri (2014) and (2018). See also the ruling of the German Federal Court of Justice (BGH), 20 December 2018 – I ZR 104/17.

Moreover, by imposing photography bans, often within the framework of house rules, many museums have tried to promote the sale of images offered in the museum shop, to create a monopoly for in-house photographers or even to make the publication of images of works in the public domain de facto dependent on the permission of the exhibiting museum. However, such a practice cannot be justified on the grounds that the revenue it generates is necessary to cover the costs of the museums concerned. For it is possible for museums – both public and private – to charge an entrance fee to cover costs; and it is fairer to (partially) cover the costs of a museum in this way than with the help of a photography ban because then all the museum’s visitors contribute to the revenues created, rather than only those who want to remember certain exhibits with the help of photographs. This practice cannot therefore be proven to be morally justified with this argument either. Hence, there do not seem to be any valid reasons to argue against the Principle of the Legitimacy of Taking Photographs in Museums. Indeed, the “Kulturgesetzbuch Nordrhein-Westfalen” (Cultural Code of North Rhine-Westphalia, KulturGB NW), which was unanimously passed by the North Rhine-Westphalian state parliament on 25 November 2021 and came into force on 1 January 2022, takes this finding of the ethical analysis into legal account in an exemplary manner by stipulating in § 40 para. 2: “The taking of photographs of items of museum collections which are permanently on display is to be permitted for private purposes”.³⁰

3. *The Principle of Prohibiting Deception by Manipulated Photographs*

My last example of a mid-level principle of a digital image ethics ties in with the third gradual difference between digital and analogue images. Photographs are highly valued as evidence in everyday contexts, but also in relation to fines and court proceedings.³¹ However, digital photographs can be altered much more easily than analogue photos, and in many cases,

30 Official Journal (Gesetz- und Verordnungsblatt) of Northrhine-Westphalia 2021 No. 84 of 14 December 2021, 1345 (online at https://recht.nrw.de/lmi/owa/br_vbl_detail_text?anw_nr=6&vdl_id=19996&zver=8&val=19996&sg=0&menu=0&vdl_ba ck=N); translation by the author.

31 The legal weight of pictorial evidence has been documented in a remarkable exhibition “La preuve par l’image. Archives de la justice et de la police” at the Musée gruérien in Bulle (Fribourg, Switzerland) from 30 October 2021 to 22 February 2022; cf. <https://musee-gruerien.ch/events/la-preuve-par-limage>.

it is much more difficult (sometimes even impossible) to clearly determine whether a digital photograph has been altered. This provides new possibilities for the artistic use of photographs and even enables new forms of artistic expression and artistic criticism, such as photographic caricature. However, it also facilitates deception about facts through manipulated photos, whose supposed evidential value often makes people believe that what can be seen in a photograph did indeed happen although it did not happen (or did not happen the way a manipulated photo seems to prove). With the help of face swapping techniques, it is even possible to provide supposed picture evidence that a person has committed an act that he or she in fact has not committed. To produce so-called deepfakes, artificial neural networks can be used, which automatically generate such fakes.³²

Of course, by giving rise to new forms of artistic articulation, the potentiation of the manipulability of photographic images promotes ongoing cultural development. Combined with the “uncomplicated possibilities of sharing ‘digital images’ with third parties”³³ (and indeed with a numerically barely limited multitude of third parties), it also enables the rapid and mass dissemination of visual political critique, especially via social media. By using manipulated digital photos, this critique can now be articulated through visual irony or through forms of visual mockery that were not possible before. This greatly increases the punch of such criticism, as was demonstrated in the Arab Spring and in other political contexts since. In this respect, the increase in the manipulability of photographic images that comes with the digital transformation contributes to the preservation and probably even the increase of artistic freedom and freedom of expression.

However, photographs are still commonly considered as evidence: Notwithstanding the fact that by virtue of the choice of cropping, perspective, lighting conditions, focal length, etc., every photograph represents a certain *perspective* on reality, photographs are still the most influential means of evidence in everyday life. The possibility of a hitherto unknown easy, fast and mass distribution of manipulated images, which make many people believe something that never happened, therefore enables a much more effective establishment of fake facts than was previously possible – namely a much faster simultaneous deception of a much larger number of people. It is obvious that this greatly increases the possibilities of “effective” exposure and defamation of third parties. But, also for processes of democratic decision-making, the possibility of the rapid simultaneous

32 See Pawelec/Bieß (2021); Hägle (2022); Leone (2022).

33 Dreier (2019) 243; translation by the author.

deception of many people about facts bears the danger that decisions will be made which those who make them would not have made in the same way if they had not started from fake facts suggested to them by supposed photographs of evidence.³⁴

Taking this ambivalent ethical finding into account, one cannot assume that even the *production* of manipulated photographs, which under certain circumstances can make fake facts appear to be facts, is illegitimate. For we do not in principle consider the production of artefacts that can be used both for morally blameless purposes and for morally reprehensible acts to be illegitimate.³⁵ From a moral point of view, however, it must seem reprehensible and therefore forbidden to use manipulated photographs in such a way that they make people believe events that did not happen or make them believe that someone performed or omitted an action that they did not perform or omit. My third example of a mid-level principle of digital image ethics can therefore be reduced to a brief formula: It is morally forbidden to deceive third parties about facts by publishing, reproducing or distributing manipulated photographs that are neither marked as such nor recognisable as such in the context of their use. Unlike the first two principles I have presented, this *Principle of Prohibiting Deception by Manipulated Photographs* does not require most national legislatures to do much rework. For criminal law, by sanctioning defamation, fraud and falsification of data relevant to evidence (cf. the German Criminal Code §§ 187, 263, 269), already largely takes into account the moral reprehensibility of deception about facts by means of manipulated photographs. Indeed, at most, it remains to be discussed whether the morally reprehensible deception about facts that influences a person's decisions about their own way of life or their vote should also be sanctioned under criminal law (I am sceptical about this.) For the rest, moral judges – and, in relation to legal consequences, courts – will have to decide in each individual case whether manipulated photos are labelled as such or are recognisable as such in the

34 This is probably even more true for all forms of direct democracy that dispense with representation and instead rely on voting “by mouse click or wipe” than for parliamentary democracies. For the vision of such a democracy “by mouse click or wipe” see Sommer (2022), quoted from the blurb of the book to be published on 11 April 2022.

35 As John Stuart Mill already stated in the 5th chapter of *On Liberty*, see Mill (1859/1991) 106: “If poisons were never bought or used for any purpose except the commission of murder, it would be right to prohibit their manufacture and sale. They may, however, be wanted not only for innocent but for useful purposes, and restrictions cannot be imposed in the one case without operating in the other”. I owe this reference to Lukas Daum.

context of their use and whether they are actually misleading about facts or not. Digital image ethics cannot relieve them of the responsibility for assessing the concrete individual case in this regard.³⁶

References

- Beever, Jonathan/McDaniel, Rudy/Stanlick, Nancy (2020): *Understanding Digital Ethics – Cases and Contexts* (Abingdon/New York: Routledge 2020)
- Christen, Markus/Gordijn, Bert/Loi, Michele (eds) (2020): *The Ethics of Cybersecurity* (Cham: Springer 2020)
- Christians, Clifford G. (2019): *Media Ethics and Global Justice in the Digital Age – A New Theory of Communication* (Cambridge: Cambridge University Press 2019)
- Dreier, Thomas (2019): *Bild und Recht – Versuch einer programmatischen Grundlegung* (Baden-Baden: Nomos 2019)
- Elliott, Deni/Spence, Edward H. (eds) (2018): *Ethics for a Digital Era* (Hoboken, N. J./Chichester: Wiley Blackwell 2018)
- Ess, Charles (2009/2020): *Digital Media Ethics* (Cambridge/Malden, Mass.: Polity Press 2009, 3rd ed. 2020)
- European Data Protection Supervisor (EDPS) Ethics Advisory Group (2018): *Towards a Digital Ethics* (2018, https://edps.europa.eu/sites/default/files/publication/18-01-25_eag_report_en.pdf)
- Floridi, Luciano (2013): *The Ethics of Information* (Oxford/New York: Oxford University Press 2013)
- Floridi, Luciano/Taddeo, Mariarosaria (2014): *The Ethics of Information Warfare* (Cham: Springer 2014)
- Floridi, Luciano/Taddeo, Mariarosaria (2016): ‘What is data ethics?’, *Philosophical Transactions R. Soc., Series A* 374: 20160360 (28 December 2016, <https://royalsocietypublishing.org/doi/pdf/10.1098/rsta.2016.0360>)
- Floridi, Luciano/Taddeo, Mariarosaria (eds) (2018 et seq.): *The Yearbook of the Digital Ethics Lab* (Cham: Springer 2018 et seq.)
- Geiger, Christophe (ed) (2015): *Research Handbook on Human Rights and Intellectual Property* (Cheltenham/Northampton, Mass.: Edward Elgar 2015)
- Gert, Bernard (1998): *Morality – Its Nature and Justification* (Oxford/New York: Oxford University Press 1998)
- Grimm, Petra/Keber, Tobias A./Zöllner, Oliver (eds) (2019/2020): *Digitale Ethik – Leben in vernetzten Welten* (Ditzingen: Reclam 2019, 2nd ed. 2020)

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- Gross, Larry/Katz, John Stuart/Ruby, Jay (eds) (1988): *Image Ethics – The Moral Rights of Subjects in Photographs, Film, and Television* (New York: Oxford University Press 1988)
- Gross, Larry/Katz, John Stuart/Ruby, Jay (eds) (2003): *Image Ethics in the Digital Age* (Minneapolis, Minn./London: The University of Minnesota Press 2003)
- Habermas, Jürgen (1973): ‘Wahrheitstheorien’, in: Fahrenbach, Helmut (ed): *Wirklichkeit und Reflexion – Festschrift für Walter Schulz* (Pfullingen: Neske 1973) 211–265
- Hägle, Olivia (2022): ‘From Copy & Paste to Deep Fakes – Digital Collaging and Image Manipulation’, in: Dreier, Thomas/Andina, Tiziana (eds): *Digital Ethics – The Issue of Images* (Baden-Baden: Nomos 2022) 207–227
- Heider, Don/Massanari, Adrienne (eds) (2012): *Digital Ethics – Research and Practice* (New York: Peter Lang 2012)
- Hick, Darren H./Schmücker, Reinold (eds) (2016): *The Aesthetics and Ethics of Copying* (New York/London: Bloomsbury 2016)
- Joerden, Jan C./Schmücker, Reinold/Ortland, Eberhard (eds) (2018): ‘Recht und Ethik des Kopierens – Law and Ethics of Copying’, 26 Annual Review of Law and Ethics (2018) 1–264
- Kant, Immanuel (1788/2015): *Critique of Practical Reason* (Cambridge: Cambridge University Press 2nd ed. 2015)
- Leone, Massimo (2022): ‘Semioethics of the Visual Fake’, in: Dreier, Thomas/Andina, Tiziana (eds): *Digital Ethics – The Issue of Images* (Baden-Baden: Nomos 2022) 187–205
- Lukas, George R. (2017): *Ethics and Cyber Warfare – The Quest for Responsible Security in the Age of Digital Warfare* (New York/Oxford: Oxford University Press 2017)
- Mahieu, René/van Eck, Nees Jan/van Putten, David/van den Hoven, Jeroen (2018): ‘From Dignity to Security Protocols – A Scientometric Analysis of Digital Ethics’, 20 Ethics and Information Technology (2018) 175–187
- Mill, John Stuart (1859/1991): ‘On Liberty’, in: Mill, John Stuart: *On Liberty and Other Essays*, ed. with an Introduction and Notes by John Gray (New York/Oxford: Oxford University Press) 1–128
- Mittelstadt, Brent Daniel/Allo, Patrick/Taddeo, Mariarosaria/Wachter, Sandra/Floridi, Luciano (2016): ‘The Ethics of Algorithms – Mapping the Debate’, Big Data & Society (July–December 2016, <https://journals.sagepub.com/doi/pdf/10.1177/2053951716679679>) 1–21
- Mittelstadt, Brent Daniel/Floridi, Luciano (eds) (2016a): *The Ethics of Biomedical Big Data* (Cham: Springer 2016)
- Mittelstadt, Brent Daniel/Floridi, Luciano (2016b): ‘The Ethics of Big Data – Current and Foreseeable Issues in Biomedical Contexts’, 22 Science and Engineering Ethics (2016) 303–341
- Otto, Philipp/Gräf, Eike (eds) (2018): *3TH1CS – Die Ethik der digitalen Zeit* (Berlin: iRights media 2nd ed. 2018)

- Pawelec, Maria/Bieß, Cora (2021): *Deepfakes – Technikfolgen und Regulierungsfragen aus ethischer und sozialwissenschaftlicher Perspektive* (Baden-Baden: Nomos 2021)
- Petri, Grischka (2014): 'The Public Domain vs. the Museum – The Limits of Copyright and Reproductions of Two-dimensional Works of Art', 12 Journal of Conservation and Museum Studies No. 1 (2014, <http://dx.doi.org/10.5334/jcms.1021217>)
- Petri, Grischka (2018): 'La propriété, c'est le vol? – Reproducing Art at the Museum', 26 Annual Review of Law and Ethics (2018) 99–123
- Reyman, Jessica/Sparby, Erika M. (eds) (2020): *Digital Ethics – Rhetoric and Responsibility in Online Aggression* (New York/London: Routledge 2020)
- Schicha, Christian (2021): *Bildethik* (München: UVK 2021)
- Schmücker, Reinold (2016): 'Normative Resources and Domain-Specific Principles – Heading for an Ethics of Copying', in: Hick, Darren H./Schmücker, Reinold (eds) (2016): *The Aesthetics and Ethics of Copying* (New York/London: Bloomsbury 2016) 359–377
- Schmücker, Reinold (2018): 'What is Wrong with Non-substitutional Copying?', 26 Annual Review of Law and Ethics (2018) 57–66
- Sommer, Andreas Urs (2022): *Eine Demokratie für das 21. Jahrhundert – Warum die Volksvertretung überholt ist und die Zukunft der direkten Demokratie gehört* (Freiburg: Herder 2022)
- Spiekermann, Sarah (2019/2021): *Digitale Ethik – Ein Wertesystem für das 21. Jahrhundert* (München: Droemer 2019, 2nd ed. 2021)
- Taddeo, Mariarosaria (2016): 'Just Information Warfare', 35 Topoi (2016) 213–224
- Taddeo, Mariarosaria/Floridi, Luciano (2016): 'The Debate on the Moral Responsibilities of Online Service Providers', 22 Science and Engineering Ethics (2016) 1575–1603
- Véliz, Carissa (2019): 'Three Things Digital Ethics Can Learn from Medical Ethics', 2 Nature Electronics (2019) 316–318
- Weber-Wulff, Deborah/Class, Christina/Coy, Wolfgang/Kurz, Constanze/Zellhöfer, David (2009): *Gewissensbisse. Ethische Probleme der Informatik. Biometrie – Datenschutz – geistiges Eigentum* (Bielefeld: transcript 2009)

Photo credits

Fig. 1: https://www.hdm-stuttgart.de/digitale-ethik/lehre/10_gebote

