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Irreplaceable Works

Non-substitutability, Market Failure, and Access Needs

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A well thought-out, convincing ethics of copying and a firmly grounded, balanced copyright law must satisfy not only the interests of authors and exploiters, but also the legitimate concerns of potential users.¹ However, in practice, this obvious requirement leads to a number of substantial problems. Authors and exploiters are closely related to concrete works due to their involvement in the creative process, refinements, and investments. Potential users are facing an enormous market that is difficult to oversee. One could think that the users' interests do not have to be taken into account to the same degree as those of authors and exploiters – or that there is an asymmetry between authors and exploiters, who are tied to individual works, and users, who can freely choose between numerous works. If a particular novel seems too expensive to a reader, she can decide to buy a different book. But it is easy to forget that, in some contexts and situations, works can prove to be irreplaceable. In this case, potential users have to acknowledge that there is no alternative that they can resort to. Such cases of irreplaceability deserve closer analysis.² It could reveal the necessity – and this will be my claim in this paper – that in weighing the interests of copyright owners and license holders against those of users, greater weight must be placed on questions of the accessibility of works.

I. Extrinsic and Intrinsic Non-substitutability

A fictitious example can illustrate that it is frequently the case that using a work, especially in a scientific context, involves irreplaceability. Let us imagine that a philosopher is working on a basic work on the ethics of copying. She develops a new argument about limitations in the marketability of copyright-protected works and relates these considerations to the existing literature on the issue. While reading a recent paper, she stumbles upon a bibliographic reference that draws her attention to another, obviously highly relevant article. However, she does not manage to obtain this paper, because access to the article would require an unusually expensive fee. If the philosopher has neither the private nor institutional means to pay this fee, she is forced to abandon working on her promising project. If she were to write her paper without acquainting herself with the earlier paper, she would risk violating the rules of good academic practice. At the very least, she would jeopardize her reputation by not taking the relevant latest research into account.

In many European, North American, and some East Asian countries, a situation like this is currently unlikely to occur, because public libraries guarantee access to scholarly literature with their interlibrary loan system. The problem is more urgent in regions with less developed, if not wanting, academic systems. Researchers in those countries potentially face insurmountable obstacles in the form of very costly remunerations. This is by no means an unrealistic scenario. Just recently, I received an inquiry from a Turkish philosopher of art who wanted to read my monograph on Caspar David Friedrich for her work on Kant's aesthetics and its importance for Romanticism. She wrote to me because she could not find the book in any Turkish library, nor was she able to buy it for the – admittedly not exactly cheap – price of \$ 120. The problem is even more serious with respect to digital works, regardless of the allegedly infinite access that the internet provides. Technical copy protection mechanisms and measures to regulate access prove to be particularly effective instruments for enforcing the copyrights of authors and exploiters. In these cases, the question of what is permissible in the context of copyright law does not even arise, since the accessibility and usability of a given work is already determined by technical means. At the same time, these protection measures ignore regulations that are thought to lift or limit copyright protection for specific privileged uses.³ For accessing digital works, special limiting preconditions often apply. For instance, individual documents only become available as part of larger packets, e.g., in the form of so-called consortial licenses.

But even if one takes account of the fact that, in many countries, this problem hardly arises by virtue of their well-equipped libraries, an unpleasant aftertaste remains. The supposed solution obviously comes at the price of public authorities anticipating and averting the problem by paying the, sometimes very high, license fees. In such cases access is secured at the price of a displacement of the problem. There always has to be an authority that has already paid the sales price, user fee, or license fee in order for others to avoid the problem.

What might initially seem to be a rare difficulty that only concerns access to some rather specialist scientific works, is in fact not that isolated. The problem tends to concern all copyright-protected works, as any protected work can become the subject of scientific research. A second fictitious example can demonstrate how, in particular, scientifically dealing with works that are not genuinely scientific can lead to a number of questions and problems. Imagine an art historian in Germany⁴ who is working on a monograph about Candida Höfer. In a central chapter, she analyzes the photograph *Museum of Modern Art New York XII, 2001*⁵ (fig. 1). The photograph is particularly telling, because it is rather unusual for Höfer's oeuvre, as it does not deliberately show the room parallel to the picture plane and from the front. The picture of a New York Museum of Modern Art exhibition room stands out for its tilted view, a *scena per angolo*, as it were, which shows the room from a special perspective and enables viewers to experience it a way that is unusual for Höfer.

Based on this observation, our art historian develops the argument that, with her work, Candida Höfer addressed and criticized the modern critique against the traditional easel painting and the linear-perspectival depiction of space – a critique that is particularly articulated in works of the avant-gardes in the 20th century. In an extensive analysis that takes into account a number of individual picture elements (the, overall, four paintings by Claude

Monet, Henri Matisse and Jackson Pollock,⁶ the wall arrangement and distribution of the works of art, the round grids of the air conditioning, the benches, the light distribution, as well as the arrangement of all these motifs in the photograph's composition), the art historian develops her thesis that Höfer responded to the high standards of the modern avant-gardes, subtly ironizing their pathos. She points out, among other things, the skillfully chosen angle and field of vision that makes the viewer involuntarily relate both the benches in the picture to the Pollock painting covering the wall – which makes the museum space appear to be furnished with church pews. However, in what follows we will not be concerned with this art-historical argument, but with the problems that the scholar could encounter when publishing her book. For example (this idea is also purely fictitious), it is conceivable Candida Höfer would only allow for printing the picture if she were able to read the manuscript beforehand.⁷ The art historian, however, wants to avoid this, because she makes some critical statements about Höfer's works. After taking a look at German copyright law (Urheberrechtsgesetz, UrhG), she abandons asking Höfer for permission to reproduce the image and decides instead to refer to the citation right according to § 51 of the copyright law, which allows for printing an image, “if, subsequent to publication, individual works are included in an independent scientific work for the purpose of explaining the contents”.⁸

However, upon rereading her analysis, our art historian is alarmed. She realizes that the Höfer image affects at least three other works that could fall under copyright protection: according to her own interpretation, none of the four paintings appearing in the picture could be arbitrarily substituted. They unfold a visual art-historical argument that Höfer's choice of perspective seems to directly respond to. Now, three of these works, the two paintings by Henri Matisse and the one by Jackson Pollock, are not yet in the public domain. The art historian is convinced that these works are highly relevant for Höfer's work and therefore also for her own line of reasoning. Hence she could not refer to § 57 UrhG, which permits the reproduction of works “if they are to be regarded as works incidental to the actual subject-matter being reproduced, distributed or communicated to the public”.⁹ On the other hand, she does not analyze these works individually and in detail in her text. She therefore now even doubts whether the quotation provision applies at all, since her text only concerns Höfer's photograph, so only this photograph, but not the other works depicted in it, are cited in the sense required by the law. Measured against the practice of the German copyright collecting society for pictures and art, *VG Bild-Kunst*, she would indeed have to fear that rights holders could contest the quotation right in this case.

The list of unsolved legal issues is not at all exhausted yet. Our art historian's analysis suggests that the curatorial achievement of assembling and spatially arranging the four paintings might constitute a work of its own (in the sense of an exhibition as a “compilation” [*Sammelwerk*] according to § 4 no. 1 UrhG).¹⁰ Independently of the question of whether quotation law could be applied to each of these works, the art historian therefore has to fear that the reproduction of Höfer's photograph affects up to six copyright-protected works and that, for her argumentation, none of these works could be substituted by anything else.

For the question at hand, it is not relevant how the art historian might eventually arrive at a legally correct solution, and at what expense. The example rather highlights a frequently

ignored but indeed common constellation in which works can prove to be irreplaceable: when protectable works are “contained” within another work and do not merely appear as “incidental to the actual subject-matter” in the sense of § 57 UrhG, use of a work containing the third party works inevitably also concerns the incorporated works.¹¹ The integration of works into other works (collages, compilations, anthologies, photographs, exhibitions, etc.) can hence have the consequence that the use of the overall work inevitably entails the use of the works contained within it. The incorporated work then proves to be irreplaceable in a specific way (differently from the first example). This second example is by no means unusual or far-fetched. Producers of documentary films or photographs, in particular, are constantly struggling with fundamental problems as their works often contain a large number of other copyrighted works. Many documentaries contain – accidentally or deliberately – copyrighted material when showing interiors or communicating a certain atmosphere. Even within the framework of the fair use doctrine of US copyright law, for a long time producers of documentaries carefully avoided integrating copyrighted material into their works. They were, as Patricia Aufderheide and Peter Jaszi put it, “trapped within a culture of fear and doubt”¹². In order to minimize the risk of law suits, they excluded popular music or films from their projects. Since the fair use-doctrine has become well-known among US documentary producers, the situation has changed significantly.¹³ However, the situation is different in other countries, where producers of documentaries still face considerable obstacles.¹⁴

Both examples do not outline the problem of potential irreplaceability in its entirety. But they show that potential users can be confronted by the non-substitutability of a work in various ways. In the first example, the non-substitutability is caused solely by external constraints – the rules of scientific practice. In the second example, there is an irreplaceability already rooted in the work itself. The first case can be characterized as an *extrinsic* non-substitutability; the second example, by contrast, features an *intrinsic* irreplaceability. Of course, in many cases, both forms of non-substitutability are involved.

Beside this distinction, our examples also allow for a second fundamental observation. Works are not irreplaceable by themselves. They are always irreplaceable with respect to specific situations, contexts, and practices of use. The circumstances of the intended use decide whether a different work could be used instead, after all, or whether use of the work can be dropped. This also applies to cases of intrinsic non-substitutability. It follows from the incorporation of a work x into another work y that use of y implies access to x (albeit not necessarily full access). However, in such a case, work x is only non-substitutable if y has already proven to be irreplaceable for the user’s purposes. Non-substitutability therefore does not depend merely on properties of works (quality, originality, etc.), but on contexts of use.

Cases of non-substitutability may occur particularly often in fields and social subsystems that have developed a high degree of routines, institutionalized practices, and rules for the production and use of works. This is primarily the case within the area of creative and artistic practice as well as in the sciences, i.e. in contexts where, in the production of new works, reference is usually made to already existing works. The problem is certainly even more serious under the current working conditions in science. Beside the standard of following the

rules of good scientific practice, the endeavor to sufficiently acknowledge the relevant state of research is equally important.¹⁵

However, it would be shortsighted to regard this problem as limited to the use of scientific or artistic works. The challenge posed to ethics and law by the potential non-substitutability of works is rather of a fundamental nature and cannot be restricted to particular types of works. For any given work, situations and contexts are conceivable in which it cannot be substituted. Any work (as defined by copyright law), for example, can become the subject of scientific investigation or artistic intervention. The irreplaceability of works is not a clearly delimited minor problem that could be resolved by solutions that are limited to particular types of works.

II. Unduly High Remunerations as a Consequence of Non-substitutability

One person's loss is another's gain. If authors and exploiters know that a work can be irreplaceable in certain situations and for particular users, they are able to demand fees that are disproportionately higher than their own expenses (for development, production, and distribution) or the profit they could otherwise legitimately expect.¹⁶ Of course, nobody would deny that the economic interests of authors and exploiters should be taken into account for the use of works eligible for protection – even if these works cannot be substituted. Nobody will take possible cases of irreplaceable protected works as a reason to question appropriate remunerations in general. However, it is ethically problematic if the predicament of a user – who requires the work and is, at the same time, legally obliged to comply with the financial demands of the author or exploiter – is used to demand disproportionately high fees.

The examples to illustrate this point are not fictitious. At least two incidents over the past few years have drawn attention to the aggressive pricing policy of large, globally active academic publishers – namely, Elsevier, Springer Nature, and Wiley. In 2011, the Kazakh academic Alexandra Elbakyan founded the internet platform Sci-Hub – a “shadow library”.¹⁷ By now, more than 60 million academic articles are accessible on this platform, bypassing the claims of the authors and exploiters. Elbakyan, who in 2016 was voted among the “ten people who mattered this year”¹⁸ by the journal *Nature*, justified this massive infringement of copyrights as a reaction to the pricing policies of leading academic publishers that, according to Elbakyan, do harm to science.

A similar argument is also put forward by the German association of professional science organizations, the *Allianz der Wissenschaftsorganisationen*. In the context of the project DEAL, the association tries to negotiate nationwide licenses with the most important academic publishers. Since its beginning in 2014, the project DEAL tries to limit the financial burdens for German libraries and academic institutions and to enhance access to scholarly literature for academics. In 2016, the negotiations with the Elsevier publishing group led to an escalation in the relations between the company and academic organizations, causing numerous academic libraries in Germany to cancel their subscriptions for journals published by Elsevier. The *Allianz der Wissenschaftsorganisationen* stated: “Despite the current returns on sales of 40 percent, the publisher continues to rely on increasing prices beyond the license

fees that have been paid so far.” Elsevier was accused of exploiting “its dominant position on the market.”¹⁹

The main indicator of the academic publishers’ inappropriate pricing is their exceptionally high returns, which have kept rising over the past decades.²⁰ The returns reliably show that the high prices for subscriptions to renowned academic journals cannot be solely – and not even primarily – attributed to the publishers’ expenses for refinements (such as catalogue design, quality control, editing, typesetting, distribution, and marketing – steps that have been increasingly delegated to authors and editors, anyway) or higher-than-average economic risks. The journal prices are due mainly to the particular intrinsic dynamics of the academic publishing sector and to a specific common trait of copyright-protected works, i.e. that these works are unique in at least one respect and therefore potentially irreplaceable. Another reason for the high prices is the internal dynamics of academic publishing. Both factors need to be examined in more detail.

1. Work Concept and Non-substitutability

The potential non-substitutability of protectable works consequently follows from the concept of work on which copyright itself is based. According to § 2, subsection 2 of the German Copyright Act (UrhG), “only the author’s own intellectual creations” enjoy protection by copyright. The term “creation” signals that something new has been produced that had not previously existed in the same way.²¹ Only something that somehow, and significantly, differs from other, previously existing things is therefore eligible for protection. This difference, which is the basis of a work’s specificity, may – depending on the context and intended use – turn into a property that makes the work irreplaceable. If the properties, characteristics, or qualities that characterize the work as an original creation are at the focus of a potential user’s interest, the work becomes indispensable for her. The concept of the work of authorship contained in copyright law implies the potential non-substitutability as a main defining element.

Copyright can be justified as a subjective exclusive right, because – among other reasons – it makes works that count as so-called intellectual property marketable in the first place. It is essential to solving the problem that such works cannot be exhausted and are thus not, by nature, scarce, since multiple – even simultaneous – uses of the same work are entirely possible. Copyright law responds to this problem by generating – and this is by no means an unintended side-effect – an artificial ‘scarcity’ of protected works in order to guarantee that a remuneration can be demanded for these works. One common argument in favor of such remuneration is that it creates an incentive for further creative activities.²² The legally established ‘scarcity’ that is required for this, however also means that a situation involving the non-substitutability of a work can turn into a manifest problem if that work is not available to a user due to high fees.

2. *Science as a Catalyst of Non-substitutability*

Mechanisms of reputation in the sciences can be a particularly effective factor in the generation of non-substitutability. Science has, in its practice, so far tolerated the predicaments caused by unfair pricing on the part of major publishers. The primary reason for this is the way publishing organs function within science. The “oligopoly”²³ of journals and publishing houses with strong reputations, prestige, and considerable impact on career advancement substantially contributes to the monopolistic control of exploiters over particular works. An academic who wants to make an innovative research contribution and successfully publish it must acknowledge those contributions that address the relevant issue – or related issues – in the major journals. To take our earlier example, an art historian would hardly manage to place an article on Candida Höfer in the renowned *Art Bulletin* if she ignored in her argument, for financial reasons, any of the relevant previous research about Höfer, which partly might have been published in the very same journal.

The oligopoly of leading professional journals is based primarily on the earlier achievements of scholars who contributed to the development of the journals’ reputation either as authors, editors, or referees. The fact that the good reputation of a publishing organ is not primarily due to publishing accomplishments is already grounded in the internal logic of science. Its basic commitment to scientific merit excludes any extra-scientific factors as irrelevant. It goes against the nature of the scientific system to acknowledge any non-scientific accomplishment – such as refinement through a publisher – as particularly relevant for the scientific evaluation.²⁴ The role of publishers is indeed largely limited to aggregating the achievements made by individual scholars or research groups in terms of building reputation and securing its lasting continuity. Nonetheless, this generates considerable capital for the publisher – and not just symbolical capital. The reputation earned through previous authors and referees binds later authors and users (that is, readers) to particular publication organs and hence to publishers, which can thereby attain the position of an oligopoly. The importance of this reputation makes it difficult, if not impossible, to resist the monopoly exercised by the exploiter in granting access to individual concrete works. The potential user simply cannot afford to ignore a paper in a journal of high repute because of its exorbitant charges. The reputation-based oligopoly of powerful exploiters supports the possibility to exploit the non-substitutability of works like a monopoly in order to demand exorbitant fees. (The present DEAL initiative by the *Allianz der Wissenschaftsorganisationen* demonstrates exactly this point.) Although scholars are suffering from this situation, they are also contributing toward its continuation with their reputation-enhancing work. One main reason for this is that publishing in the leading academic journals is decisive for an academic career.

III. Ethical Considerations

The tendency toward an oligopoly of a few market-dominating exploiters sketched above, which is supported and intensified by, in particular, the interplay between the potential non-substitutability of particular works and the internal logic of mechanisms of scholarly reputation, can hardly be considered satisfactory from an ethical point of view. I will briefly

outline three ethical considerations that suggest that, when it comes to developing sensible and consensual copyright regulations, conflicts about potential non-substitutability must be properly taken into account.

(1) Cases in which the non-substitutability of works goes along with disproportionately high charges mark one of those critical moments in which the intention of copyright law to facilitate and promote creativity and innovations²⁵ threatens to turn into the opposite, that is, the restriction and prevention of new works. The fictitious example of an academic who cannot complete and publish her study following the rules of good scientific practice because she cannot get access to a potentially relevant source indicates how the potential non-substitutability of protected works and the associated “market failure” can prevent innovations. In such cases, an essential ethical argument – which supports the acceptance of copyright by asserting that it is in the interest of society as a whole – does not apply. A copyright law that is perceived as an obstacle to scientific or artistic innovation may well still be justified as a protection of ownership, but the price for the latter would be disproportionately high.

(2) The intrinsic non-substitutability of works in particular – i.e., cases where a work contains or affects further protectable works – can confront interested users with impenetrable, legally complex states of affairs and thus potentially with a high degree of legal insecurity. For laypersons, it is easy to get confused about whether the citation right applies in such cases or whether the incorporated work can count as “incidental” (in the sense of § 57 UrhG). In such cases, the user is either forced to invest a considerable amount of time and money to arrive at a legal solution or accept risks that are almost impossible to calculate. This is also a case where creative innovations that are potentially in the interest of society as a whole run the risk of being prevented. In view of such complexity and insecurity concerning the legal assessment, promising talents or scientists could be shut out because they do not think they can answer the open legal questions and also do not have sufficient means to seek professional advice. The experience of legal insecurity could undermine trust in the legal system in general.

(3) The initiative by Alexandra Elbakyan has highlighted a third problem: so far, our strategies to circumvent (and not solve) the problem of the potential non-substitutability of works in the area of science intensify and exacerbate an already profound lack of equal opportunities. Whereas in European, Anglo-American and East Asian countries, access to even excessively expensive journals is largely guaranteed by a system of public and university libraries, the scientific communities in many other countries – indeed on entire continents – are cut off from these sources. On a smaller scale, such inequalities could indeed also arise in European and Anglo-American knowledge societies if the interlibrary loan system – an instrument that is by no means to be taken for granted – should ever be called into question. The result would be that junior academics at a comparatively poor university would soon face worse career opportunities than their colleagues at well-funded universities. An equally inevitable consequence would be that scientists at publicly funded institutions or well-equipped company research centres would have considerably better access to scientific publications than so-called independent scholars.

A system that, in practice, hardly poses any problems for most scientists working in comparatively privileged academic institutions and relying on a functioning network of libraries is still not fair as long as countless scientists in other countries do not have the same opportunities. The potential non-substitutability of scholarly publications, in combination with existing copyright and the reputation oligopolies of some publishing organs, contribute to sustaining and deepening the academic inequality between the so-called developed countries and many other regions of the world. The excessive fees charged by eminent academic publishers – which could only be established on the basis of potential situational non-substitutability – add to the consolidation of a Western and European hegemony in the sciences, because it makes it much more difficult for scholars from economically less prosperous countries to become competitive. Such a development cannot be reconciled with deeply rooted notions of justice; it has to be deemed extremely unfair.

Moreover, the ethical considerations outlined above are not the only reasons that make this fact appear problematic. It cannot be in the interest of the sciences, either. On the one hand, the prospects for numerous innovative contributions are minimalized this way, simply because fewer researchers are able to contribute to scientific discourse “at eye level”. On the other hand, the opportunity for cultural and social diversity from different regional contexts to productively contribute to challenging existing academic discourses, concepts, practices, and paradigms becomes limited. If the European-American hegemony in science continues to largely exclude a substantial part of other countries’ academic intellectual elite by means of the high fees charged by the exploiters, it is acting in a way that is deeply hostile to science and also against its own interests.

In view of such consequences, the potential non-substitutability of individual works becomes a factor that has structural effects beyond individual situations. Certain protectable works are only irreplaceable with respect to a concrete context of use and a particular concern. At the same time, non-substitutability gains systemic relevance if one must always expect the potential irreplaceability constantly to raise real, concrete problems.

IV. Solutions? On the Relevance of Potential Non-substitutability for the Improvement of Copyright Regulations

Neither the market nor criminal or competition cartel law seem to be able to effectively prevent authors or exploiters from taking advantage of the potential non-substitutability of works in order to demand excessive remuneration. In situations and contexts in which a work cannot be substituted, the market can no longer contribute to a regulation of prices. Where there are in fact no alternative offers, no competition among suppliers can take place. Not only does the market turn out to be a blunt sword, but so too does the ban on usury or other kinds of profiteering prescribed by criminal law.²⁶ Since the user’s weak position does not usually imply a predicament (that is, a compelling need in the sense of criminal law), the requirements for the existence of usury pursuant to the criminal code are not met. But what about competition law?²⁷ Any attempt to find a legal solution based on cartel legislation would encounter the problem that the area of application of the issue described above can

hardly be fixed to a specific industry or subject matter. Moreover, the dominant market position of particular exploiters is not the result of collusion or coordinated actions. It is rather based on the reputation logic of the sciences and the non-substitutability of works in a given research context. Publishing houses have gained their privileged position automatically, as it were, if they have succeeded in prudently aggregating the reputation-enhancing efforts of numerous scientific authors, editors, and referees.

As far as I can see, the legal literature and the discussions on reforming copyright law suggest three main approaches toward a solution: the establishment of arbitration boards or regulatory authorities; far-reaching changes within the sciences concerning the practices of publishing and granting access to works; and a readjustment of the limitations and exceptions of copyright law. Let us examine these three options again in light of our considerations about potential non-substitutability.

Establishing arbitration boards or regulatory authorities could help to clarify claims for remuneration in a reliable and legal way²⁸ if the latter are regarded as excessive by potential users. However, a regulation of this kind would lead to numerous time-consuming case-by-case reviews. Moreover, it would hardly have any effect on granting users access to a work in a timely manner and at an acceptable price.²⁹ It would therefore not solve the problem of non-substitutability, at least not within science, because the amount of time that a legal resolution would take is, again, disproportionate and incompatible with scientific research practice. In many scientific disciplines, it is not just the quality of the research that is highly important, but also the time it takes to quickly publish the research results. Lengthy negotiations with arbitration boards (including possible objections, appeals, and strategic delays) could mean that other researchers publish similar results elsewhere before the board has settled the issue, or that the results need to be revised due to new insights that were gained in the meantime. Academic publications reflect the state of knowledge at a particular point in time. This internal temporal logic of academic publishing would be seriously disturbed by such time-consuming clarification processes.

A science-internal regulation,³⁰ i.e. an extensive commitment to publishing under the conditions of “open access,” could at best only partially solve the problem. Such a commitment could possibly be enforced through details in employment contracts (albeit probably only for publicly funded scientific institutions) and the conditions for public funding.³¹ However, there would still be unavoidably large areas of academically relevant works that could not be covered by this measure: apart from the works of researchers attempting to evade such a commitment, this applies in particular to the majority of previously published works. Even if – contrary to expectations – such a regulation internal to science could be broadly implemented, most works published to date would remain excluded from this. As long as the sciences remain dependent on access to such works, situations of non-substitutability will continue to occur regularly. They could, at least potentially, continue to be used by exploiters. A science-internal solution would also face another barrier: if at all, it would merely alleviate cases of non-substitutability concerning scientific works. Non-scientific works that are taken as the subject of a scientific analysis would thus not be covered. Numerous cases, particularly of intrinsic non-substitutability, would remain

unresolved.³² The art historian working on a complex work of art incorporating other works, for example, would not benefit from such a regulation at all.

In order to effectively avoid that the potential non-substitutability of works is used for demanding excessively high fees or that these demands prevent the creation and publication of further works, a solution is needed that acknowledges the possibility of extrinsic non-substitutability and potential cases of intrinsic irreplaceability. Moreover, the solution must acknowledge that this does not only apply to specific works, but to all works affected by purpose of the intended use. The easiest way to reach such a solution would probably be a comprehensive statutory exception to copyright, compensated by an obligation to pay remuneration. Such a regulation would not deny that a remuneration can be demanded for access to protected works. It would, however, leave the amounts charged not up to the exploiters alone. Exploiters would no longer be able to use the potential non-substitutability of works for demanding disproportionately high fees. They would be bound by an authority – such as a collecting society – to prevent a potential non-substitutability from being unduly exploited in pricing.

The applicability of such a statutory exception should not be defined by reference to the character of individual types of works but by reference to the context of use. What the German legislator recently attempted – although not very boldly – with the latest copyright reform bill flagged out as serving to adjust our copyright law to the requirements of the knowledge society³³ points a little bit in this direction. At least it contains explicit reference to specific purposes of use for which the rights of authors and license holders are to be limited. But the debates about this law amendment alone have shown that not all of the potential problems are addressed by this focus on the sciences and education. Similar questions also arise for the arts.³⁴ An exhaustive determination and precise demarcation of those areas of uses where instances of non-substitutability can occur and raise serious problems, is still lacking. It should not be prematurely restricted to the (for us) obvious example of science. However, the latter clearly demonstrates that any regulation that does not take into account the problem of the potential non-substitutability of works, is unlikely to be accepted in the long run.

Zusammenfassung

Der Beitrag nimmt Fälle in den Blick, in denen sich urheberrechtlich geschützte Werke für einen Nutzer als unersetzlich erweisen. Neben Situationen, in denen die Absichten des Nutzers oder externe Regeln (beispielsweise der Wissenschaft) die Unersetzlichkeit eines bestimmten Werkes zur Folge haben, sind auch Fälle intrinsischer Unersetzlichkeit zu berücksichtigen, die sich dem Umstand verdanken, dass urheberrechtlich geschützte Werke Teile eines bestimmten anderen Werkes sind. Der Beitrag analysiert die Schwierigkeit, den Zugang zu unersetzlichen urheberrechtlich geschützten Werken all denen zu gewährleisten, die daran ein legitimes Interesse haben, von den Inhabern urheberrechtlich begründeter Nutzungsrechte daran jedoch unter Umständen durch prohibitiv hohe Nutzungsgebühren gehindert werden. Der Beitrag analysiert das Problem unter anderem am Beispiel des Zugangs zu den Inhalten

vieler wissenschaftlicher Fachzeitschriften und wägt abschließend mögliche Lösungswege gegeneinander ab.

Figures

Fig. 1: Candida Höfer, 'Museum of Modern Art New York XII 2001', 2001, C-print, 121 x 152 cm. Reproduced from: Michael Krüger, *Candida Höfer. A Monograph*, transl. by Jeremy Gaines, London 2003, p. 121.

Notes

1 Cf., for instance, Reinold Schmücker, Normative Resources and Domain-specific Principles: Heading for an Ethics of Copying, in: Darren Hudson Hick / Reinold Schmücker (eds.), *The Aesthetics and Ethics of Copying*, New York / London 2016, pp. 359 – 377, esp. p. 371 et seq. The above reference to copyright owners, exploiters, and users is obviously incomplete, since it does not cover everyone affected by copyright regulations. There are also the owners and users of technical devices – who are affected by copyright due to copyright – as well as potential users who do not appear as actual users of certain copyrighted works since they remain excluded from using the respective works for some economic, political or technical reasons, and tax payers in general who contribute to the fact that, in many cases, public institutions can be users. Tax revenues are also used for funding the production of certain copyrighted works. The interests of all of these people must also be taken into account.

2 The problem of potential non-substitutability has by no means been ignored; cf., e.g., Reto M. Hilty, *Das Urheberrecht und der Wissenschaftler*, in: *GRUR Int* 2006, pp. 179–190, esp. pp. 185 et seq. A related problem concerns the criterion of indispensability, which is important to define the limits of the exploitation of copyrighted works; cf. Lionel Bently / Brad Sherman, *Intellectual Property Law*, 4th ed., Oxford 2014, pp. 321 et seq.

3 Hilty, *Das Urheberrecht und der Wissenschaftler* (supra, n. 2), p. 180, with further refs., pp. 186 et seq.

4 As the legal problem outlined in what follows is treated differently in each national legislation, it is necessary to discuss the matter with reference to one particular copyright law – in this example, German copyright law.

5 Michael Krüger, *Candida Höfer. A Monograph*, transl. by Jeremy Gaines, London 2003, p. 121; Maren Polte, *Klasse Bilder. Die Fotografieästhetik der 'Becher-Schule'*, Berlin 2012, pp. 163–165. For a legal point of view, see Celia Kakies, *Kunstzitate in Malerei und Fotografie*, Köln 2007, pp. 19–21, 72, 118, 129.

6 Höfer's photograph shows the following paintings that belong to the collections of the MoMA New York (from left to right): Henri Matisse, 'The Piano Lesson' (1916); Henri

Matisse, 'Goldfish and Palette' (1914); Jackson Pollock, 'One: Number 31, 1950' (1950); and Claude Monet, 'Water Lilies' (1914–1926).

7 On the phenomenon of artists trying to influence texts about their artwork by granting or denying permission to reproduce it, see Wolfgang Ullrich, *Siegerkunst. Neuer Adel, teure Lust*, Berlin 2016, p. 93 et seq., as well as idem, *Stellungnahme des Autors zu den Abbildungsverboten in „Siegerkunst. Neuer Adel, teure Lust“*, accessible at <https://ideenfreiheit.files.wordpress.com/2016/01/siegerkunst-stellungnahme1.pdf> (last access: 20 May 2017).

8 Official English translation by the German Federal Ministry of Justice and Consumer Protection, https://www.gesetze-im-internet.de/englisch_urhg/englisch_urhg.pdf (last access: 25 May 2018). For the problem discussed here, see also Thomas Dreier / Gernot Schulze / Louisa Specht, *Urheberrechtsgesetz. Kommentar*, 6th ed., Munich 2018, § 51 para. 22–25; Timo Prengel, *Bildzitate von Kunstwerken als Schranke des Urheberrechts und des Eigentums mit Bezügen zum Internationalen Privatrecht*, Frankfurt (Main) 2011.

9 “[...] wenn sie als unwesentliches Beiwerk neben dem eigentlichen Gegenstand der Vervielfältigung, Verbreitung oder öffentlichen Wiedergabe anzusehen sind.” On the tendency to interpret the concept of an “inessential accessory” (“unwesentliches Beiwerk”) narrowly, see Dreier / Schulze / Specht, *Urheberrechtsgesetz. Kommentar* (supra, n. 8), § 57 para. 2–4.

10 Clemens Waitz, *Die Ausstellung als urheberrechtlich geschütztes Werk*, Baden-Baden 2009.

11 As far as I can see, juridical research on such works-within-works constellations has focused rather on their production and less on questions of the subsequent use of such works; cf., e.g., Kakies, *Kunstzitate* (supra, n. 5); Ilja Czernik, *Die Collage in der urheberrechtlichen Auseinandersetzung zwischen Kunstfreiheit und Schutz des geistigen Eigentums*, Berlin 2008; Wolfgang Maaßen, *Plagiat, freie Benutzung oder Kunstzitat? Erscheinungsformen der urheberrechtlichen Leistungübernahme in Fotografie und Kunst*, in: Matthias Weller / Nicolai Kemle / Thomas Dreier (eds.), *Raub – Beute – Diebstahl. Tagungsband des Sechsten Heidelberger Kunstrechtstags am 28. und 29. September 2012*, Baden-Baden 2013, pp. 191–246.

12 Patricia Aufderheide / Peter Jaszi, *Reclaiming Fair Use. How to Put Balance Back in Copyright*, Chicago 2011, p. 3.

13 See Patricia Aufderheide / Aram Sinnreich, *Documentarians, Fair Use and Free Expression: Changes in Copyright Attitudes and Actions with Access to Best Practices*, *Communication, Information and Society* 19:2 (2016), <https://doi.org/10.1080/1369118X.2015.1050050>.

14 See, e.g., Patricia Aufderheide, *Artistic Licence*, *The Saturday Paper*, No. 160 (10 June 2017), p. 9.

15 Unfortunately, the present text, ironically, cannot fully meet this demand. As an art historian, I lack the expertise and familiarity with ethical and legal discourses in order to

embed my considerations within the relevant state of research. My paper outlines the thoughts that have been occupying me over the past few years in practice (i.a. as coeditor of an academic journal and as a member of the interdisciplinary ZiF research group on The Ethics of Copying).

16 This is, of course, not a new insight. See, for instance, Andreas Degkwitz, Grundlegende Konflikte und Kontroversen beim Umgang mit ‘geistigem Eigentum’ in der Wissens- und Informationsgesellschaft, in: Stiftung Deutsches Forum für Kriminalprävention (ed.), *Internet-Devianz*, Berlin 2006, pp. 33–40: p. 34; Rainer Kuhlen, *Erfolgreiches Scheitern. Eine Götterdämmerung des Urheberrechts?*, Boizenburg 2008, p. 218–241.

17 Klaus Graf, *Sci Hub, Fernleihe und Open Access*, in: *Archivalia*, 9 April 2016, <https://archivalia.hypotheses.org/55814> (last access: 20 May 2017).

18 Richard van Noorden, *Paper Pirate. The Founder of an Illegal Hub for Paywalled Papers Has Attracted Litigation and Acclaim*, in: *Nature* 540 (22/29 December 2016), p. 512, http://www.nature.com/polopoly_fs/1.21157!/menu/main/topColumns/topLeftColumn/pdf/540507a.pdf (last access: 20 May 2017).

19 Press statement by the Allianz der Wissenschaftsorganisationen, 2 December 2016: https://www.leopoldina.org/fileadmin/redaktion/Publikationen/Allianz/2016_12_02_DEAL.pdf (last access: 20 May 2017).

20 For the development of the returns on sales, see Vincent Larivière / Stefanie Haustein / Philippe Mongeon, *The Oligopoly of Academic Publishers in the Digital Era*, in: *PLoS ONE* 10:6 (2015), p. 10–12, <https://doi.org/10.1371/journal.pone.0127502> (last access: 20 May 2017); Niels Taubert / Peter Weingart, *Wandel des wissenschaftlichen Publizierens. Eine Heuristik zur Analyse rezenter Wandlungsprozesse*, in: iid. (eds.), *Wissenschaftliches Publizieren zwischen Digitalisierung, Leistungsmessung, Ökonomisierung und medialer Beobachtung*, Berlin 2016, pp. 3–38: pp. 12–14.

21 Cf. Dreier / Schulze / Specht, *Urheberrechtsgesetz. Kommentar* (supra, n. 8), § 2 para. 16.

22 Cf., e.g., Gerd Hansen, *Warum Urheberrecht? Die Rechtfertigung des Urheberrechts unter besonderer Berücksichtigung des Nutzerschutzes*, Baden-Baden 2009, pp. 107 et seq. For a critical reflection on an empirical basis, see Arian Nazari-Khanachayi, *Rechtfertigungsnarrative des Urheberrechts im Praxistest. Empirie zur Rolle des Urheberrechts*, Tübingen 2016.

23 I use this term in a rather imprecise and figurative manner with reference to the internal logic of the science system and its “economy” of reputation. The tendency towards the development of an oligopoly in the economic sense of the word is, however, closely related to this. See, e.g., Taubert / Weingart, *Wandel des wissenschaftlichen Publizierens* (supra, n. 20), p. 13, and Niels Taubert, *Open Access und digitale Publikation aus der Perspektive von Wissenschaftsverlagen*, in: Taubert / Weingart (eds.), *Wissenschaftliches Publizieren* (supra, n. 20), pp. 75–102: p. 78; on the continual concentration of the academic publishing market, see also Larivière / Haustein / Mongeon, *The Oligopoly of Academic Publishers in the Digital Era* (supra, n. 20).

24 It is therefore consistent that no independent protection is granted to publishers – in contrast to, e.g., producers of sound recordings, films, or databases. I thank Thomas Dreier for this point; see also Hilty, *Das Urheberrecht und der Wissenschaftler* (supra, n. 2), p. 181.

25 US copyright law refers to the aim of promoting “the progress of Science and useful Arts”; The U.S. Constitution, art. I, sect. 8; see Jack N. Rakove, *The Annotated U.S. Constitution and Declaration of Independence*, Cambridge, MA 2009, p. 147. Although German copyright law does not explicitly articulate its purpose, it is generally thought to support and stimulate creativity and innovation by securing the subsistence of creators (“Alimentationsprinzip”) and the amortization of investments (“Amortisationsprinzip”); see, e.g., Manfred Rehbinder / Alexander Peukert, *Urheberrecht*, 17th ed., Munich 2015, § 6 para. 123 et seq.

26 See, for instance, § 291 of the German Criminal Code (Strafgesetzbuch, StGB); English translation provided by the German Federal Ministry of Justice and Consumer Protection available at: https://www.gesetze-im-internet.de/englisch_stgb/englisch_stgb.pdf (last access: 25 May 2018).

27 See also Hilty, *Das Urheberrecht und der Wissenschaftler* (supra, n. 2), p. 186, who points out that “the path of cartel proceedings is long and stony” and would have to be taken again every time there is a new infringement.

28 Existing regulatory authorities in telecommunications, the energy sector, and rail transportation could serve as models here.

29 This problem could be mitigated to a degree by the option of advance payment: in this case, the interested user would provisionally pay the (in his view, excessive) fee into an escrow account of some form and immediately gain access to the work. If she later were to win the lawsuit, the excessive fee would be reimbursed. Such a procedure would presumably mainly benefit institutional users.

30 See, e.g., the recommendations by Aileen Fyfe / Kelly Coate / Stephen Curry et al., *Untangling Academic Publishing. A History of the Relationship Between Commercial Interests, Academic Prestige and the Circulation of Research*, St Andrews 2017, pp. 18–20, <https://doi.org/10.5281/zenodo.546100> (last access: 22 July 2018).

31 Cf. the controversial attempts by the University of Constance to force its scientists to make publications available on an open-access server, in line with the Berlin declaration on open access to scientific knowledge of 20 October 2003.

32 The problems outlined above will also remain if – as Hilty, *Das Urheberrecht und der Wissenschaftler* (supra, n. 2), p. 185, suggested – scientific works generated in public institutions are considered public goods that are no longer protectable by copyright.

33 Gesetz zur Angleichung des Urheberrechts an die aktuellen Erfordernisse der Wissensgesellschaft (Urheberrechts-Wissensgesellschafts-Gesetz – UrhWissG) of 1 September 2017.

34 In February 2017, the ZiF research group *The Ethics of Copying* published a statement on the draft of the “Gesetz zur Angleichung des Urheberrechts an die aktuellen Erfordernisse der

Wissensgesellschaft” (UrhWissG) by the Federal Ministry of Justice and Consumer Protection. In this statement, the group favoured explicit reference to the arts in defining quotation rights; see *Stellungnahme der Forschungsgruppe Ethik des Kopierens am Zentrum für interdisziplinäre Forschung (ZiF) zum Entwurf eines Gesetzes zur Angleichung des Urheberrechts an die aktuellen Erfordernisse der Wissensgesellschaft (UrhWissG)*, Bielefeld 2017, p. 8: https://www.bmjv.de / SharedDocs / Gesetzgebungsverfahren / Stellungnahmen/2017/Downloads/02222017_Stellungnahme_zif_RefE_UrhWissG.html?nn=6712350 (last access: 25 May 2018); see also Thomas Dreier, *Bilder im Zeitalter ihrer vernetzten Kommunizierbarkeit*, *Zeitschrift für geistiges Eigentum* 9 (2017), pp. 135–148.