



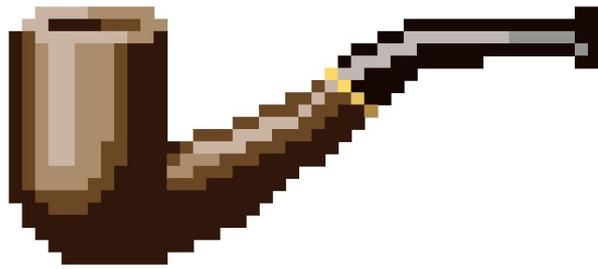
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Copyright and Non-Fungible Tokens

– This Is Not an NFT



This is not an NFT

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Abstract

This thesis explores the relationship between NFTs and copyright. The discussion is centred around the three themes of protection, infringement, and agreements. In terms of protection, the type of art generally seen on the NFT market faces two principal problems: first, NFT art is frequently very simple; second, many NFTs are based on algorithmically generated images. When minting an NFT, the underlying work is reproduced and communicated to the public, either directly or by linking. Consequently, minting an NFT of a protected work may be unlawful without the author's consent. An important actor on the NFT market are the trading platforms where users can create and sell NFTs. These actors earn commissions from sales and have a responsibility to ensure that illegal material is not available through their sites, lest they be held accountable for the infringements of their users. Transfer of copyright can be explicit or implicit, and it is likely that some rights to the underlying artwork are included in the purchase of an NFT. However, there are international differences concerning the requirements of copyright agreements, especially concerning the author's moral rights. This may be an issue on the NFT market where extensive licensing is common and the link to the author is often tenuous. The themes explored suggest that there is an opposition between the core principles of copyright law and those governing the NFT market: the former are based in the centralised phenomenon of law, whereas the latter are founded in a decentralised philosophy where code is law.

Contents

ABBREVIATIONS AND KEY TERMS	7
1 INTRODUCTION.....	9
1.1 COPYRIGHT IN THE CRYPTO CRAZE	9
1.2 LIMITATION OF SCOPE	10
1.2.1 <i>Copyright protected digital visual art</i>	10
1.2.2 <i>Questions on jurisdiction and on the choice of applicable law</i>	11
1.3 METHOD	12
1.3.1 <i>A few notes on terminology</i>	13
2 COPYRIGHT PROTECTION OF NFT ART	15
2.1 THE RELATIONSHIP BETWEEN THE NFT AND THE UNDERLYING ARTWORK	15
2.2 REQUIREMENTS FOR COPYRIGHT PROTECTION: SWEDISH <i>VERKSHÖJD</i> AND EU ORIGINALITY	16
2.2.1 <i>Development and influence of the CJEU standard of originality</i>	18
2.2.2 <i>Toward a harmonised copyright standard</i>	21
2.3 NFT ORIGINALITY PROBLEMS	22
2.3.1 <i>The world’s first tweet</i>	23
2.3.2 <i>Bored Ape Yacht Club</i>	24
3 NFTS AND COPYRIGHT EXPLOITATION.....	29
3.1 THE SCOPE OF THE AUTHOR’S RIGHT TO THEIR WORK	29
3.2 COPYRIGHT IMPLICATIONS OF THE MINTING PROCESS.....	30
3.3 CAN UNAUTHORISED MINTING AMOUNT TO COPYRIGHT INFRINGEMENT?	31
3.3.1 <i>Scenario 1: uploading the work online</i>	32
3.3.2 <i>Scenario 2: linking to a work already existing online</i>	33
3.4 DISPLAYING A WORK FOR THE SALE OF AN NFT: PLATFORM RESPONSIBILITY	37
3.4.1 <i>Communication to the public through deliberate intervention by a platform</i>	39
3.4.2 <i>The importance of intent</i>	43
3.5 ENSURING A HIGH LEVEL OF PROTECTION IN THE NFT SPHERE.....	44
4 THE SALE OF NFTS AND THE TRANSFER OF RIGHTS	49
4.1 ONE PURCHASE, TWO CONTRACTS	49
4.2 WHAT RIGHTS COME WITH THE NFT? THE IMPLICIT TRANSFER OF COPYRIGHT	50
4.3 PRINCIPLES FOR INTERPRETING COPYRIGHT CONTRACTS.....	52
4.3.1 <i>The specification principle and the author’s right to remuneration</i>	53
4.3.2 <i>Interpretation of NFT platform terms</i>	54
4.4 THE ISSUE OF MORAL RIGHTS	56
4.4.1 <i>Moral rights in EU law: the three-step test and a fair balance</i>	57
4.4.2 <i>Moral Rights in Sweden</i>	60
4.4.3 <i>Snoop Dogg and Eminem at the VMAs</i>	62
4.5 CAN YOU EVER REALLY OWN THE APE?	63
5 CONCLUDING REMARKS.....	65
5.1 CODE IS LAW VS. COPYRIGHT LAW	65
5.2 SUMMARY	67
5.2.1 <i>Are NFTs protected by copyright?</i>	67
5.2.2 <i>NFTs and copyright infringement</i>	67
5.2.3 <i>Copyright agreements in the NFT sphere</i>	68
5.3 PROPOSED PERSPECTIVES	68
BIBLIOGRAPHY.....	71
OFFICIAL DOCUMENTS	71
<i>European Union</i>	71
<i>Sweden</i>	73

<i>United States</i>	73
<i>Other</i>	74
CASE-LAW.....	74
<i>European Union</i>	74
<i>Sweden</i>	75
<i>United Kingdom</i>	75
LITERATURE.....	76
<i>Books</i>	76
<i>Articles</i>	76
OTHER SOURCES.....	77
<i>Magazine and news articles</i>	77
<i>Other online sources</i>	79

Abbreviations and key terms

BAYC	Bored Ape Yacht Club
Blockchain	A list of encrypted blocks of code, where each block contains a cryptographic signature of the previous one
CJEU	Court of Justice of the European Union
Crypto	A term used to refer to various digital phenomena relying on encryption technology
Cryptocurrency	A digital currency managed through the blockchain
Crypto wallet	A digital wallet containing crypto assets
DeFi	Decentralised Finance
HD	Högsta Domstolen, the Swedish Supreme Court
Infosoc	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
IP	Intellectual Property
Minting blockchain	The act of creating an NFT by writing an entry on the blockchain
NFT blockchain	Non-Fungible Token, a unique asset stored on the blockchain
PMÖD	Patent- och marknadsöverdomstolen, the Swedish Patent and Market Court of Appeals
Smart contract	A computer program written on the blockchain that automatically executes certain actions when the relevant conditions are met
URL	Lag (1960:729) om upphovsrätt till litterära och konstnärliga verk (Swedish Copyright Act)
WIPO	World Intellectual Property Organisation

1 Introduction

1.1 Copyright in the Crypto Craze

In a time where artists are struggling to earn money from their works—especially in the online sphere where piracy and illegitimate uses proliferate¹—a digital art phenomenon has emerged where people are paying millions of dollars for what are said to be a new kind of digital originals. People are talking about *Non-Fungible Tokens*, NFTs, as being potentially ground-breaking for the art community, enabling artists to make a profit by selling their works in the form of assets stored on the blockchain.² The success of the NFT phenomenon, however, has also brought with it a host of problems.

In the summer of 2022, it was reported that NFTs worth over \$ 100 million had been stolen in the last year alone.³ Apart from theft of the crypto assets themselves, there are a multitude of cases relating to infringements of intellectual property rights. From independent artists claiming to have had their artwork turned into NFTs and sold without their knowledge or permission,⁴ to high-profile cases involving international companies,⁵ the NFT sphere has become a breeding ground for copyright infringement. A possible reason for this is the common misunderstanding is that NFTs and digital works of art are the same thing, when in fact they are not. Interestingly, not all members of the NFT community agree that the confusion of these concepts is a problem. In fact, some seem to think that the crypto sphere should be left to its own devices and that copyright law has no place on the blockchain.⁶

This thesis will delve into the legal specifics of the intricate world of NFTs. The complex connections between artists, their works, NFTs, buyers, and marketplaces will be examined from a copyright perspective. The discussion will be centred around three main themes: protection, infringement, and agreements. More specifically, the aim is to answer the following questions:

¹ SOU 2022:44, p. 203–6.

² Gino Yazdini, ‘A Guide To Non-Fungible Tokens, The Future Of Art’, *Forbes*, 28 April 2021; Chow, ‘NFTs Are Shaking Up the Art World—But They Could Change So Much More’, *TIME*, 22 March 2021.

³ Hern, ‘More than \$100m Worth of NFTs Stolen since July 2021, Data Shows’, *The Guardian*, 24 August 2022.

⁴ This Twitter feed contains plenty of examples, <https://twitter.com/nfttheft> (accessed 4 January 2023).

⁵ The Fashion Law, ‘From Hermès to Bored Apes: A Running List of Key Lawsuits Over NFTs’.

⁶ Guadamuz, ‘Platform Is Law: The Cautionary Tale of Stolen NFTs’.

- Are NFTs, in fact, protected by copyright?
- What is the relationship between an NFT and the underlying artwork it represents?
- What are the consequences of creating an NFT from a copyright protected work, and can it constitute an infringement?
- What responsibility do NFT marketplaces have for infringements committed on their platforms?
- What rights come with the purchase of an NFT?
- What rules apply to agreements on the transfer of copyright, and how do they affect the NFT market?

1.2 Limitation of scope

1.2.1 Copyright protected digital visual art

The main object of this study will be copyright protected digital visual art. This means that while, in theory, anything⁷ can be minted as an NFT, this analysis will leave out music and literary works, as well as physical works of art. Related rights, such as photographer's rights regulated in the Swedish Copyright Act, URL,⁸ chapter 5 section 49 a, will not be dealt with. Because legal sources and cases of litigation in the field are scarce, examples will nonetheless be used where the underlying copyright protected material is not a work of digital visual art but some other work, e.g., a piece of writing. These examples serve as context to the analysis, to make the rather abstract and novel subject matter easier to grasp. Because the relationship between the underlying work and the NFT is the same regardless of the type of work in question, these examples are relevant despite the limitation of scope to visual artworks.

Other categories of intellectual property will also be left out, which is not to say that they are less relevant in practice. The application of trademark law and competition law to NFTs could be especially interesting since many large NFT collections have worked

⁷ And not just works of art! Anything that can be given a digital identifier can be turned into an NFT, including real estate. See the report from the Swedish Land Survey, Lantmäteriet, 'Fastighetsöverlåtelse i En Digital Tid', p. 47.

⁸ Lag (1960:729) om upphovsrätt till litterära och konstnärliga verk.

hard to build a brand. Also currently being discussed are possible applications of NFTs in patent law.⁹

Technical details will be kept to a minimum in order to prevent the text from being too inaccessible to those less comfortable with computers, code, the blockchain, etcetera. Some understanding of the technology is, however, necessary for the legal discussion. The objective is to explain these facts in a way that is comprehensible to the average internet user, rather than to enable a detailed and technically correct knowledge of the subject. Especially tech-savvy readers will have to excuse any oversimplifications or mistakes resulting from the author's limited experience in the subject.

1.2.2 Questions on jurisdiction and on the choice of applicable law

The issue of jurisdiction and choice of applicable law in cases pertaining to the online sphere could be the subject of a thesis of its own.¹⁰ The complex interplay between contract law, private international law, and national law on the internet has a great effect on the outcome of individual cases. However, it is not what this thesis is about. In a principled discussion on the relationship between NFTs and copyright law, these questions are too specific to be dealt with extensively. Nonetheless, a couple of points might be useful for the reader to bear in mind.

The internet poses challenges to the way we solve legal issues involving multiple jurisdictions and legal systems. In a chapter on the internationalisation of law through digitalisation, Svantesson calls information technology “a catalyst for the internationalization of law”.¹¹ Even the most commonplace of online activities—e.g., posting a picture on Instagram—frequently implicates multiple jurisdictions because of its reach alone. Choosing between them is a daunting task, not to mention the subsequent selection of applicable law and its interpretation.¹² If this is the case on the internet in general, it is especially apparent in a blockchain context. The decentralised ideology driving much of crypto tech-

⁹ IBM, ‘IPwe and IBM Seek to Transform Corporate Patents With Next Generation NFTs Using IBM Blockchain’, <https://newsroom.ibm.com/2021-04-20-IPwe-and-IBM-Seek-to-Transform-Corporate-Patents-With-Next-Generation-NFTs-Using-IBM-Blockchain> (accessed 4 January 2023).

¹⁰ The subject of intellectual property and private international law has been a difficult one since long before the blockchain. See Strömholm, ‘Den andra metoden. Några anteckningar till immaterialrättens särställning i den internationella privaträtten’, p. 351–57.

¹¹ Svantesson, ‘Rättens internationalisering genom digitalisering’, in Magnusson Sjöberg, *Rättsinformatik. Juridiken i det digitala informationssamhället*, p. 63.

¹² *Ibid.*, p. 33–37.

nology development has no interest in what nation's laws should apply to the transactions happening on-chain.

Most of the discussion will focus on EU law and national Swedish legislation. Nevertheless, there are instances where differences between legal traditions, especially between common law and civil law countries, could have a major impact on the answer to a legal question.¹³ In those instances, the differences will be highlighted in order to show how they might affect the outcome of a case.

1.3 Method

NFTs are a fairly new phenomenon,¹⁴ which means there is a general lack of legal sources. The sources consulted in the work on this thesis span from traditional Intellectual Property, IP, Law to news from the entertainment business and Twitter feeds. For the most part, a traditional Swedish legal method is applied, whereby national and European case-law, preparatory works, and doctrine are used to interpret the law. Because copyright law is largely harmonised in the EU, most of the analysis will deal with Swedish implementations of secondary law and the subsequent development through the Court of Justice of the European Union's, CJEU, case-law.

The emphasis on Swedish or EU law will vary between chapters. In Chapter 2, the interplay between the Swedish and EU originality doctrines will be analysed, as the differences between them may prove important in relation to some NFTs. In Chapter 3, the focus will be almost exclusively on EU law, since the artist's economic rights is harmonised in the Union and most of the development has been happening in CJEU case-law. Because of a lack of harmonisation, Chapter 4 turns again to Swedish national law in dealing with the scope of moral rights, but throws a glance at what might be the CJEU's first step toward regulating these rights.

Apart from being new, NFTs are also an international phenomenon, which means that the analysis has a great deal to gain from a comparative perspective. Despite some differences, IP Law is largely international. It is therefore both possible and necessary to study different jurisdictions in order to see how the law is beginning to tackle these issues. However, the ambition of this thesis is not a comparative one. Therefore, comparative

¹³ One such example is the assignment of moral rights through licensing agreements. See section 4.4.

¹⁴ It first gained traction in 2017.

elements will be outlined briefly as nuancing examples, rather than as an object for in-depth analysis.¹⁵

Throughout the thesis, a few unconventional references can be found. These are intended to provide the reader with an understanding of the context of the issues at hand. The object of this thesis lies far from the world of peer-reviewed journals, and it is in the clash with a scholarly subject such as the law that it becomes so interesting. The reader will hopefully forgive any dubious sources and enjoy them for what they are: colourful examples from a world that is quite different from the legal scholar's mundane existence.

1.3.1 A few notes on terminology

Throughout the thesis, two closely related concepts will have to be kept separate: *the NFT*, meaning the encrypted file on the Blockchain, and the *underlying artwork*, meaning the image that the NFT is associated with via, e.g., a link in the NFT file. As we will discover throughout the thesis, these two pieces of property are distinct, and different legal frameworks apply to them. However, this is not entirely clear to many internet users, and much of the controversy and many difficulties associated with the NFT phenomenon is due to the confusion of the two concepts. We will refer to them here as, simply, “the NFT”, for the encrypted file, and “the (underlying) artwork”, “work”, or “NFT art”, for the artwork it links to.

In everyday language, the person that has created a work is referred to by different terms depending on the type of work in question: author, writer, artist, painter, and composer are all examples of terms that can refer to such a person. In copyright law, “author” is the generic term used to refer to the person whose work is protected by copyright. In this thesis, dealing with visual art, “author” and “artist” will be used interchangeably. When dealing with copyright principles in the abstract, “author” will be used more frequently, while cases and examples of visual art will predominantly use “artist”. Frequently, the author of a work will have assigned their rights to another entity. In cases where it is not important to distinguish between the author and anyone to whom they have assigned their rights, the term “rightsholder” will be used to refer to them collectively. The gender-neutral pronouns “they”, “their”, and “them”, will be used in the singular throughout.

¹⁵ See Strömholm, ‘Användning av utländskt material i juridiska monografier. Några anteckningar och förslag’, p. 251–63.

2 Copyright Protection of NFT Art

2.1 The relationship between the NFT and the underlying artwork

Before going into how NFTs relate to copyright legislation, it is important to establish a baseline understanding of what the term “NFT” really means. As stated in the introduction, the abbreviation “NFT” stands for *Non-Fungible Token*. The word “Token”, in this case, refers to a record of a digital transaction on the blockchain. “Non-Fungible”, on the other hand, means that the token is not interchangeable with others like it: it is unique. This is what separates NFTs from other, perhaps more well-known crypto assets: for instance, cryptocurrencies like Bitcoin.

The simplified explanation of what NFTs are is usually that they are a way to ensure the scarcity of digital art, that “with the use of blockchain technology, something digital can also be something unique.”¹⁶ However, it is not the artwork itself that is rendered unique. It would be more accurate to think of the NFT as a receipt verifying the purchase of the original artwork. All digital copies of the work are identical: anyone simply looking at a copy will not be able to distinguish it from the original. The NFT simply serves as proof that the original work has been purchased. As such, it constitutes a certificate of authenticity; it is the combination of the digital artwork and the NFT that creates value. This does not, however, mean there can only be one such receipt per artwork. An asset can be tokenised several times, creating partial rights to it.¹⁷ The relationship between the NFT, the underlying work, and copies of it can be illustrated in the following way.

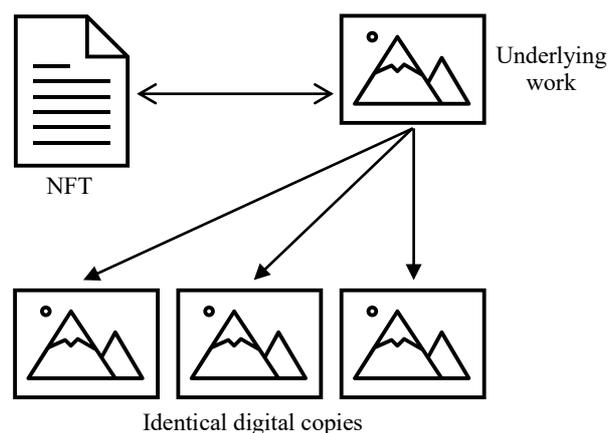


Figure 1. The relationship between the NFT and the artwork

¹⁶ Çağlayan Aksoy and Özkan Üner, ‘NFTs and Copyright: Challenges and Opportunities’, p. 1119.

¹⁷ More on the tokenisation process, also known as *minting*, below, section 3.2.

When discussing copyright protection for NFTs, it is crucial that the two concepts: the metadata file and the underlying artwork, be kept separate. The metadata file that makes up the NFT consists of computer code, which can be protected as a literary work. The protection of computer programs, written in code, is regulated at EU-level by the Computer Program Directive.¹⁸ Article 1 of that Directive requires Member States to “protect computer programs, by copyright, as literary works within the meaning of the Berne Convention for the Protection of Literary and Artistic Works.” The Directive has been implemented in URL which explicitly includes computer programs among the examples of protected works in chapter 1 section 1.

This thesis will not go into the protection of the metadata file in further detail. The NFT itself is a collection of rather unimpressive lines of code,¹⁹ which in and of itself would most likely not fetch the staggering prices the NFT market has seen. In the NFT infringement cases brought so far, it is not the NFT file that is the subject of exploitation; instead, it is the underlying artwork used to create the token. The real interest from a copyright perspective arises when we study the underlying work, which is a digital image protected as an artistic work. This is where the confusion happens, and where the rest of the thesis will focus its attention.

2.2 Requirements for copyright protection: Swedish *verkshöjd* and EU originality

Swedish law affords protection to literary and artistic *works*, URL chapter 1 section 1. In the preparatory works it was specified that this term was to be given a wide interpretation,²⁰ but that it required an element of “spiritual creation”: a certain independence and originality expressing the authors individuality.²¹ In particular, it was emphasised that a work had to be independent from earlier works.²² This requirement of independence is further supported by URL chapter 1 section 4 paragraph 2, which states that if a new and independent work is produced in connection with an earlier work, copyright to the new work is not dependent on the right to the original. The preparatory works described the

¹⁸ Directive 2009/24/EC.

¹⁹ An example of what an NFT might look like can be found in Guadamuz, ‘Non-Fungible Tokens (NFTs) and Copyright’, p. 34, table 1.

²⁰ Proposition 1960:17, p. 48.

²¹ SOU 1956:25, p. 66; proposition 1960:17, p. 49.

²² SOU 1956:25, p. 82.

relationship between altered reproductions and new and independent works as a scale, where the same, non-copyrightable, underlying idea is given an increasingly original form until the result can only be described as a new work. The line between the two was said to be unclear.²³ Through case-law and doctrine, the requirements of originality²⁴ and independence have been interpreted as making up a single standard by which to judge works. This standard is commonly referred to as *verkshöjd*.²⁵ Swedish courts have used the standard both implicitly and explicitly and have developed supplementary theories or tests to facilitate the evaluation. The most important of these are the criterion of double creation and the doctrine of the work's protected scope.

The criterion of double creation has been described as a negative test, according to which *verkshöjd* is excluded if it is likely that the same result would have been achieved by someone other than the artist, given the same creative task.²⁶ As an example, in the case NJA 1998 s. 563 *Tomoko Hus*, a house manufacturer claimed that their blueprints had been copied by a competitor. The question was whether the blueprints were copyright protected, and thus whether the competitor's use of them constituted an infringement. The Swedish Supreme Court, HD, noted that in his design of the blueprints, the architect had to make several decisions about their form and content. The architect himself claimed that his goal in making these decisions had been to make the blueprints thorough and detailed. Though the purpose of the blueprints was mainly practical, HD held that it was likely that another person would have given them a different design.²⁷ In its subsequent case-law, HD has clarified that the criterion of double creation alone is not enough to establish that a work qualifies for copyright protection.²⁸ However, it can be used to exclude the possibility that a work has *verkshöjd*, and to determine its protected scope.

The doctrine of a work's protected scope is the other major theory used by Swedish courts to judge works. The *verkshöjd* standard is considered a minimum level to be

²³ SOU 1956:25, p. 99–100.

²⁴ *N.B.* not originality in the EU sense.

²⁵ Throughout the text, the standard will be referred to by its Swedish name as it does not lend itself to an elegant translation. Literally, it means something like the “height of the work”.

²⁶ Bernitz et al., p. 51; Levin and Hellstadius, p. 85.

²⁷ NJA 1998 s. 563 *Tomoku Hus*, p. 573.

²⁸ NJA 2004 s. 149 *Golvskivan*, p. 163.

achieved, and the bar is set relatively low.²⁹ Hence, the fact that not all works have the same level of originality is not directly relevant to the assessment of whether or not a work achieves *verkshöjd*. Instead, relative differences in originality between works are taken into consideration by adjusting the works' protected scope. Thus, the *verkshöjd* criterion should be judged in connection with the protected scope; a work of limited originality can be given a restricted protected scope to balance out a relatively low requirement of *verkshöjd*.³⁰ The demarcation of a work's protected scope coincides with the line where a reproduction becomes independent enough to qualify as a new work according to URL chapter 1 section 4 paragraph 2.

An example of the interplay between *verkshöjd* and protected scope can be found in the case NJA 1994 s. 74 *Smultron*. A designer claimed one of her fabric designs, made up of the leaves, flowers, and berries of the wild strawberry plant, had been copied. HD stated briefly that the design of the fabric was independent and distinctive enough to qualify for copyright protection, and then went on to discuss the protected scope in more detail. The protected scope is dependent on the level of originality present in the work. Since the components of the fabric design were taken from nature, its originality constituted in the artist's use of those components. Consequently, the protected scope was limited. It did, however, cover not only copies of the design, but also clearly similar designs.³¹

2.2.1 Development and influence of the CJEU standard of originality

The development of the Swedish standard of *verkshöjd* has been happening alongside, but largely independent of the evolution of the EU originality requirement, and the relationship between the two has been a topic of discussion among Swedish legal scholars. There has been dissent concerning the level of harmonisation in the EU, and whether the continued use of *verkshöjd* in Swedish courts is compliant with EU law.³² In the case NJA 2009 s. 159 *Mini Maglite*, HD stated that the harmonising effect of the EU Directives was only partial, motivated by the special nature of the works they concern. Therefore,

²⁹ This follows from the fact that the interpretation of the term 'work' is supposed to be wide. Proposition 1960:17, p. 48.

³⁰ NJA 2009 s. 159 *Mini Maglite*, p. 178.

³¹ NJA 1994 s. 74 *Smultron*, p. 80.

³² An overview of the debate can be found in Nordell, 'Verkshöjd eller originalitet?', p. 176–79.

the court found no reason to consider the implications of the originality standard in the case at hand.³³

The Swedish court was soon to be proven wrong, however, as only months later, the CJEU delivered its judgment in case C-5/08 *Infopaq*. In this case, the Court extended the interpretation of the originality criterion as “the author’s own intellectual creation” from computer programs, photographs, and databases to all other works.³⁴ According to the Court, the Infosoc Directive³⁵ purports to grant authors certain rights in respect to their works,³⁶ and according to the Berne Convention, a subject-matter must be an intellectual creation to qualify as such. This principle is echoed in a number of EU Directives on copyright, where works are protected “only if they are original in the sense that they are their author’s own intellectual creation.”³⁷ The Court stated that the Infosoc Directive is based on the same principle, and consequently the same definition of “work” should apply under it.³⁸

Since *Infopaq*, the Court has further elaborated on the ways in which the originality criterion can be fulfilled. The *Infopaq* case itself concerned excerpts from newspaper articles. The Court stated that, to determine whether a journalistic piece is original, “the form, the manner in which the subject is presented and the linguistic expression” can be taken into account.³⁹ On the contrary, the basic elements of the text, i.e. the individual words, are not protected by copyright. Hence, “[i]t is only through the choice, sequence and combination of those words that the author may express his creativity in an original manner and achieve a result which is an intellectual creation.”⁴⁰ A similar conclusion was reached in C-393/09 *BSA*, which concerned the protection of a computer program’s graphic user interface (GUI). According to the Court, the assessment of the GUI’s

³³ NJA 2009 s. 159 *Mini Maglite*, p. 177.

³⁴ Council Directive 91/250/EEC; Directive 2006/116/EC; and Directive 96/9/EC all contain this requirement for protection.

³⁵ Directive 2001/29/EC.

³⁶ C-5/08, *Infopaq*, para. 33.

³⁷ C-5/08 *Infopaq*, paras. 34–35.

³⁸ C-5/08 *Infopaq*, paras. 36–37. This stance has since been confirmed in several cases before the CJEU. See C-469/17 *Funke Medien and Cofemel*, para. 19; C-145/10 *Painer*, paras. 88–89; and C-403/08 & C-429/08 *Football Association Premier League and Others*, paras. 97–98.

³⁹ C-5/08 *Infopaq*, para. 44.

⁴⁰ C-5/08 *Infopaq*, para. 45.

originality should be based on “the specific arrangement or configuration of all the components which form part of” it.⁴¹

The importance of the artist’s choices and the way in which these can express individuality was further developed in C-145/10 *Painer*. The case concerned the protection of portrait photos as works, and the question whether such a photo provides enough opportunities for “free and creative choices” to qualify as original.⁴² The Court did not exclude this possibility but held that portrait photography involves several stages where the artist must choose between different options. Factors that the artist can affect through their personal creative choices were said to include the subject’s pose, the lighting, the framing, the angle of view, the atmosphere created, the choice of developing technique, and any subsequent editing with computer software.⁴³ Combined, these factors create the artist’s “personal touch.”⁴⁴

The development of the harmonised EU originality standard did not reach the highest instances of the Swedish courts until 2015. In the case NJA 2015 s. 1097 *C More*, HD was finally compelled to comment on relationship between originality and *verkshöjd*. In so doing, it cited the CJEU’s judgment in *Infopaq*, acknowledging the harmonisation of the EU standard. HD did not, however, deem it necessary to abandon the traditional doctrine of *verkshöjd*, since the two were considered largely synonymous, requiring the same “rather moderate” level of originality.⁴⁵ HD then went on to judge the case using the Swedish terminology.

This trend continued in NJA 2017 s. 75 *Svenska syndabockar*. The case concerned an oil painting, which was based in part on a famous portrait photo of the suspect of the murder of the Swedish Prime Minister Olof Palme. The photographer claimed the painter had infringed his copyright by reproducing the picture without consent. The painter, on the other hand, held that the painting was to be characterised as a new and independent work. The court stated that a reproduction is characterised by the same artistic individuality as the original, whereas a “new work bears the mark of the artist’s own individuality

⁴¹ C-393/09 *BSA*, para. 48.

⁴² C-145/10 *Painer*, para. 89.

⁴³ C-145/10 *Painer*, para. 91.

⁴⁴ C-145/10 *Painer*, para. 92.

⁴⁵ NJA 2015 s. 1097 *C More*, para. 18.

and has *verkshöjd*.⁴⁶ To determine whether that is the case, the “literary or artistic impression” or the meaning that a work conveys to its audience must be considered.⁴⁷ Noting the composition of elements and the use of muted colours, the court found that the artist had transformed the photograph from a portrait to a symbolic painting with an entirely different meaning.⁴⁸

2.2.2 Toward a harmonised copyright standard

Despite a certain resistance, it seems like Swedish courts may finally be starting to embrace the use of originality over *verkshöjd*. In 2019, the Swedish Patent and Market Court of Appeals, PMÖD, delivered its judgment in the case T 5885-18 *Daniel Wellington*, in which a jewellery store chain was found to have copied the popular wristwatch brand Daniel Wellington’s designs. Referring to the case C-310/17 *Levola Hengelo*, the court found that the originality standard was harmonised within the EU and should therefore be used to evaluate all works.⁴⁹ The court proceeded to review the creative choices that the designer claimed to have made in terms of the watch’s size and shape so as to achieve a thin and minimalistic expression.⁵⁰ The claims were corroborated by an expert, who confirmed that there was considerable room for creative choices in designing a wristwatch. The court found that the designer’s “own choices were both free and creative to the extent that there could be an intellectual creation.”⁵¹ The case is important because it is the first where the highest instance of the Swedish courts has relied completely on the CJEU standard of originality. PMÖD did not even mention *verkshöjd* in their judgment.

In conclusion, Swedish courts have been reluctant to start applying the originality criterion, but it seems like this is changing. Although some have questioned the importance of distinguishing between the terms,⁵² such a distinction could be important because Swedish courts tend to emphasise the comparative element of copyright, whereas the CJEU focuses more on the expression of the author’s personality through their creative choices. However, the fundamental requirement for copyright protection in both doctrines

⁴⁶ NJA 2017 s. 75 *Svenska syndabockar*, para. 12.

⁴⁷ NJA 2017 s. 75 *Svenska syndabockar*, para. 14–15.

⁴⁸ NJA 2017 s. 75 *Svenska syndabockar*, para. 17.

⁴⁹ PMÖD T 5885-18 *Daniel Wellington*, p. 6.

⁵⁰ PMÖD T 5885-18 *Daniel Wellington*, p. 8.

⁵¹ PMÖD T 5885-18 *Daniel Wellington*, p. 9.

⁵² Nordell, ‘Verkshöjd eller originalitet?’, p. 179.

is that the work must be original in some way. How that ephemeral quality has been defined is what distinguishes one from the other. In this overview of Swedish and EU case-law, a few essential features have emerged.

Regardless of what standard is used—originality or *verkshöjd*—a few elements recur in the courts’ arguments. First, even a work made up of simple elements can be original. It is only through an overall assessment of the composition as a whole that it can be determined whether a work qualifies for copyright protection.⁵³ Second, even commonplace or seemingly mundane creative efforts can qualify as works. This is because originality is not determined by the purpose of creation—one does not have to strive to create *Art* to attain work-status—but by the *choices* made in the process. It is these choices that allow the artist to express their creativity.⁵⁴ Finally, it is not necessary that the choices made should be unique or revolutionary. On the contrary, it is enough that someone else, given the same task, would have made, or would have had the option to make, other such choices.⁵⁵

In the next section, these central criteria for copyright will be applied to a few well-known examples of NFTs. This thesis departs from the idea that there is a relationship between NFTs and copyright because of the underlying pieces of art that constitute works. But when the criteria established through national and EU case-law are applied, it becomes apparent that these pieces of art face certain difficulties in relation to traditional copyright standards.

2.3 NFT originality problems

As a starting point for the following discussion, it is important to stress that digital images sold as NFTs are not subject to different standards for copyright protection than other works. However, NFT art usually displays a couple of features that affect the assessment of the relevant criteria. This section will deal with two potential problems concerning NFTs and copyright. Firstly, many pieces of NFT art are of a relatively simple nature. Hence, they may not live up to the standards of original creation required to qualify for protection at all. Secondly, NFT art is frequently generated using algorithms: i.e., it is not

⁵³ C-393/09 *BSA*, para. 48; NJA 1990 s. 499 *Gotlandskarta*, p. 509; NJA 1994 s. 74 *Smultron*, p. 80; NJA 2017 s. 75 *Svenska syndabockar*, para. 17.

⁵⁴ C-5/08 *Infopaq*, para. 45; C-145/10 *Painer*, para. 91; NJA 1998 s. 563 *Tomoku Hus*, p. 572–73.

⁵⁵ NJA 1998 s. 563 *Tomoku Hus*, p. 573.

composed by a human being but by a computer program. In this regard, the intellectual creation of an author which is required by EU law may be lacking.

2.3.1 The world's first tweet

A case that drew a great deal of attention in 2021 is Twitter-founder Jack Dorsey's sale of the first ever tweet as an NFT.⁵⁶ To make this NFT, Dorsey simply used a copy of his post to the site, which read "just setting up my twttr". It could be argued that a work consisting in no more than five words in total is too limited to deserve copyright protection. However, in *Infopaq*, the Court held that even very limited parts of a work—11 words—may be protected, because "there is nothing [...] indicating that those parts are to be treated any differently from the work as a whole. It follows that they are protected by copyright since, as such, they share the originality of the whole work."⁵⁷ Of course, the case concerned parts of a work which was, undisputedly, original. The Court's statement that parts of a work share the originality of the whole could be taken to mean that a work consisting of no more than a few words is not original, unless it forms part of a larger original work. But other parts of the judgment contradict this interpretation, indicating that an isolated string of words could constitute "an element which is, in itself, the expression of the intellectual creation of the author of that article."⁵⁸

The phrase in Dorsey's tweet is purely descriptive. The only original thing about it seems to be the use of the form "twttr" instead of "twitter". However, this is not an artistic choice, but a reflection of the website's early name: Twttr.⁵⁹ Consequently, there is no element of intellectual creation present in Dorsey's tweet. The tweet also fails the Swedish test of double creation, as it is highly likely that another person would have used the exact same words to describe their actions in that situation. In conclusion, anyone could post a tweet saying the same thing, in the exact same words, without infringing Dorsey's copyright. Anyone could also, presumably, create an NFT of the tweet and sell it, without infringing any rights.⁶⁰

⁵⁶ Locke, 'Jack Dorsey Sells His First Tweet Ever as an NFT for over \$2.9 Million', *CNBC*, 22 March 2021.

⁵⁷ C-5/08 *Infopaq*, para. 38.

⁵⁸ C-5/08 *Infopaq*, para. 47.

⁵⁹ Landi, "'Just Setting up My Twttr' – How Jack Dorsey Helped Build Twitter", *The Independent*, 29 November 2021.

⁶⁰ This has been done by lawyer and NFT enthusiast Guadamuz, 'What Do You Buy When You Buy an NFT?'

As an interesting contrast, it has been suggested elsewhere that the action of creating the NFT could be seen as adding some artistic value to the artwork.⁶¹ Dorsey’s tweet, then, might not live up to the standards for copyright protection, but by turning it into an NFT, he would have imbued it with some element of originality. In situating himself within the current discussion on art in the online sphere, he would have added some sort of artistic value by expressing his own personal creativity.⁶² For the purpose of this discussion, however, suffice it to say that some NFTs simply do not live up even to the relatively low standard of originality required for copyright protection.

2.3.2 Bored Ape Yacht Club

Other NFTs appear significantly more unique than Jack Dorsey’s tweet. One of the most well-known and expensive NFT collections is the Bored Ape Yacht Club, BAYC, created by Yuga Labs. On the BAYC website, it is described as “A limited NFT collection where the token itself doubles as your membership to a swamp club for apes.”⁶³ The collection consists of 10 000 unique collectible profile pictures, PFPs, of humanoid cartoon apes with various expressions, clothing, and accessories. The individual features recur in several pictures; two apes can have the same hat, eyes, fur, etcetera, but never the exact same combination of features. Many of the features are also of an almost banal nature: most of the earrings—especially the silver and gold studs and rings—and the halo are so simple they hardly qualify as original.⁶⁴ Seen in isolation, the same could be said for many of the other features.⁶⁵

As discussed above, however, when evaluating whether a work is original, it is not the isolated elements but the creation as a whole that should be considered.⁶⁶ In the case NJA 1990 s. 499 *Gotlandskarta*, HD stated that simple drawings of landmarks on a map

⁶¹ Çağlayan Aksoy and Özkan Üner, ‘NFTs and Copyright: Challenges and Opportunities’, p. 1121–22.

⁶² This line of reasoning, however interesting, is getting too far into the field of art philosophy for the scope of the present discussion. For further elaboration on the subject, please consult Çağlayan Aksoy and Özkan Üner.

⁶³ <https://boredapeyachtclub.com/#/> (accessed 2 October 2022).

⁶⁴ The full range of features can be explored in the BAYC Gallery, <https://boredapeyachtclub.com/#/gallery> (accessed 3 January 2023).

⁶⁵ Interestingly, Guadamuz has noted that Yuga Labs themselves have refrained from referring to copyright in their recent lawsuit against Ryder Ripps, the creator of the RR/BAYC NFT Collection. See Guadamuz, ‘Do Bored Apes Have a Copyright Problem?’

⁶⁶ C-393/09 *BSA*, para. 48; NJA 1994 s. 74 *Smultron*, p. 80; NJA 2017 s. 75 *Svenska syndabockar*, para. 17.

“should not just be considered in isolation but as parts of the whole in which they appear”.⁶⁷ The court noted that the artist had made all of the drawings in the same style, displaying “a clear artistic ambition”. Accordingly, in determining whether the BAYC PFPs are original, each picture should be considered as a coherent composition. Following the line of reasoning in *Infopaq*, the form given to the subject, i.e., the Bored Ape, and the artistic expression of the image are crucial.⁶⁸ Considering also the criteria set forth in *Painer*,⁶⁹ a couple of observations can be made. The humanoid Apes that inhabit the BAYC are drawn not from the front, but slightly from the side (the angle of view) with posture that appears slightly slumped (subject’s pose). They are depicted with unnatural colours of fur, whacky expressions, and set against brightly coloured backgrounds, thus creating a humorous effect (the atmosphere created). Based on this brief analysis, it seems that the BAYC Apes easily live up to the level of originality required by the CJEU for copyright protection.⁷⁰

However, NFTs such as the BAYC collection might have another problem in relation to copyright.⁷¹ The BAYC website states that “[e]ach Bored Ape is unique and programmatically generated from over 170 possible traits, including expression, headwear, clothing, and more. All apes are dope, but some are rarer than others.”⁷² From this description, we learn that the PFPs are generated by a computer program designed to combine a set of pre-existing features in a certain way. This is an example of *generative art*, which is a broad term for artistic creation with the use of computer systems. The concept has attracted increasingly more attention in the past couple of years, as progress in the field of Artificial Intelligence (AI) has resulted in systems capable of completely autonomous creation.⁷³ No such case has yet been tried, but there is a wide consensus that EU

⁶⁷ NJA 1990 s. 499 *Gotlandskarta*, p. 509.

⁶⁸ C-5/08 *Infopaq*, para. 44.

⁶⁹ C-145/10 *Painer*, para. 91.

⁷⁰ Another question is who has copyright to the compositions; reportedly, the BAYC features were drawn by several people. Hissong, ‘The NFT Art World Wouldn’t Be the Same Without This Woman’s “Wide-Awake Hallucinations”’, *Rolling Stone Online*, 26 January 2022. This might be the case for other NFT collections as well. In this case, copyright is most likely shared between contributors.

⁷¹ This issue has previously been raised by Guadamuz, ‘NFTs Could Have a Generative Art Copyright Problem’.

⁷² <https://boredapeyachtclub.com/#/home#buy-an-ape> (accessed 2 October 2022).

⁷³ An excellent introduction to creative AI is de Vries, ‘You Never Fake Alone. Creative AI in Action’, p. 2110–27. For a shorter explanation of the technology, see de Vries, ‘Let the Robot Speak! AI-Generated Speech and Freedom of Expression’, sec. 1.

law does not support copyright protection of autonomously generated works.⁷⁴ Nevertheless, the level of involvement of the system vis-à-vis the human creator varies significantly between works of generative art, and this has an impact on the evaluation of the works' originality.

In cases such as BAYC, the algorithms involved are not examples of AI. These much less advanced computer programs do not generate the images autonomously but follow a set of step-by-step instructions provided by the programmer. Nevertheless, the finished product is the result of the algorithm's processing of the input data, and not the work of a human being. If the user's function is restricted to performing operational tasks—essentially, pressing “start”—the composition of the finished image is determined entirely by the program. This would mean that there are no free and creative choices involved in creating the final product, as those choices are predetermined by computer code. This would in turn exclude originality. On the other hand, the program used to combine the features could be seen as a tool for the artist. The creation of the traits and the decision to combine them with the use of a program might be enough of a free and creative choice for the finished product to enjoy protection.⁷⁵ The question of whether the output should be considered an intellectual creation depends on the level of involvement by the person using the program.

In the Swedish preparatory works, interviews were used as an example of forms of expression where the author does not have complete control of the output; the main part of the interview frequently consists of quotes from the interviewee. It was considered that, even in cases where the author relates the subject's words verbatim, interviews can be copyright protected. The interview is preceded by a preparation stage, where the author applies their professional skill to influence the outcome of the interview, and succeeded by an editing stage.⁷⁶ The argument is similar to the one used by the CJEU in *Painer*,⁷⁷ and the idea of different stages of production where the author can express their individuality through a work has recently been applied to AI. Thus, a 2020 report from the European commission distinguishes “three distinct phases of the creative process in AI-

⁷⁴ European Commission, Directorate General for Communications Networks, Content and Technology, *Trends and Developments in Artificial Intelligence*, p. 117.

⁷⁵ See, e.g., C-393/09 *BSA*, para. 48.

⁷⁶ SOU 1956:25, p. 71.

⁷⁷ C-145/10 *Painer*, paras. 90–91.

assisted production: ‘conception’ (design and specifications), ‘execution’ (producing draft versions) and ‘redaction’ (editing, refinement, finalisation).”⁷⁸

Though there is a difference between AI and other algorithms, the same stages of production can be identified. In the conception stage, the user designs the features and decides which ones to include in the algorithm’s input. The frequency with which the features will appear also needs to be specified. The role of the algorithm in the case of BAYC would correspond to the execution stage, where the algorithm takes the instructions given by the human programmer in the conception phase. In the redaction phase, the user can then choose between the drafts generated by the algorithm, and make any necessary modifications. Provided that the user takes the opportunity to make their own choices in the process in this way, it is possible that computer-generated art could be protected by copyright.

In conclusion, the requirements for copyright protection are no different in the world of NFTs compared to the *terra firma* of traditional art. Subject to the same conditions as a physical painting or a sculpture, a digital image minted as an NFT is copyright protected if it lives up to the standard of originality. Nevertheless, many NFT images present a low level of originality which would preclude copyright protection. Others present a higher level of originality but have the added issue of being computer-generated compilations of elements. For this reason, they might not be considered intellectual creations at all, and thus might not qualify for protection. Whether this is the case will have to be determined through an individual assessment in each case. While these problems affect many NFT collections, there is also a great deal of NFTs created from works that are, indisputably, copyright protected. The next chapter will focus on the copyright implications of the creation of NFTs, both authorised and unauthorised.

⁷⁸ European Commission. Directorate General for Communications Networks, Content and Technology, *Trends and Developments in Artificial Intelligence*, p. 116.

3 NFTs and copyright exploitation

3.1 The scope of the author's right to their work

The previous chapter dealt with the general requirements for copyright protection as well as some of the challenges faced by NFT creators. Leaving these problematic aspects aside, this chapter will focus on the effects of copyright protection, i.e., the rights it grants the author. Copyright can generally be described as the exclusive right to exploit a work in various ways. In URL chapter 1 section 2 paragraph 1, this is defined as the right to make copies of the work and to make it available to the public. More precisely, according to URL chapter 1 section 2 paragraph 3, making the work available to the public includes four types of exploitation: communication to the public, public performance, public exhibition, and distribution of copies. The Swedish law was amended and given its current phrasing in 2005 to accommodate the changes mandated by the Infosoc Directive.⁷⁹ Therefore, the extent of copyright according to URL is intended to be interpreted in light of Articles 2-4 in said Directive.

The scope of the author's exclusive rights is circumscribed by a series of exceptions and limitations. These are described in URL chapter 2 and include a variety of actions that would otherwise constitute copyright infringement. Like the definition in URL chapter 1 section 2 of the author's exclusive rights, chapter two has been largely influenced by the Infosoc Directive. Article 5.1 of that Directive prescribes a mandatory⁸⁰ exception for transient reproductions subject to certain requirements, while Article 5.2-5.3 include a series of optional⁸¹ exceptions. These will not be further described in this section. At this stage, suffice it to note that the interplay between the author's rights and the exceptions and limitations is what determines the scope of copyright.

During the process of creating and distributing an NFT, there are several actions that might fall within the author's exclusive right to the work. 1) The first is the creation of the NFT, which requires that the metadata file itself is somehow connected to the underlying work it represents. 2) When the NFT is put up for sale, the artwork is generally displayed on the marketplace in question. 3) After buying the NFT, the buyer accesses the

⁷⁹ Proposition 2004/05:110, p. 377–80.

⁸⁰ “[...] *shall* be exempted [...]” (emphasis added).

⁸¹ “Member states *may* provide for [...]” (emphasis added).

work, possibly making copies and distributing them. Aspects of the first two situations will be dealt with in the following subsections. The third, however, is closely related to other questions concerning the transfer of ownership of the NFT vis-à-vis the ownership of the artwork. It will, therefore, be addressed separately in Chapter 4.

The first subsection of this chapter will explain the technical process of creating an NFT from the artwork, and what implications this could have in terms of the value of the original work. Secondly, we explore the unauthorised creation of an NFT by someone other than the artist, and whether this kind of use constitutes infringement. In the third section, the role of NFT marketplaces as intermediaries will be examined. Finally, the fourth subsection aims to sum up and deal with the question of how to ensure a high level of protection for copyright in the NFT sphere.

3.2 Copyright implications of the minting process

To understand what copyright implications the creation of an NFT might have, it is necessary to have some grasp of the technical process. Essentially, creating an NFT means using an object to write an entry on the blockchain. This is called *minting*.⁸² Usually, minting is done by using the *digital identifier* of an object,⁸³ but some forms of NFT write an entire digital object on the blockchain. For the purpose of this thesis, the object in question will be a piece of digital art. A distinction is made between *on-chain* and *off-chain* NFTs. With on-chain NFTs, the artwork itself is stored on the blockchain. This requires a significant amount of encrypted data storage, which is expensive. With an off-chain NFT, on the other hand, the token—i.e., the metadata file that constitutes the NFT—does not include the image but a link to an external source where it can be accessed. This also requires data storage, but “regular” online storage, which is considerably less resource intensive. Off-chain NFTs are therefore more common than on-chain NFTs, and this thesis will focus exclusively on the former type.

NFTs have been described as an opportunity for artists to benefit from the digitalisation that has long been seen as a threat to the market for their works. Where previously there has been no way to verify the provenance of a copy of a work, blockchain techno-

⁸² The NFT Marketplace OpenSea’s *Learn*-series offers easily accessible introductions to various NFT-related terms and phenomena. See OpenSea, ‘What Is Minting?’ <https://opensea.io/learn/what-is-minting-nft> (accessed 28 November 2022). A pedagogical account written by a lawyer can be found in Guadamuz, ‘The Treachery of Images: Non-Fungible Tokens and Copyright’, p. 1369 f.

⁸³ The object itself can be digital or exist in the physical world; the important thing is that it can be *represented* in digital form.

logy offers a way to ensure authenticity and scarcity in digital works. The NFT marketplace OpenSea claims that “[a]s a creator, minting your work allows you to establish provable scarcity, verified ownership, and ongoing creator earnings. For the first time, creators can publish limited edition digital works, whose authenticity is validated on the blockchain.”⁸⁴ However, there are several questions that the artist must consider before minting an NFT of one or more of their works.

First, the existence of NFTs might affect the value of the original work.⁸⁵ Minting an NFT creates a digitally verifiable original that claims to be just as authentic as a physical painting would be. Likewise, while it is possible to create several NFTs from the same link, the number of NFTs connected to a work could impact the value of each of them. Much like printing numbered copies of a work, how many NFTs are minted in this way will affect the scarcity and perceived value of each one. It is also possible that minting a work could constitute a breach of contract. If the work has previously been sold as part of a limited edition, creating new NFTs might be seen as unethical, if not illegal.⁸⁶ Finally, selling NFTs of a work could involve a risk of losing control of it;⁸⁷ transactions on the blockchain cannot be reversed, so once the sale is complete, the artist cannot regain control of the NFT. To summarise, artists entering the NFT market should think carefully about the terms of their sales beforehand.

3.3 Can unauthorised minting amount to copyright infringement?

While NFTs may present an opportunity for artists to profit from digitalisation, the recent hype surrounding them and the corresponding surge in value have made the market a target for illicit behaviour.⁸⁸ From NFT collections exploiting famous trademarks to scams where owners have lost digital assets worth millions, the relative lack of regulation and enforcement present an opportunity for those looking to make an easy buck. Aside

⁸⁴ OpenSea, ‘What Is Minting?’, <https://opensea.io/learn/what-is-minting-nft> (accessed 28 November 2022).

⁸⁵ Svenska Tecknare, Konstnärernas Riksorganisation, and Svenska Fotografers Förbund, ‘NFT-Checklista För Upphovspersoner’, p. 5.

⁸⁶ This can be compared to the situation of an artist making copies of a work that the buyer assumed was the only original, see SOU 1956:25, p. 280.

⁸⁷ See Svenska Tecknare, Konstnärernas Riksorganisation, and Svenska Fotografers Förbund, ‘NFT-Checklista För Upphovspersoner’.

⁸⁸ A list of some high-profile disputes can be found here: The Fashion Law, ‘From Hermès to Bored Apes: A Running List of Key Lawsuits Over NFTs’.

from these examples, a question asked by legal scholars is what implications unauthorised minting has for copyright.⁸⁹

Minting and selling an NFT of another person's protected work essentially allows the minter to profit from someone else's intellectual property. As noted in the previous section, creating an NFT of a work may have implications for the value of the original, and should ultimately be the rightsholder's prerogative. However, it is not clear whether such an action constitutes an infringement of copyright. As previously mentioned, an off-chain NFT does not contain the underlying artwork itself but provides the buyer with a link to where the work can be accessed. In this section, two different scenarios will be analysed. Firstly: the minter chooses to upload a copy of the artwork online, which they can then link to in the NFT; secondly, the minter links to an online source (a website) where the work has been previously made available by a third party. In the second scenario, we will distinguish between cases where the work has been made available with the rightsholders' consent and without it. These situations are all different in terms of what copyright-relevant actions are taken.

3.3.1 Scenario 1: uploading the work online

In the first scenario, the minter uploads a copy of the underlying artwork online and then uses it to mint the NFT. According to the Infosoc Directive Article 2(a), authors shall be granted the exclusive right of reproduction of their work. The right covers any "direct or indirect, temporary or permanent reproduction by any means and in any form, in whole or in part." In uploading a work to a website, the user is making a permanent reproduction that is stored on the site's servers. In principle, such a reproduction must have the author's authorisation to be legal.

Even if it has not been authorised by the author, an act of reproduction can be legal if it falls under one of the exceptions to the author's exclusive rights. These exceptions are outlined in Infosoc Article 5, and their implementation varies between member states. One practically important exception is the so-called private copying exception in Infosoc Article 5.2(b), which allows users to make reproductions for private, non-commercial use, as long as rightsholders receive fair compensation for this type of use. The exception

⁸⁹ The question has been raised by, among others, Guadamuz, 'The Treachery of Images', p. 1378–82; and Çağlayan Aksoy and Özkan Üner, 'NFTs and Copyright: Challenges and Opportunities', p. 1122–24.

has been implemented in Swedish law through URL chapter 2 section 12.⁹⁰ This means that a Swedish internet-user might, for example, upload a copyright-protected image to an online file-storing service as a back-up, without infringing copyright.

However, the fourth section of that URL chapter 2 section 12 includes a clarification that the exception does not apply to copies made from unlawful sources. This interpretation is not apparent from the wording of Article 5, but the legislator considered it necessary to emphasise and strengthen the rights of authors.⁹¹ The CJEU has since confirmed that the source of the copy must be lawful for Infosoc 5.2(b) to apply.⁹² Consequently, the image uploaded to the file-storing service would have to have been legally purchased—or otherwise lawfully acquired—for the reproduction to be lawful. If the image in question had not been bought, but illegally downloaded from the internet, the upload would be unlawful regardless of its purpose. In this scenario, furthermore, the purpose of the upload is neither private nor non-commercial, but to mint and sell an NFT of the work. Consequently, the private copying exception does not apply, and the reproduction is unlawful regardless of whether the source is lawful or not.

As a second step in the process, the user would go on to make the NFT, thus linking to the uploaded work. This involves the same steps regardless of whether the image used has been uploaded by the minter or by another internet user. Therefore, the matter will not be dealt with separately. The discussion on communication to the public in the next section applies in scenario one as well as scenario two.

3.3.2 Scenario 2: linking to a work already existing online

Instead of uploading the work, the minter can choose to link to an address where the work already exists online. In this case, there is likely a difference between linking to a source where the work has been made available lawfully, and a source where the work is unlawfully available. This has to do with the CJEU’s interpretation of the term “communication to the public”. Pursuant to Infosoc Article 3.1, authors have the exclusive right to communicate their works to the public, “including the making available to the public of their works in such a way that members of the public may access them from a place and at a

⁹⁰ A list of countries that have implemented the exception can be found in the EUIPO report by Geiger and Schönherr, ‘Consumers’ Frequently Asked Questions (FAQs) on Copyright Summary Report’, p. 31–32.

⁹¹ Proposition 2004/05:110, p. 219–20 & 384.

⁹² C-435/12 *ACI Adam*, paras. 32–41.

time individually chosen by them.” However, what actions fall within the scope of the Article is not precisely defined in the text of the Directive, which has led to a large number of cases before the CJEU concerning its interpretation.

In its numerous preliminary rulings on the matter, the Court has reiterated that the term “communication to the public”, as it is not defined in the Directive, must be defined in light of the objectives of the Directive and the context.⁹³ The objectives can be found in Recitals 9 and 10, according to which the Directive aims to ensure a high level of protection for authors, as well as reasonable remuneration for the use of their works. As expressly stated in Recital 23, the term “communication to the public” must therefore be given a broad interpretation.⁹⁴ With these principles established, the Court has then gone on to make an individual assessment in each of the cases.⁹⁵ To determine if there has been a communication to the public, there are two main criteria that must be fulfilled: it must first be decided whether an act of communication has taken place, and secondly, if this act is aimed at a ‘public’.⁹⁶

An act of communication has been described by the Court as a conscious intervention that gives users access to the work, especially if the act is a necessary condition for this access.⁹⁷ It has established on several occasions that the posting of a hyperlink online can constitute such an action. For example, in the case C-466/12 *Svensson*, the court stated that providing links on a website to works freely available on a different site constituted an act of communication.⁹⁸ When creating an off-chain NFT, a link to the underlying artwork is included in the metadata that is encoded on the blockchain. That link can then be used to access the work. Hence, the creation of an NFT linking to a work available online involves an act of communication.

The second of the criteria, the ‘public’, “encompasses a certain *de minimis* threshold, which excludes from the concept groups of persons which are too small, or insigni-

⁹³ C-527/15 *Filmspeler*, para. 26.

⁹⁴ C-527/15 *Filmspeler*, para. 27.

⁹⁵ C-527/15 *Filmspeler*, para. 28.

⁹⁶ C-607/11 *ITV Broadcasting*, paras. 21 & 31; C-527/15 *Filmspeler*, para. 29.

⁹⁷ C-527/15 *Filmspeler*, para. 31.

⁹⁸ C-466/12 *Svensson*, paras. 18–20.

ficant.”⁹⁹ In addition to being sufficiently large, the group must be indeterminate.¹⁰⁰ The Court has not provided any specific guideline for the number of people that constitutes a large enough group, but it is clear that the entire collective of internet users is such a large and indeterminate group.¹⁰¹ In some cases, the link in the NFT is only accessible to the owner, who is then the sole recipient of the communicative act at any given time. If the work is only accessible to the owner in this way, linking to it can be an act of communication, but it cannot be a communication to the public since the work is accessible only to a small number of people: the owner and anyone they might wish to show the work to.¹⁰²

Nevertheless, the assessment should not only consider the number of people who can access the work at any one time, but also how many people can do so in succession. According to the CJEU, the cumulative effects of an act of communication must be taken into account.¹⁰³ Consequently, in determining the size of the “public” in the case of an NFT, all successive owners must be taken into account. That number is indeterminate, but it is difficult to estimate if it is sufficiently large. It is also important to note that with most NFTs, it is quite easy for anyone to access the metadata.¹⁰⁴ In practice, therefore, the underlying artwork is available to any internet user who wishes to see it. In those cases, it must be considered that a communication to the public has been made.

Even if it there has been a communication to the public, such a communication is not always unlawful. In C-466/12 *Svensson*, the CJEU introduced a couple of additional criteria to determine whether this is the case: the communication is prohibited under InfoSoc Article 3.1 if it uses a new technical means, or if it reaches a *new public*, that is, a public not originally envisioned by the rights holder.¹⁰⁵ The first criterion is not relevant to this discussion since the act of linking to a work online does not use a different technical means than the original communication of that work. On the other hand, the question of a new public is much more interesting. When the rightsholder authorises online public-

⁹⁹ C-527/15 *Filmspeler*, para 44.

¹⁰⁰ C-466/12 *Svensson*, paras. 21–23; C-527/15 *Filmspeler*, para. 32.

¹⁰¹ C-466/12 *Svensson*, paras. 26–27.

¹⁰² C-610/15 *Stichting Brein v Ziggo*, paras. 41–42.

¹⁰³ C-306/05 *SGAE*, paras. 37–39.

¹⁰⁴ A quick internet search will immediately tell you how to find the image URL of any NFT on OpenSea.

¹⁰⁵ C-527/15 *Filmspeler*, para. 33.

cation of their work, they implicitly agree to a public which potentially consists of all internet users.¹⁰⁶ As long as the copyright protected material has been made available with the rightsholders' consent, therefore, the communication is not aimed at a new public, and linking to it does not constitute an infringement.¹⁰⁷ In that regard, there is no difference between hyperlinking, where the user is redirected to a different site, and framing, where the linked material is embedded and displayed as if it had been uploaded to the first site itself.¹⁰⁸

If the provider of the hyperlink derives the legitimacy of their act of communication from the original publication of the work in this way, it is crucial that they know whether it was uploaded lawfully or not. The Court has noted that it cannot always be expected of an individual to know whether a certain source on the internet is lawful or not.¹⁰⁹ Conversely, if the person who posted the link to a work knew or ought to have known that the source was illegal, they must be held responsible for their act of communication to the public.¹¹⁰ Such knowledge can be demonstrated by the fact that the provider of the link has been notified that the source is illegal, that the link allows users to circumvent technical protection put in place to restrict access, or that the link has been posted for profit.¹¹¹ If links are posted online for profit, the Court has stated, the person who posted them can be expected to investigate if the source is legal or not, creating a presumption that they know whether this is the case.

It is logically and systematically odd that the knowledge of the person performing an act of communication to the public should determine whether the act itself has been performed. What the Court wishes to achieve is a fair balance between rightsholders' interest in keeping control of their works, on the one hand, and the rights of individuals who make use of their freedom of expression, on the other. To achieve such a balance, it is reasonable that an act should be permissible, if the person committing it lacks knowledge of the fact that it is unlawful. Normally, however, this balance is achieved by means of

¹⁰⁶ C-348/13 *BestWater*, para. 18; C-527/15 *Filmspelers*, para. 48; C-160/15 *GS Media*, para. 42.

¹⁰⁷ C-466/12 *Svensson*, para. 24.

¹⁰⁸ C-466/12 *Svensson*, para. 29. This stance was confirmed in a following case: C-348/13 *BestWater*, para. 19.

¹⁰⁹ C-160/15 *GS Media*, paras. 46–47.

¹¹⁰ C-160/15 *GS Media*, para. 49.

¹¹¹ C-160/15 *GS Media*, paras. 49–51.

exceptions and limitations to the author's rights, not by altering the definition or the scope of the rights themselves. Arguably, the Court's aims in instituting the "for profit"-criterion would have been better achieved in the form of an exception.

As the law stands, the question of whether it is legal to mint an NFT linking to a protected work online is determined by the lawfulness of the source. If the NFT links to a source where the work has been lawfully made available, there is no communication to the public, since the rightsholder has already intended the work to be accessible from that source to the entire community of internet users. If the NFT links to a source where the work has been uploaded without the rightsholder's authorisation, on the other hand, the act of communication is aimed at a new public. Since the creation and sale of NFTs is carried out for profit, it should be presumed that the minter knows that the source is unlawful. Unless this presumption can be rebutted, the creator of the NFT has made an unauthorised communication to the public of the underlying work within the meaning of Infosoc Article 3.1.

In conclusion, minting an NFT of another person's artwork could constitute copyright infringement, if the artwork is unlawfully uploaded to the internet by the minter, or if an existing unlawful source is used. It is worthwhile to note that the problems outlined in this section are not restricted to malicious internet users who steal other people's artwork for their own profit. There are examples of arguably more justifiable situations where the creation of NFTs have led to copyright infringement lawsuits.¹¹² Be that as it may, finding that there has been an infringement is not enough if there is no way to enforce the right. One of the challenges with enforcing copyright in a blockchain context is that the system relies on anonymity and decentralisation. If finding out the identity of the minter proves too difficult, a viable option might be to take action against the online marketplace where the infringing NFT has been put up for sale.

3.4 Displaying a work for the sale of an NFT: platform responsibility

NFTs are usually sold on online marketplaces specifically profiled in crypto assets. Platforms like OpenSea,¹¹³ Rarible,¹¹⁴ and Mintable¹¹⁵ offer their users minting services as

¹¹² E.g., 'Quentin Tarantino Going Ahead with Auction of Pulp Fiction NFTs despite Lawsuit', *CNBCTV18*, 6 January 2022.

¹¹³ <https://opensea.io/> (accessed 7 December 2022).

¹¹⁴ <https://rarible.com/> (accessed 7 December 2022).

¹¹⁵ <https://mintable.app/> (accessed 7 December 2022).

well as a place to display and sell NFTs. When an NFT is put up for sale, the underlying artwork is generally displayed on the marketplace in question. It can also be displayed in search results and in featured ads on the marketplace's front page. Because these marketplace platforms have vast numbers of users, any illegally uploaded works reach a far wider audience than they otherwise would have. Consequently, NFT marketplaces have an important role in the exploitation of protected works, and this section explores whether it is possible to hold them accountable for the illegal works present on their sites.

As important intermediaries in the information society, online service providers have been subject to various regulatory efforts in the EU. One of the latest and most widely discussed is the DSM Copyright Directive,¹¹⁶ Article 17 of which makes online service-providers responsible for their users' infringing activities, regardless of any knowledge thereof. According to the first section of that provision, Member States shall provide that an online content-sharing service provider performs an act of communication to the public when it gives the public access to copyright-protected works uploaded by its users. The service-provider can only avoid liability by obtaining authorisation, licence, for the works, or by fulfilling the requirements for exemption in Article 17.4. The service-provider is exempt from liability a) if it has made best efforts to obtain authorisation, b) if it has made best efforts to ensure the unavailability of protected works (e.g., through automatic content-filtering), and c) if it has an effective notice-and-take-down system. Article 17 has been implemented in URL chapter 6 b, which came into effect on 1 January 2023.

However, these rules do not apply to NFT marketplaces, since according to Article 2.6, online marketplaces are not online content-sharing service providers within the meaning of the DSM Directive.¹¹⁷ There are no grounds, therefore, for holding NFT marketplaces responsible according to the strict standards prescribed by the DSM Directive. On the other hand, an analysis of Article 3 of the Infosoc Directive might provide a different conclusion. According to established CJEU case-law, the marketplaces might be considered to carry out an act of communication to the public of protected works, if they have knowledge of the fact that such works exist on their platforms and do not take action to prevent their dissemination.

¹¹⁶ Directive (EU) 2019/790.

¹¹⁷ See proposition 2021/22:278, p. 349, note 8.

3.4.1 Communication to the public through deliberate intervention by a platform

As noted above, Article 3 of the Infosoc Directive grants the author the exclusive right of communication of their works to the public. Pursuant to Recital 23 of the same Directive, this term is given a broad interpretation and covers any transmission or retransmission of a work to the public by wire or wireless means. This includes uploading protected works to a content-sharing platform on the internet, when the uploading users “give other internet users access, via those platforms, to protected works which those other internet users would not have been able to enjoy without the intervention of those users.”¹¹⁸ But the actions of individual users would be much less impactful were it not for the reach of the platforms themselves. For example, the artwork displayed on the NFT marketplace is uploaded by the user, but its presence on the marketplace is what gives it a large audience. Depending on their level of involvement with the content on the site, therefore, platform providers can also be considered to make an act of communication in relation to those works. The CJEU has commented on this in a few cases, notably C-610/15 *Stichting Brein* and joint cases C-682/18 & C-683/18 *YouTube/Cyando*.

As discussed above,¹¹⁹ for a communication to the public to have taken place, two basic criteria must be fulfilled: there must have been an act of communication, and it must have been aimed at a public. In the case of artwork displayed on NFT marketplaces, the second of these criteria is rather easily evaluated; during the time the NFT is up for sale, the work is accessible to all users of the platform, i.e., potentially to all internet users.¹²⁰ A more difficult question to answer is whether the marketplace makes an act of communication when the works are available on their site. The providers of content-sharing platforms do not upload the protected works available on their sites themselves. Hence, for the provider to have made an act of communication to the public, the Court has established that there needs to be some other element of *deliberate intervention* on their part.¹²¹ However, the court has found that the mere provision of a digital facility for communication, such as an online platform, does not in itself amount to such a communi-

¹¹⁸ C-682/18 & C-683/18 *YouTube and Cyando*, para. 72.

¹¹⁹ Section 3.3.2.

¹²⁰ For example, the underlying works of art of the NFTs for sale on OpenSea are displayed on the website <https://opensea.io/> to anyone accessing the site.

¹²¹ C-610/15 *Stichting Brein v Ziggo*, para. 36; C-682/18 & C-683/18 *YouTube/Cyando*, para. 68.

cation.¹²² Hence, if the only involvement of the platform provider is the maintenance of the site, it is not considered to participate in the communication to the public of user-uploaded works.¹²³

In *Stichting Brein*, the providers of the platform in question had clearly shown that they knew that their site was used for the illegal communication of works, and they actively promoted such acts.¹²⁴ It was, consequently, easy to conclude that they had intervened, deliberately and in full knowledge of the facts, in the making available of the illegal content. But other cases may not be so clear-cut. In the *YouTube/Cyando* case, therefore, the Court listed several relevant factors that can be used to determine whether a platform provider has made a deliberate intervention in the unauthorised sharing of protected works on their site. All the factors are to be taken into consideration in the overall assessment of the platform provider's actions.¹²⁵ Although the CJEU does not deliver judgments in the cases before it, in *YouTube/Cyando* it nonetheless decided to clarify its reasoning by referring to the facts of the case.¹²⁶ In this section, the Court's arguments will be analysed and tested in relation to NFT marketplaces.

Like the content-sharing platforms in *Stichting Brein* and *YouTube/Cyando*, NFT marketplaces enable the sharing of protected works between users on their sites. They serve as a community for users, storing data, facilitating communication, and increasing the audience of uploaded works. It is therefore relevant to apply the same line of reasoning to NFT marketplaces as to other content-sharing sites, in terms of responsibility for user-uploaded content. OpenSea is currently the largest NFT marketplace, with many high-profile collections sold and transactions amounting to staggering sums.¹²⁷ It is easy to find information about the platform's mode of operation, and it will therefore serve as a handy example.

¹²² In the same way that, according to Infosoc Recital 27, “[t]he mere provision of physical facilities for enabling or making a communication does not in itself amount to communication within the meaning of this Directive.”

¹²³ C-682/18 & C-683/18 *YouTube/Cyando*, paras. 79 & 102.

¹²⁴ C-610/15 *Stichting Brein v Ziggo*, para. 45.

¹²⁵ C-682/18 & C-683/18 *YouTube/Cyando*, paras. 83–84.

¹²⁶ C-682/18 & C-683/18 *YouTube/Cyando*, paras. 90–91.

¹²⁷ The total sum of transactions since it was founded in 2017 is over \$ 20 billion, <https://opensea.io/about> (accessed 18 December 2022).

One of the relevant factors in determining if the platform has made a deliberate intervention is how content is selected. In the *YouTube/Cyando* case, neither of the providers was an active participant in uploading content, nor did they monitor uploaded content.¹²⁸ Consequently, the platform operators had no part in the selection of works available on the site. The same is not true of the NFTs sold on OpenSea. Among the benefits of using OpenSea instead of other NFT marketplaces, “secondary market dominance, content curation, and sorting features” are specifically mentioned.¹²⁹ It is unclear exactly what sort of content curation OpenSea performs, but one form is certainly the platform’s partnership model, through which it is directly involved with some of the NFT collections available. To be sure, not all NFTs on OpenSea is curated by the operator, but it is undoubtedly involved with the selection of content on the marketplace. This indicates that the operator has insight into and control over that content, “beyond merely making that platform available,”¹³⁰ which would entail a responsibility for infringing content posted by its users.

Another factor emphasised by the Court in *YouTube/Cyando* was the platforms’ policies on intellectual property, their actions to prevent infringement, and the information given to users. In both of the cases before the CJEU, users were informed that copyright infringement was forbidden on the platform.¹³¹ In comparison, it is important to note section 6 of OpenSea’s Terms of Service, which includes rules on user conduct. That section explicitly states that users may not violate the intellectual property rights of others. However, whereas YouTube users were warned against publishing infringing content when they uploaded a video, OpenSea does not provide such a warning when creating an NFT.

OpenSea has other mechanisms devoted to preventing infringements: in their own words, their “User Safety team reviews countless collections every day. During this process, many collections have been removed from OpenSea for not qualifying as fair use.”¹³² If a rightsholder discovers that their work has been made available without con-

¹²⁸ C-682/18 & C-683/18 *YouTube/Cyando*, paras. 92 & 97.

¹²⁹ OpenSea, ‘Why Partner with OpenSea’, <https://opensea.io/partners>, under FAQ ‘What makes OpenSea special?’ (accessed 28 November 2022).

¹³⁰ Cf. C-682/18 & C-683/18 *YouTube/Cyando*, para. 89.

¹³¹ C-682/18 & C-683/18 *YouTube/Cyando*, paras. 93 & 97.

¹³² OpenSea, ‘Are Spin-off, Homage, or Remix Collections Allowed on OpenSea?’ <https://support.opensea.io/hc/en-us/articles/1500010882082-Are-spin-off-homage-or-remix-collections-allowed-on-OpenSea-> (accessed 8 December 2022).

sent on OpenSea, they can fill out a designated IP Takedown Request Form, which is linked in section 7 of the Terms of Service. This notice-and-take-down model appears to correspond to the “special alert procedure” for infringing content used by YouTube.¹³³ In the case of content being blocked, YouTube provided users with specific information about the consequences of repeated infringements.¹³⁴ Likewise, OpenSea informs its users that access to their service may be disabled in case of a violation of the Terms of Service.¹³⁵

Overall, OpenSea’s policies and user information seem to correspond to the level required by the court. However, it does not appear that the site uses any content recognition software to prevent users from uploading infringing content. One important factor emphasised by the Court was whether the platform operator had put in place “the appropriate technological measures that can be expected from a reasonably diligent operator.”¹³⁶ It was specifically noted that *YouTube* had put in place technological measures against infringing material through automatic filtering systems.¹³⁷ Bearing in mind the media attention to copyright infringement in relation to NFTs and the duties placed on other providers of online services, it is possible that a platform such as OpenSea would be expected to have some sort of preventive filtering in place, in order to be considered reasonably diligent. If the DSM Directive is any indication of the general direction of copyright policy in the EU, it appears to be moving away from notice-and-take-down solutions toward tougher requirements.

Finally, the court underlined the importance of the platform operator’s financial model, which may indicate that the operator encourages the unauthorised communication of works. In its previous case-law, the Court has established that the profit-making nature of an act of communication is not irrelevant to the question of its legality.¹³⁸ As many online content-sharing platforms earn revenue from advertisements, one of their aims is clearly to make a profit. In that regard, the Court stated that “the mere fact that the operator [...] has the aim of making a profit neither establishes that its intervention [...] was deliberate,

¹³³ C-682/18 & C-683/18 *YouTube/Cyando*, para. 94.

¹³⁴ C-682/18 & C-683/18 *YouTube/Cyando*, para. 93.

¹³⁵ OpenSea, ‘Terms of Service’, sec. 6, <https://opensea.io/tos> (accessed 12 September 2022).

¹³⁶ C-682/18 & C-683/18 *YouTube/Cyando*, para. 84.

¹³⁷ C-682/18 & C-683/18 *YouTube/Cyando*, para. 94.

¹³⁸ C-527/15 *Filmspeler*, para. 34 and the case-law cited.

nor gives rise to an presumption that that is the case.”¹³⁹ Consequently, the court found that the “for profit” criterion does not apply to platforms that have no control over the source of links posted to their site.¹⁴⁰ This represents a departure from the Court’s earlier case-law, which is likely due to the fact that an application of the “for profit” criterion would have placed an unreasonably heavy burden on the platforms.

While the “for profit” presumption was disregarded, the financial model of the platforms was still considered important in the case. Regarding YouTube, the Court noted that while the provider earns revenue from advertisements on the site, the “rankings, content categories and overviews of recommended videos are not intended to facilitate the illegal sharing of protected content or to promote such sharing.”¹⁴¹ In conclusion, the Court found that YouTube’s financial model was not based on the availability of infringing material.¹⁴² It would seem that the lack of correlation between the source of revenue (the advertisements) and the service provided by YouTube (giving users content recommendations) convinced the Court that the provider had no intention of promoting the illegal sharing of content.

As opposed to revenue from advertisements, OpenSea’s financial model is based on a commission on all NFT sales. The commission appears to be the same share—2,5%—of the price regardless of the seller’s identity, the kind of NFT sold, etcetera.¹⁴³ As the commission is relative to the sales price, the operator of OpenSea has an immediate stake in all sales on the platform. Thus, they have an incentive to make sure expensive NFTs are sold on their marketplace. This does not necessarily mean that OpenSea profits more from the presence of illegally uploaded works, but it is likely that NFTs of already famous artwork would sell more expensively than NFTs of unknown works. Indirectly, therefore, OpenSea’s financial model might promote the sale of infringing works.

3.4.2 The importance of intent

The crucial point in the Court’s argument on platform operators’ communication to the public is the existence of an illegal intent, in other words, “the aim of giving the public

¹³⁹ C-682/18 & C-683/18 *YouTube/Cyando*, para. 86.

¹⁴⁰ C-682/18 & C-683/18 *YouTube/Cyando*, para. 89.

¹⁴¹ C-682/18 & C-683/18 *YouTube/Cyando*, para. 95.

¹⁴² C-682/18 & C-683/18 *YouTube/Cyando*, para. 96.

¹⁴³ OpenSea ‘How to Sell an NFT Using OpenSea’, <https://opensea.io/learn/how-to-sell-nfts> (accessed 8 December 2022).

access to protected works”.¹⁴⁴ In *Stichting Brein*, the platform in question, The Pirate Bay, was a known provider of pirated works, and the operators had freely expressed their support of unauthorised copying online. By contrast, in the case of YouTube, the Court seems to have focused on the operator’s seeming lack of any intention to give access to illegal content. Judging by these cases, the platform provider’s ideological beliefs and overall aims appear to have an important influence on the outcome of a case.

In that context, it is relevant to note that an essential part of the ideology behind the crypto movement is freedom from centralised control of ownership.¹⁴⁵ While this should not lead to a presumption that all crypto platforms support illegal exploitation of protected works, it may warrant a more careful investigation of each platform’s aims. The matter was recently brought to a head in the Hangzhou Internet Court in China. In a case from April 2022, *Qice v Yuanyuzhou*, the court held that, because of the nature of their businesses, NFT marketplaces have more responsibilities than other platform providers in preventing infringements on their sites.¹⁴⁶ Given the recent attention to copyright infringements on the NFT market and the tendency—visible in the DSM Directive—to place more responsibilities on service providers in general, it is possible that European courts will reach the same conclusion.

To summarise, the stance of the Court appears to be that platforms that knowingly facilitate the sharing of illegal content become complicit in their users’ unauthorised communication to the public. Because of this, they must also share in the responsibility for any infringement. Considering the increasing attention to the subject from legislators and courts alike,¹⁴⁷ it is likely only a matter of time before platforms like OpenSea are required to take responsibility for the infringements happening on their sites.

3.5 Ensuring a high level of protection in the NFT sphere

This chapter has dealt with some of the copyright implications of minting and selling NFTs. The first section contained an overview of the implications of minting an NFT of a protected work, and the effects this might have for the artist. The second section dealt

¹⁴⁴ C-682/18 & C-683/18 *YouTube/Cyando*, para. 81.

¹⁴⁵ OECD, ‘Why Decentralised Finance (DeFi) Matters and the Policy Implications’, p. 16.

¹⁴⁶ Chang, Li, and Zhang, ‘A Brief Look into NFTs in China’.

¹⁴⁷ See, for example *Lavinia Deborah Osbourne v (1) Persons Unknown (2) Ozone Networks Inc Trading as Opensea*; and Andrews Kurth, ‘Senators Dive Into the World of NFTs, Asking US Patent and Copyright Offices to Consider Questions Regarding Related IP Rights’.

with the question of whether unauthorised minting constitutes a violation of the author's right of communication to the public. The CJEU has established that hyperlinks to protected works derive their legitimacy from the source. Hence, minting an off-chain NFT from a protected work stored online does not constitute a communication to the public within the meaning of Infosoc Article 3, as long as the work has been lawfully uploaded. Finally, in the third section, the role of NFT marketplaces was examined. Even though protected works are not uploaded by the platform providers themselves, they may perform a communication to the public if they have knowledge of the existence of these works on their sites. The platform's purpose as well as measures taken to prevent infringements are important factors to consider.

It seems unsatisfactory that minting and selling a protected work as an NFT without the authorisation of the rightsholder might not be considered as a form of infringement. Such a sale could generate a considerable profit for the seller, and negatively affect the scarcity as well as the value of any NFTs minted by the artist. As long as there is no infringement of rights, however, the author has no recourse to sanctions within the copyright legal framework. It is therefore worth exploring other options in cases of non-infringing exploitations of art for NFTs.

In cases where there is neither crime nor contract but injustice nonetheless, the doctrine of unjustified enrichment can sometimes be applied. According to Book VII of the Draft Common Frame of Reference, chapter 1 section 1 paragraph 1, “[a] person who obtains an unjustified enrichment which is attributable to another's disadvantage is obliged to that other to reverse the enrichment.”¹⁴⁸ The institute of unjustified enrichment is seldom used in Swedish law; in fact, its very existence is debated among legal scholars.¹⁴⁹ In the preparatory works to URL, it was debated whether a rule on unjust enrichment should be included in the law. It was pointed out that other countries acknowledged remuneration for authors in such cases.¹⁵⁰ In the end, no such rule was included in the Swedish law, as rules on damages were deemed to achieve the same effect.¹⁵¹

¹⁴⁸ von Bar et al., *Principles, Definitions and Model Rules of European Private Law: Draft Common Frame of Reference (DCFR)*.

¹⁴⁹ In the last decade, the institute has, arguably, gained influence. However, it is still not a widely accepted legal device. An overview of the Swedish debate can be found in Munukka, ‘Är Obehörig Vinst En Svensk Rättsprincip?’, p. 26–34.

¹⁵⁰ SOU 1956:25, p. 430.

¹⁵¹ Proposition 1960:17, p. 35.

Today, it is possible to take unjust enrichment into account when setting the damages in infringement cases. URL chapter 7 section 54 paragraph 2 specifies that the profit of the infringing party is one of the factors to be considered by the courts in their estimation. The wording is a result of the implementation of Article 13.1 of the IPRED Directive,¹⁵² whereby the judicial authorities shall take into account “any unfair profits made by the infringer” when setting the damages. The implementation was considered to be of a clarifying nature, as the profits made by the infringement are simply a way to calculate any lost profit on the rightsholder’s part.¹⁵³ However, the provision can only be applied once an infringement has been established.

As noted above, the issue in some NFT cases is that the exploitation of a protected work for an NFT may not always constitute an infringement. It might be constructive, therefore, to revisit the idea of unjustified enrichment in these cases. One of the reasons against including a rule on unjustified enrichment in URL was that it is often hard to determine what part of the profit from a venture stems from the exploitation of a particular work. In many cases, several protected works are exploited at the same time.¹⁵⁴ In the case of NFTs, however, the link between the exploited work and any profit is clear: the sale of the NFT involves one work only, and the profit is directly related to the exploitation of that work.

Even when an infringement has occurred, the issue remains of how to enforce copyright in the NFT sphere. In recent cases, it has been made clear that finding the culprit of NFT-related infringements is difficult.¹⁵⁵ Perhaps the only viable option in these cases is to hold NFT marketplaces accountable directly, rather than prosecute individual users. But even if platforms can be held accountable, the immutable nature of the blockchain makes enforcing injunctions extremely difficult, if not impossible. An essential feature of blockchain ledgers is that they cannot be edited retroactively. Hence, they cannot be deleted.¹⁵⁶ Platform providers can prevent NFTs from being sold via their marketplace,

¹⁵² Directive 2004/48/EC.

¹⁵³ Proposition 2008/09:67, p. 229–30 & 271.

¹⁵⁴ SOU 1956:25, p. 431.

¹⁵⁵ See, e.g., *Lavinia Deborah Osbourne v (1) Persons Unknown (2) Ozone Networks Inc Trading as Opensea*, paras. 10–12.

¹⁵⁶ This is illustrated by a recent Italian case where the Juventus Football Club claimed to have had their trademark infringed by a series of NFTs. See Gangi, ‘Can Injunctions Be Enforced in the Case of NFTs? Do Not Take It for Granted...’.

but the NFT itself will continue to exist. This means that rules such as URL chapter 7 section 53 a on forfeiture are practically useless in NFT cases.

Although they present many challenges, in other ways NFTs can be a useful tool in ensuring a high level of protection for rightsholders' interests. Smart contracts offer the possibility of including an automatic royalty payment in each transaction. This is akin to the artist's resale right, or *droit de suite*, regulated in URL chapter 2 a section 26 n-q. According to section 26 n, the artist has a right to part of the profits each time a copy of a work is sold. By using the automatic royalty function, an artist can make sure that a *de facto* resale right is coded into the contract, regardless of whether the legal conditions are fulfilled. This has the potential of lowering transaction costs as no intermediary is required in the process of collecting the fees, and has been pointed out as an opportunity for rights management on the blockchain.¹⁵⁷ On the other hand, it runs the risk of adding insult to infringement in cases where the NFT has been minted by a third party without the consent of the artist. According to URL chapter 2 a section 26 o paragraph 4, the resale right is personal and non-transferable, but there is no mechanism to control who is recorded as the recipient in the smart contract.¹⁵⁸ The fact remains that what is coded into the contract is not the same as, nor is it necessarily compliant with, copyright law.

¹⁵⁷ See the JURI report by Garbers-von Boehm, Haag and Gruber, 'Intellectual Property Rights and Distributed Ledger Technology with a Focus on Art NFTs and Tokenized Art', p. 44–45.

¹⁵⁸ For more on these issues, see Çağlayan Aksoy and Özkan Üner, 'NFTs and Copyright: Challenges and Opportunities', p. 1125–26; and van Haaften-Schick and Whitaker, 'From the Artist's Contract to the Blockchain Ledger: New Forms of Artists' Funding Using Equity and Resale Royalties', p. 287–315.

4 The sale of NFTs and the transfer of rights

4.1 One purchase, two contracts

As explained above¹⁵⁹ the NFT and the underlying artwork, while related, are not synonymous. When an NFT is sold, two important things happen: firstly, the ownership of the blockchain metadata file is transferred from the seller to the buyer; and secondly, any other rights that were tied to the NFT are redistributed. The question of ownership of the NFT, although unfamiliar to some, is fairly straightforward: the NFT contains a smart contract that performs the transaction, recording it on the blockchain and transferring the NFT from the seller's crypto wallet to the buyer's in exchange for cryptocurrency.¹⁶⁰ Since the blockchain cannot be edited retroactively, it will contain a verifiable history of ownership transfers. The problem lies in the redistribution of other rights; there is an obvious "lack of clarity about what it is exactly that you get when you buy an NFT."¹⁶¹ A great deal of the current debate about NFTs is centred on this lack of clarity, which leads to buyers of NFTs committing various infringing acts while believing they are entitled to use the artwork, and to disappointment and outrage when they find out this is not the case.¹⁶²

This chapter will deal with the transfer of copyright to the underlying work of an NFT. The first section deals with the question of implicit copyright transfer. Simply put: does the purchase of an NFT include any rights to the underlying work, even if there is no agreement between the parties? In the second section, the role of separate agreements governing copyright transfer, so-called "purchase terms", will be examined. Copyright contracts are subject to special principles of interpretation, which are not always taken into consideration by the parties when drafting their agreements. Finally, the third section deals with rights that cannot be transferred at all, regardless of any agreement between the parties. It will become apparent that the existence of these *moral rights* complicates the transfer of copyright on the digital market, and in the NFT sphere in particular.

¹⁵⁹ Section 2.1.

¹⁶⁰ The smart contract is usually written after a standard model called "ERC-721", <http://erc721.org/> (accessed 11 December 2022).

¹⁶¹ Guadamuz, 'Non-Fungible Tokens (NFTs) and Copyright', p. 35.

¹⁶² It is likely that the confusion about the relationship between NFTs and copyright contributed to the exorbitant prices that the market saw in 2021. Guadamuz, 'Non-Fungible Tokens (NFTs) and Copyright', p. 35–37.

4.2 What rights come with the NFT? The implicit transfer of copyright

According to Swedish law, URL chapter 3 section 27 paragraph 1, the author's economic rights can be transferred. This can be done partially, by licensing the rights to a work, or completely, by selling them all at once. The main rule according to section 27 paragraph 2 is that copyright does not come with the sale of a copy of the work. In many contexts, this is easy to understand: most buyers of a work of art would hesitate to start selling replicas of the work, and infomercials taught us from an early age that copying a DVD or CD is wrong. On the internet, however, these principles seem to be harder to grasp. Just as the buyer of a physical painting does not automatically acquire copyright to the work, the buyer of an NFT does not acquire copyright to the underlying work, but it is a widespread misunderstanding that this is the case.

There are no formal requirements for written copyright contracts in Swedish law, although written agreements are standard practice due to the nature and value of the assets.¹⁶³ Likewise, the CJEU has noted that the Infosoc Directive contains no formal requirements for the author's consent to exploitation of their works; “[i]t must be held, on the contrary, that those provisions also allow that consent to be expressed implicitly.”¹⁶⁴ As with all contracts, identifying the will of the parties is key in interpreting copyright transfer agreements.¹⁶⁵ The lack of formal requirements coupled with the public's misconceptions raise the question of whether the sale of an NFT could include an implicit agreement on copyright transfer. It is possible that some rights could be presumed to be included in the purchase of an NFT.

In the case NJA 2010 s. 559 *Evert Taube*, HD came to the conclusion that consent to certain types of use can be implied between the parties despite not being stated in the contract. A photo of the artist Evert Taube was used on the cover of a CD of his songs, and as a part of the advertisements for the CD, the cover was then published on the internet and in product catalogues. HD found that the licence to use the photo on the packaging also included the right to use it for marketing purposes. Such a use is customary in con-

¹⁶³ SOU 1956:25, p. 277.

¹⁶⁴ C-301/15 *Soulier & Doke*, para. 35.

¹⁶⁵ Bernitz et al., p. 383.

sumer marketing, and hence, it was the rightsholders' responsibility to clarify that it was not included in the agreement.¹⁶⁶

The *Evert Taube* case suggests that uses which are a natural extension of those regulated by the contract are permissible; the sale of products requires marketing, and a customary form of marketing is to show pictures of the product. Likewise, the whole point of buying certain kinds of NFT is to use the image it represents as a profile picture. This use requires both reproducing the work and communicating it to the public—uses which otherwise are not included when purchasing a copy. With this kind of NFT, the whole purpose of the purchase is defeated if certain rights to the work are not included. A strong case can therefore be made that even in cases where it is not explicitly stated, ownership of the NFT includes a right of reproduction and communication to the public for the purpose of displaying the artwork online.

Other, less obvious uses of the artwork may also be implicitly included in the purchase of an NFT. Printing physical copies of the work as well as limited use for commercial purposes are two examples of uses allowed by several major NFT collections.¹⁶⁷ However, these uses lie further from the core use of displaying the image online: disallowing them would not defeat or obstruct the main purpose of the agreement. For these uses to be allowed, therefore, there would have to be some other indication that this was intended by the parties. In this context, it is worth mentioning that Dapper Labs Inc, the company behind the CryptoKitties game and corresponding NFTs, has developed a standard licence agreement to be used in NFT transactions.¹⁶⁸ The objective is to help set clear expectations on the market and to promote the establishment of best practices. The agreement includes a right to use, copy, and display the underlying artwork for non-commercial and commercial purposes.¹⁶⁹ The commercial use of the artwork may not result in a revenue exceeding \$ 100,000 a year. If this agreement were to gain traction in the community, it is possible that it would take on the role as a standard market practice, thus affecting the way that implicit copyright transfers are judged.

¹⁶⁶ NJA 2010 s. 559 *Evert Taube*, paras. 10/11.

¹⁶⁷ Dapper Labs Inc, 'CryptoKitties Terms of Use', sec. C, <https://www.cryptokitties.co/terms-of-use> (accessed 15 December 2022); Yuga Labs Inc, 'BAYC Terms & Conditions', sec. iii, , <https://boredapeyachtclub.com/#/terms> (accessed 1 September 2022).

¹⁶⁸ Dapper Labs Inc, 'NFT License', <https://www.nftlicense.org/> (accessed 15 December 2022).

¹⁶⁹ Dapper Labs Inc, 'NFT License', sec. 3.

Even though there is a strong case to be made that certain rights to the underlying work are indeed included in the purchase of an NFT, it is important that the author's rights are not too narrowly circumscribed. As noted by the CJEU in *C-301/15 Soulier & Doke*, “the circumstances in which implicit consent can be admitted must be strictly defined in order not to deprive of effect the very principle of the author's prior consent.”¹⁷⁰ The power to authorise or prohibit the use of a work lies, first and foremost, with the author, and any exception must not be so generously interpreted that that power is lost. Swedish law includes two firmly established principles to that effect: the specification principle¹⁷¹ and the author's moral rights.¹⁷² The next section will deal with the specification principle for interpretation of copyright contracts. Then, in section 4.4, the importance of moral rights as a protective measure for the artist will be examined.

4.3 Principles for interpreting copyright contracts

Although consent to some uses of the underlying work may be implied when buying an NFT, the main rule is that no copyright is included unless this is specified. To avoid any confusion, it lies in the interest of both parties to agree in advance on what rights are included in the purchase. This can be done in a separate licence agreement between the artist and the buyer. Such agreements are sometimes referred to as “purchase terms”.¹⁷³ The terms can be set in a written contract between the parties, or they can be included in preformulated terms of service. The latter is common with NFT collections like BAYC¹⁷⁴ or CryptoPunks.¹⁷⁵ Taking BAYC as an example, the Terms and Conditions are comparatively short, only containing a preamble and three clauses detailing the terms of ownership. As is conventional for this type of online forum, the user accepts the conditions tacitly by accessing the site.

¹⁷⁰ *C-301/15 Soulier & Doke*, para. 37.

¹⁷¹ SOU 2010:24, p. 93–106.

¹⁷² Wainikka, ‘Upphovsrätten i mediebranschen: En fråga om avtal’, p. 603.

¹⁷³ The term is used by OpenSea, ‘Terms of Service’, sec. 5, <https://opensea.io/tos> (accessed 12 September 2022).

¹⁷⁴ Yuga Labs Inc, ‘BAYC Terms & Conditions’, <https://boredapeyachtclub.com/#!/terms> (accessed 1 September 2022).

¹⁷⁵ Yuga Labs Inc, ‘CryptoPunks Terms’, <https://licenseterms.cryptopunks.app/> (accessed 3 January 2023).

The first clause of the BAYC Terms details the ownership of the NFT as well as “the underlying Bored Ape, the Art”, stating that the buyer of a Bored Ape NFT owns both.¹⁷⁶ The second and third clauses include licences for personal and commercial use, respectively. In brief, subject to a few conditions, any personal or commercial use of the Bored Ape artwork is allowed, as long as the user can cryptographically (using the unique encrypted signature) prove that they are in fact the owner of the associated NFT. In essence, these terms constitute a licence agreement between the provider of the BAYC website, Yuga Labs LLC, and the buyer of a Bored Ape NFT. The issue is that this licence is vaguely formulated. To prevent such vague terms from putting the author at a disadvantage, there are special rules on interpretation that apply to copyright transfer agreements.

4.3.1 The specification principle and the author’s right to remuneration

In Swedish law, it is a widely accepted presumption that only the uses specified in the contract are included in the agreement between the parties.¹⁷⁷ This presumption has been called the *specification principle*, and it has been partially codified in chapter 3 section 28 of URL,¹⁷⁸ according to which no alterations of the work, nor any reassignment of rights, are allowed unless this is specified in the contract. Beyond preventing extensive interpretations, the specification principle can sometimes restrict the interpretation of vaguely formulated agreements.¹⁷⁹ One important application of the specification principle is when new forms of use or even new rights appear after the time of agreement, because of new technology or new legislation. In these cases, it is presumed that the parties only meant for the agreement to cover rights existing at the time, and that the author retains any other rights.¹⁸⁰ One of the motives behind the specification principle is the parties’

¹⁷⁶ Yuga Labs Inc, ‘BAYC Terms & Conditions’, sec. 1, <https://boredapeyachtclub.com/#/terms> (accessed 1 September 2022).

¹⁷⁷ Rosén, p. 151–52. A comprehensive overview of case-law and doctrine on the principle can be found in SOU 2010:24, p. 94–101.

¹⁷⁸ SOU 1956:25, p. 277.

¹⁷⁹ See Rosén, p. 152–53. In Swedish, different terms are sometimes used for these similar principles: “specialitetsgrundsatsen” and “specialitetsprincipen” or “specifikationsprincipen”, respectively. The terms are confusingly similar in Swedish and an attempt at translating them into English would make them even more so. For the sake of clarity, and because they have essentially the same meaning, this discussion will not differentiate between the two. Instead, they will be referred to jointly as the specification principle. Cf. Bernitz et al., p. 384–85; Levin and Hellstadius, p. 119 & 521–22. A complete codification of both uses of the specification principle was suggested by a special committee in 2010, but it was never implemented, SOU 2010:24, p. 16 & 93–101.

¹⁸⁰ SOU 1956:25, p. 282.

inability to foresee all possible uses of a work. Therefore, general, *a priori* transfers of copyright are typically not accepted in Swedish law unless clearly formulated.¹⁸¹

Excepting the specification principle's restricting effect, copyright contracts have not been subject to heavy regulation in Swedish law. There are, however, indications that this is changing; in its attempts to regulate the Digital Single Market, the European Union is increasingly protective of authors and other rightsholders. Recently, the DSM Directive has led to an implementation of more peremptory rules on copyright agreements in Sweden.¹⁸² The objective is to ensure that authors are fairly compensated for the professional exploitation of their works, as they are usually the weaker party in negotiating such agreements.¹⁸³

The new URL chapter 3 section 29 concerns the author's right to remuneration. Paragraph 1 contains a statement of the principle that the author has a right to an appropriate and proportionate remuneration, while paragraph 2 contains a rule on adjustments of copyright contracts.¹⁸⁴ A modification of the author's compensation could have a significant effect in cases where an artist has agreed to let someone else produce an NFT of their work. It is often difficult to foresee the price of an NFT, and the remuneration agreed in advance may prove to be disproportionate. Other examples of new rules to protect the author are section 29 d, which gives the author a right to revoke an exclusive licence if the licensee does not exploit the work within a certain time, and section 30, which states that licences are non-exclusive and valid for three years, unless otherwise agreed.

4.3.2 Interpretation of NFT platform terms

The BAYC Terms and Conditions grant the owner of a Bored Ape NFT "an unlimited, worldwide licence to use, copy, and display the purchased Art for the purpose of creating derivative works" for both personal and commercial use. When considering the specification principle, this licence appears both too vague and unreasonably wide. If conflict

¹⁸¹ SOU 1956:25, p. 283; Rosén, p. 153.

¹⁸² Lag (2022:1712) om ändring i lagen (1960:729) om upphovsrätt till litterära och konstnärliga verk. The law came into effect on 1 January 2023.

¹⁸³ Prop 2021/22:278, p. 153–55.

¹⁸⁴ Previously, adjustments to a copyright agreement could be made by invoking section 36 of the Swedish Contracts Act, Lag (1915:218) om avtal och andra rättshandlingar på förmögenhetsrättens område. When it was first passed, section 36 replaced a number of similar rules in other laws, notably what was then URL section 29. See Rosén, p. 112–15 & 151. Thus, the new section 29 paragraph 2 of URL is a clarification of existing rules rather than an establishment of new ones.

were to arise regarding the scope of the licence, it is likely that Swedish courts would interpret the agreement in a way that at least one of the parties did not intend. A couple of specific problems can be pointed out. Firstly, the agreement does not specify any maximum revenue that an NFT owner is allowed earn by exploiting the art,¹⁸⁵ and the only example of commercial use given is the production of merchandise.

Secondly, there is no mention of the right of communication to the public. The Terms state that the owner is allowed to copy and display the Art, but this does not necessarily mean that communicating it to the public is allowed; displaying the Art might simply involve showing it on a screen in one's home, for instance. A strict interpretation of the Terms according to the specification principle would exclude a right to upload the work online. Finally, adding to the complexity of interpreting the Terms is the fact that Yuga Labs is not, in fact, the author of the Bored Apes. Most of the artwork was drawn by an independent artist, who would have had even less of an opportunity to gauge the importance of her work.¹⁸⁶ Considering the author's right to an appropriate and proportionate remuneration according to URL chapter 3 section 29, this might be a problem if the exploitation of the work in later stages generates more substantial revenue than was foreseen by the parties.

In all cases, the purpose of a copyright transfer agreement is important in determining its scope. As noted above, in the *Taube*-case, the scope of the agreement was given an extensive interpretation because its purpose would otherwise have been obstructed. Likewise, the circumstances and the purpose of an NFT purchase might show that certain uses are implicitly included in the agreement. However, the Swedish legislator has specifically noted that the interpretation of copyright contracts "typically" results in a restricted scope, which can be especially important in the interpretation of implicit agreements.¹⁸⁷ All things considered, there does not seem to be a solid basis for the wide licences applied in NFT communities. There is a risk that even the conscientious NFT buyer, who makes an effort to ensure that their use is covered by a licence, might end up disappointed.

¹⁸⁵ As opposed to the abovementioned NFT License, which sets the limit at \$ 100,000. Dapper Labs Inc, 'NFT License', sec. 3 b, <https://www.nftlicense.org/> (accessed 15 December 2022).

¹⁸⁶ Hissong, 'The NFT Art World Wouldn't Be the Same Without This Woman's "Wide-Awake Hallucinations"'. This is especially important when considering the author's moral rights, see Chapter 5.

¹⁸⁷ SOU 2010:24, p. 105.

4.4 The issue of moral rights

Apart from the various rules and principles on the interpretation of copyright agreements, freedom of contract between the parties is importantly restricted by the absolute nature of the author's moral rights. There are two principal aspects of the author's moral rights, usually referred to by their French terms: *droit de la paternité*, the right to be named, and *droit au respect*, the right to respect. Both rights can be found in Article 6 *bis* para. 1 of the Berne convention of 1886, which gives the author the right to claim authorship of their works, *droit de la paternité*, and the right to object to derogatory actions, *droit au respect*. From the wording of the Article, it is clear that moral rights exist independently of economic rights, and that they are not transferrable in the same way.

The protection of moral rights varies between countries and is largely a matter of tradition. The difference in treatment of the author's moral rights roughly corresponds to the divide between common law and civil law countries. In continental European and Nordic countries, the artist's inalienable right is seen as an essential part of the author's rights. As a result, moral rights cannot, or can only partially be transferred. By contrast, common law countries such as the UK, Ireland, and the US, tend to leave the transfer of moral rights up to the parties.¹⁸⁸ In the US, moral rights only started to gain importance after the accession to the Berne Convention in 1988. Some scholars even question whether US law is compliant with the Convention in this case.¹⁸⁹ At the same time, American contract law is increasingly gaining influence over the European copyright industry.¹⁹⁰

In the international environment of the internet, these differences in legal tradition can cause problems for the parties to a copyright transaction. For the buyer of an NFT, they could have far-reaching consequences in terms of what uses of a work are permitted or prohibited. In this section, the consequences of moral rights legislation for contractual freedom in copyright transactions will be examined.

¹⁸⁸ Differences within Europe between civil and common law countries are described in the EUIPO report on Consumer FAQs on Copyright. The report compiles answers from legal experts from all EU countries and the UK. See EUIPO by Geiger and Schön herr, p. 14–20 & 42–44. See also the report from the European Parliament, Directorate General for Internal Policies of the Union, by Hebet te et al., 'Copyright Law in the EU', p. 3 f., and special chapters on each country.

¹⁸⁹ Levin and Hellstadius, p. 160.

¹⁹⁰ Wainikka, 'Upphovsrätten i mediebranschen: En fråga om avtal', p. 602 f.

4.4.1 Moral rights in EU law: the three-step test and a fair balance

Moral rights are not harmonised within the EU. On the contrary, several EU legal acts on copyright explicitly exclude moral rights from their scope, leaving the matter to be dealt with according to national legislation, the Berne Convention, and rules issued by the World Intellectual Property Organization, WIPO.¹⁹¹ The main reason why moral rights have not been harmonised is likely that they are not considered as important from a Union perspective. Establishment of the internal market is the driving force behind much EU legislation, including in the field of copyright. For example, the first Recital in the preamble of the Infosoc Directive states that harmonisation of copyright law within the Union contributes to the functioning of the internal market. It follows that any rights deemed less influential over the functioning of the market would be less important from the perspective of EU legislature.

Harmonisation of moral rights has been discussed on several occasions. However, the view that the consequences are not significant enough seems predominant. In its 2004 review of the copyright legal framework, the European Commission stated that the differences between Member States' moral rights legislation did not appear to "have had a negative impact on the good functioning of the Internal Market."¹⁹² While there was a risk that this might change with an increase in digital use, that risk was found to be slight, and the paper concluded that there was "no apparent need to harmonise moral rights protection in the Community at this stage."¹⁹³ This decision has been criticised by some scholars, who argue that national disparities on moral rights may indeed have an adverse effect on the internal market.¹⁹⁴ As there is no harmonising legislation in the field of moral rights, there is nothing to match the multitude of CJEU case-law concerning the author's economic rights. Nevertheless, in a couple of cases, the Court seems to have based its decisions on moral considerations.

¹⁹¹ See, e.g., Recital 28 in the preamble of Council Directive 93/83/EEC; Recital 28 of Directive 96/9/EC; Recital 19 of Directive 2001/29/EC; and Recital 20 and Article 9 of Directive 2006/116/EC.

¹⁹² Commission of the European Communities, 'Commission Staff Working Paper on the Review of the EC Legal Framework in the Field of Copyright and Related Rights', p. 15.

¹⁹³ *Id.*

¹⁹⁴ To this effect, see Sirvinskaite, 'Toward Copyright Europeanification: European Union Moral Rights', p. 282–87. Levin has pointed out that moral rights do not lack economic importance: the paternity right can be crucial to help the artist build a reputation, which increases the value of their works. See Levin and Hellstadius, p. 159.

As noted above,¹⁹⁵ the extent of the author's copyright is circumscribed by a series of exceptions and limitations which have been harmonised in the EU through Article 5 of the Infosoc Directive. Each of the exceptions contains its own conditions, which must be satisfied in order for it to be applicable. However, fulfilment of these conditions is not enough for an exception to be permissible. Article 5.5 contains a series of additional criteria, collectively referred to as the three-step test. Application of an exception is only allowed 1) in certain special cases 2) if it does not conflict with a normal exploitation of the work 3) and as long as it does not unreasonably prejudice the legitimate interests of the rightsholder. The Article is to be interpreted in light of Recital 31, which emphasises the importance of ensuring a fair balance between rightsholders, on the one hand, and individuals who wish to use protected works, on the other.¹⁹⁶

There have been many cases before the CJEU concerning the interpretation of the exceptions and limitations in Infosoc and the three-step test. Some authors claim the importance of Article 5.5 has increased, especially since the Court established that it is a binding provision for national courts and lawmakers.¹⁹⁷ However, the Court's motivations for their findings have been scarce, and for a long time there was little guidance to be found on the interpretation of the three-step test's conditions. Initially, Article 5.5 was primarily used as a supporting argument for the strict interpretation of derogations from a general principle.¹⁹⁸ In later cases, on the other hand, the court has elaborated somewhat on the meaning of "normal exploitation" and "unreasonable prejudice". In both *ACI Adam* and *Filmspeler*, the court stated that national exceptions which do not differentiate between lawful and unlawful sources encourage unlawful uses of the work. This reduces the number of sales, which adversely affects the normal exploitation of the work.¹⁹⁹

From these arguments, it is possible to draw a couple of general conclusions. First, lawful transactions are considered a normal exploitation of the work. Second, unlawful transactions reduce the volume of lawful transactions, meaning they adversely affect

¹⁹⁵ Section 3.1.

¹⁹⁶ The three-step test has not been implemented in URL but is considered as a guidance for the implementation and interpretation of exceptions and limitations. See Prop 2004/05:110, p. 81 ff.; NJA 2016 s. 212 Wikimedia.

¹⁹⁷ Rosati, 'The Construction of Exceptions and Limitations in the InfoSoc Directive', p. 129.

¹⁹⁸ C-5/08 *Infopaq*, paras. 57–58; C-145/10 *Painer*, para. 110; C-435/12 *ACI Adam*, para. 22; C-527/15 *Filmspeler*, para. 62.

¹⁹⁹ C-527/15 *Filmspeler*, para. 70; C-435/12 *ACI Adam*, para. 39.

normal exploitations. Third, the diminution of lawful transactions causes unreasonable prejudice against the rightsholder. It seems the legitimate interest considered here is an economic one: namely, the collection of revenue from legal transactions involving the works.

On a couple of occasions, however, the Court seems to have used Article 5.5, interpreted in light of Recital 31, as a safety valve, allowing for a wider interpretation of a fair balance of interests. In these cases, the Court has taken into consideration not just economic interests, but factors which are typically relevant in a discussion on the artist's moral rights. In *Painer*, the Court briefly discussed the relationship between the quotation exception in Infosoc Article 5.3(d) and the author's paternity right. In evaluating the applicability of the quotation exception, the Court stated that the exception aims to create a fair balance between the author's rights and the freedom of expression of users of a work. The Court held that such a balance was achieved "by favouring the exercise of the users' right to freedom of expression [...], whilst ensuring that the author has the right, in principle, to have his name indicated."²⁰⁰ There is, consequently, a form of protection for the author's moral right to be named built into the quotation exception. In other words, the exception to the author's economic rights is acceptable only if the author's paternity right is taken into account.

Perhaps even more interestingly, the case C-201/13 *Deckmyn* concerned the parody exception included in Article 5.3(k) of the Infosoc Directive. During a social event, a member of a political party in Belgium distributed calendars to his party colleagues. The cover of the calendars showed a drawing resembling an issue of a famous Belgian comic book series, with some modifications. The copyright holders claimed that the drawing did not meet the criteria for a parody and therefore infringed their copyright. They also held "that the drawing at issue conveyed a discriminatory message [toward] people wearing veils and people of colour."²⁰¹

After commenting on the interpretation of the term "parody", the Court went on to state that the application of the parody exception must strike a fair balance between the rights of the author and the freedom of expression of users of protected works.²⁰² The

²⁰⁰ C-145/10 *Painer*, paras. 134–135.

²⁰¹ C-201/13 *Deckmyn*, para. 12.

²⁰² C-201/13 *Deckmyn*, paras. 26–32.

Court stated that all the circumstances of a case must be considered to determine if the application of an exception preserves such a balance.²⁰³ It then went on to explain that, because of the principle of non-discrimination in Article 21.1 of the EU Charter of Fundamental Rights, rightsholders “have, in principle, a legitimate interest in ensuring that the work protected by copyright is not associated with [a discriminatory] message.”²⁰⁴ A similar stance was adopted by Advocate General Szpunar in the Case C-476/17 *Pelham*, who stated that “in balancing fundamental rights, it is necessary to take account of the rights and material interests of [authors] including their moral rights. Moral rights [...] may legitimately preclude use of that work.”²⁰⁵

The Court’s interpretation of Recital 31 is certainly an extensive one. As noted above, the Recital relates to Article 5.5 and concerns the balancing of rights with regard to copyright exceptions. The wording of the Recital does not indicate that a complete balancing of all the author’s interests is required for an exception to their rights to be acceptable. In spite of this, and even though the Infosoc Directive explicitly excludes moral rights from its scope, the Court interprets the “fair balance”-criterion in such a way that the author’s *droit au respect* is given a crucial role. Factors outside the author’s economic interest in their work are thus allowed to determine whether a use should be protected according to an exception in the Directive. All in all, the relationship between the author’s legitimate interest and moral rights is unclear.²⁰⁶ While moral rights are explicitly excluded from several Directives, the reference to international law implies that some level of protection of the author’s moral rights is required under EU law. These cases further strengthen that view.

4.4.2 Moral Rights in Sweden

In URL chapter 3 section 27, it is explicitly stated that copyright is assignable, with the exceptions listed in section 3. The latter contains an account of the author’s moral rights: firstly, the artist has a right to be named to the extent and in a way that is customary.²⁰⁷ Secondly, the work must not be changed or communicated to the public in such a way

²⁰³ C-201/13 *Deckmyn*, para. 28.

²⁰⁴ C-201/13 *Deckmyn*, paras. 30–31.

²⁰⁵ Opinion of Advocate General Szpunar in Case C-476/17 *Pelham*, para. 97.

²⁰⁶ The *Deckmyn* case and the importance of moral rights is discussed more at length in Rosati, ‘Just a Laughing Matter? Why the Decision in *Deckmyn* Is Broader than Parody’, p. 511–29.

²⁰⁷ Para. 1.

that the artist's integrity is harmed.²⁰⁸ These rights can only be waived on a case-by-case basis, for certain uses of the work.²⁰⁹ According to Swedish law, consequently, the artist can only waive their moral rights for a specific purpose. In the preparatory works, it was emphasised that even a contract whereby the artist agrees to transfer all rights to their work is not sufficient to permanently waive their moral rights.²¹⁰

The Swedish case NJA 1975 s. 679 *Sveriges flagga* deals with the infringement of moral rights when works are put in a political context not intended by the author. In this case, the opening lines to a Swedish poem from the early twentieth century had been used in a propaganda song criticising the Vietnam War. The defendant in the case claimed that the song was a political parody, and that the right to freedom of expression justified the use of the original lyrics. Disagreeing, HD noted that copyright is meant to serve the interest of individuals, and found that it was not warranted to restrict the rights of an author who had nothing to do with the "political disagreements" in question.²¹¹ Moreover, the court held that infringements of moral rights should be evaluated from the author's point of view. When the author is deceased, it must be determined if the use is "prejudicial to the author's personality such as it is expressed through the work."²¹² The court then went on to note that the part of the poem used in the song had been taken out of context and used to communicate a political message relating to "vastly different circumstances than the ones that inspired" the original.²¹³ Consequently, the court concluded that the author's moral rights had been infringed.

This case deals with two questions: one is whether and to what extent parodies with a political intent can justify a restriction of the author's copyright. The second is whether it constitutes an infringement of the author's moral rights to place a work in a context that is unrelated to the original one. This second question is especially relevant in the NFT universe, where extensive licensing of the underlying artwork is commonplace. Platforms like BAYC rely heavily on personal branding for their success, and famous artists use

²⁰⁸ Para. 2.

²⁰⁹ Para. 3.

²¹⁰ Proposition 1960:17, p. 72 f.

²¹¹ NJA 1975 s. 679 *Sveriges flagga*, p. 685.

²¹² *Ibid.*

²¹³ NJA 1975 s. 679 *Sveriges flagga*, p. 686. While the original was a hymn to Swedish patriotism, the new song encouraged burning the US flag in protest of the Vietnam War. Although they are not mutually exclusive, the two messages seem hard to reconcile.

their PFP avatars as digital alter egos. Commercial use of the artwork becomes part of the owner's marketing a way similar to their own trademark. This is difficult for the original artist to control, and it is likely that the work will be used in new contexts, irrespective of the author's views.

4.4.3 Snoop Dogg and Eminem at the VMAs

In August 2022, hip hop-artists Eminem and Snoop Dogg made a much-discussed performance at the MTV Video Music Awards. In a colorful stage show featuring animations of the artists' Bored Ape alter egos, the duo performed their recent single "From the D 2 the LBC".²¹⁴ From start to finish, the show included psychedelic animations and marijuana leaves, accompanied by lyrics such as "If y'all are seekin' the smoke, I got all the weed – I am a walking motherfuckin' marijuana leaf". The performance can be described as a live adaptation of the duo's music video for the same song,²¹⁵ which was produced in collaboration with Yuga Labs and released in June 2022.²¹⁶ The collaboration, along with the generous licence in the BAYC Terms and Conditions, should answer any questions as to the performance's legality with respect to economic rights.²¹⁷ However, it is possible that the use of the Apes would violate the original artist's moral rights.

Since moral rights are not transferable, it is irrelevant whether Yuga Labs consented to the use of the works in their capacity as rights holders. Regardless of who controls the economic rights, only the artist can authorise use of their work in a potentially controversial context such as the one in question. The works are taken out of context and used in a performance which strongly advocates the use of marijuana, which is still illegal in many states. The performance can be construed as a contribution to the debate on the legalisation of marijuana in the US. Although her position in the debate is unclear, this is

²¹⁴ *Eminem Feat. Snoop Dogg Performs 'From the D 2 the LBC' | 2022 VMAs*, 28 August 2022, <https://www.youtube.com/watch?v=0GW3TWB1QgE> (accessed 31 October 2022).

²¹⁵ *Eminem & Snoop Dogg - From The D 2 The LBC [Official Music Video]*, <https://www.youtube.com/watch?v=RjrA-slMoZ4> (accessed 31 October 2022).

²¹⁶ Arcand, 'Watch Eminem and Snoop Dogg Perform "From the D 2 the LBC" at VMAs 2022', *Pitchfork*, 28 August 2022.

²¹⁷ A commercial licence "to use, copy, and display the purchased Art for the purpose of creating derivative works based upon the Art". Yuga Labs Inc, 'BAYC Terms & Conditions', <https://boredapeyachtclub.com/#/terms> (accessed 1 September 2022).

not a use that was intended by the artist when she created the work. It would have been impossible for her to foresee such a use and to consider its implications.²¹⁸

We can only speculate as to what agreements exist between Yuga Labs and the artist that drew the Apes. Furthermore, the artist is American, and US law does not acknowledge moral rights to the extent that, for example, Swedish law does. A comprehensive study of the US “moral rights patchwork” was conducted by the United States Copyright Office a few years ago. It concluded that the current US moral rights framework is a combination of federal and state legislation, which provides some protection for the author’s right to be named and to respect.²¹⁹ As previously noted,²²⁰ however, the US has been criticised for its relatively low level of protection in this regard, which constitutes a kind of bare minimum-approach to the Berne convention. Irrespective of these national differences, the example raises some interesting points. A similar situation could conceivably arise in a European country, and considering the strong protection of moral rights traditionally granted in Europe, this could cause great damage for a buyer of an NFT who believes they have acquired the rights to use the artwork for almost any purpose.

4.5 Can you ever really own the Ape?

In conclusion, buyers of NFTs need to be careful. While it is likely that some rights to the underlying artwork come with the purchase of an NFT, the safest course of action is to agree in advance on the terms of the transaction. To make matters more complicated, however, international differences in copyright legislation may lead to unexpected results. In Sweden, the specification principle dictates that vague contracts be interpreted in favour of the author. Similarly, increased harmonisation within the EU has led to the establishment of an incontrovertible right to fair compensation, which can lead to the adjustment of copyright contracts.

Furthermore, in many countries, such as Sweden, *a priori* waivers of moral rights are legally null and void. Consequently, preformulated agreements such as the BAYC Terms and Conditions are not enough to assign the moral rights to the work to the buyer of the NFT. Assuming that the artist is aware of the agreement and that their intention was in

²¹⁸ In fact, the artist, who calls herself Seneca, claims to have had no idea of the NFT collection’s success for quite some time after she drew the Apes. Hissong, ‘The NFT Art World Wouldn’t Be the Same Without This Woman’s “Wide-Awake Hallucinations”’.

²¹⁹ See Temple, ‘Authors, Attribution, and Integrity: Examining Moral Rights in the United States’, p. 23-25.

²²⁰ See p. 45.

fact to assign all rights, the buyer might run little risk of legal consequences. But should the artist change their mind, they would be legally entitled to claim their moral rights. Depending on the actions already taken by the buyer, this might have dire economic consequences. In an individual case, the choice of applicable law will determine the success of the author's claims; in the US, the relatively under-developed moral rights system offers more leeway when it comes to artists' waiving of their rights. But in Europe, NFTs do not have the power to assign complete copyright to the underlying artwork to the buyer; even with an iron-clad licence agreement, some rights will remain with the author.

5 Concluding remarks

5.1 Code is Law vs. Copyright Law

Throughout this thesis, it has likely become apparent that there is friction in the contact between NFTs and copyright. Legal cases are starting to show that it is difficult to combat illegitimate uses in the NFT sphere; anonymity and the immutable nature of the blockchain are two challenges that the law is poorly equipped to handle.²²¹ But there is also an ideological resistance to copyright from the NFT community. While authors and lawyers seem content to distinguish between the NFT and the work it is based on, some buyers of NFTs hold on to the idea that the NFT is the ultimate bearer of rights.²²² By contrast, from a copyright contract perspective, an NFT only gives the buyer a very limited right to exploit the underlying work. One important problem appears to be that copyright law and the regulation of the blockchain depart from different principles.

A fundamental feature of the law is that it relies on central governance. In fact, all aspects of legal governance are centralised; in Sweden, for example, government authorities enact new laws,²²³ govern the country according to these laws,²²⁴ and resolve any conflicts that may arise among the people.²²⁵ Trust in these institutions is crucial for the law to work. Quite the reverse, DeFi technologies such as the blockchain are based on a decentralised ideology, according to which “collective decisions are made, conflicts are resolved and changes to protocols are implemented” without the influence of a central authority.²²⁶ In this decentralised structure, trust in institutions is replaced by trust in systems,²²⁷ more specifically, in cryptographically verifiable code.

Almost two decades ago, Lessig presented his revised theory on code as one of four regulators available to control human behaviour,²²⁸ social norms, the market, and the law

²²¹ Gangi, ‘Can Injunctions Be Enforced in the Case of NFTs? Do Not Take It for Granted...’; Lavinia Deborah Osbourne v (1) Persons Unknown (2) Ozone Networks Inc Trading as Opensea.

²²² An interesting illustration is this Twitter thread, first referenced in Guadamuz, ‘The Treachery of Images’, p. 1376, note 94, <https://twitter.com/spencecoin/status/1418457068986454018> (accessed 5 January 2022).

²²³ The Swedish Instrument of Government, RF, chapter 1 section 4.

²²⁴ RF, chapter 1 section 6.

²²⁵ RF, chapter 1 section 8.

²²⁶ World Economic Forum, ‘Decentralized Finance (DeFi) Policy-Maker Toolkit’, p. 8.

²²⁷ OECD, ‘Why Decentralised Finance (DeFi) Matters and the Policy Implications’, p. 16.

²²⁸ See Lessig, *Code*.

are the other three. One important difference between copyright and the blockchain is how they relate to these forms of regulation. The blockchain and smart contracts are regulated by code, whereas intellectual property protection is fundamentally based in law. Thus, ownership of NFTs follows the rule of code, while ownership of copyright follows the rule of law. On the protection of intellectual property in cyberspace, specifically, Lessig has the following to say:

The question that law should ask is, What means would bring about the most efficient set of protections for property interests in cyberspace? Two sorts of protections are possible. One is the traditional protection of law—the law defines a space where others should not enter and punishes people who enter nonetheless. The other protection is a fence, a technological device (a bit of code) that (among other things) blocks the unwanted from entering. In real space, of course, we have both—law, in the form of trespass law, and fences that supplement that law.²²⁹

In this choice between code and law, copyright law and NFTs take opposing views. For the question of who has copyright, code is meaningless. For the question of who owns an NFT, it is everything.²³⁰ In a way, Lessig predicted the rise of blockchain technology as a means of protecting copyright. In describing the role of “trusted systems”, where access to works is dependent on digital contracts,²³¹ he stated that code could replace the law as a regulator of copyright in cyberspace.²³² This is the DeFi Dream, and it may be a piece of the puzzle of protecting rights in this new environment.

There are those who disagree that there is a fundamental opposition between law and the blockchain. The argument has been made that the differences between the environments are exaggerated; copyright law has successfully dealt with the challenges of digital technology in the past, and there is no reason to believe it could not do so again.²³³ Although this is true, what separates the blockchain and NFTs from other digital phenomena is the decentralised ideology, which makes it particularly resistant to regulation. While not insurmountable, this is an obstacle that must be considered in future efforts to regulate the blockchain.

²²⁹ Lessig, p. 169.

²³⁰ As pointed out by Guadamuz, “Some crypto thought leaders adhere to a ‘code is law’ ideology.” Guadamuz, ‘Platform Is Law: The Cautionary Tale of Stolen NFTs’.

²³¹ Lessig, p. 176–80.

²³² Lessig, p. 179. It is worth noting, however, that the protected works would have to be stored on-chain to achieve the desired regulatory effect.

²³³ Ramos, ‘The Metaverse, NFTs and IP Rights: To Regulate or Not to Regulate?’.

5.2 Summary

The goal of this thesis has been to provide an inventory of issues relating to NFTs and copyright. In doing so, it has dealt with three themes: copyright protection, infringement, and agreements. A summary of the conclusions is offered here.

5.2.1 Are NFTs protected by copyright?

In Chapter 2, the nature of the relationship between the NFT and the underlying artwork was explored. While these two concepts are often confused, it is important to distinguish between them as they follow different sets of rules. While the NFT itself consists of computer code, the artwork connected to it is protected as an artistic work. The requirements for copyright protection according to Swedish and EU law were analysed in order to identify relevant criteria by which to evaluate works. These were then applied to NFTs, showing that many works of NFT art may struggle to meet the standards of artistic works. For some works, this is due to their simple nature: a creation needs to achieve a certain level of originality to qualify for copyright protection. In other cases, the use of computer programs in the creation of an artwork may exclude copyright protection, since the work is not the author's own intellectual creation.

5.2.2 NFTs and copyright infringement

Chapter 3 concerned the copyright implications of minting an NFT. Firstly, artists minting their works as NFTs need to consider any existing agreements, as well as the effects that creating NFTs may have on the value of their original. Secondly, a person who wishes to mint an NFT should make sure to obtain the author's consent, since any upload of a work to the internet constitutes a reproduction and is therefore illegal unless it has been authorised. Even if a work already exists online and can be made into an NFT by linking to it, it is important that the source is legal. The CJEU definition of communication to the public entails that a communication based on illegal sources constitutes an infringement. Consequently, sharing links to infringing material is illegal. Thirdly, NFT marketplaces have a responsibility to ensure that users do not commit infringements on their platforms. If they fail to take the necessary actions against such behaviour, they are considered to participate in any illegal acts of communication. Finally, when considering the effects of copyright sanctions, it is apparent that the copyright lawyer's standard toolbox is ill-suited to infringements in a blockchain context. In order to ensure a high level of protection for copyright, some other solution would have to be implemented.

5.2.3 Copyright agreements in the NFT sphere

Chapter 4 investigated the transfer of copyright to NFT art. Consent to certain uses of a work is implied when buying an NFT, because otherwise the purpose of the agreement would not be fulfilled. Nonetheless, the majority of rights stays with the artist unless there is a separate licence agreement. When drafting such an agreement, the parties should avoid any room for interpretation that might put either of them at a disadvantage. Standard licences included in user agreements may often not be specific enough for this purpose, and vague agreements will be interpreted in favour of the artist, exposing the buyer of an NFT to the risk of unknowingly committing acts of infringement. Even if there exists a carefully formulated agreement, certain rights cannot be transferred from the author. Moral rights are not harmonised in the EU, but there are cases where the CJEU appears to have taken similar considerations into account in its application of the three-step test according to InfoSoc Article 5.5. Furthermore, Swedish law does not allow general waivers of moral rights, which means that buyers of NFTs must keep these rights in mind when exploiting their NFT art.

5.3 Proposed perspectives

It is appropriate here to take a step back, and distance oneself from the frustration that trying to reconcile NFTs and copyright may have caused. Thinking about digital art NFTs as a cultural phenomenon, inspired by the boredom and escapism of the pandemic, may help; internet culture is often confusing and largely dependent on “hype”. This is also why the space has been so susceptible to manipulation. In December 2022, it was reported that investors were suing a number of celebrities for promoting BAYC, thus driving up prices and deceiving customers into paying inordinate amounts for the NFTs.²³⁴ But this is an issue for consumer law to deal with. Another, perhaps more constructive way to think about NFTs is as a form of modern patronage, an alternative to crowdfunding pages such as Patreon or Kickstarter.

It seems the promise of NFTs as a revolutionary new tool for authors in the digital world was not fulfilled. The crash of the NFT market has left many disappointed, and

²³⁴ Schneider, ‘Madonna, Justin Bieber among Celebrities Sued over Bored Ape Promotion of NFTs’, *Los Angeles Times*, 13 December 2022.

what was once hailed as the future of art is now regarded with a certain scepticism.²³⁵ But the technology has great potential, although perhaps not as an effective safeguard for copyright in the digital sphere. This thesis has presented the argument that this is due, at least in part, to the fundamental difference of ideologies between copyright law, on the one hand, and the world of decentralised finance where NFTs reside, on the other. Copyright is an institute created and protected by law in our real-space universe. By contrast, the Metaverse is governed by code and acknowledges no central government. It remains to be seen how the NFT market will develop, and how the law will deal with the challenges it presents.

Attention, lawyers: now entering Metaverse—proceed at your own risk!

²³⁵ Brooks, 'NFT Prices Slump as FTX's Collapse Shadows Digital Collectibles', *CBS News*, 18 November 2022; Hochwarter, 'Thousands of NFTs Bought By Art Lovers Now Virtually Worthless', *Newsweek*, 24 April 2022.

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