AUTHORS AT WORK

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I. Introduction

There are many forms of cultural production. Medieval European patronage might be gone,² but public grants, prizes and especially legal protection in the form of copyright law, replaced them as sources of incentives for creativity. Modern views of cultural production focus on the romantic author, who is apparent in the text and in the sub-text of much of copyright law as we know it for the past three centuries.³ This is Author's copyright. Today, in post-modern times, copyright scholars are growingly aware of other forms of creative production, such as non-western communal authorship⁴ and collaborative research.⁵ As our lives go digital, more attention is devoted to various forms of peer production, such as open source projects and wikis.⁶ Within the excitement of the realization of these other forms of creativity, fuelled by the expansion of copyright law in the past decade,⁷ one traditional mode of creativity attracted surprisingly little attention: creative works produced in the workplace, governed by the doctrine of work made for hire. This article focuses on the works

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² See Mark Rose, Authors and Owners: The Invention of Copyright 16-17 (1993).

³ See Martha Woodmansee, *The Genius and the Copyright: Economic and Legal Conditions of the Emergence of the Author*, 17 EIGHTEENTH CENTURY STUDIES 425 (1984) (arguing that the romantic author is a social construction); Peter Jaszi, *Toward a Theory of Copyright: The Metamorphosis of "Authorship,"* 1991 DUKE L.J. 455 (discussing the romantic author and the law).

⁴ See James Boyle, Shamans, Software, and Spleens: Law and the Construction of the Information Society (1996); Madhavi Sunder, *IP*³, 59 Stand. L. Rev. 258 (2006).

⁵ See Rochelle Cooper Dreyfuss, *Commodifying Collaborative Research*, in THE COMMODIFICATION OF INFORMATION 397 (Niva Elkin-Koren & Neil Weinstock Netanel, eds., 2002).

 $^{^6}$ See Yochai Benkler, The Wealth of Networks – How Social Production Transforms Markets and Freedom (2006).

⁷ See JESSICA LITMAN, DIGITAL COPYRIGHT: PROTECTING INTELLECTUAL PROPERTY ON THE INTERNET (2001); EXPANDING THE BOUNDARIES OF INTELLECTUAL PROPERTY: INNOVATION POLICY FOR THE KNOWLEDGE SOCIETY (Rochelle Cooper Dreyfuss, Diane Leenheer Zimmerman, Harry First eds., 2001).

made by employees.⁸ This is the corporate copyright.⁹ The case of freelancers and independent contractors will be discussed in as much as it sheds light on the main focus here, namely employed authors.¹⁰

Should the law determine the ownership of original works of authorship, *i.e.*, copyrighted works, which are created within the scope of the workplace? If the answer is positive, should the employee be the owner or is it better that the law allocates the copyright to the employer? In economic terms, the goal is to figure out the most efficient allocation of copyright of works created within the workplace.

Current law provides several possible answers, ranging from full ownership to the employer when some criteria are met on one end of the spectrum (mostly in Common Law jurisdictions), through limited ownership to the employer, such as ownership for a limited time or initial ownership to the author, but one which is transferable, ending with alienable rights vested with the author but subject to many paternalistic limitations which aim to empower the author vis-à-vis the employer on the other end of the spectrum (mostly in Civil Law jurisdictions). Accordingly, the questions courts face are the two main prongs of the work-made-for-hire doctrine: who is an employer and has the work been prepared within the scope of the employment?

Surprisingly, little attention has been devoted to these questions and where they were discussed, it was usually addressed either from an exclusive copyright point of view, or from an exclusive labour law point of view, or a rather blunt importation and implantation of one into the other, usually labour law doctrines applied within copyright law. This article addresses the allocation of copyright in the workplace context by conceptualizing the issue under a dual, integrated perspective of both copyright law and labour law.

As for the copyright law, the article proceeds within the instrumental, incentive-based theory of copyright law, based on by-now familiar economic analyses.¹¹ Previous economic analysis addressed the allocation of ownership within the workplace only in passing, or focused on ex-post allocations, once the copyrighted work had already

⁸ I do not discuss special workplaces, such as universities and the government, as these raise unique considerations. For a thoughtful discussion of the university setting, see Rochelle Cooper Dreyfuss, *The Creative Employee and the Copyright Act of 1976*, 54 U. CHI. L. REV. 590 (1987).

⁹ The corporate copyright entered copyright law with the introduction of the work made for hire in the US Copyright Act of 1909, an amendment which is said to have been added "in a most casual manner." See L. RAY PATTERSON AND STANLEY W. LINDBERG, THE NATURE OF COPYRIGHT – A LAW OF USERS' RIGHTS 85-88 (1991); SIVA VAIDHYANATHAN, COPYRIGHTS AND COPYWRONGS: THE RISE OF INTELLECTUAL PROPERTY AND HOW IT THREATENS CREATIVITY 101-03 (2001).

¹⁰ Freelancer authors deserve special treatment, as apparent in two recent cases from the US and Canada. See New York Times v. Tasini, 533 U.S. 483 (2001); Robertson v. The Thomson Corp. [2006] 2 S.C.R. 363. In the freelancer cases, the common legal issues are the interpretation of the contract between the author and the corporate user, usually the newspaper, and the determination of whether a specific new use of the work at stake is sufficiently similar to the agreed upon use.

¹¹ William M. Landes & Richard Posner, *An Economic Analysis of Copyright Law*, 18 J. LEGAL STUD. 325 (1989); Stanley M. Besen & Leo J. Raskind, *An Introduction to the Law and Economics of Intellectual Property*, 5 J. OF ECON. PERS. 3, 11-18 (1991); Wendy J. Gordon and Robert G. Bone, Copyright, in 1 ENCYCLOPAEDIA OF LAW AND ECONOMICS 189 (Boudewijn Bouckaert & Gerrit De Geest, eds., 2000).

been created.¹² Under the instrumental view of copyright law, I argue that the incentives advocated by this theory should aim at the *risk* associated with firstly creating the work and secondly, with its optimal use, for the benefits of both the owners and the public. Accordingly, one criterion for allocating ownership in workplace works is identifying the party who bears the risks. Wishing to avoid a case-by-case solution and uncertainty, the task is to identify kinds of common scenarios.

The labour law perspective adds to this examination the special relationship between the employee and the employer. Other than the obvious unequal bargaining power of the two parties, this relationship should be understood as an on-going game. Although employees are usually cast as the weaker party and indeed they often are on the weaker side, there are several situations in which the employee does have substantial power vis-à-vis the employer. Examples are when the "game" between the employee and the employer is a continuous relationship, rather than a one-shot game (as opposed to a freelancer), or when the employer sees beyond the specific employee who claims ownership over the work of authorship he has created and realizes that she has an ongoing relationship with all employees. Where there are unions and collective labour contracts, the employees' power is further strengthened. There are other more specific factors that need to be taken into consideration here, such as the likelihood of the author-employee being a repeat player, the value of the work created etc. This analysis points us to situations where the employee-employer relationship is a one-shot game and hence deserves a different legal treatment.

The discussion will point to three main criteria for identifying the party who bears the risk: the kind of business (whether the context is one of cultural/content industry), the kind of the employee (whether the employee is hired to be creative) and the business model (centralized activities, *e.g.*, a music label, or decentralized, *e.g.*, an independent film producer).

A crucial factor that should be evaluated here is the parties' opportunities to change the initial allocation of ownership. Applying Coase's theorem, the question is one of transaction costs. ¹⁴ This article argues that we should add the temporal axis and evaluate different "Coasian moments" when querying the possibility of a corrective transaction. The possibility should affect the legal analysis: where a fair corrective transaction can take place, the law should not interfere.

The integrated labour/copyright analysis is much needed. It results in a moderate support for the common law work-made-for-hire doctrine (as in the UK model), though it requires important distinctions and some reinterpretation. The article first maps the field, then it surveys the main legal models of allocations, turning to a short

¹² I.T. Hardy, An Economic Analysis of Copyright Law's Work-Made-for-Hire Doctrine, 12 COLUMBIA-VLA J. OF L. & THE ARTS 181 (1988); Francesco Parisi and Catherine Ševčenko, Lessons from the Anticommons: The Economics of New York Times Co. v. Tasini, 90 Ky. L.J. 295 (2002).

¹³ I borrow the term from Theodore W. Adorno, THE CULTURE INDUSTRY: SELECTED ESSAYS ON MASS CULTURE (2001), who used it in the critique of what we would later call the consumerist society, or in Guy Debord's term, *La Société du Spectacle*.

¹⁴ See Ronald H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960).

¹⁵ I borrow the term form Drevfuss, *Commodifying Collaborative Research*, at 405.

review of the literature on the issue. The article then turns to the copyright perspective and to the labour law perspective, and eventually ties all threads together. ¹⁶

II. Framing the Discussion: Four Dimensions

The task of figuring the best allocation of copyright in works created by employees demands our attention to several dimensions, which form a complex background. We should appreciate the co-existence of several overlapping frameworks. One is a cultural framework, a second is economic, a third is ethical and a fourth is legal.

A. *The cultural framework* focuses on the quality of the works of authorship and asks whether the legal rule should reflect and/or encourage one kind of works over the other possible kinds. The tension here is between high quality, highly original works of authorship and medium or low quality works.

Copyright law is, at least formally, indifferent to the quality of creative works and aims at the quantity of works, leaving for the market to judge the quality thereof. But, even the seemingly neutral rules of copyright law have some indirect affect over the kinds of works produced.¹⁷ Elsewhere I argued that copyright law, especially under its instrumental conception does demonstrate a strong preference for quality over quantity and the latter is a means to achieve the former.¹⁸

But, is the venue of production of the creative work a proxy to its quality? We need to devise a way to measure quality and then examine the assumption. Common views often associate works created within the corporate setting with a gloom vision of a Fordist-like, mass-production assembly line of industrial products and commodified culture. The need to reach large audiences does seem to result in the corporations appealing to the lowest common denominator, with many of the creative works being shallow, plagued with overt and covert commercial messages and generally, of low quality. In contrast, works created outside the industries are often associated with independent artists, individual, free-spirited and free of the economic pressures of the industries (but no doubt subject to other financial constraints). This is a romantic view. The romantic author might still be alive, but the assumption about different quality of individual works versus the quality of corporate works requires proof.

Nevertheless, the lack of empirical data does not render the cultural view irrelevant. The legal rule about copyright ownership should be concerned with preserving a viable avenue for the individual authors, whether they are independent authors or employees. The concern is that the content produced in and by corporations replaces

¹⁶ One caveat is due before we delve into the details. This article is theoretical in nature and is not based on a particular legal system. I do refer to concrete legal systems as examples.

¹⁷ See Paul Goldstein, Copyright's Highway: The Law and the Lore of Copyright From Gutenberg to the Celestial Jukebox 202-03 (1994): "Decisions about the scope of copyright's subject matter and the reach of its rights will inevitably affect the quantity, quality, and cost of future literary and artistic works—and whether in the future, there is anything on [television] that is worth watching."

¹⁸ See Michael D. Birnhack, *More or Better? Shaping the Public Domain*, in The Future of the Public Domain – Identifying the Commons in Information Law 59, 74-79 (Lucie Guibault and P. Bernt Hugenholtz eds., 2006).

the independent voice of authors, thus dominating not only the market but the marketplace of ideas too. 19

The recent expansion of copyright law teaches us that the concern is real. The cultural/content industries push for stronger copyright laws on the national and global levels, 20 and most of them enforce it zealously, applying a zero-tolerance approach. Alternative modes of social production of creative works seem a promising alternative, 21 and alternative avenues to traditional copyright law, namely the open source movement and the Creative Commons project also glow in the dark. Nevertheless, many works are created within workplaces. It is this traditional twentieth century mode of cultural production which is the focus of this article. The challenge is to preserve a multiplicity of forms of cultural production.

B. *The economical framework* seeks the most efficient allocation of copyright. As Ronald Coase taught us, in the absence of transaction costs, it does not matter what allocation is dictated by the law, as the parties seek efficiency and will correct the initial allocation in case it was inefficient.²² However, transaction costs do exist. The task is to recognize transaction costs in the context of the creative workplace. A corrective transaction can take place at various stages on the employment-creation temporal axis and its costs vary accordingly. It is cheaper to have a pre-employment contract addressing future ownership than reaching one after employment commenced. It is cheaper to reach a pre-authorship agreement than a post-authorship one, especially when there are likely to be many employees who each have a property interest. Pre-authorship contracts can avoid the problem of multiple copyright owners who fail to join hands in a common action, namely, it avoids the anti-commons problem.²³

Accordingly, the challenge is to identify the cases in which transaction costs are low enough to enable a corrective transaction and separate them from those cases in which the costs are likely to fail such a transaction. As for the first case, the law's choice would affect the distribution of wealth among the parties and as for the second case, the law's choice is even more crucial, as it is likely to stick even if inefficient. The economic perspective will be applied throughout the article.

C. *The ethical framework* juxtaposes efficiency with fairness and distributive justice. We can leave aside the on going "macro" debate about the relationship of these two notions and concentrate on its "micro" appearance, which plays an active role in both

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¹⁹ See Maureen A. O'Rourke, *Bargaining in the Shadow of Copyright Law After Tasini*, 53 CASE W. RES. L. REV. 605, 615-16 (2003)(discussing the social value associated with an independent voice).

²⁰ Pamela Samuelson, *The Copyright Grab*, Wired 4.01 (1996); Litman, Digital Copyright; Lawrence Lessig, Free Culture (2004); Michael D. Birnhack, *Global Copyright, Local Speech*, 24 Cardozo Arts & Ent. L.J. 491 (2006).

²¹ BENKLER, THE WEALTH OF NETWORKS; Lior Jacob Strahilevitz, *Wealth Without Markets*? 116 YALE L.J. 1472 (2007).

²² See Coase, The Problem of Social Cost.

²³ See Michael A. Heller, *The Tragedy of the Anti-Commons: Property in the Transition from Marx to Markets*, 111 HARV. L. REV. 621 (1998).

the popular²⁴ and legislative forums²⁵ and also lurks into the judicial treatment of employees' works. Bluntly speaking, the fairness argument is that the weak employees are ripped-off their creative works and of the revenues. The response is that the deal between employers and employees is the most efficient mode of production. The question thus turns to the internal distribution of the wealth.

The unequal power of the employee is a prevalent narrative in labour law and justifies the law's interference in the free labour market.²⁶ This lesson is apparent in numerous protective labour laws found worldwide, including in the US in its post-*Lochner* era. Jurisdictions diverge as to how to address the inequality of power among the parties (be it information inequality, bargaining differences and other specific manifestations thereof). That some intervention is justified does not in itself instruct us when should the law interfere and how.

In the context of employees' creative works, we should examine the fairness argument carefully. In most cases, the employment relationship reflects a trade-off of risks and benefits between the parties.²⁷ The employee is hired to create works knowing that he or she will not own the copyright to these works. The employee receives a risk-free salary and other benefits and does not undertake any risk associated with the investment in the copyrighted work or its exploitation. The unfairness instincts are triggered when the employer earns substantial gains and the author-employee receives only his or her regular salary and does not share the gains. This can happen due to the strong party exploiting its superior power or when reality exceeds expectations.

The latter are situations where there are "unbargained for or unforeseen uses, [in which] one party will gain what the other loses", 28 i.e., when "unforeseen uses... bring windfall profits to the hiring party", 29 or put differently, "an ex ante 'fair' bargain can turn into an ex post rip-off." Indeed, in the freelancer cases, where there was no clear agreement as to the subsequent use, the law should fill the gap one way or the other, either by legislation or judicial decisions and allocate the copyright. However, the existence of a contract does not obliterate the unfairness instincts.

This situation is more likely to arise in the absence of a contract or when the contract is either silent or unclear as to the uses of the work of authorship. This used to be the situation in creative sectors where freelancing is ubiquitous, such as journalists, until

²⁷ See Ann-Sophie Vandenberghe, *Labour Contracts*, in 3 ENCYCLOPAEDIA OF LAW AND ECONOMICS, at 541, 550 (writing that "At the heart of the principal-agent problem lies the inevitable trade-off between the provision of incentives to work hard and the sharing of risks.").

²⁴ See Courtney Love, *Courtney Love Does the Math*, Salon Magazine (June 14, 2000), available at http://archive.salon.com/tech/feature/2000/06/14/love/ (criticizing the record industry's pressure to include sound recordings in the "work for hire" doctrine in the U.S.).

²⁵ See the testimonies before Congress, while it debated the 1976 Copyright Act, as discussed in Hardy, at 183-85. Later on we will discuss the German Copyright Act, which celebrates fairness.

²⁶ See _.

²⁸ Hardy, An Economic Analysis, at 185.

²⁹ Hardy, ibid, at 190.

 $^{^{30}}$ Ruth Towse, Creativity, Incentive and Rewards: An Economic Analysis of Copyright and Culture in the Information Age 17 (2001).

the *Tasini* case decided by the US Supreme Court in 2001. The defendant newspapers, including the *New York Times*, used articles written by freelancers not only in the original agreed-upon use, namely the print paper, but for digital collections (then still offline CD databases). The Supreme Court ruled in a 7:2 decision in favour of the journalists, finding that the digital republication was not a revision of the original collective work and accordingly, that the publishers were not authorized to use the articles in the way they did. Whether this technological/legal interpretation is correct or not, the aftermath of the case carries important lessons. The newspapers changed their contractual relationship with the freelancer journalists, so that they were required to transfer *all* possible rights to the newspapers and in some cases, they were required to do so retroactively. In other words, expectations and foreseeing the future are only part of the picture.

Accordingly, the question is whether the law should empower the weak author/employee, given the context of the workplace and the economics of creativity? The answers range from a "never" libertarian instinct to an "always" protective approach and thus the more important questions are not only "if", but "when" and "how."

D. The legal framework juxtaposes labour law and copyright law. The two fields of law might pull in opposite directions. Once a person enjoys the status of an employee, labour law provides him or her with an arsenal of protections. Hence, the legal test for determining who is an employee is crucial. Depending on the conception of labour law and its purpose within a particular jurisdiction, the doctrine may be lax and inclusive (more people will enjoy the status of an employee) or strict and exclusive. However, once a person is treated as an employee, the work for hire doctrine (or its civil law counterparts) is operative, with the result that the person might lose the copyright to the employer. Thus, the benefits of being an employee under labour law are losses under copyright law, and vice versa.

This is not an insurmountable problem. One possible solution is to accept multiple legal statuses for the same person. This would require a legal system to overcome its inherent aspiration for coherency and consistency and be able to apply different tests in different contexts.³² If this view is adopted, the law will accept plural statuses, so that the person will be deemed an employee as far as labour law is concerned and at the same time that he or she will be deemed an independent contractor under copyright law, so to enjoy copyright ownership. Jurisdictions with a strong proemployee tendency might be creative in such a manner.³³

³¹ This retroactive transfer of rights was challenged in Marx v. Globe Newspaper Co., Inc., 15 Mass. L. Rptr. 400 (Mass. Super. 2002), where the court found in favour of the newspaper. The new freelancer agreement read in relevant part that the freelancer grants the Globe "for no additional fee, "a non-exclusive, fully-paid up, worldwide license to use all of the Works that The Globe has previously accepted from [the freelancer], if any." – quoted in Marx, ibid.

³² The need for consistency was mentioned as one justification for applying the common law agency test. See Kreiss, *Scope of Employment*, at 132.

³³ Israeli courts seem to act in this way, applying the stricter "direct and control" test in the copyright context, usually finding that the employer was not involved in the creation of the copyrighted work, and at the same time applying a "mixed test", which includes the "integration test", in employment contexts. See *e.g.*, C.A. 571/68 Yanai v. Mansfeld, 23(1) P.D. 501; C.C. 41/92 Qimron v. Shankes, 1993(3) P.M. 10.

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A community needs to choose its values and if these are in conflict, to devise a method of reconciling them or prioritizing them. For the purpose of the discussion here I will assume that all values mentioned here are worth pursuing. The challenge is to devise a legal scheme that would obey to copyright law's neutral position as to the quality of works but preserve multiple modes of cultural production, while searching for the most efficient allocation of rights under circumstances of changing costs and doing so without compromising fairness and distributive principles where they exist. All this should be done in a way that enhances the coherency of the legal system in general and the labour law/copyright law relationship in particular.

III. THE LAW

The law has a wide range of options to choose from regarding the allocation of ownership of copyrighted works in general and within the workplace in particular.³⁴ A short survey of current legal models will help set the discussion within concrete frameworks. The work made for hire doctrine has three main manifestations, the UK model,³⁵ found also in many other jurisdictions which law was directly or indirectly affected by English law,³⁶ the US model,³⁷ and the Civil Law model.³⁸ The

Where the author of a work was in the employment of some other person under a contract of service or apprenticeship and the work was made in the course of his employment by that person, the person by whom the author was employed shall, in the absence of any agreement to the contrary, be the first owner of the copyright...

The Israeli Copyright Act is still the English Copyright Act of 1911, and s. 5(1)(b) is identical to the 1911 English Act.

And 17 U.S.C. §201(b):

³⁴ The discussion here focuses on material rights and leaves the issue of moral rights, which raises another complex set of considerations for another day.

³⁵ See Copyright, Designs and Patent Act 1988 ("CDPA") (c. 48), s. 11(2):

⁽²⁾ Where a literary, dramatic, musical or artistic work is made by an employee in the course of his employment, his employer is the first owner of any copyright in the work subject to any agreement to the contrary.

³⁶ See for example in Canada, Copyright Act (R.S., 1985, c. C-42), based on the English Act of 1911 (Copyright Act, 1911, 1 & 2 Geo. 5, c. 46). Section 13(3) reads:

³⁷ See definition of "work made for hire" at 17 U.S.C. §101:

⁽¹⁾ a work prepared by an employee within the scope of his or her employment; or

⁽²⁾ a work specially ordered or commissioned for use as a contribution to a collective work, as a part of a motion picture or other audiovisual work, as a translation, as a supplementary work, as a compilation, as an instructional text, as a test, as answer material for a test, or as an atlas, if the parties expressly agree in a written instrument signed by them that the work shall be considered a work made for hire. For the purpose of the foregoing sentence, a "supplementary work" is a work prepared for publication as a secondary adjunct to a work by another author for the purpose of introducing, concluding, illustrating, explaining, revising, commenting upon, or assisting in the use of the other work, such as forewords, afterwords, pictorial illustrations, maps, charts, tables, editorial notes, musical arrangements, answer material for tests, bibliographies, appendixes, and indexes, and an "instructional text" is a literary, pictorial, or graphic work prepared for publication and with the purpose of use in systematic instructional activities. ...

differences seem to be subtle in some aspects, but are useful so to draw the range of possible allocations and legislative techniques. All models vest the initial ownership with the author, ³⁹ accompanied with an explicit or implicit permission to transfer the (material) rights. ⁴⁰ The initial allocation to the author is accompanied with specific rules addressing specific situations such as joint ownership, and of interest here, works made for hire.

Under the UK and US models, the law refers to works created by employees and by implication leaves independent contractors outside, subject to the general rule that an author is the owner the original work he or she made. When the work made for hire doctrine applies and its conditions are met, then the employer is considered the first owner of the copyright, even though the author is the employee or, in the US, also the independent contractor, if the statutory conditions of the doctrine are met. This allocation means there is no transfer of the copyright from the author-employee to the employer, but rather an initial allocation to the employer. The independent contractor can, as all copyright owners, transfer his or her rights to whomever they wish, including to a party who might seem to be the employer. However, this would be a transfer of the copyright and should not be confused with the initial allocation.⁴¹ In any case, the initial allocation of ownership to either the employee or the employer is

In the case of a work made for hire, the employer or other person for whom the work was prepared is considered the author for purposes of this title, and, unless the parties have expressly agreed otherwise in a written instrument signed by them, owns all of the rights comprised in the copyright.

³⁸ This is an admitted generalization for the clarity of the discussion. The German law will serve a chief example. For a survey of copyright law in several Civil Law jurisdictions, see KENNETH D. CREWS AND JACQUE RAMOS, COMPARATIVE ANALYSIS OF WORLD INTELLECTUAL PROPERTY LAW: ISSUES FOR University SCHOLARSHIP (Copyright Management Centre, 2005), available http://copyright.surf.nl/copyright/files/International Comparative Chart Zwolle III rev071306.pdf; J.A.L. STERLING, WORLD COPYRIGHT LAW 200-01 (2003) (discussing French, German, Greek and Dutch law); SANNA WOLK (ED.), CHRISTINE KIRCHBERGER, ULRIKA NYH, SILVANA PENALOZA, HANNA SEPPÄNEN AND KERLI TULTS, OWNERSHIP OF THE COPYRIGHT IN WORKS AND THE PATENT RIGHT IN INVENTIONS CREATED BY EMPLOYEES IN FINLAND, SWEDEN, GERMANY, AUSTRIA, THE UNITED KINGDOM. **ESTONIA** AND ARGENTINA (2002)available http://www.juridicum.su.se/user/sawo/Publikationer/Wolk%20nr%20120.pdf; INTELLECTUAL PROPERTY LAWS OF EUROPE (1995, George Metaxas-Maranghidis ed.), discussing the ownership of works created by employees in Belgium (62); Denmark (103); Iceland (221); Italy (270); Norway (335); Portugal (356); Spain (373); Switzerland (423).

³⁹ UK: CDPA, s. 11(1) ("The author of a work is the first owner of any copyright in it..."); US: 17 U.S.C. §201(a) ("Copyright in a work protected under this title vests initially in the author or authors of the work..."); Germany: Law dealing with Copyright and Related Rights (Copyright Law)(Text of September 9, 1965, as last amended by the Law of July 16, 1998), art. 11. For an English translation see http://www.wipo.int/clea/docs_new/pdf/en/de/de080en.pdf (hereafter: German Copyright Act).

⁴⁰ UK: CDPA, s. 90; US: 17 U.S.C. §201(d); German Copyright Act, art. 31 (allowing the author to grant another the right to use the work, which is referred to as "exploitation right").

⁴¹ The distinction matters. Some rules that apply to works made for hire do not apply to other works. For example, in the US, ordinary transfers of copyright ownership can be terminated under some conditions, whereas a work made for hire that belongs to the employer is not eligible for such termination. See 17 U.S.C. §203(a)(3). The rules regarding duration of copyright also differ. See 17 U.S.C. §§302(a), 302(c). For a full discussion of the implications of treating a work as made for hire, see Melville B. Nimmer & David Nimmer, 1 NIMMER ON COPYRIGHT §5.03[A].

not the end of the story and there is no legal barrier prohibiting the parties to contract around the initial allocation as they see fit.⁴²

Accordingly, the work made for hire doctrine has two prongs which are conditions for its application: the first is that there is an employment relationship and the second is that the work was created within the scope of employment. The UK and US models are silent as to the details of either prong, leaving their interpretation to the courts. Thus, courts apply various tests as to the employment prong, ranging from a "direct and control test", *i.e.*, whether the employer has the right to direct the employee and to exercise control over him or her, to the newer "integration test", *i.e.*, whether the employee was acting as an integral part of the employers' business. Other tests applied were borrowed from agency law⁴⁴ or other fields of law, or specific tests developed for the purpose of copyright allocation.

The main difference between the UK and US models is found in the situation of a commissioned work. The UK Copyright Act of 1911 addressed commissioned works of a particular kind, 45 but this special treatment was eliminated in subsequent Acts. Current UK law is silent about commissioned works, leaving them subject to the general rule that the author is the copyright owner and leaving any subsequent transfers entirely to the market: 46 the author can transfer his or her rights to the commissioner of the work. The transfer can be explicit, *i.e.*, in a written contract, but it can also be implicit. Indeed, courts found that there was an equitable transfer of rights in some circumstances. 47

Where, in the case of an engraving, photograph or portrait, the plate or other original was ordered by some other person and was made for valuable consideration, in pursuance of that order, in the absence of any agreement to the contrary, the person by whom the plate or other original was ordered shall be the first owner of the copyright.

See Canada Copyright Act, s. 13(2) (where the section was amended to state that the said consideration was paid); Israel Copyright Act, s. 5(1)(a).

⁴² Freelancers remain the owners of their rights, unless they transfer them. However, freelancers grant a license to use their work, under conditions agreed upon. The disputes then turn on determining the scope of the license granted.

⁴³ See for example in the UK, a decision by Lord Denning: Stephenson Jordan v. McDonald & Evans (1951) 69 R.P.C. 10 (Court of Appeals).

⁴⁴ US: Community for Creative Non-Violence v. Reid, 490 U.S. 730 (1989). For discussion, see Robert A. Kreiss, *Scope of Employment and Being an Employee under the Work-Made-for-Hire Provision of the Copyright Law: Applying the Common-Law Agency Tests*, 40 U. KAN. L. REV. 119 (1991) (advocating the application of the common law agency test); NIMMER ON COPYRIGHT, at §5.03[B][1][a]; Assaf Jacob, *Copyright Ownership – Reconsidering the CCNV Case* (unpublished manuscript); in the UK, see 1 COPINGER AND SKONE JAMES ON COPYRIGHT 221-26 (Garnett, James & Davies eds., 14th ed. 1999).

⁴⁵ The English Copyright Act of 1911, which has been adopted in several jurisdictions (Canada and Israel for example) stated that:

⁴⁶ See 1 COPINGER ON COPYRIGHT 231-32. Copinger points to other sections in the CDPA, relating to commissioned works. Thus, for example, s. 85(1) provides the commissioner of a photograph with a privacy right.

 $^{^{47}}$ For discussion of the latter situations, see Simon Stokes, Art and Copyright 156-59 (2001); William R. Cornish, Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights 462 (4^{th} ed. 1999).

The US model treats commissioned works as works made for hire, if three conditions are met:⁴⁸ first, that the work was specially ordered or commissioned; second, that the work is to be used for at least one of nine listed categories, such as a contribution to a collective work, a motion picture or an instructional text; and third, that the parties expressly agreed in a written and signed instrument that the work shall be considered a work made for hire. This means that works commissioned for other purposes or works commissioned with no specific written agreement remain the author's. The authors are then free to license or transfer the copyright as they see fit. Accordingly, the question which may arise is whether the work falls within this category to begin with and if the answer is positive, then disputes might evolve around the interpretation of the contract. Once the status of the work as commissioned rather than a work made for hire is determined, then labour law is not part of the picture. In economic terms, the commissioned work is a situation in which the interaction between the parties is more akin to a one-shot game and each party is free to choose whether to engage in the specific transaction at all.

The Civil Law model frames the ownership of works created by employees in the context of their work somewhat differently. The general approach is that the author is the initial owner and if the work is made within the scope of the employment, then the employee either transfers the right to the employer or grants the employer a license to use the work. The transfer or grant can be explicit or implied from the circumstances and the context of the employment. Various countries differ in the power of the presumption of transfer of rights, but all allow the parties to reach a contrary contract. An important feature is, however, that the transfer or grant are subject to a principle of "limited purpose," according to which the rights transferred are interpreted narrowly, to cover only those that are related to the employment and leaving any residual rights to the author.

The German Copyright Act, for example, allocates the initial copyright to the author, ⁵⁰ but permits the author to allow other parties, including the employer, ⁵¹ to use the work. This is the exploitation right. Unlike the UK and US models, the allocation of the copyright to the author who can permit others to exploit it rather than an

⁴⁹ An important exception to the Civil law model is found in Continental European countries regarding material rights in software prepared by employees belong to the employer. The source of this exception is art. 2(3) of the "Software Directive" – Council Directive 91/250/EEC on the legal Protection of Computer Programs of 1991, which instructs Member States to implement the following principle: "Where a computer program is created by an employee in the execution of his duties or following the instructions given by his employer, the employer exclusively shall be entitled to exercise all economic rights in the program so created, unless otherwise provided by contract." The Directive was implemented throughout the EU. See Wolk et al, OWNERSHIP, at 7-8. The Software Directive was left unchanged by the Copyright Harmonisation Directive. See art. 2(a) of Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society.

⁴⁸ See 17 U.S.C. §101(2) (definition of "work made for hire", quoted supra note).

⁵⁰ German Copyright Act, art. 11 ("Copyright shall protect the author... with respect to utilization of his work)

⁵¹ Art. 43 applies the articles dealing with the exploitation rights to an author who has "created the work in execution of his duties under a contract of employment or service provided nothing to the contrary transpires from the terms or nature of the contract of employment or service." For discussion of the German legal framework, see Wolk, et al, OWNERSHIP, at 13-15.

immediate initial allocation to the employer, raises questions about the scope of the grant and about any remaining powers that the employee-author might have.

Several rules in the German Copyright Act empower the employee-author vis-à-vis the employer. First, unbargained-for uses of the work are not granted automatically to the employer, but are to be determined "in accordance with the purpose envisaged in making the grant" [of an exploitation right]. 52 The law voids the grant of unforeseen uses.⁵³ In other words, the scope of the grant should be determined on a case by case basis, based on interpreting the contract governing the grant. Second, the employee has some control over subsequent transfers of the exploitation rights.⁵⁴ Third, the Act was amended in 2002 so to allow the author to renegotiate the terms of the contract if the compensation is inequitable.⁵⁵ The amendment lists some conditions and specifies various standards for such equity. The right is operative if the difference between the reward to the author and the proceeds is "conspicuous." One German commentator advises escalating royalties' rates instead of lump-sum remunerations.⁵⁷ The right to modify the contract is limited if a collective labour agreement applies.⁵⁸ Fourth, the law instructs that the grants of exploitation rights are to be interpreted narrowly, so whenever in doubt, the disputed rights remain the author's.⁵⁹ Fifth, the law allows agreements regarding future works, but the author has an unwaiveable right to terminate the grant after five years. 60 Sixth, the employee-author has an unwaiveable right of revoking the exploitation right, in some circumstances.⁶¹

The spectrum of current legislative choices thus ranges from allocating the copyright directly and initially to the employer on the one end (UK, US) if two main conditions are met (employment and scope) or to the employee on the other end (Germany), accompanied with a general presumption of transfer to the employer and subject to various powers left with the author. Each option can be modified by mutual agreement, but for a few unwaivable rights on the Civil Law side of the spectrum.

⁵² Art. 31(5).

⁵³ Art. 31(4).

⁵⁴ Art. 34(1) states that "An exploitation right may be transferred only with the author's consent", though it goes on to limit the power of the author, stating that "The author may not unreasonably refuse his consent." See also art. 35, regarding the grant of non-exclusive exploitation rights by the holder of an exclusive right.

⁵⁵ See Copyright Act, art. 36, as amended by the Act on Strengthening the Contractual Position of Authors and Performers of March 22, 2002. For a summary of the 2002 amendment and its legislative history, see Bettina C. Goldmann, *New Law on Copyright Contracts in Germany*, 9 COMPUTER AND INTERNET LAWYER 17 (2002); for analysis, see Reto M. Hilty and Alexander Peukert, "Equitable Remuneration" in Copyright Law: The Amended German Copyright Act as a Trap for the Entertainment Industry in the U.S.?, 22 CARDOZO ARTS & ENT. L.J. 401, 416-21 (2004).

⁵⁶ See Karsten M. Gutsche, *Equitable Remuneration for Authors in Germany – How the German Copyright Act Secures Their Rewards*, 50 J. COP'T SOC'Y USA 257, 264-65 (2003).

⁵⁷ Gutsche, ibid, at 265.

⁵⁸ Goldmann, New Law.

⁵⁹ Art. 37. This rule has an exception in cases of collective works, see art. 38.

⁶⁰ Art. 40.

⁶¹ Art. 41 (revocation for non-use) and art. 42 (revocation for changed conviction).

Thus, legislators face many policy choices. What would be the best rule of allocating initial ownership of copyrighted works?

IV. LESSONS FROM THE LAW & ECONOMICS LITERATURE

Interestingly, little attention was devoted to employed authors. Perhaps the issue has not raised many controversies, or at least not such that justified undertaking expensive legal costs in asserting the rights. The last contention stands in contrast to patent disputes, where the potential gains (or losses) in an ownership battle are occasionally huge. In other words, it might be the case that the market managed to take care of most copyright disputes on its own, perhaps with the assistance of the legal background rules. This part surveys the leading law and economics scholarship on the topic.

Landes and Posner, in their influential economic analysis of copyright law (1989) treated the author and publisher as one unit and did not address the work made for hire doctrine at all. They did provide us with one insightful comment on the former relationship, which can be applied to the employment relationship. They examined the internal distributive rule between the publisher and the author and argued that "A publisher (say) who must share any future speculative gains with the author will pay the author less for the work, so the risky component of the author's expected remuneration will increase relative to the certain component." In a later work (2003), they addressed the work for hire doctrine, making several arguments: first, that it is efficient to vest copyright of an integrated expressive work in the hands of one person so to avoid multiple ownership; second, that paying wages shifts the risk from the employee to the employer; third, that an allocation to the employee would result in a transfer of the rights to the employer.

An elaborate economic analysis of copyright in the workplace is found in an article by Hardy (1988).⁶⁴ Hardy examined the US legal doctrine of work made for hire and assumed that it does not raise any particular difficulties with salaried employees. Accordingly, he focused on freelancers and independent contractors and more specifically on the ownership of unforeseen and unbargained for uses of the copyrighted work. The 2001 case of *Tasini* provides a recent example for unforeseen uses, where the contract between the parties addressed specific uses—the publication of the freelancers' articles in the print newspapers—and later on with the rise of the digital technology, new uses appeared, namely digital databases.⁶⁵

Hardy, applying the Coase theorem, noted that in the regular course of events, authors and publishers negotiate all the time and hence the transactions costs are low. He concluded that the initial allocation in these cases does not matter from the public's

⁶² Landes and Posner, *An Economic Analysis*, at 327.

 $^{^{63}}$ William M. Landes and Richard A. Posner, The Economic Structure of Intellectual Property Law 272 (2003).

⁶⁴ Hardy, An Economic Analysis.

⁶⁵ See text supra .

point of view.⁶⁶ Focusing on the unforeseen uses, he concluded that bargaining over the rights for such uses have infinite transaction costs.⁶⁷ Hardy explores two possible criteria for allocation of the rights of these uses. One is the "best exploiter" test: which party is in a better position to exploit the work better, in terms of resources, experience and market position. He evaluates the "better exploitation" according to what can be understood as a Constitutional standard that the works should benefit the public, rather than the copyright owner (or author).⁶⁸

A second possible criterion Hardy discussed is the "cheaper estimator": "who is better placed to estimate the value of unforeseen uses"?⁶⁹ If we accord the rights to this party, it would profit alone from the unforeseen uses. If we accord the rights in the unforeseen uses to the party who could not estimate them cheaply, the rule will result in the cheaper estimator raising the issue and contracting for any such uses. Accordingly, Hardy concluded that the rights for any unforeseen uses should vest with the party who cannot estimate the unforeseen uses cheaply. However, Hardy noted that this is a difficult assessment to make and should be done on a case by case analysis. He thus abandoned this criterion and remained with the best exploiter criterion alone.⁷⁰

This is a very helpful analysis, but we need to draw its contours. It limits itself to situations where there is no contract, or that the contract is silent about some uses of the work, as in the case of unforeseen uses. Foreseeing the unforeseen is indeed an impossible task, but as Ruth Towse notes, the practice is that publishers frequently require the author to assign all future rights, including unknown uses. In other words, the fact that there are unforeseen uses is itself foreseen and can be addressed by the parties ex ante, unless the law interferes and prohibits this, as is the case under the German Copyright Act. The cheaper estimator test is thus emptied. The cheaper estimator is likely to raise the issue of unforeseen uses during negotiation. Given the unknown probability of such unforeseen uses and their inherent speculative nature, the price for these uses is likely to be low, if anything.

Cognitive psychology teaches us that many prefer the concrete, solid and positive present value, rather than the probable future gain with similar expectancy.⁷³ For

⁶⁸ Hardy, ibid, emphasized the public, but did not directly attribute this emphasis to the Constitution. His careful study of numerous cases found that courts followed this "better exploiter" rule in most cases.

⁶⁶ Hardy, An Economic Analysis, at 191.

⁶⁷ Hardy, ibid, at 191.

⁶⁹ Hardy, ibid, at 185, 192-93. Note, that Hardy assumes that known uses are disclosed, ibid, at 191, note 23.

⁷⁰ Hardy, ibid, at 194. Hardy seems to dismiss the cheaper estimator rule due to a series of assumptions about how courts are likely to determine who the cheaper estimator is and who are the stronger parties. See at 195. I find that analysis less convincing, but do agree that the costs of figuring out who is the cheapest estimator render the proposed rule irrelevant.

⁷¹ Towse, CREATIVITY, INCENTIVE AND REWARDS, at 17.

⁷² See infra, .

⁷³ See *e.g.* Amos Tversky and Craig R. Fox, *Weighing Risk and Uncertainty*, in PREFERENCES, BELIEF AND SIMILARITY: SELECTED WRITINGS 747 (Eldar Shafir ed., 2004).

example, most of us would rather receive \$100 now than a 20% chance that we would receive \$500 later. In the context of creative employees, the future gains and their probability are unknown in advance. Faced with the option of receiving a reasonable payment now or a large share of the gains in the future, but under an assumption of low probability, most people would prefer the former option. Adding that we can safely assume that most employees are risk-averse and that most employers can more easily bear the risk by spreading it over their entire activity and applying the Landes-Posner assertion noted above (that sharing the gains with the authors will reduce the authors' salary and shift part of the risk to them), the practice of requiring that all rights are transferred makes sense and Hardy's "cheapest estimator" rule collapses. Given the unequal bargaining power of the employee and the employer, we should not be surprised to see that where a written contract exists, the employee will transfer all uses, known and present as well as unknown and future, to the employer.

Hardy's analysis is also limited in that he focused on works that have already been created. He assumed that the works came into being, and discussed the post-creation phase. Hence, it is not surprising that his main criterion is the better exploiter of the work. However, the economic view of copyright law taught us that the law needs to provide incentives to make works in the first place.

There is one further important lesson here, though it is implicit in Hardy's analysis: Borrowing labour law doctrines and applying them "as is" in the context of copyright law is misplaced. The criteria for allocating copyright should stem from within copyright law, its justifications and rationales, but this should be done by way of integrating labour law and copyright law.

The US *Tasini* case produced some scholarship addressing various aspects of the case such as the fate of revisions of collective works, *i.e.*, republications of works in a different format, usually a digital format, ⁷⁷ or the aftermath of the case, which was firstly an immediate change of contracts between publishers and freelancers and secondly, the deletion of thousands of articles from various databases, ⁷⁸ as well as

⁷⁶ The aftermath of *Tasini*, where newspapers insisted that freelancers agree to an "all rights transferred" contract with no further compensation illustrates this point.

⁷⁴ See discussion of the "certainty effect" and related effects in Amos Tversky and Daniel Kahneman, *Rational Choice and the Framing of Decisions*, in PREFERENCES, BELIEF AND SIMILARITY, ibid at 593, 606-11; Paul Slovic, Baruch Fischoff and Sara Lichtenstein, *Facts Versus Fears: Understanding Perceived Risk*, in JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES 463, 480-81 (Daniel Kahneman, Paul Slovic, Amos Tversky, eds., 1982).

⁷⁵ See Landes and Posner, supra note _.

⁷⁷ See 17 U.S.C. §201(c). See Lateef Mtima, *Tasini and its Progeny: The New Exclusive Right or Fair Use on the Electronic Publishing Frontier?*, 14 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 369 (2004).

⁷⁸ See Amy Terry, *Tasini Aftermath: The Consequences of the Freelancers' Victory*, 14 DEPAUL-LCA J. ART & ENT. L. 231 (2004); Andrew Snyder, Comment, *Pulling the Plug: Ignoring the Rights of the Public in Interpreting Copyright Law*, 41 WASHBURN L.J. 365 (2002); Douglas P. Bickham, *Extra! Can't Read All About It: Articles Disappear After High Court Rules Freelance Writers Taken Out of Context IN New York Times Co. v. Tasini*, 29 W. ST. U. L. REV. 85 (2001); Robert A. Gorman and Jane C. Ginsburg, *Authors and Publishers: Adversaries or Collaborators in Copyright Law?* In BENJAMIN KAPLAN, AN UNHURRIED VIEW OF COPYRIGHT REPUBLISHED (AND WITH CONTRIBUTIONS FROM FRIENDS) GORGIN-9 (Iris C. Geik, Michael L. Rustad, Jerry Cohen, Andrew Beckerman-Rodau and

interesting discussions of ethical aspects of the case.⁷⁹ The *Tasini* literature provides us with important lessons, though they are in the context of freelancers' rights that exceed the scope of this article. Freelancers are, by definition, not employees, though some of them are engaged in a repeat game with the publishers.⁸⁰

Parisi and Ševčenko portray the freelancer-publishers relationship as an anticommons situation.⁸¹ They note that the easiest solution in the case would have been to compensate the freelance authors and transfer the digital publication rights to the publishers. However, Parisi and Ševčenko point to the asymmetric transaction costs involved in such a corrective transaction. 82 While it is easy and cheap to split the bundle of rights which constitutes the copyright, it is expensive to reverse the division and reunify the fragmented copyrights. The high costs are a combination of tracing costs of all freelance authors affected by the decision, negotiating with them and overcoming attempts by some freelancers to hold-out for higher compensation. A possible solution offered by the two authors turns to the fair use defence. 83 and more broadly, they suggest that the choice of remedy can solve Tasini's anti-commons problem by shifting from a property rule to a liability rule. This analysis refers to the allocation of copyright that takes place after the initial relationship between the parties was established (such as freelancers in *Tasini*, when no pre-creation or preemployment agreement was reached. This analysis should be extended to cover also the initial allocation and the various situations of a need for reallocation.

Patent law seems to be an obvious comparative source. However, any comparison should note several crucial differences between patent law and copyright law. *First*, the financial and legal risk involved in creating copyrighted works or patentable inventions are sharply different. Inventions take place mostly within industries and firms. Gone are the days of the lone scientist inventing new chemicals in the home laboratory. There is no widespread phenomenon of "freelance inventors" or independent contractors hired to invent. By contrast, copyrighted works are created everywhere, all the time.

Second, copyright subsists in an original work once it is created. No registration, publication or any other formality is required. Hence, enjoying legal protection is immediate and cheap. Enforcing it is a separate matter, but not every assertion of copyright ends in a full and expensive trial. Patents, by contrast, require a lengthy and expensive process of registration with the Patent Office, and there is no guarantee that the PTO will award the patent. The costs of obtaining the legal

Henry Hobaczewski, eds., 2005)(writing that "In this tug-of-war between author and publisher, the former won the litigation battle but not necessarily the economic war.") Landes and Posner describe the decision as unfortunate from an economic standpoint, since it increases transaction costs without enhancing the incentives to create. See Landes & Posner, The Economic Structure, at 273-74.

⁷⁹ See Wendy J. Gordon, *Fine-Tuning Tasini: Privileges of Electronic Distribution and Reproduction*, 66 BROOK. L. REV. 473, 493-98 (2000).

⁸⁰ One of the challenges freelancers face in the post-*Tasini* era is how to compensate for their low bargaining power. Interesting options are to unionize or create a collective rights organization. For discussion, see O'Rourke, *Bargaining in the Shadow*, at 626-34.

⁸¹ Parisi and Ševčenko, Lessons from the Anticommons.

⁸² Ibid, at 302-03. For a similar point regarding real property, see Richard Posner, *Economic Analysis of Law* 51 (7th ed. 2007).

⁸³ Ibid. at 323.

protection are too expensive for many inventors to pursue this avenue on their own. Those who cannot engage in a solo-endeavour need to search for partners who are willing to invest the money and undertake the risk. Employers are such potential investors.

Third, the patent registration process requires that the owner of the invention is asserted. ⁸⁴ Thus, the issue of ownership arises in a relatively early point in the relationship between the employer and the inventor/employee. It is the point where the initial investment in the invention has already been made and so is the investment in applying for the patent. But in most cases, at this point of the application for a patent, the invention has not yet been commercialized. Turning a patent into a source of revenue requires (in many cases, though not all) further investment. Once again, the two parties need each other to proceed.

For all the above reasons, any lesson from patent law should be carefully examined before applied in the copyright context. This area yearns for empirical research, but we can safely assume that in the patent field there are fewer situations in which there is no written agreement as to ownership of the patent.

Bearing this caveat in mind, the economic analysis offered by Professor Robert Merges for employee inventions can assist us in searching for the best legal regime for employee copyrighted works. 85 Merges integrates patent law and labour law, via a careful understanding of the complex context of the workplace. He strongly supports the current default rules set by US patent law according to which the employer is the owner of the patent and points to four economic theories to support this contention. First, the law enables pre-employment, pre-invention contracts between the employers and the employees, transferring the rights ex ante, thus avoiding the anti-commons problem and the need to gather dispersed property rights ex post. Thus, the invention exploiters (to apply Hardy's non-pejorative term) can avoid the asymmetric transactions costs which bothered Parisi and Ševčenko. 86 Merges explains the preassignment contract as a trade of risks: "... it is arguable that current salaries for R&D employees are a precise measure of the expected, risk-adjusted present value of all future employee inventions."87 He further points to various internal incentives, such as employee reward plans. A second economic theory Merges discusses is team production theory, which points to the difficulty to determine the individual contribution of each employee to the final product.⁸⁸ Arguably, this point is more acute in the patent field than in the copyright field, though it is equally applicable to large content industries, such as software companies or Hollywood studios. A third theory looks at the incentives of the employees and suggests that employees' ownership would have resulted in the employees maximizing their own utility at the expense of the firm's utility.⁸⁹ A fourth economic source for Merges' argument is

⁸⁴ See *e.g.* in the U.S., 35 U.S.C. § .

⁸⁵ Robert P. Merges, *The Law and Economics of Employee Inventions*, 13 HARV. J.L. & TECH. 1 (1999).

⁸⁶ See supra text accompanying notes - .

⁸⁷ Merges, ibid, at 16.

⁸⁸ Merges, ibid, at 20-26.

⁸⁹ Merges, ibid, at 26-30.

"simple risk analysis." By this, he refers to the employee's consent to a low-risk award in the form of a salary, whereas the employer undertakes the risk and investment. 90

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The literature carries with it some important lessons. Firstly, we should realize the complex interaction of labour law and copyright law. Legal tests developed in the context of labour law cannot be applied "as is" within copyright law. On the other hand, copyright law needs to be attentive to the dynamics of labour law, its insights about labour relations and internal balances. Secondly, we should not limit our discussion to works that have already been created, but extend our inquiry to previous points on the timeline. Particularly we should notice the pre-employment phase. Thirdly, both employers and employees adjust their behaviour to the law and continue to do so when the law changes. A legal rule that seems to empower the weaker side might turn out to be more damaging as the aftermath of *Tasini* teaches us, where not only many authors did not receive any compensation, but their works were deleted from the databases and/or they were forced to surrender their rights. The affect of the 2002 amendment to the German Copyright Act will be interesting to follow.

V. COPYRIGHT LAW: COSTS AND OTHER RISKS

There are several leading traditions of copyright law, reflecting various goals. The legal discourse distinguishes between the Continental, *droit d'auteur* view, which posits the author at the centre of discussion and the Anglo-American, copyright view, which is an instrumental conception thereof. Under the latter, instrumental view, copyright is a means to an end rather than an end in itself. The goal of copyright law is described in general terms, such as "the encouragement of learning" (in the words of the 1709 English Statue of Anne), or "to promote the progress of science" (in the words of the US Constitution). The goal is attributed to the public and the right accorded to the author is a tool to achieve that goal. There are many versions of the instrumental view, each emphasizing a different aspect such as creativity, culture, learning, education and research, access to information and to knowledge, free speech, and other democratic notions. In all of these, the incentive theory reigns. The copyright serves as an encouraging consideration for the would-be author in its prohibition of unlicensed taking of his or her copyrighted work by others.

The protection against such unlicensed uses is needed due to some economic features of intangible works, namely its properties as public goods. Absent a law prohibiting the copying of the work, it is likely to be copied. Since it is difficult to exclude others from using the work (non-excludability) and simultaneous use by one user is possible without affecting another's use (non-rivalry) and absent the physical boundaries of the work or equivalents thereto (such as Digital Rights Management – DRM), copying and other unlicensed uses are likely to occur. This proposition is true as long as the cost of copying is lower than the cost of creating the work in the first place, which makes the vulnerability of the copyrighted work contingent upon the technology of

⁹⁰ Merges, ibid, at 30-31.

⁹¹ See respectively, 8 Anne, c. 19; U.S. Const. art. I, § 8, cl. 8.

copying. 92 Today, for most kinds of works, technology enables digital copying in almost zero cost. Due to the above reasons, a market failure is likely to occur. The law intervenes so to restore the functionality of the market. The interference is in the form of prohibiting the use (unless the owner agrees to the use), imposing sanctions on the infringer and providing the owner with a set of remedies. The law thus creates a legal fence around the intangible work and raises the costs of copying, which include not only the actual costs of copying (such as obtaining access and paying for the use of a photocopy machine) but also the legal risks. The higher cost of copying affects its feasibility and profitability.

Thus understood, copyright clears some obstacles and risks from the author's path. But copyright does not clear all potential hurdles, and does not guarantee success in the market. It does not carry any promise to the owner that he or she will cover their initial investment. An author might invest time and effort worth ten thousand dollars to write a book; a music company might invest hundred thousand dollars in producing a CD; a studio might invest a hundred million dollars in producing a movie. Copyright law will provide the owners with tools to prevent others from copying the works without permission. The absence of free copies—assuming enforcement is effective—might influence the price and the sales, but other than this, copyright has nothing to do with the revenue. The book might be a best seller, earning millions for the author. The CD or movie might turn out to be a complete failure in the market. What does it take to turn a book into a best seller and a movie into a block buster? This is a multi-million question, but the answer is not found in the realm of copyright. Copyright is a necessary tool for some authors and owners, but not for all. Some dedicate their work to the public domain or allow various uses of the code they composed or the books they wrote and nevertheless make money. 93 But in any case. copyright is not a sufficient condition for success.

Accordingly, we can note that commercializing cultural products requires two kinds of costs. First is the cost of expression, *i.e.*, the costs related to the actual production, such as time, effort, labour, raw material. Second is the cost of producing copies, marketing and handling the sales, or more generally, commercializing the work. This can be rephrased as the costs of making the work used in the most productive way.⁹⁴ The amount is a matter of marketing strategies. The risks, accordingly, correspond to two stages in the life-cycle of the work: its initial making and its marketing and/or commercializing. Copyright law lowers the risk in regard of the first stage by offering the owner some guarantee that his or her initial costs will not be rendered irrelevant by unwanted third parties, but it does not obliterate the risk. The author might invest a substantial amount in the making of the work and might lose the entire investment without any right being infringed. The protection provided by copyright law enables the copyright owner to rely on some distribution avenues. For example, a music producer knows that under current US law they can rely on online distribution of the

⁹² No doubt there are other factors that need to be taken into consideration, such as whether the copies are perfect substitutes for the original work. For a discussion of core conditions for the economic argument, see Gordon, Copyright, at 199-201.

⁹³ The Open Source GNU/Linux license or Creative Commons license offer ready mechanisms to allow certain uses in a cheaper way than individually-tailored licenses.

⁹⁴ Writing about real property, Posner notes that the law should allocate the resource to the party who can best use it productively and can incur the costs. See POSNER, ECONOMIC ANALYSIS OF LAW at 81.

music, since the law treats the work as copyrighted, since the copyright covers the rights of distribution and public performance, self-help mechanisms such as DRMs and para-copyright protections such as the anti-circumvention rules of the DMCA ensure that it is a safe avenue. 95 Of course, as this example reveals, the protection itself, or more precisely, enforcement, has its own costs. In any case, copyright law provides incentives to make the work only in as much as it refers to unwanted uses. Copyright law is not in itself akin to winning a lottery ticket.

Should copyright law aim to offer compensation for all costs and risks of the production and commercialization of a work? Should copyright law settle for creating the market tools, *i.e.*, the property rights and the means to transfer them in the form of contract law but abstain from interfering in the functioning of the market itself once it is set in motion? This is a considerable question. For the purposes of our discussion here, it is sufficient to stop at a far less ambitious point: while I leave the question of whether copyright law should "push" the market in ways other than creating transferable rights, we can agree that copyright law should not hinder the operation of the market.

Narrowing down the last point and returning to the employment context, the question is the following: should the law take into consideration the various costs and risks described above in devising the rule of initial allocation? The answer is a clear "yes." There should be a correlation between the party who bears the costs and the risks and the tool that allows the owner to exclude potential infringers. The right should be accorded to the party who undertakes the costs and thus the financial risks. ⁹⁶ Had the law awarded its prize to a party who did not undertake the costs and the risks associated with making the work and channelling it into the market, it would not only have failed in its mission to provide incentives for making the work, but it would have provided disincentives for so doing. Consider Author A, who spent substantial time, effort and money in making a work. Copyright law assures that Infringer B will not use the work unless he receives A's consent. However, if the copyright and the right to exclude B from using the work is not in the hands of A, but rather in the hands of a third party C, then A lacks direct control over the work, and B's use is unrelated to the A's costs. Once A considers whether to make a second work, recalling that she has no control over the uses of the work and hence copyright law is ineffective for her, she might refrain from making the second work. In the meantime, C gains, without any investing any risk.

The next task that follows is to identify the party in the employment context that undertakes the costs and risks. Doing so in a case-by-case manner adds uncertainty and additional unnecessary costs to the calculation. Instead, the law should identify typical situations and act accordingly, by according the rights to the party who is most likely to undertake the risk, but making this initial allocation one that can be contracted around. In other words, the law should seek for the typical risk-bearer and allocate the rights to this party as a default rule.

⁹⁵ See 17 U.S.C. §§106, 1201.

⁹⁶ There might be other risks which are more difficult to quantify, such as a risk to the reputation of the author. These are addressed by moral rights, where these exist.

However, the legislative (or judicial) technique of opting for a default rule should be applied carefully, since there are additional factors that might interfere and render changing the default rule impossible. Changing the default requires information, awareness and understanding of the situation, as well as being able to evaluate it. Furthermore, the initial allocation might create an endowment effect, i.e., the bias of property holders as to its value. Owners tend to value their property at a higher price than they themselves would have been willing to pay to buy the same property. 97 If the default rule accords the employer with the copyright subject to the option to change the default rule (which is the law in all models surveyed above) and given the typical lack of power by the individual employee, setting the default rule in favour of the employer means that in most cases it will not be changed. (The issue of the balance of power of the employer and the employee will be discussed in the next part.) Stated more generally, the last point about the availability of changing the default rule can be described and generalized in Coasean terms as a corrective transaction and its costs. The initial allocation of the copyright can and is likely to be corrected by the parties if they think it is efficient to do so and if transaction costs of reallocating the rights are negligible.

Given that a general rule based on typical cases is more efficient than a case-by-case rule, but given that there are various kinds of transaction costs that might fail efficient corrective transactions, I believe it is better to calibrate the scales and zoom-in into the workplace, so to differentiate between various kinds of situations. This will enable us to fine-tune the general allocation rule. Of course, defining sub-categories has some costs of its own, as parties are likely to disagree as to the applicable category, a dispute resulting in uncertainty and further costs. The latter is of course a general point about categories in the law.

Equipped with the caveat about the availability of corrective reallocation transactions and with the idea of searching not for a single typical situation but for typical situations, in the plural, we should ask the following question: in the workplace, who is the party that typically undertakes the risks associated with creating the copyrighted work? The answer is that in most working scenarios, once the work is made in the scope of the workplace the employer is the party who pays for the costs of making the work in the first place and hence undertakes the associated risks. In most cases, it is also the employer who bears the costs associated with the commercialization of the work.

The intuitive observation of the employer as the risk-bearer should be attentive to the additional costs and risks, other than the immediate costs of expression and commercialization. For instance, as Parisi and Ševčenko discuss, creative works are often the result of many people each contributing a piece of the work, which needs to be assembled together. Complex software is an obvious example. In order to be able to commercialize the aggregated work, the bits and pieces need to be accumulated. The various authors can attempt to negotiate a joint venture, but given the well-known problems of common action, such as negotiation costs and hold-outs, the split of rights is likely to result in an anti-commons problem and nothing at all but

⁹⁷ For discussion of the endowment effect in the context of employment, see Cass R. Sunstein, *Switching the Default Rule*, 77 N.Y.U. L. REV. 106 (2002).

⁹⁸ See supra .

frustration.⁹⁹ Allocating the rights to one entity in the first place is far more efficient than pooling them together later. Thus, when the kind of work is such that it is produced by several authors or that its value lies in combining several independent works together, we have yet another reason to allocate the rights to the employer.

But the kind of work is not a decisive factor. We should also query the kind of the employer. Especially, we should differentiate a content business from a non-content business. In workplaces such as a music label, a Hollywood studio, a software company or a publisher, the employer is in a better position to undertake the risks associated with producing and marketing the work, since the typical production firm does not invest in one work only, but simultaneously, in several works. This enables to spread the risk over the several works and cross-subsidize them. One best seller is enough to enable the publication of several other books, including those that might be a commercial failure. The employer whose incentive is to market such works has better familiarity with the market and its workings. Thus, the employer is in a better position to market the work efficiently and successfully.

However, in a non-content industry, where the employee is hired to do a non-creative (in the copyright sense) job, but nevertheless makes a work of authorship, the employer is not usually involved in the risk taken in making the work and does not have any unique knowledge about the market of the unexpected work. In such cases, there is no ex ante reason to allocate the copyright to the employer. The law follows suit and the work-for-hire doctrine includes not only the requirement that the author is an employee, but also that the work was made in the scope of the employment. ¹⁰⁰ If the work was made outside the employment scope then it does not belong to the employer.

To summarize this part, one leg of the allocation rule of copyright law should correspond to the costs and risks taken in producing the work in the first place and in marketing and commercializing it in the later phase. Designing a rule based on typical cases is more efficient and the typical situation is that the employer is the risk-bearer. However, the kind of business matters. It is submitted that we should treat employers and employees in the cultural industries differently from those in other industries. A journalist, photographer, architect, musician and the like, working for a publisher, design company, or a music label, respectively, are different from a lawyer working in a law firm, or a planner (as opposed to a creative) in an advertising agency, even though the latter might make works of authorship. This analysis supports the second prong in the common law work-made-for-hire doctrine (as in the UK and US models), *i.e.*, whether the work was created within the scope of the employment. A second leg of the allocation rule looks not only at the work at stake and the risk bearer, but at the relationship between the parties, and here is where labour law enters. ¹⁰¹

⁹⁹ There are important exceptions, as when there is something else uniting the authors, such as a shared ideology. The Open Source movement provides numerous illustrations of such joint ventures.

¹⁰⁰ See supra note .

¹⁰¹ A full discussion would insert here also the relationship between the author and the work. This is usually dealt with under the doctrine of moral rights and personality-based rationales of copyright law and is not discussed here.

VI. LABOUR LAW: ONE SHOT GAMES AND REPEAT GAMES

Thus far, we discussed the copyright law aspect of the situation. We looked at the kind of work and at the kind of employer. It is time that we look at the kind of the employee, and more importantly, at the employee-employer relationship. The copyright discourse was one of incentives and applied an economic view, but one persistent claim is that we need also take fairness into consideration in shaping the law. The crux of the fairness argument is a well-known lesson of labour law, that the employer and the employee have unequal bargaining power. While this is true in many situations, we need to assess the proposition of unequal power in the creative sector, in light of its unique characteristics.

The distinction between salaried employees (those who are under a contract of service) and independent contractors who provide their services to a hiring party (those under a contract for service) is a bedrock principle of the Common Law. Many jurists and courts struggle to provide various tests to distinguish between the two kinds. This is the question of who is an employee?¹⁰² Here, I assume that the law can distinguish between the employee and the independent contractor (which is what happens once a court so decides).

Given the costs and risks associated with making works as discussed in the previous part, the risk-averse author who lacks resources to fund the expression costs would rule out the option of running her own business. She will then consider the remaining options: offering her services as an independent contractor or a freelancer, in which case the costs of the expression will be covered by the party commissioning the work in exchange for her surrendering her rights or granting a license to use the work, or offering her services as an employee, in which case she surrenders all her rights as to all works made within the scope of the employment.

The risk-averse author who lacks the knowledge, funds or will to run her own business would turn to the salaried employment option. She would receive a stable solid salary, other benefits such as pension and paid vacations and not be subject to various risks such as liability for torts (assuming the vicarious liability doctrine applies). She would also not need to engage in managing the business, searching for clients, dealing with the regulators etc. These benefits do not come without a price. The author is limited in her creativity. She needs to follow the instructions of her employer (as is the situation of the independent contractor who needs to follow the instructions of the commissioner of her work, but has the choice not to take the job in the first place) and is limited in her artistic and creative freedom, at least in the workplace.

Is this not a fair deal? The author limits her artistic freedom and transfers the copyright in the works she will be making in exchange for risk-free stability. She can go on making her own works outside the scope of the employment. The alternative is undertaking the costs of expression and the risk herself and when these are too high, the alternative is not engaging in any creative work at all. As long as the author understands the deal and is not misled and all other factors are equal, it seems to be a

 $^{^{102}}$ See CCNV, supra note _; Deborah J. Lockton, Employment Law (4^{th} ed. 2003); _.

fair deal. This argument applies when the author is hired to create works of authorship and when the deal was struck at the outset of the employment relationship.

Of course, this does not justify unfair exploitation of the author. The complaint about unfairness is a merger of two narratives—that of the romantic author with that of the exploited weak employee. Is the employee so weak vis-à-vis the employer? The answer is contingent upon several factors: the power of the individual author/employee, the collective power of the employees, the temporal dimension (when is the contract discussed?), as well as the kind of work and the kind of the employer (content or non-content industry), and the business model applied by the employer. A way to figure out this complex field is framing the relationship in terms borrowed from game theory, as a repeat game or a one-shot game between the parties, followed by some distinctions.

In a one-shot game, the parties are focused on the gains and losses from that specific interaction and each party attempts to maximize its gains. If one party in a one-shot game is stronger than the other and absent a legal rule to the contrary, exploitation is likely to occur. This is the situation of the independent contractor. To prevent this, all legal models assist the weaker side in various ways. The US model, for instance, leaves the copyright with the independent contractor, unless several conditions are met. These limit the situations in which the relationship can be deemed as a work made for hire to specific kinds of works, when the work is commissioned and most importantly in my view is the requirement that the parties formalize their relationship and explicitly specify that the work is to be considered a work made for hire. These requirements, once fulfilled, contain a clear signal to the parties about the kind of transaction they are entering, including the issue of copyright ownership. The required formalities inform the parties and each side can now assess its situation and decide whether to enter the transaction or not. The other models (UK, Germany) leave the ownership with the contractor, who can now transfer the rights to use the work.

But the employee and the employer are usually engaged in a repeat game. In a content industry context, the employer is interested in the employee creating more works of quality and the employee knows that. Unfair treatment will decrease the motivation of the employee to create more works of as good (or better) quality. The employer who is interested in a steady stream of quality works realizes that it will be counterproductive to treat the employee in an unfair manner, all other factors being equal. In the normal course of the workplace these considerations mean that the salary will be reasonable and/or that the employer will search for ways to create incentives for the employees where there are unexpected, unforeseen gains. Internal incentives can take the form of bonuses or a more direct sharing of the revenues, such as an escalating scheme: After covering the expenses, the more revenue the work produces, the higher will be the employee's share. 104

¹⁰³ 17 U.S.C. §101(2).

¹⁰⁴ The sharing of gains should not be at the expense of the steady salary, otherwise the risk component of the salary increases and the employer is likely to reduce the basic salary. A salary based solely on a pay for performance principle runs into many difficulties. See Vandenberghe, *Labour Contracts*, at 550.

There are additional factors here. The employer in the content industry context should not limit its view to the individual employee. Mistreating one employee sends a signal to other employees, current and future, about what lies ahead for them. The one-shot game between the employer and the individual employee is transformed into a series of one-shot games with all employees. The accumulation of many one-shot games between the same employer and many employees can be viewed as a repeat game, between the employer and the employees as one entity. Under conditions of a repeat game, the employer knows that it will not be beneficial to mistreat the employees. Hence, there is another motivation here for the employer to offer the employees ways to share the benefits from their works.

The above analysis affects each of the employees as well. An employee who will not make the works as expected or that will attempt to hide a work he or she made from the employer with the intention to exploit it on their own, is likely to be fired. This ultimate sanction maintains the framework of a multiple one shot games, which result in a collective repeat game.

The result of the dynamics described here can also occur in an artificial manner, in the form of an employees' union. Once the individual employees act together, they are no longer in a weak, continuous one-shot game subject to the arbitrary will of the employer, but rather, they are part of a multiple repeat game between two parties whose power is on a par.

The assumptions underlying this analysis should be underlined, so we know the limits thereof and address other situations accordingly. The above applies to the content industry, where employees are hired to make creative works. A content industry, by definition, engages in the continuous production of creative works, hence the game is a repeat one. Both parties are aware (or should be) of the trade-off of risks. The consideration takes place ex ante, at time that the author still has the choice of working as an individual, independent contractor or as an employee. When these assumptions do not apply, such as in a non-content industry where an employee unexpectedly makes a work of authorship, the ownership was not discussed and was not traded-off, it would not make sense to talk about a repeat game. If the parties realize ex post that the work is worth exploiting, who should win the ownership? Depending on the work, it might be the case that the commercialization of the work requires a substantial investment and the cooperation of both parties. If so, they are likely to reach a contract as to the use and commercialization of the work and in the negotiation process agree about the ownership. Since there are transaction costs related to the use of the work, the costs of discussing the ownership are ancillary and low. In Coasean terms, we could say that the initial allocation does not matter and the parties will reach an efficient allocation (or reallocation) on their own.

In other cases, where each of the two parties can commercialize the work on their own, without the other party, the law needs to determine who owns the copyright. If the estimated gains from the work are high enough and the parties estimate that there are no additional works that can follow the first work (and the author is usually in a better position to know this), then the repeat game, either in its individual feature or its collective feature, is transformed into a one-shot game. Here, the initial allocation matters, as it is a "winner takes it all" situation. Importantly, this situation is unlikely to be addressed by the parties ex ante, as the situation is not one of a content industry,

the employee was not hired to make the work but to do other tasks and none of the parties foresaw the happy event. In other words, absent a property rule that allocates the copyright to either side, the situation is not one of unequal bargaining power.

If there are no such follow-up discussions as to the commercialization of the work then the ownership should be determined based on the copyright analysis. The allocation criterion that should be applied ex post is the ex ante view: Which party undertook the costs and risks associated with creating the work in the first place? This is a case-by-case decision, but it is reflected in the second prong of the work for hire doctrine in several jurisdictions, namely, was the work created in the scope of the employment?

The non-content employer, who is aware of the work-for-hire doctrine and estimates that occasionally there might be a worthy work that would be made by an employee, can attempt to pre-empt any future uncertainties by requiring the employees to give up all rights in any work they might make. However, this avenue might have an unproductive effect, as it will inform the employees that they will not own any work they might make as employees. Adjusting to such a rule, they will focus on their initial task for which they were hired, and creativity will be left at the doorstep of the workplace. Alternatively, the creative employee who was forced to sign such a contract is likely to search for ways to bypass it, as distancing the work from the workplace, so it will not be considered as a work made in the scope of the employment. This might cause some tension between the employer and the employees and if costs of expression and commercialization and the related risks are too high, the work might not be made in the first place or might not be circulated. Accordingly, a pre-emptive overall transfer of rights in a non-content industry will be inefficient from the viewpoint of copyright law for al parties involved, including the public.

The analysis of the way in which a series of one-shot games between the employer in the content-industry and each of the employees is transformed into a repeat game should further be distinguished. In some contexts, the authors employed by the employer each work on their own, their works are not aggregated and in many cases they are in competition with each other. Musicians working for a record company or authors working for a publisher provide examples. Each musician competes with many other musicians in the same genre. The individual musicians create their music on their own, unrelated to other musicians. The same applies to authors of novels. Under such circumstance, a union is less likely to form; the way the publisher treats one author or musician does not affect her competitors (or even indirectly assists them) and the employer does not face the need to pool separate rights together, i.e., there is no anti-commons problem. In such situations, the series of one-shot games will remain such and will not be transformed into a collective repeat game. Hence, in devising the best legal rule we should also be aware of the structure of the specific market at stake and the business model of the employer. In the above scenarios, the form of employment is likely to be one of commissioned work or freelance. The incentives of the publisher and the author do not necessarily correspond. For example, an author might be eager to gain reputation first and immediate financial rewards in a second place. 105 An author eager to publish might surrender his rights too quickly.

¹⁰⁵ Reputation can be translated into financial gains in later events. An author who has gains good reputation is more likely to be paid for writing a second book, invited to lecture etc.

The law can provide some paternalistic assistance to prevent hurried decision or ease their effect. 106

To summarize, this part examined the argument that authors are often treated unfairly by their employers. Contrary to this popular contention, the discussion suggested that fairness is not compromised in most situations. First, authors have a choice of various business models to choose from, such as an independent contractor, freelancer or a salaried employee. Second, the basic transaction between an employer who is in the content-business and the author-employee is a transfer of risks from the author to the employer in exchange for financial certainty for the risk-averse author. Third, the dynamics of the workplace in the content industry and under a business model in which the employer pools together the works made by the employees are such that convert a series of one-shot games between the employer and each employee into a repeat game between the employer and the employees as a whole, thus reducing the inefficiencies attributed to one-shot games versus repeat game. Fourth, the discussion suggests that we should distinguish between content industries where the employees are hired to make creative works from non-content industries, where the employees are hired to perform tasks other than making works of authorship. In case such an employee nevertheless makes a creative work, the second prong of the work-madefor-hire doctrine, insisting that the work is made within the scope of the employment, protects the employee and deposits the work in her hands. The economics of the market are likely to result in cooperation between the employer and the employee, in a post-creation agreement. Fifth, some employers apply a different business model, in which they do not accumulate the separate works made by the employees into one work, but market each separately. In such circumstance, the transformation of the one-shot games into a one, repeat game is unlikely to occur. Due to a mismatch of interests between the author and the employer, the author might transfer her rights too quickly. The law, however, provides the author with some background tools to redress hasty transactions. These are more powerful in the Continent than in the US, reflecting different views on the strength of the freedom to contract and the law's interference within the market.

VII: RE-ALLOCATION

Thus far, we searched for the most efficient initial allocation of the copyright in works of authorship made by employees. Applying a dual perspective of both copyright law and labour law indicated that we should take into consideration criteria such as the allocation of risks, the overall aspects of the employment contract and the choices each party made in entering the employment relationship. Fairness also plays a significant role as well as additional criteria that need to be evaluated, such as the kind of work, the nature of the business and the business model, all of which serve as proxies for the allocation of risks and fairness. Along the way I commented on issues of transaction costs and their effect on the choice of the most efficient rule of initial allocation. This part examines the option of a corrective transaction, in case the law's initial allocation turns out to be inefficient. This is a straight-forward application of the Coase theorem, which states that when transaction costs are negligible, the initial allocation does not matter since the parties will reallocate the resources at stake. Of

 106 See for example the right to terminate transfers of copyright in the U.S., 17 U.S.C. $\$ _ or the German rules discussed above, supra note _.

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course, the distribution of wealth among the parties matters to the parties, and in the case of copyright, it might matter to the public at large.

There are several situations which we should examine. Some considerations that we have already used will be relevant here too: the temporal dimension, the relative power of the parties and the kind of business, i.e., whether the employer is in the content industry or not.

- 1. Before the employee is hired and before she creates any work, if hired to make creative works in a content industry, the most efficient initial allocation of the copyright in the work is to the employer. Had the law allocated the right to the employee, we would have seen an immediate, pre-employment, pre-creation corrective transaction. Authors that decided they prefer to be employed rather than work as independent contractors are willing to engage in the trade-off of risks-for-financial security. Before they are part of the collective body of employees, whether it is an organised union or an accumulation of interests, the employee lacks any real bargaining power. Since the parties meet each other and negotiate the entire scheme of the employment, the additional transaction costs related to transferring the rights are negligible. Even if the rights are allocated to the employee, a re-allocation to the employer is more than likely to occur. The employee is unlikely to receive much for this transfer, other than the salary and employment benefits. In some cases, the employer might offer internal incentives such as bonuses or a share in the gains, to enhance the employee's incentives. Accordingly, and in order to save the (small) transaction costs, the law should allocate the rights to the employer. This initial allocation should be a default rule and is unlikely to be changed, unless the employee is a star whose bargaining power is equal to the employer or perhaps even stronger in some cases.
- 2. Once employment commenced and if no pre-employment agreement was made, then the most efficient allocation of the rights in the content industry is to the employer. Had the law allocated the rights to the employee and these have not yet been transferred, what is the likelihood of a corrective transaction? Now, that the employee is already hired, he or she are in a better bargaining position than they have had before employment. Furthermore, now that they are employees, they engage in the overall repeat game between the entire employees' body and the employer, even if on their side it seems to be a one-shot game. The employer in these rare cases, where no initial contract addressed the copyright, is likely to request a transfer of rights. The authoremployee is likely to require a high payment, or at least higher than in situation (1). The employer, understanding that the treatment of one authoremployee will affect its treatment of all employees, current and future, might re-consider its entire treatment of the matter. Depending on the importance of the work, the employer might pay for the transfer of the rights, but in any case the employer will change its policy at once and switch to (1). The lesson of Tasini, though discussing freelancers, is applicable here. This is a situation where transaction costs are not necessarily negligible and if the employees demand too high a price they are likely to bring down the business, with the unfortunate result that they too will lose their jobs.

- 3. In a non-content industry, a pre-employment assignment of rights in future creative works is unlikely to occur, since the parties do not see this as part of the reason for hiring the employee. The employee is hired to perform another task. In case such a work is nevertheless and unexpectedly created or that the parties suddenly realize the commercial value of routine works, the question would turn on the issue of the scope of the employment: was the work part of it or not. In any case, as explained above, the parties are likely to engage in negotiations and reach a deal as to the commercialization of the work, if they need each other to do so, in terms of investment and further creation. During such negotiations, the ownership issue will be discussed. The additional transaction costs for determining the ownership is negligible and even if the rights are in the hands of the employee, a reallocation is likely to occur. The parties will determine the price themselves.
- 4. We are left with individual employees, who are not part of a collective employee body (either a union or a "natural" collective) and make works which do not require further investment for their commercialization, i.e., this is not the situation (3) in which the commercialization requires cooperation. The fairness argument might arise, according to which, the authors were so enthusiastic to market their works that they did not pay attention or did not understand or that they were simply taken advantage of, by the much stronger and sophisticated employer. While ignorance, unawareness, lack of business experience and lack of sophistication on the authors' side do occur and no doubt there are employers who attempt to exploit the authors, this is not a reason to allocate the rights to the employee. The incentive theory of copyright law instructed us to allocate the rights to the party undertaking the risks. In most cases this is the employer, especially in the context of the content industry. The unfairness is mitigated by the transformation of the one-shot game into a repeat game, as discussed earlier. In this sense, the independent contractor or the freelancer is in a worse situation than the salaried employee.

Should we allocate the rights to the authors? If the issue arises before employment commences. I believe an allocation to the author would turn out to be useless and will be corrected immediately, in a pre-employment assignment, as discussed in situation (1). Should we opt for other protective mechanisms, such as the US right to terminate the transfer after some time or various rights awarded in German law to authors, usually rights which cannot be waived? Such measures might have a positive dynamic affect. It seems to me that their power lies not with the actual content of these pro-author rules, but with their signalling power. Once there are measures aimed to protect the author, he or she are more likely to learn about them. Once they do so, they might be drawn into learning their rights and options. Of course, this is a speculative effect, which needs to be empirically examined. It is not unlikely that the effect is the opposite, that the fact that the author learns he or she enjoys some rights vis-à-vis the employer might lead them to overestimate their power. The signal, however, works also in the direction of the employer. Wishing to avoid a judicial determination that the compensation to the author was inequitable, as the German Copyright Act enables, with its immediate and reputational consequences, the employer might offer a somewhat higher salary. If these signals work in the ways just described, it is likely that there will be few cases if any regarding the application of such legal options.

VIII. CONCLUSION

Copyright law provides incentives to make works of authorship, but does not guarantee commercial success. The gap between the property-like right in the form of the copyright and a multi-million dollar exit is where the employment relationship has a productive role. The employment relationship enables both parties thereto to trade off their risks and rights.

This article searched for the most efficient rule of initial allocation of copyright in works created by authors at the workplace. The discussion, applying an integrated copyright law and labour law perspective, largely supports the current UK and US models, with a medium support to the post-employment rights accorded to employees-authors in Germany. The latter are an interesting case to study and could provide an actual legal laboratory.