Copyright and Technology: 
Hearing the Dissonance 

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Abstract

This thesis concerns copyright and technology. It investigates their ever-growing dissonance, currently intensified by the processes of digitisation taking place in society at large. If there is a pressing need to reassess/modify copyright law against the backdrop of digital technology, the thesis argues that a prerequisite of this is that it divorces itself from the limitations in the existing copyright paradigm and, accordingly, recognise technology as a quality and condition for both its emergence and subsistence. In contrast to the prevailing tradition of viewing technology as an extrinsic condition affecting copyright, here its intrinsic quality is traced and emphasised. This is accomplished by means of circumventing copyright’s fundamental orienting principle of property and drawing instead on the notion of communication, which in turn enables us to recognise and reconstitute the ever-present intertwinement of copyright and technology. While communication as an approach is not foreign to the copyright discourse, it has rarely been deployed in investigating the relation between copyright and technology. The thesis advances from an understanding of communication focused on the end points and recognises the middle as a prerequisite and an essential element of communication. This shift in view does not only allow recognition of noise as an intrinsic feature of communication but also becomes a methodological tool through which the dissonance of copyright and technology can be ‘heard’ and comprehended. In doing so, the thesis draws on information theory, the work of the French philosopher Michel Serres, media and sound studies. By traversing different fields of study, in the end, the thesis immerses itself into a soundscape, and thus ‘aurality’ becomes a sensible manner for answering the guiding research question of what is the actual dissonance between copyright and technology. Ultimately, it argues that this manner of displacement provides new passages of investigation that go beyond the limitations of copyright’s normativity, and sets a conceptual basis for addressing the issues and re-articulating the relation between copyright and technology.
# TABLE OF CONTENTS

Abstract ii  
Table of Contents iii  
List of figures v  
Acknowledgments vi  
Declaration vii  
Pre-word viii  

**Introduction** 1  
Setting the tone 4  
Hearing the dissonance 10  
© 22  
Structure of the thesis 24  

I. MEAN(S) 26  
1. Intangibility 27  
   1.1. Histories of copyright 27  
   1.2. Justifications of copyright 35  
   1.3. Internal and external aspects 44  
   1.4. Intangibility in tangibility 49  
   1.5. Double intangibility 63  
   1.6. Intelligible intangibility 69  
2. Communication 73  
   2.1. Relations 73  
   2.2. Copyright in communication 77  
   2.3. Information theory 91  
   2.4. Information theory and copyright 98  
   2.5. Dissonance of copyright and technology 106
# II. MEDIUM

## 3. Copysite

- 3.1. Parasite
- 3.2. Copyright and parasites
- 3.3. Para-historicity of copyright
- 3.4. Parasites today
- 3.5. Copyright as parasite

## 4. Technosite

- 4.1. Copyright law and technology
- 4.2. Medium in the middle
- 4.3. Technology as noise
- 4.4. Noise and copyright

# III. MILIEU

## 5. © at Open Sea

- 5.1. Spatiality of copyright
- 5.2. Piracy and copyright
- 5.3. Pirates and parasites
- 5.4. © and the sea
- 5.5. Order and disorder

## 6. Soundscape of ©

- 6.1. Visuality of copyright
- 6.2. Copyright and modes of communication
- 6.3. Copyright in the network
- 6.4. Sounding double intangibility
- 6.5. Sounding relations
- 6.6. Spatiality and temporality
- 6.7. Senses of Law

# Conclusion

# Bibliography
List of figures

Chapter 2

Figure 1. Schematic diagram of a general communication system 92

Figure 2. Copyright (law) in the communication model 103
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This thesis is submitted to the Westminster Law School, University of Westminster, in partial fulfilment for the degree of Doctor of Philosophy. I declare that all the material contained in this thesis is my own work.

Date __________________________

Signed __________________________
Pre-word

How does one begin to enunciate a thesis? Or, in this case, how does one begin to read a thesis? Simply with a sound. Turning to this page has already made a sound. Before every uttered word obtains any meaning there is always a vocalised sound that precedes it. Before every written word obtains any meaning there is always a background noise that underpins it. This thesis, therefore, requires acknowledging the sound as an additional quality to the text, its representations and the signifiers it bears. In order to make any sense, the sound necessitates a sensory stimulation on both a conceptual and practical level — and while the former provokes theoretical comprehension, the latter allows better apprehension of the subject matter.
Introduction

From where does one start to debate about law? Exclusively, from the middle. Law, or *ius*, etymologically carries the notion of ‘that which is binding’, and shares the same root with *iungere*, that is ‘to join’. In general, law joins two extremes, positions, subjects by binding them together and regulating their relation. This arrangement between positions A and B is not necessarily an ordering established by law, but it is a condition according to which communication in its most general sense occurs and is comprehended by humans. Essentially, on the condition of having recognised end points as legal subjects, law validates itself in the *middle* where the relation between the end points takes place — thus this positioning is what essentially underpins law and sustains its immanence.

A closer look at copyright law and the manner in which it has been constructed reveals that it entirely functions and justifies itself, and therefore builds its normativity, on the basis of being a property right itself, which law defines as a *relation* between two subjects towards an object. Even a superficial overview of copyright law and its discourse will soon discern that it instils itself, and further justifies its property conceptualisation, on the end points of the communications which it regulates: on the one side, the author and/or owner, and on the other side, the public that enjoys, uses or consumes the work that is subjected to copyright protection and promotion. This not only frames copyright but also maintains the ongoing tension between dichotomous viewpoints manifested in copyright discourse, particularly as these are intensified by the proliferation of digital technology and the challenges it has introduced. Since copyright law is entrusted to maintain a balance, its dichotomous arrangement is difficult to detach from, making every alternative on the one side of the spectrum futile by its other end, always blinded by its mirroring reflection.

While there is substantial and ongoing scholarship of intellectual and sophisticated

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1 While very often the owners are the intermediaries (content industries) between the authors and the users, in this context their exclusive right to control the manner and the use of copyright works they own still puts them on one side/point of communication.
quality that advances copyright discourse, it remains in a condition of being unable to liberate itself from copyright’s legally constructed ends. That said, if one succeeded in any total emancipation from copyright’s ends, that would instantaneously become something other than copyright and any further engagement would be pointless. Nevertheless, amidst the great challenges posed by technological advancement, an attempt at bridging copyright’s binarism has taken sway in recent years by addressing communication and its features in the context of, and in relation to, copyright. An attempt has thus been made in recent work by Craig and Drassinower to incorporate communication within the copyright discourse and alternatively comprehend and articulate the principles and processes upon which its institution, both as a legal construct and a cultural artefact, can (or should) be ascertained.² By this means, the dynamic process of communication becomes not only effective in destabilising the status of the copyright’s ends (authors and users) but also in recognising new qualities of those relations (dialogues) of cultural interchange that copyright essentially deals with. Accordingly, this opens up a great potential for a transformation of the copyright debate, in so far as it introduces principles that must be acknowledged in addition to the dominating and expanding proprietary principles of copyright that take place with digitisation and information communication technology. In this sense, a communicative take on copyright provides a better conceptualisation of what is at stake in both digitisation and the possibilities for communication it has enabled.

Crucially, such demands for a ‘communicative copyright’ embrace the triad of communication, in recognising the medium (in their case a copyright work), as a third element, through which those two points connect.³ Since, technology is not the direct subject of their investigation, it is within this understanding of the medium that I propose to address the relation between copyright and technology. To put it differently, by focusing on re-modifying the relations in which copyright subsists, technology, as is the case for the most part in copyright discourse, is seen as an


³ While I favour and gravitate towards this way of thinking, I will argue that these appraisals remain embedded in the copyright apparatus they are trying to contest.
extrinsic condition, a means that is only subjected to communication of end points. For now, it should be borne in mind that the middle is not merely a technological means of communication. Its etymology indicates, it also bears the qualities of a medium and milieu that must be recognised when embarking on communication conceptualisations of copyright.\(^4\) It is from this that I seek to establish the meaning of technology in this thesis. Technology should be comprehended in its equivocal capacity of carrying all these three meanings – means, medium, and milieu – simultaneously.\(^5\) I contend here that definition, although a scientific prerequisite, tends to delimit and enclose a particular matter and restrain its potency. This unsteady positioning is thus specifically vital for comprehending the relationship between copyright and technology.\(^6\)

By contrast, then, to the binary perspective of copyright, and through employing an array of different methodological approaches to communication and its ineradicable elements, this thesis constructs a fresh investigative model for repositioning copyright itself and thereafter its relation to technology. In acknowledging the triad of elements that constitute communication, copyright (law) here takes the position on the channel of communication of being in the centre, in the *middle*. In that sense, this thesis attempts not to start with the end positions of A and B upon which copyright law constructs its edifice. Rather, it situates itself in a third position, that of a medium, in between, the position of C — or better, to employ copyright’s representation, ©. This actual positioning in the middle enables an alternative methodological recourse freed from the contrasting and constraining perspectives

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\(^4\) The words *means*, *medium* and *milieu* share the same etymological basis from Latin designating middle, intermediary, mean. Also, this can be traced in the Slavic languages. In Macedonian, for example: **сред** [sred] – in the middle, **средство** [sredstvo] – means, **средина** [sredina] – middle, milieu.


\(^6\) This approach draws on Michel Serres’s endeavour to liberate knowledge from the constraining and centralising formation. Definition for Serres is an analytical method that is inherent to knowledge creation as once it is performed it closes and delimits the matter of investigation. See, for example, Serres, M. ‘The Origin of Language: Biology, Information Theory & Thermodynamics’ in Serres, M. (1982) Harari, J.V. and Bell, D.F. (eds.) *Hermes: Literature, Science, Philosophy* Baltimore and London: The John Hopkins University Press; p.75. Also see, generally, Serres, M. (2000 [1991]) *The Troubadour of Knowledge* Ann Arbor: The University of Michigan Press.
that copyright discourse is bound to focus upon.\textsuperscript{7}

**Setting the tone**

Copyright law is one segment of the broader intellectual property law recognised as an instrument for promoting and protecting intellectual works of creation and knowledge. Nowadays, it is closely related to the knowledge economy, creative entertainment industries, popular culture and production of cultural works. Just as its name suggests, it designates a right to copy that in consequence bestows an owner with control over reproduction and distribution of the copyright works in his or her possession. Copyright is a legal category that deals with production and diffusion. With its origin at the turn of the eighteenth century, although constantly having the encouragement of creativity and knowledge as its higher goal, it remains a means to a specific end — to protect and provide an incentive for the rights-holders of ‘intellectual works’. This instrumentalist understanding has certainly grounded its rationale in the notion of property, and thus it remains an orienting principle according to which intellectual works are regulated and used.\textsuperscript{8}

In recent years, the social landscape has attained an additional layer actualised by the advancement of information technology, which is marked by the peculiar ‘materiality’ of the digital. The digital is now a substantially integrated feature of society’s multilayered topology. More specifically, as the digital has manifested its potential for introducing novel processes of formation, transformation, and circulation of ‘things’, it became a focus of attention by law in general and copyright law in particular. Concurrently to the acceleration of digitisation processes and the appearance of new forms of (re)production and distribution, the question of whether copyright law is capable of being applied to these novel technological expressions

\textsuperscript{7} Borghi also investigates the middle in order to bridge the ‘binary language of the dominating paradigm’ by identifying a ‘\textit{third and higher instance}’ — that of truth — as a fundamental feature that sustains relations within a community, and from there proposes a comprehension of copyright to be neither (just) about the author or (just) the public, but rather about author-public coalescence. Borghi, M. (2011) ‘Copyright and Truth’ \textit{Theoretical Inquiries in Law}, Vol.12, No.1, 1-27, p.3. and p.20 [Emphasis in original].

and circumstances has come to the forefront of debates. It has become a subject of significant concern, attracting attention from legal, social, cultural and economic discourses that are challenging and attempting to make a sense — from and within their landscapes of observation — of the institution of copyright.\(^9\)

The history (or histories) of copyright shows, however, that this tension between copyright and technology has always been inherently present, and moreover, has been one of the main reasons for the constant modifications/developments manifested in the body of copyright. While copyright has historically been a subject of intermittent adaptations and change, the technological advancements of digitisation, nevertheless, have unquestionably posed the most serious challenge to its institution. Recent technological developments and the Internet, in particular, have initiated a number of concerns related to the offline and online digital availability of copyright works, affecting not only the regulation and control of copyright works, but contesting most, if not all those principles upon which copyright on the whole ‘peacefully’ rests. Copyright law has thus been placed under continuous scrutiny, with its modes, approaches and established principles challenged by the question of how to deal with the impact of technological change. The notion of ‘digital impact’ challenged, in this way, the already contentious concepts of copyright justifications and property notions, thus requiring new approaches and modes of understanding that would differentiate and advance from copyright law’s traditional basic principles.\(^{10}\) Copyright has always dealt with its historical origin and situated itself along the technological advances penetrating the realm of creativity and knowledge, invention and protection. It is important to recognise that copyright law and discourse have, as such, never detached itself from the presence of technology. However, this does not imply that copyright law is not inclined to a positivistic approach in tackling technology. Even though copyright law is an outcome of justification constructions and is capable of reconstructing itself in line with concurrent social, political, cultural and technological circumstances, its

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9 ‘For the same object of enquiry can be read differently by different discursive practices (a landscape can be read/interpreted differently by geographers, sociologist, historians, artists, economists, etc.)’. Jenkins, K. (2003) *Re-thinking History* London and New York: Routledge; p.7.

holistic approach means that it still persistently views technology as an ‘external’ aspect of copyright’s concerns. Any interference imposed by this external entity is thus unavoidably an object of its apparatus.\textsuperscript{11} Technology is often given as a means through which we produce, reproduce and distribute, that is, what enables and affects the processes which copyright is itself set up to regulate. In that sense, as Gillespie argues, if ‘the implications of a technological system depend on how that system is defined’, ‘the choice of how to define it is itself political.’\textsuperscript{12} Although with the emergence of digitisation, the question of whether copyright’s regulation should be technologically specific or technologically neutral remains a subject of ongoing debate, this very position asserts an exogenous approach to technology, which is thus subjugated as an object of legal and political intervention.\textsuperscript{13}

In the digital realm, the possibilities of creation and knowledge diffusion have become an everyday praxis, signalling the presence of new technological possibilities for taking an active part in accessing and distributing the artefacts of our society and culture. These artefacts now often fall under the rubric of the knowledge economy and creative industries, while the potential of the digital realm also supplies a capitalist urge for growth by commodifying ‘intellectual’ objects. The instrument of copyright is not only deemed to serve this purpose, but it also consolidates its dominant role in promoting and protecting creativity and knowledge. It thus remains the legal edifice in, through, and by which communication of cultural works is permitted and performed.

However, against the backdrop of digitisation, it is widely argued that copyright is in a state of ‘legitimation crisis’, not fully capable of coming to grips with itself, in so far...
as it seeks to maintain an authoritarian position.\textsuperscript{14} While law provides legitimacy for the actions, it also requires legitimation for the actions it imposes.\textsuperscript{15} For this reason, it is often argued that copyright law fails to face, embrace, actualise and contextualise the technological development of cultural production, distribution and use, which are, at the same time, those fundamentals that copyright is set up to promote and protect. Accordingly, all the debates and policy decisions articulated around copyright and technology have tended to situate the issue in an ongoing loop, where opposing stances and their out-of-tune interpretations alienate us from the essential issue now imposed on copyright law of how to deal with technological development; or to put it more precisely in the spirit of this thesis — of how to deal with itself being adjacent to technology.

Digitisation has enabled instantaneous and far-reaching copying, reproduction and dissemination of copyrighted works. From this perspective, digitisation has directly affected copyright’s apparatus in dealing with its ‘self-assigned’ objectives of promoting and protecting creativity and knowledge. As a consequence, it induced the necessity for a reconsideration of already contentious traditional premises upon which copyright is based. This ‘necessity’ has generated diverse arguments about and manifold challenges to the notion of property as subjected to the author, or more precisely to the owner of a copyright work, and their subsequent access and use by the public. In addressing this necessity, one ongoing dispute concerns whether copyright law should adapt, modify to the technological changes, or whether it should announce its own ‘death’?\textsuperscript{16} As a result, there are generally two poles in tackling the conflict between copyright and technology, disguised under different

\begin{flushright}
\textsuperscript{15} Legitimacy is a justification by reference to some authority. Mansell notes: ‘What is relevant to us is to see the necessary connection between the legitimation and the way things are done, and to consider the role of law in justifying and reinforcing the official way of doing things’. See more Mansell, W. et al. (2004) A Critical Introduction to Law 3rd Ed. London: Cavendish; p.23 and pp.43-4.
\textsuperscript{16} Death is a deliberately employed term, not only because of copyright’s ‘existential crisis’ in a technological context, nor just because Barthes’s ‘Death of the Author’ has been already integrated within the discourse to refute the dominance of the author within copyright law. I also use it an ontological sense – as a condition of life itself. See, for instance, Depoorter, B. (2009) ‘Technology and Uncertainty: Shaping Effect on Copyright Law’ University of Pennsylvania Law Review, Vol.157, 1831-1868; p.1833.
\end{flushright}
theoretical positions and concerns that adhere to this division. There are those who argue for more rigid mechanisms to protect copyright principles, and those who embrace the new conditions of technology on which copyright could either terminate or adapt, acknowledging the benefits of this new ‘open’ information society. Even though this is a common division of perspectives, it nevertheless adds more weight to the subject matter’s complexity.

This thesis contends that both of these approaches revolve around the principles of property, creativity and knowledge, thus feeding each other through sustaining copyright’s inherent dichotomy between private and public, author and user. While copyright expansionism remains embedded in the author-centred copyright system, this subsequently becomes a counterpoint for the emergence of rubrics such as those of public domain, fair (dealing) use, and user’s rights, often viewed as the ultimate remaining means by which to counterpo(i)se the existing rigidness of copyright law and to reinstate the cultural significance and objective that copyright apparently ought to have in this digital age.\footnote{Halbert, for instance, argues that public domain remains if not the only instrument for resistance against the growing rigidness and containment of copyright law. Halbert, D.J. (2005) \textit{Resisting Intellectual Property} New York: Routledge; p.15; See, generally, Boyle, J. (2008) \textit{The Public Domain: Enclosing the Commons of the Mind} New Haven and London: Yale University Press.} What is more, this is the area where governmental power – replicated on an international level – is using legal mechanisms and instruments to implement a certain regulation and control that exacerbates further all the opposing, if not different, stances and debates with respect to the notion and institution of copyright today. For the reasons related to these oppositions that both copyright’s normativity and discourse are confined to, neither property nor public domain are taken as starting positions from which the relation between copyright and technology is discussed. Accordingly, the paved statutory legislation and innumerable case-law are not considered as a starting position for investigation, as they reassert and maintain the (op)positions that this thesis has set to avoid. In view of the fact that the impact of technology obliterates the boundaries of the legal systems, this in turn presents a single position in dealing with the issue reflected in national and supranational debates and treaties. For that reason, this study addresses western systems of copyright law under the rubric of its internationalisation, having almost if not identical concerns and actions often moving.
beyond their national territory or localisation.\textsuperscript{18} As such, it approaches copyright from a ‘legal-tradition indifferent’, by avoiding any of the characteristics specific to a legal tradition.\textsuperscript{19}

Nonetheless, while different justifications maintain their relevance within copyright discourse, all the same they are the foundation upon which the inability of comprehending new rationales bases. Furthermore, in these approaches the actual dissonance between copyright and technology is amplified within the same debate concerning whether copyright should change in accordance with technology, or whether technology should be tamed and/or internalised as a legal instrument to restrict the potentials the very same technology enables and provides. This is problematic for three simple reasons. First, they straightforwardly position copyright and technology as separate entities where technology is subjected to various legal and political instruments that bring about ‘solutions’ in terms of harmony or equilibrium. Second, by this separation they create a relationship of conflict and constant dissatisfaction among all the positions one holds within the copyright landscape.\textsuperscript{20} Third, it directs in a deterministic manner the focus on copyright law’s modification and alteration to meet the extrinsic conditions of technology, predominantly overlooking its intrinsic ‘technological’ edifice. With this preliminary attempt at providing three simple arguments, this study does not discard the complexity surrounding copyright and technology today. Moreover, similar to any other unit\textsuperscript{21} or category, copyright carries in itself its own justifications, theories and schools of thought that cannot be easily waived and dismantled. Therefore, in order to understand the complexity of the relationship between copyright and technology,

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\textsuperscript{18} Most recent example are the controversial international agreement \textit{Anti-Counterfeiting Trade Agreement} (ACTA), which had a purpose to establish stronger global principles for enforcement of intellectual property, and US’s proposed laws \textit{Stop The Piracy Act} (SOPA) and \textit{Protect IP Act} (PIPA) which could have had a direct and detrimental effect on regulating web piracy worldwide.


\textsuperscript{20} What I will further argue is that the visual perspective of copyright’s landscape, dominant for the Western thought, creates this kind of positions, whereas the ‘copyright soundscape’, although has a centre (middle point) where the sound is coming from, most of the positions are immersed and decentralised in it. Therefore, the concept of soundscape is proposed below to substitute the already-used conceptual framework of networks when addressing the relations within the copyright system.

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one aim of this research is to establish a different interdisciplinary approach to dealing with the matter, rather than simply immersing itself into the already established course of the discourse. This entails drawing upon copyright’s significant theoretical and practical applications and implications, whilst, in a modified descriptive manner, bringing into question the adequacy of established approaches to dealing with this subject matter.

Hearing the dissonance

For these reasons, and continuing from the overture made above, the communication is considered as a significant conceptual and contextual entry to comprehend the relation between copyright and technology. Communication addresses the process and its dynamic nature of connecting, creating, sharing, and bringing potentials between two ends. As such, the communicative aspect is particularly important as it vitalises and discerns the process prior to propertisation of things. It allows drawing attention to the action that both precedes and follows the actualisation of copyright. And most importantly, it provides a possibility to acknowledge the significance of technology in actualising that process. It is in the process of communication where copyright and technology coincide and where their dissonance arises.

What is communicated is the intangible, which is the principal and fundamental notion at stake that copyright has irreversibly been entrusted, from the outset, with a task to grasp, justify, regulate and simply make sense of something that has no physical substance apparent to the senses. However, under the auspices of law, it is fragmented and objectified, and its quality is reduced to an object subject to ownership. The object of copyright is the intangible, generally defined as intellectual and creative expression that becomes an object of property and its regulation between ends – hence copyright protects and regulates the intangible property. But the intangible, as it will be argued, carries within different manifestations relevant for the copyright and its normativity, such as property, creativity, knowledge, creation, or public good. Its abstractness, as such, designates diverse economic and
cultural values that are adopted by the binary perspective that property paradigm entails. For that reason, the articulation of the intangible through property prism reduces the intangible on a mere object of property.

While difficult to articulate, the intangible remains the main issue of protection and promotion for copyright, and it is that very peculiarity that has mainly been affected by digital technology. It has disturbed the manner in which it is communicated, thus not only challenging but also affording different qualities to the intangible. This thesis demonstrates and argues that the dissonance between copyright and technology is the ‘intangible’.

In order for the dissonance to be considered, the instilled binarism and the divisions that property entails are not sufficient to apprehend what really is at stake. The binarism locks the discourse, and it is itself a result of the property paradigm and its divisions, which restrict the intangible and obscure its dynamic process. The intangible is not a finite, fixed, static object but has a dynamic quality carrying a potential beyond that must be recognised. While its understanding as property is considered as a legal construction, and its understanding as creativity and knowledge as a rhetorical adaption, here, I depart from such notions and address the intangible as a quality prior to any property or qualifications it entails. However, this does not entail defining intangibility, but the methodological positioning in the middle allows for it to be manifested and articulated differently throughout the thesis.

Moreover, in view of the fact that property exerts two opposing positions, the manner in which technology is approached and investigated results from these positions. While the mainstream copyright discourse is engaged with the effect that technology has on the intangible, in this thesis it is recognising the middle as a main aspect that must be tackled for the purposes of understanding the dissonance, that is, the relation between copyright and technology. For that reason, by identifying intangibility as the dissonance between copyright and technology, it is in its tracing and investigation of the process that copyright and technology bring about, which unfolds and structures the thesis.
By dissociating copyright from the ends it gravitates to — the subjects (author, owner, user) — here it is primarily located in the middle, on the medium that makes relations possible, thus arguing its origination to be only a corollary of already established communication between agents. In fact, it is in the communication or interaction that copyright actualises itself and performs its assigned functions, and thus it is from there that its institution should be challenged and investigated. This displacement onto the communication, however, does not presume a focus on the object as copyright’s main subject matter of regulation. Instead, it addresses the middle where its object intertwined with technology is understood as a process, which carries within itself greater qualities than that of the fixation that property entails. With this gesture, the connotation of copyright as property right is put forward only as a subsequent construction of already established communication in which copyright and technology coalesced. Instead of arguing for copyright’s amelioration through the notions of property, creations and its responsibility for culture’s continuation, this approach goes beyond those ensuing discourses and focuses instead on communication and its intrinsic features. More importantly, by employing the concept of communication, I argue that the notion of ‘intangibility’, an essential subject matter of copyright’s regulation, can be better ‘grasped’ and comprehended. Moreover, this provides a possibility to address not only how technology affects, but also how it contextualises or, as I argue, ‘materialises’ the intangible by manifesting its potentials, fluidity and dynamism and, as such, offers a better understanding of it.

This repositioning enables the thesis critically to impugn the view of copyright as a holistic mechanism that grants, regulates, establishes and provides communication of works, and situates it on the channel against the milieu of technology, where the actual transmission of works occurs. In other words, the centrality of © is taken as a position from where its central authority is challenged. This in turn creates a passage to disengage from the legal rhetoric about creativity and knowledge when

22 In contrast to this spatial standpoint, situating in the middle also allows one to address copyright law’s temporality, conditioned by its own ‘romanticised’ historical genealogy and development. Law inherently joins or binds together different temporal points, always actualising itself in between the past where it took shape and the future where reshaping takes place.
dealing with the discord of copyright and technology. Most importantly, by taking a position in the middle, technology becomes a medium that manifests different qualities from those in place when observed from the ends. Thus, the recourse to the middle provides a possibility for technology to attain rather different attributes than being merely a medium or means that is used and/or abused by the activities and practices copyright has recognised for its end points — the subjects. By means of employing several meanings that the word ‘middle’ conveys — such as means, medium and milieu — it is argued that technology, by contrast to how it is usually conceived, is an intrinsic quality of copyright’s subsistence, and thus not a mere instrument that can be easily subjugated to the copyright apparatus.

Within this changed scenery of copyright’s subsistence where communication is the basis of investigation, noise is identified both in technical and conceptual terms, as an integral part of communication, and thus becomes both a subject matter and a method for this thesis. As such, it not only allows a better understanding of copyright and its relation to technology, but also, in view of its potency, leads the argument in different realms. If intangibility is identified as a dissonance, its grasping and contextualising does not remain on mere meanings and definitions that can serve the discourse, but require its comprehension from a new position, which communication and the concepts drawn from it provide. The following chapters firstly address the notion of intangibility in both copyright and the technological realms, as of central importance when analysing the conflicting state existing between copyright and technology. In order to ‘grasp’ intangibility, the text further has recourse to information theory, thus identifying copyright’s position on a communication model. This enables translating both copyright and technology in the processes of communication and thereby establishes a critical position from which to study their dissonance. Accordingly, ‘noise’ takes primacy not only as a concept through which the argument of the thesis develops, but also as a method to address the dissonance.

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of copyright and technology. The concept is further extended drawing on the work of the French philosopher Michel Serres on parasite/noise. Taking into consideration that his significant work has never been closely read in legal contexts, this thesis employs Serres's seminal text *The Parasite*, which becomes a basis for the arguments of Chapters 3, 4 and 5. By drawing on wide-ranging sources and theoretical angles, Serres intriguingly identifies the third, the parasite or noise always present in the middle, as an integral (and hence ineliminable) part of communication. The parasite, which bears a triple meaning and denotes noise (static), social parasite, and biological parasite, enables an investigation of the ‘parasitic’ social interaction of human relations, which is where copyright’s actualisation belongs. In short, what this conceptualisation in fact offers is a possibility for ‘auscultation’ of copyright’s application and its relation with that of technology. Moreover, it creates a framework through which to tackle centrality — the multi-layered composition of legal, political, cultural and economic undercurrents surrounding the issue of copyright (law) today. This can be articulated, I will argue, through different roles that both the parasite and noise perform.

Copyright as a property right could be said to intrinsically deals with parasites that constantly encroach upon the proprietary circumference of ©. In this manner, the concept of the parasite serves to address some of the perennial conditions to which copyright responds. By closely reading and explicating of the notion of parasite as Serres defines it, I argue that the emergence of copyright is an outcome of parasitic activities that eventually gave rise to it. More specifically, the parasite allows questioning the main principle of production upon which property subsists and

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25 Also see Paulson, R.W. (1988) *The Noise of Culture: Literary Texts in a World of Information* Ithaca: Cornell University Press; pp.67-8 ['we include whatever noise is actually present in the channel and thus inseparable from its function as a channel.'].

26 The term ‘auscultation’ means the action of listening with an instrument to sounds from the inner body as a part of diagnosis and treatment.


28 As it will be shown below, the parasite, or the noise, is a feature that is capable of metamorphosing, constantly changing positions and qualities, while however always carrying its own specificity. As Serres states ‘The noise is joker.’ Serres, M. (2007 [1980]) *The Parasite* Minneapolis and London: University of Minnesota; p.67.
acknowledges that reproduction is the initial activity that actualised copyright. In such a manner, this not only disrupts mainstream discussion, but also recognises the inherent parasitic quality of property formations, crucial for copyright’s dependence on property. Furthermore, by recognising the middle of communication as a site where copyright law both belongs and stems from, it may be considered as a parasite that attaches itself onto already established communication. The significance of this approach lies in that it recognises the parasite/noise to be both order and disorder of communication. In this sense, copyright attains a role of a parasite in the relation, which simultaneously connects and separates, creates and obstructs the communication between agents. This allows new reflections upon and scrutiny of the effects of copyright as a legal instrument and the manner in which its rules, procedures and rationales are constructed; but it also allows its consideration as a cultural phenomenon, especially due to its ubiquity and ‘popularity’ instigated by the current digital surrounding.29

This reading of the parasite/noise also discerns the adjacent qualities of the relation between copyright and technology, which is especially pertinent when studying current issues surrounding digitisation. More precisely, since copyright is situated on the channel of communication, technology attains the role of noise in the channel, and thus becomes a technosite, both enabling and interfering with the communication regulated by copyright.30 That is manifested in the interference generated in the context of peer-to-peer sharing networks, widespread reproduction and dissemination of copyrighted material, distortion of copyright’s fundamental principles and copyright’s inability to recognise and control new practices of social and cultural interaction. Nonetheless, the significance of this exposition can also be ascertained in that it recognises the positive features of noise, its potential for change, creation and communication – all those qualities that copyright (law) does

29 Bowrey provides an interesting cultural view on law as a tool for creating conditions of culture, such as intellectual property rights, or market regulation of commodities; as a cultural product which creates and recreates problems to be solved; and as a subject of popular culture, as people have become engaged into the debate about copyright, piracy, peer-to-peer networks and file sharing. Bowrey, K. (2005) Law and Internet Cultures Cambridge: Cambridge University Press; p.17, referring to Carol Weisbrod, in Sarat, A and Simon, J. ‘Cultural Analysis, Cultural Studies, and the Situation of Legal Scholarship’ in Sarat, A and Simon, J. (eds.) (2003) Cultural Analysis, Cultural Studies and the Law: Moving Beyond Legal Realism Durham: Duke University Press; p.9.
30 Technosite is a neologism of technology and parasite (noise).
enunciate, but which are inevitably incapable of ‘applying’ because of its inability to go beyond its own normativity. This perfectly illustrates the present wider dissonance of copyright and technology. On the one hand, technology is viewed as an interferer with the traditionally established communication of copyrighted works, a disturbance of the proprietary principles, which calls for the entertainment industries, lobbying groups and policy applications to inflexibly treat this technological noisy specificity.31 On the other hand, this very specificity is recognised as a condition that brings forth the potential for communication and enables a flow of information, that is, what falls under a general idea of culture.32

In line with the aim of this thesis to set an investigation that challenges and moves beyond the pre-given positions with which the discourse is embroiled, the interchangeable notion of the parasite/noise further enables tackling the piracy/parasites as the one of the most raucous and pronounced manifestations of the dissonance between copyright and technology. Building further on the notion of parasitism, the piracy is considered as an inherent quality to the emergence of copyright and its relation to technology, and gives a commentary on the parasitic tactics that challenge the normativity of law and its strategies. However, most importantly, piracy is not considered here as a denomination or activity that is subject of moral and legal denotations that would serve the arguments of the established binarism. Rather, as a quality that invites copyright and its discourse to spatially displace themselves into new territory – from land to sea – and destabilise the conceptual and territorial structure of copyright and thus immerse in the noisy technological sea. It is not only that the deployed concept and methodological tool of the parasite/noise confronts or recognises copyright’s continuous entanglement with the nausea, but the fluidity of the sea better encapsulates the process and dynamism of the essence that intangibility carries within, beyond its propertisation and articulation as a carrier of creativity and knowledge. Yet again, by associating technology with noise, the thesis argues that technology has not only disturbed the

32 Culture, nevertheless, is not a static notion and the conditions under which culture manifests itself are subject to change.
principles but also challenges the perceptions by introducing a space that demands a conceptual rethinking and challenges copyright’s rigidity. However, the sea is not considered as new space, such as cyberspace, but as an act of displacement where its contingent and disordering nature is the order in which copyright has been always afloat, and thus must be acknowledged if it is to maintain its purpose.

Apart from being approached as a technical and theoretical notion, noise’s acoustic quality is further extended in apprehending its sonic ‘materiality’ as it has been analysed by a growing body of scholarly work from a range of different disciplines engaged with sound and interested in the properties it conveys. The act of associating technology with noise, and ascribing it with sound qualities, provides yet another possibility for displacement into a new sensory domain in which the discord of copyright and technology can be heard. In this context, the ‘acoustic space’ brought about by technological developments connotes an immersion into a resonating soundscape of both copyright and technology as a new theoretical conceptualisation of the current contingency and fluctuations surrounding them.33

More to the point, this seeks to propose a new theoretical re(a)sonance, different to the more familiar concept/representation of networks, through which to address current digitisation practices and interconnections in the copyright’s realm of cultural production and dissemination.34 In this sense the changing role of noise becomes not only a concept through which multi-layered processes can be addressed, but also a methodological tool through which various presuppositions with respect to copyright and technology may be revealed.

How does sound interrelate with the subject matter of this thesis? In short, by investigating the ever-growing dissonance between copyright and technology. The answer, however, does not only reside in the interplay of employed terminology, but resonates far deeper into both the subject matter and methodology of investigation. Prior to expanding on the matter further below, I want to argue that the features of sound are appropriate and promising for several reasons. Firstly, on account of the

33 ‘Visual space is structured as static, abstract figure minus a ground; acoustic space is a flux in which figure and ground rub against and transform each other.’ In McLuhan, M. and McLuhan, E. (2007) Laws of New Media: The New Science Toronto: University of Toronto Press; p.33.
fact that copyright’s focal matter is that of intangibility, it does not require much to correlate its elusive character with that of a sound, and thus to discern another quality through which the legal quandary of copyright’s intangibility can be discussed. Secondly, in its broadest sense, and as argued below, technology has somehow attained an attribute of noise permanently interfering and interrupting the standardised communication established by the apparatus of copyright. The capacity to do so lies not only in the reverberating quality of noise, but also in that it is an intrinsic and equivocal feature of all communication, with which copyright law must essentially deal with. Moreover, as argued below, it is what engenders and makes copyright possible in the first place. Furthermore, drawing on the sound and media studies, the way in which digital technology operates informs the mobility and the dynamism of sound, which as a medium also serves to contextualise and give quality to the invisibility and elusiveness of technology. Sound allows for apprehending the intangible as a process that cannot be confined, but constantly dispersed. Sound is not a static object but is something that is dynamic, in constant flux, which the very intangible sets forth, especially by being inherently attached to a medium of technology, now predominantly becoming digital. By arguing how the intangible is being intertwined with technology, the sound conceptualisation puts forward a thesis that, while technology provides a means for such dynamic quality of the intangible, it also ‘materialises’ it and actualises its quality far beyond its objectification or reductive rhetorical notions of creativity and knowledge, and manifests its quality as a process, action, and communication. Thirdly, copyright’s background and development, or rather its ‘disposition of senses’,35 shows how copyright’s conceptualisation and comprehension, essentially a western creation, has been informed by a primarily visual or ocularcentric apprehension of the world. Copyright’s dependence on the visual is traced through the fact that it is based on property conceptualisation, and its relation to modes of communication as argued by media scholarship. Drawing on the previous point, that the intangible becomes entwined with the digital, therefore, this indicates the need for a novel

35 This should not be confused with Rancière’s ‘distribution of the sensible’ (le partage du sensible) by which laws (understood as social orders which Rancière calls ‘police orders’) are conditioning and governing what can be seen, heard, but also thought, made or done. The ‘disposition of the senses’ here connotes copyright’s inherent arrangement of senses. Rancière, J. (2006) The Politics of Aesthetic London: Continuum; pp.12-3.
understanding of the issue at stake, requiring that copyright in this instance, at least temporarily, closes its eyes and opens its ears. Fourthly, the continuous necessity and call for a change of perspective, especially with the advent of information technology, requires a substantial perspectival shift away from that of copyright’s existing landscape and its method of investigation. Digitisation introduces a sensory shift that requires aural capacities for it to be apprehended, challenging copyright law. The notion of sound, as such, introduces the soundscape as a conceptualisation and contextualisation where the dissonance can be closely ‘heard’. Following the thesis’s position that there is a necessity for a displacement of the discourse, soundscape becomes a realm that envelops copyright and technology, a realm in constant formation created by the noise, an effect of the reverberating dissonance, a space of interference of copyright and technology. Importantly, the dispersion of the soundscape allows avoiding the instilled distinctions between inner and outer space, private and public, closed and open and passes through the walls erected by copyright, and makes it cognizant of its sounding milieu. Accordingly, soundscape avoids the normative constructions on divisions and perspectives, where a discussion on copyright, and therefore its relation to technology, both instigates and ceases, and as such induces new comprehension of the subjectivities, interrelations, localisation and proximity, and spatio-temporal features of copyright highly disrupted by the occurrences of digital technology. Soundscape substantiates the context and localisation as significant features that must be taken into account when dealing with the relation of copyright and technology. Analogous to the quality of noise, therefore, sound’s potential remains in the background and pervades the whole thesis, making it possible to address different pitches of the actual dissonance between copyright and technology.

Finally, witnessing the ever-growing dissonance both surrounding the relations internal to the apparatus of copyright and existing between copyright and technology, in addition to the emanating cacophony of different positions and perceptions in that regard, entails an active engagement with the notion of noise as an important feature which permeates copyright’s discourse and signifies the state of noisiness taking place today. Although this ‘noisiness’ has been an integral part of copyright since its very creation, it could be moderately claimed that the current
process of digitisation has instigated or at least enabled us to become aware of such ‘auditory quality’, by becoming an interfering noise within the communication devised by copyright’s apparatus. Taking into consideration that copyright today has become a subject matter of our everydayness, a cultural phenomenon with ever increasing ‘popularity’, the ever-growing concerns sounded off/out in the policies, debates, and studies significantly add to this ‘noise’. Moreover, these concerns have deeply penetrated the social fabric where political, economic, cultural and legal processes interrelate, making it difficult to critique, analyse and study. There is a dissonance that can be heard coming from various positions associated with this issue — hence this discord is the innermost subject matter that this thesis has sought to listen to. The repeated assertion that copyright is not fit for the present technological age and therefore must adapt and ensure its pertinence has become an argumentum ad nauseum. As such, while this study is not deprived of its own ‘noisiness’, it tries to directly address and use the noisiness of the copyright landscape, or more precisely ‘copyright soundscape’. In this fashion, it outlines a different passage and employs fresh methodological means to comprehend intangibility as a matter of an ongoing discord between copyright law and technology, but also to grasp the intangibility of the subject matter itself.

That way, the thesis accomplishes a full circle from where it begins, thus providing a theoretical articulation associating intangibility and sound, and through this proposing a new sensory approach to dealing with the issue of copyright and technology. It is important to stress here that this full circle is only a gesture of structuring the thesis than an argument for a full circle where the two contested ends would meet. It rather refers to the copyright’s circumference, using its representation to circumscribe/enclose the seemingly disparate elements of the thesis.

In the middle of the various opposed stances where ‘copyright wars’ emerge, this

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thesis aims to re-constitute the dissonance of copyright and technology by identifying not their incompatibilities but those compatibilities that make interaction possible.37 This argument provides a possibility to reveal the intrinsic ‘technological’ edifice of copyright, from which a new understanding of their relationship, but also their effect on the agents may be discerned. This provides a ‘passage’ for discussing copyright and technology not from the ends but from the middle where in fact their relation actualises itself. Accordingly, the rearticulating of the relationship between copyright and technology in the thesis is conducted by discerning the middle, and tracing its different manifestations – noise, parasite, process – as a third element that affords a possibility to go beyond the divisions of copyright and provide an understanding of technology as an intrinsic feature. Such an approach, I argue, leads the discourse into a new terrain of investigation. Nevertheless, such a positioning does not presume a non-position, as being in the middle is already a position. However, while this positioning deflects the ongoing (op)positions, its purpose is not held to establish a third, better way of dealing with the discord. Nor it has a political agenda to afford meanings and control the discourse, but recognises its existence and thus affords displacement of the investigation of the relation between copyright and technology. More to the point, its purpose is not to have the two ends meet in order to perform yet another synthetic meaning, but is only envisioned as a realm that invites investigation in the middle that makes the two ends connect. In that context, the argument is developed not by directly constructing knowledge, but by indirectly dissolving the knowledge – copyright as a legal category, instrument, apparatus, established solidly, requires displacement of the place from where it is observed and where the findings are obtained.

What is central to the thesis is to identify an approach for investigating the multi-layered intersections between copyright and technology, but also the multiple narratives and perspectives surrounding them. This way, it endeavours to reach and thereby extricate the significance of both copyright and technology as assembling ‘material’ agents of cultural production and dissemination. Accordingly, this elucidation generates a prospect for addressing and compressing the discord of

copyright and technology. It is in the middle and from the middle that copyright should be investigated. Hence, what is central for the thesis is the middle.

In the end, there is a necessity to make a distinction between hearing and listening. Roland Barthes, for example, makes a distinction between hearing as a ‘physiological phenomenon’ and listening as a ‘psychological act.’ In that sense, hearing is often associated with perceiving sounds without any intention of meaning making, whereas listening, or ‘intentional hearing’ requires an active engagement for making sense. Jan-Luc Nancy, considers hearing (stating that entendre – ‘to hear’ also means comprendre – ‘to understand’) as an act that is engaged in understanding any sound, that provides a ‘rough outline of a situation, a context if not a text.’ As such, hearing is ‘to understand the sense’ whereas listening is an act that is engaged with the resonance of the sound that leads to ‘a possible meaning, and consequently one that is not immediately accessible.’ Listening is considered as a ‘communicative and participatory act’ which is always dialogical, in contrast to hearing as being a monological act. In that regard, the act of hearing the dissonance of and between copyright and technology it is not engaged with any particular meaning that such discord emanates. It is a monological act, a methodological tool to hear and understand the dissonance between those two. Even though a hearing implies a legal procedure where legal issues and evidences are tried and presented before a judge, the act of hearing deployed here is not intended to be conclusive.

©

© is a symbol of representation. Introduced in the US as one of the requirements for registering and publishing copyrighted works, it has become a widespread symbol, a signifier of law's presence that indicates rights on the part of the author/owner and

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implies duties for the public in using and accessing a particular work. © is a sign that represents an object, in this case a copyright. However, while the object is a subject matter of the sign, for their actualisation to take place there is a necessity for a third feature, that is, what Peirce, in his theory of signs, calls an interpretant, which is needed in order for the sign to signify. In this manner, the interpretant is 'central to the content of the sign, in that, the meaning of a sign is manifest in the interpretation that it generates in sign users.' While the interpretation is limited to what copyright actually signifies, I argue that the symbol is related to the manifold explicit and implicit meanings that it carries within or performs as a legal system. For these reasons, it allows for the addition of new interpretations of the object represented by © that are associated with copyright not only in explicating better what it stands for, but in attempting to decipher new potentials that the symbol © awaits to signify. In this sense, representation is an intrinsic feature of copyright. This visual dependency is perceivable not only in its fundamental conceptualisation of a property, but also in the requirement for the work to be expressed, fixed in a tangible object that is visible, in order for copyright to subsist. As an ocularcentric approach has been deeply embedded within the western comprehension of the world, copyright and its construction are not an exception. Although, as argued below, copyright’s dependency on the visual is one of the reasons for its discord with technology, the fact that copyright law is one of the few laws that has a privilege of being visually represented requires an acknowledgment and is certainly apposite as regards the concerns of this thesis. Akin to the noise as an interferer of communication, these segments of re-interpreting the copyright symbol intermittently appear throughout the thesis, both in their own right and as an argumentative support for the chapters in which they appear.

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Structure of the thesis

Having the middle as a position and attention of investigation, I use the terms means, medium and milieu and their meanings for structuring the thesis.

The first section Mean(s) is constituted of two words and the chapters therein are enacting and performing the two meanings they entail. The section, therefore, challenges the dichotomous system of copyright, which I argue is limiting for comprehending technology and establishes the mode in which this is achievable.

Chapter 1 (Intangibility) identifies ‘intangibility’ not only as an essential trait of copyright, its history, and justifications, but also as a main subject matter of the conundrum between copyright and technology. It suggests that historical perspectives of copyright, the justifications and the notion of property are not sufficient to discern and recognise the dissonant relation between copyright and technology. It further proceeds to consider the elusiveness of ‘intangible property’ and how digital technology affects it, but also argues how technology provides a potential for copyright to fully comprehend the intangible, which is further elaborated in the final chapter. Chapter 2 (Communication) draws on communication and investigates the ‘communicative features’ of copyright. It considers the emergent scholarship that critically challenges copyright through communication, and argues why such an approach is not helpful to comprehend the relation between technology and copyright. The information theory is therefore introduced as a model that helps to articulate an ‘engineering’ model of communication, liberated from any notions of creativity and knowledge that are associated with the copyright paradigm. The communication model of the theory enables to both articulate and visualise the relationship between copyright and technology in the middle, in the channels of communication, where both of them meet. Moreover, recognising noise as an intrinsic element of communication in this chapter reveals the disturbing and interfering characteristics of technology. As such, it opens a methodological passage through which the investigation further proceeds.

43 A mean is ‘a quality, condition, or way of doing something that is in the middle of two extremes’, a middle way. A means is ‘an action, an object or a system by which a result is achieved’, ‘a way of doing something’. Oxford Learner’s Dictionary [online] http://www.oxfordlearnersdictionaries.com/ (Accessed 21 May 2014).
The *Medium* section also encompasses two chapters that reflect its meaning. ‘Copysite’ and ‘Technosite’ draw on the seminal work *The Parasite* by Michel Serres and his distinctive explication of the term parasite (noise). By associating copyright and technology with that of the parasite, in a descriptive manner, it addresses different aspects of copyright itself and its relation to technology. More specifically, the Chapter 3 (Copysite) considers the inherent parasitic relations that not only gave rise to copyright, but also justify its subsistence. The notion of parasite is further applied to explicate a para-historical view of copyright, but also to articulate copyright as a parasitic entity in itself. Following the demonstration of technology being a noise of the communication, covered in the ‘Communication’, through Serres’s reading of the parasite, I extend that in the context of digital technology and copyright’s reactions to it. The Chapter 4 (Technosite) begins by considering the debates about the relation between law and technology, and argues against the extraneous view on technology predominant in the copyright debates. It further identifies different aspects of the technological ‘noise’ and challenges it poses on copyright. In addition, it gives an overview of the responses to these challenges, and demonstrates how different legislative, juridical strategies, and content industry’s tactics manifest ‘noise’ qualities themselves.

Led primarily by the object of observation, that is noise, the third section *Milieu*, displaces the whole debate into new realms, as the titles themselves suggest – ‘© at Open Sea’ and ‘Soundscape of ©’. The former, Chapter 5, tries to explicate and demonstrate the necessity for copyright to displace itself from its territorial grounding in order to understand the processes and the nature of technology. In this chapter the parasite is considered as analogous to the pirates and identifies their intrinsic nature to copyright. Moreover, this chapter argues that copyright must recognise the disordering nature of technology if it is to sustain the aims it sets to achieve. Finally, Chapter 6 (Soundscape of ©), recognises technology’s sonic quality. Arguing that copyright is a visually dependant category it therefore challenges copyright apparatus’s privilege of the visual, and proposes that copyright ought to open its auditory sense in order to better apprehend technology and, most importantly, the elusiveness of its subject matter – that of intangibility.
I. MEAN(S)
1. Intangibility

What is the actual dissonance between copyright and technology? In order to answer this question, this chapter begins by addressing and questioning copyright’s history and justifications. It further considers the internal and external aspect of copyright in order to initially articulate its relationship with technology. The argument continues by contending that intangibility is the principal and fundamental notion at stake in copyright, and that copyright has irreversibly been entrusted, from the outset, with a task to grasp, justify, regulate or simply make sense of it. The notion of ‘intangibility’ is directly related to the ‘intangible property’ that copyright protects and promotes. Its peculiar ‘materiality’ was not only the reason why different copyright justifications had to emerge and make it intelligible, but also it is a thread which perpetually binds and divides the discourse of copyright in various ways. Regardless of the aspect of copyright that is addressed, intangibility surfaces either as a cause or an aim that should be protected and promoted. Its manifestations include property, creativity, knowledge, creation, use, production, enjoyment, or public good, to name but a few. The intention of this chapter is to consider how digital technology, besides significantly disturbing intangibility, provides a significant potential for copyright to comprehend such elusive intangibility in full. In parallel, by identifying the dichotomous nature of copyright, this chapter establishes the mode of investigation for answering the main question of this thesis.

1.1. Histories of copyright

Any attempt to engage with copyright ineluctably demands reflection on its history. This consists not only in tracing the origin of what is an artificially constructed concept of copyright, but also of history being a background against which its current function is justified and/or challenged. Understanding copyright’s history allows us to comprehend the stages of its development that resulted in it attaining the function of a protector and promoter of creativity and knowledge, validated and then
executed on the basis of a property right principle. It also allows us to witness the inherited contrasting end-positions on which copyright’s subsistence depends, further underlined with the current destabilising processes initiated by the advancement of digital technology. Accordingly, copyright’s historicity often becomes a source for different agendas to bring forth and present an intelligible perception of copyright today.

In 1966 Benjamin Kaplan performed an unhurried view of copyright to demonstrate its contingent historical emergence, and to address its subject matter and formalities.¹ Soon after, Patterson introduced and acknowledged the importance of putting copyright in a historical perspective in so far as this ‘may reveal aspects of law which logical analysis does not bring into focus.’² From this perspective, he argued that ‘[o]ur ideas of copyright are a heritage of history’ and thus asserted that becoming familiar with these ideas not only brings confidence in establishing a sound understanding but also enriches the investigation of its subject matter.³ Copyright law should therefore be perceived as part of the heritage of western thought that has evolved alongside political and societal conditions and disruptions, strongly imbedded in the various justifications that support its subsistence. This development of copyright principles, notions and approaches, depending on the (geo)political and legal systems in which they are elaborated, has been applied and interpreted differently, thus presenting different rationales to its purpose, embedded genuinely in the philosophical traditions from which the two main copyright legal systems – that is, the Anglo-Saxon approach to law as copyright and continental approach to law as author’s rights – came into existence.

Taking into consideration the current technological challenges posed to copyright, an ongoing reflection on its history appears in the discourse which critically engages

¹ Kaplan’s unhurried view of copyright is a compilation of three lectures held at Columbia University in 1966, which begins by stating: ‘As a veteran listener at many lectures by copyright specialists over the past decade, I know it is almost obligatory to begin by invoking the “communications revolution” of our time, then to pronounce upon the inadequacies of the present copyright act, and finally to encourage all hands to cooperate in getting a Revision Bill passed.’ Kaplan, B. (1967) An Unhurried View of Copyright New York and London: Columbia University Press; p.1 [Emphasis added].
² Patterson, L.R. (1968) Copyright in Historical Perspective Nashville: Vanderbilt University Press; p.v.
³ Ibid, p.222.
with copyright’s traditional settings, the appropriateness of its notions, and especially the application of its property principle. The new potential for instantaneous copy-making, intensified by the technological capacity of dissemination, manifested by the Internet, became a significant impediment for copyright that requires constant return to the past in order to bring forth a better understanding of the present. In that regard, Patterson argued that a historical view removes impediments ‘which may be present when analysis occurs in a wholly contemporary context’, and provides a possibility for tracing their origin and development in order to compare them with the ideas and conceptualisations of today’s modern copyright law.

However, the impediments could not be easily removed since they are embedded in the tradition of the subject matter itself. Sherman and Bently, for instance, suggest that no matter how radical and attractive new approaches to digitised property may be, still the concepts and the language used within the discourse ‘remain indebted to the tradition from which they are trying to escape’. In reverse fashion, when considered from the perspective of, for example, Foucault’s historical analysis which rejects any continuous extension of the past into the present, it seems that the strangeness of the past manifests itself in the strangeness of the present. In this way, while analysis of the past undoubtedly sheds light on the present, the historical conditions of copyright differ significantly to those of today. As such, reflecting contemporary forms back into the past cannot be straightforward.

In comparison to other legal disciplines, technology and its advancements are widely

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4 ‘One of the benefits of looking at the way that copyright law responded to technological change in the past is that it enables us to assess some of the claims made about how different things are today.’ Sherman, B. and Wiseman, L. ‘Copyright: When Old Technologies Were New’ in Sherman, B. and Wiseman, L. (eds.) (2012) Copyright and the Challenge of the New Alphen aan den Rijn: Kluwer Law International; p.6. (For studies on how different technologies affected copyright law see generally the chapters in the same book by Sherman and Wiseman).

5 Patterson, L.R. (1968) Copyright in Historical Perspective Nashville: Vanderbilt University Press; p.223; May and Sell take similar approach, as for them history matters not only in viewing the history(ies) of the institution of intellectual property, but also to better understand the current political conflicts over intellectual property. May, C. and Sell, S.K. (2006) Intellectual Property Rights: A Critical History Boulder and London: Lynne Rienner Publishers; p.204.


recognised as central to the historical tracing of copyright, especially with regard to the invention of the printing machine as a technological condition upon which first the form of privileges and then copyright controlled the production and dissemination of books.\textsuperscript{8} Goldstein notes that '[c]opyright was technology's child from the start\textsuperscript{9} and, as such, argues it is worth considering the effect that technological development had on copyright historically. In this regard, Grosheide asserts, too, that without the printing-press 'the advent of copyright would have been unlikely'.\textsuperscript{10} Copyright is a product of a technological condition, which reified its subject matter of operation. However, Grosheide has rightly argued against the common perception that 'the origin of copyright is not be found [only] in the invention of the printing-press'.\textsuperscript{11} More specifically, copyright should be considered as a product of 'particular constellations of social and paradigmatic conditions', in which developments in technology and the ideologies of Enlightenment, individualistic philosophies of freedom, ideas of genius and originality were significant.\textsuperscript{12} However, despite this recognition technology continues to be seen as the key factor and therefore a condition for changes in copyright. Hence, in light of the current technological challenges, there is a reiterated declaration that copyright must change, adapt or modify in response to this, hence reducing it to a mere reactive feature of exogenous technology.\textsuperscript{13}

While different insights into copyright are of great value to writings of its histories, they presume some kind of singular perspective upon it. Viewing history as a background that illuminates the current condition of copyright is limiting since it entails a perspectival view on copyright and presupposes a particular position to its


\textsuperscript{11} Ibid.

\textsuperscript{12} Ibid, pp.205-6.

\textsuperscript{13} I deploy the notions of reactivity and exogenous view of technology from Bracha. The issue of reactivity and therefore viewing technology as an exogenous to law will be discussed in the chapter ‘Technosite’ as this is one of the underlying positions that this thesis has set to oppose. See, Bracha, O. (2013) ‘Copyright History as History of Technology’ W.I.P.O. Journal, Vol. 5(1), 45-53.
subsistence. However, while a perspective may limit to one position, there are diverse perspectival gazes to its elusive history – parallax.\textsuperscript{14} For that reason, copyright does not have a single history. In being conditioned by different political, economic, cultural, philosophical and technological processes, in fact, copyright has multiple histories. May and Sell have therefore appropriately argued for a critical history divorced from various prevalent accounts of intellectual property rights that present them as universal and natural rights, emphasising that ‘IPRs have always been historically and politically contingent’, an outcome of a century long violent and politicised struggle over the intellectual property rights.\textsuperscript{15} Moreover, copyright’s origins are not merely historically contingent, and thus its emergence needs to be viewed from a number of different perspectives.\textsuperscript{16} Therefore, for the purposes of avoiding a presentation of copyright’s ‘law as something different, something disconnected and special’,\textsuperscript{17} Bowrey has rightly emphasised the necessity for an interdisciplinary approach to writing copyright’s history that requires a view beyond the boundaries of the discipline.\textsuperscript{18} In that sense, against the universality of copyright, its history needs to be understood as a realm of constant interference, almost a body of ‘historical inventions’\textsuperscript{19} always established from a point of historical distance.

Accordingly, Drahos argued that history plays an important role in any critical

\textsuperscript{14} Zizek, for instance, defines parallax as ‘the apparent displacement of on object (the shift of its position against a background), caused by a change in observational position [of the subject] that provides a new line of sight.’ For this reason, Zizek argues that ‘an “epistemological” shift in the subject’s point of view always reflects an “ontological” shift in the object itself.’ Zizek, S. (2006) The Parallax View Cambridge and London: The MIT Press; p.17.


evaluation of intellectual property rights, especially as history as such ‘is one distinctive kind of story-telling and intellectual property is an area in need of many more critical historical stories’.²₀ Along the same lines Sherman and Bently, particularly in the context of the challenges posed by digital technology, comment:

[I]f the law is to achieve what we demand of it, it is not only necessary to recognise the influence that narratives have upon law, it is also important that we set about inventing new narratives. As intellectual property grapples with the issues that flow from its attempts to regulate digital technology... these needs are as urgent and pressing as they ever were.²¹

Nevertheless, a historical tracing might often risk viewing history only ‘as the study of the forces that have shaped law’; it therefore must not be overlooked that law is not only an external outcome of historical change, but has an active role in the writing of it.²² While it is valid to affirm that copyright’s history does acknowledge law's presence in its actualisation, the history remains a referential background and, unavoidably, becomes a construction upon which copyright law further authorises, instils and justifies itself.²³ In this line, Deazley attempts to rethink copyright by acknowledging the fact that the authoritative and objective commentaries upon copyright are polemical as they not only do more than record and comment but ‘they seek to determine the conceptual parameters within which copyright is to be understood.’²⁴ Copyright is irreversibly tied to history and thus Johns rightfully notes that ‘[w]henever we look at intellectual property, then, we are always perforce historians; but we might be well advised to reconsider what kind of historians we really ought to be.’²⁵

In light of the above, while there is no intention to discard the validity and

²³ Sarat and Kearns aptly remind us to question whether history constrains law or its presence offers possibilities for further improvisation and interpretation. Ibid, p.2.
significance of historical perspectives and studies — especially when taking into account the variety of methodological and conceptual tracings of copyright’s origination and development — this research takes a different route and therefore attempts to disengage from conceptual parameters maintained throughout copyright’s existence. While acknowledging the historical conditions in which copyright originated and developed, it provides a different conceptualisation of its subsistence. This is accomplished by taking communication as a relation that precedes any proprietary formation of copyright and by holding this to be the main domain through which to investigate and comprehend the relation (convergence) between copyright and technology. In that manner, it allows us to approach the subject matter without necessarily taking on board the contentious historical and legal conceptualisations of copyright, and furthermore, it provides a possibility to go outside the historical perspective on copyright — that is, the deeply entrenched notions with and upon which copyright effectuates its authority. In other words, it puts forward a ‘para-historical condition’ upon which copyright emerged and in relation to which its relation with technology is investigated.26 As such, while the argument develops on the basis of copyright’s historical studies, it does not rest solely on developed narratives and historical categorisations of what copyright stands for, but rather looks into the para-historical features that precede or run in parallel to its history. Importantly, this mode of investigation supports the already established historical stories and justifications, but also introduces an ontological relation/condition in which copyright and technology partake and mutually exert influence on each other.

Furthermore, following Bowrey’s claim that history of copyright remains in ‘a particular discipline’s point of view’ and therefore ‘copyright historians, broadly defined, had lost sight of the whole’,27 I take a step further and situate the investigation into a history that is beyond or out of sight. Embarking on a project that attempts to hear the dissonance between copyright and technology, this tactic thus

26 The ‘para-historical condition’ draws on the notion of the parasite/noise as an inherent element of any relation or communication, regardless of their historical conditions in which those relations (such as social, cultural, legal) are established. This will be further discussed in the Chapter 3.

keeps a distance from the perspectives and visually sustained copyright histories, which can be said resonate the Enlightenment’s ‘visual thinking’ and understanding of the world\textsuperscript{28} — the very same period in which copyright primarily emerged. Moreover, in line with this, the methodological tools of perspective and focus are substituted for those of hearing and aurality, which allows for recognition of different qualities of both copyright and technology.\textsuperscript{29} By modifying the question(s) that Bowrey has astutely answered, I am asking: ‘Who’s hearing copyright's history?’\textsuperscript{30} In contrast to ‘who writes and/or paints copyright's histories’, which require an active engagement on the part of the author/raconteur/story-teller, hearing turns the investigator into an active hearer, engaged in rather different activity. As such, it deploys the sense of hearing instead of seeing. In this manner of sense shifting, the focus of this research is not an act of historical tracing, but instead an act of hearing the resonating echoes of history. If the discord between copyright and technology, although permanent in their relation, is a pressing issue today, I believe their solution does not rest only in posing the ‘right’ question, but also in changing the perspective of investigation, or rather, changing the position within the field where the answer can be drawn.

The histories of copyright might not be fully intelligible because of their echoing effect, but they surely revolve around the intangible as their central subject matter. With a purpose to entangle these (hi)stories, but not stumble in their singularity, therefore, I begin by taking ‘intangibility’ as the main focus of a historical multi-


perspective on copyright. This is manifested not only in being an essential matter to which different notions — such as property, creativity, knowledge or information — have been attached and their consequent actualisation rationalised, but also as an inherent subject matter of copyright’s conceptual and discursive practice. What history shows is that the intangible was, and still is, an ongoing matter of copyright’s subsistence, particularly in the context of current technological advancement, an ongoing matter of copyright’s subsistence. From copyright’s justifications, through its notions of property, creativity or knowledge, to the agents that take part in their actualisation, such as authors, owners, and users, the intangible has been the prevailing matter of copyright. Therefore, it is not an unexpected impression that all the dissonance between copyright and technology then derives and revolves around the intangible matter that law, through its mechanisms of justification, reason, social cause and purpose, has always aimed to grasp and make sense of.

1.2. Justifications of copyright

In the historical traditions of copyright law, various justifications have substantiated its necessity, informed its regulation and constituted the subject matter of its protection and promotion. The justifications that sustain copyright have as their main objective the concretisation of the elusive character of intangibility (creativity, knowledge) into a proprietary category. As such, justifications support copyright’s credibility and manifest themselves as a pre-given basis by which approval and/or criticism is built upon.

While there are two major categories of justifications to its subsistence — deontological and teleological — there a several justifications that emerge out of this

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31 Jenkins employs the term of histories in order to argue for a recognition of their multiplicity, but also narrative representations of their ‘(ostensible) objet of enquiry’ – the past. Jenkins, K. (2003) Re-thinking History London and New York: Routledge; p.4.
division. Davies, for instance, identifies and distinguishes four rationales, which are both cumulative and independent: the natural law, just reward for labour, stimulus to creativity and social requirements. Generally, natural rights justifications recognise a property right on the basis of the creation that originates from the mind of an author – either as an expression of one’s personality or its intellectual labour. For the just reward arguments, copyright protection is granted because it is fair and just for the author to receive a reward because of his or her effort in creating. In contrast to these, which not necessarily take into consideration the public benefit, the stimulus to creativity and the social requirements are founded on the idea of utilitarian theories. For the economic approaches, granting a copyright protection is considered to be an incentive for the authors to produce and disseminate their work, that is create goods, that are beneficial for the public and society at large. Whereas the natural right justification, viewed both as ‘fruits of labour’ and personality right, holds the position of the originator, the utilitarian justification takes the consequentialist position of granting property rights as incentives for the public good.

It is held that common law are upholding the economic and social arguments for copyright justification, while the civil law countries are associated with natural law rights theory, which views the work as embodiment of the creator. While a distinguished approach to copyright justifications is still existent, both legal systems have developed their legal edifice by employing characteristics from the other system. This overlap of legal systems has been particularly upheld with the

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35 The work as an embodiment of the personality of the creator shaped by the writings of Kant and Hegel (civil law) and Locke’s theory of labour (common law).
37 The utilitarian justification of copyright is only focused on the incentive, but does not provide rationale, which would comprise ‘the social benefits that flow from this incentive.’ Craig, C.J. (2011) Copyright, Communication and Culture: Towards a Relational Theory of Copyright Law Cheltenham: Edward Elgar; p.2; The economic incentive for creation has been recently criticised by Tushnet as it fails to protect the creative activity. She also criticises the use of incentive justifications by both the copyright and copyleft positions. Tushnet, R. (2009) ‘Economics of Desire: Fair Use and Marketplace Assumptions’ William and Mary Law Review, Vol.51, 513- 546.
processes of internationalisation and Pan-European harmonisations. In other words, as justifications of copyright determine and verify localised (national) functioning of copyright, on a global level they blend together informing and manifesting their universal role for sustaining protection and promotion of copyright. Copyright’s justifications have a single purpose, which is to recognise and validate the conditions under which a creation could attain a proprietary quality and subsequently confer the owner an exclusive right to control the manner how that particular creation (copyright work) can be used by the public for which it is intended for. To put it differently, ‘[t]he concept of property is nothing but a way of accounting for the justification and content of rights and obligations.’\(^\text{39}\) The peculiarities of various justifications and their sub-objectives have been significantly analysed and contested, and they remain an ongoing base for discussing copyright today. By informing boundaries between private property and commons, authors and public domain, or owners and users, the justifications have inherently maintained a division of concerns, views and understandings of what copyright represents or ought to be.

As digital technology performed a direct impact on copyright by affecting not only the notion of property but also the notions of creativity and knowledge, and furthermore, extending the acts of creation and use beyond the established categories of authors and public, it has, in effect, affected copyright’s justifications by questioning their rationale.

The justifications are eminently installed in copyright’s apparatus, as they are validations of the principles and rules transformed into rights, an underlying conception, which recognises and informs copyright’s role and function. Justifications, as such, are required for evaluating the legitimacy of law in a social context, which as May and Sell note, ‘often takes place through appeals to nonlegal ideas about the role or purpose of legal control.’\(^\text{40}\) For that reason, the ideas of creativity and knowledge, rewards and social good are inherently present as a


guiding light for copyright’s navigation. That said, not only do the actors involved in copyright debates use several justifications in tandem when there is a necessity to protect works not previously protected, but they often combine them in building arguments of contextualising and approving, now widely recognised expansion of copyright in the ‘digital age’. For these reasons, Bently and Sherman note, the problem emerges when people ‘believe the rhetoric’ used in justifying copyright and take for granted that copyright law is ‘determined and shaped’ by the philosophical debates supporting its existence.

Justifications remain a base for validating copyright and often prove inexhaustible for further rationalisation. However, there is a great potential that they enclose and often reduce the whole debate on intrinsic oppositions they carry within, never fully capable to encompass the broader context at stake. In being considered as a means for conceptualising and entangling the very essence of copyright — the intangible quality enunciated as creativity, intangible asset, or intangible property — it is appropriate to understand them as ‘after-the-fact theoretical justification[s]’, a post hoc manifestation of already established intellectual property principles, variously applied in the legal systems of protection. Justifications, in that sense, are to be viewed as conserved necessities for copyright’s actualisation and its future use. Moreover, in light of the technological challenges on creativity, originality, incentives and rewards, the justifications have a potential of limiting the focus, while also creating a ‘self-sufficient monologue’ on the subject. Justifications therefore are to be understood as mere narratives, and thus from justifications they become justfictions. While they might be just in their intention, they remain fictitious in

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42 Merging of different justifications can be traced, for instance, in cross-national treaties where a combination of different justification principles comes together. See, for example, Recitals 2, 4 10, 11, 14 in (The Information Society Directive) Directive on the harmonisation of certain aspects of copyright and related rights in the information society, 2001/29/EC.
45 Drahos, for instance, argues that the ‘abstract objects’ as a subject of intellectual property law take the form of a convenient legal fiction.’ Drahos, P. (1996) Philosophy of Intellectual Property Aldershot: Dartmouth; p.8; Patterson, for instance, argued that copyright as an author’s rights ‘was and continues to be a fiction. For the reasons that copyright law historically has been shaped by the interest of ‘copyright entrepreneurs’ thus copyright fictions can be considered as a principle for
their application. Copyright is so instilled in its ‘multiple’ justifications that it is hard to look beyond, and while one might question their relevance, it is far from being capable to recognise an alternative justification that would respond to the current challenges. In view of the previously discussed copyright’s positioning on the end points, the arrangement of justifications upholds and attests this distribution.\textsuperscript{46}

There are several justifications that work in flux and constantly provide a purpose for different legal arrangements, but they are positioned on the end points, overlooking a possible justification that might emerge from the middle. The middle, where actual communication and exchange of works (creations, objects) takes place, and connects the two ends is bereft of any justifications, most probably because any factuality does not necessities them. Communication is existent and takes place regardless of the justifications that claim to make sense of it. For this reason, it can be argued that the dominance of justifications is manifested not in holding the end positions, but in their very capacity to corroborate the processes occurring in the middle, by successfully displacing the actual event (as an outcome of communication) from the middle, where the two ends connect, to the very ends — the origination and usage.\textsuperscript{47}

Accordingly, the dissonance between copyright and technology might also resonate from the fact that technology, regardless of its capacity or quality, has never found its place in the justifications for copyright. This fact is baffling especially if taking into account the fact that the printing press initiated the communication upon which copyright’s edifice was primarily informed and actualised. Technology, from

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\textquote{enlarging copyright monopoly.’ He continues: ‘The dangers is that they can be used to carry copyright...beyond its statutory limits. The danger is most prevalent when the fiction ceases to be recognised as a fiction, a possibility that increases with the passage of time. Familiarity breeds acceptance and thus obscures the most important point about copyright fictions...[it] should be limited to the reason form which it is employed. Otherwise it becomes a source of fallacies that may well result in corrupting the integrity of copyright itself.’ Paterson, L.R. and Lindberg, S.W. (1991) \textit{The Nature of Copyright: A Law of User’s Rights} Athens: The University of Georgia Press; p.46 and pp.142-43.}

\textquote{While justifications to property, nevertheless remain individualistic, there is the social interest that is at stake. Waldron, also, in discussing the post-modern culture, suggests, ‘if we are serious about the justification of intellectual property’ then there is a necessity that public, the users, that is, ‘the would-be copiers are the ones to whom a justification of intellectual property is owed.’ Waldron, J. (1993) ‘From Authors to Copiers: Individual Rights and Social Values in intellectual Property’ \textit{Chicago-Kent Law Review}, Vol.68, 841-887; pp.847-57 and pp.881-87.}

This argument about positioning on the middle will be expanded in the Chapter 3 where the notion of parasite will be further explicated.}
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copyright’s perspective, has always been regarded, as a medium that allows or disrupts the recognised legal instances of communication (creation, (re)production, distribution), however, without any full recognition of its essential interiority to copyright – that is, in making possible the very same processes of communication that copyright fundamentally depends upon. The copyright’s justification, therefore, cannot be divorced from technology. In other words, viewing copyright as an apparatus that is affected by its digital environment, and in response, imposing norms of conduct in that very same environment is not an isolated activity, independent from it. Copyright must recognise the materiality of technology beyond its positivist and instrumentalist understanding, of it being only a means by which communication of copyrighted works occurs between subjects, but as an active (vibrant) matter that affects and constitutes our social, cultural and political life.\textsuperscript{48}

Technology is understood only through the lenses of copyright’s economic, social and cultural perspectives. For the economic perspective, technology is seen as a means that actualises and confirms the free market (commodification, incentives and property rights); for the social, it is an underlying thread or medium that typifies it (enables and offers socialisation and connection by its potential to largely serve the interests of the society); and for the cultural, it is a condition (generates objects, practices and identities of those engaged in creative processes). Moreover, all these perspectives are very often conjoined and only divided for the aim of analysing, conceptualising or developing arguments, taking technology either as a condition or an object that serves the multiple justifications and strands of criticism. The technological materiality is reduced to the symbolic, but there is a necessity to introduce a technological aspect to copyright’s subject matter.

Therefore, in investigating the conundrum between copyright and technology and, moreover, in understanding their interrelation, I find the positions sustained by the copyright’s justifications limiting and restrictive. They have not only pre-set perspectives that are difficult to disengage from, but have also disregarded technology, understood here as a means, medium and milieu. Since justifications uphold the proprietary principle – they revolve around origins (authors, fruit of labour, personality) and ends (public interest, promotion of creativity in knowledge, economic growth) – they have in every respect overlooked the position of the third, which, in fact, enables this far end points to connect and make sense of it all. Put differently, as the ‘networked’ processes of creation and production are characterised with multiplicity of subjects, the individualistic approach of the rationales for copyright is yet an additional reason for their exclusion.\textsuperscript{49} If copyright law has been given an objective to protect the interests of the owners, and also to promote creativity and knowledge as higher goals for the public, it should fully avoid the perpetual trap of these opposites and instead acknowledge the presence of a third element to its subsistence — that of communication that is enabled by technology. With such recognition of the middle, they are debased between the ends (origin and purpose) that uphold copyright’s justifications. In the middle, copyright is de-justified. Therefore, it is in the middle where copyright and technology as equal partakers of communication can be recognised.

For these reasons, having a reservation to all justifications, the investigation addresses their core subject matter — that of intangibility — but in a manner disengaged from representational and interpretative justfictions. This act of putting them aside might actualise just another fiction to become just. More specifically, since one of the aims of this study is to evaluate and contextualise the realm where copyright and technology (digitisation) congregate, this provides a modified stance from the current contentious copyright justifications (and their multiple narratives and perspectives) existing in copyright’s theory and normativeness.

In that sense, this route of investigation puts aside the prevailing copyright’s

justifications and opens a passage that compels a divergence from the given copyright justifications. This act does not disqualify them but puts them on hold; it paralyses them in order to discern and communicate different relation between copyright and technology. It thus becomes of a significant urgency to identify an approach for bridging/reconciling the multi-layered intersections of technology and copyright, and recognise them as ‘material’ agents of cultural production and dissemination. For that reason, the study dissociates itself from the limitations of mere copyright justifications and addresses the core object of ‘promotion and protection’ or the source that they derive from — the intangibility.

©

In most of the jurisdictions today, for a copyright to apply, there is no formal requirement as it subsists automatically in the moment of creation, that is, once an idea has been expressed. In the US Copyright Act of 1909, the Section 18 stated that a notice of copyright requires the year in which the work is secured and the name of the author or proprietor together with an inclusion of the word “Copyright”, the abbreviation of "Copr.”. The changes introduced with the Act of 1909 were important because, prior to them, the right to secure a copyright was lost if the work was not registered under a title in the Copyright Office, and a deposit of copies on or before the date of publication was not made. The Act of 1909 permitted for a copyright to be secured ‘by the very act of publishing a work with the copyright notice affixed to the copies’ and under these prescriptions, the requirement for a copyright notice has become one of the basic conditions for protection in the US. In addition, an optional form of notice was prescribed, as Section 18 continues: ‘In the case, however, of copies of works specified in subsections (f) to (k), inclusive, of section five of this Act, the notice may consist of the letter C inclosed within a circle, thus: ©, accompanied by the initials, monogram, mark, or symbol of the copyright proprietor’. The origin of the symbol, and its first appearance, is inscribed in this


51Copyright Act 1909, Sec. 5: f) Maps; (g) Works of art; models or designs for works of art; (h)
Act.

It is intriguing to acknowledge that what became a widespread symbol signifying copyright, has initially been related with works that were primarily *visual* in their character, unlike literary, dramatic and musical works that are considered as works beyond their immediate visible signs, printed characters and sounds. This suggests that ©, as a symbol, has an aesthetic relevance, or rather has an origin in a reference to aesthetics. Furthermore, taking into consideration that Berne Convention of 1886, as the first international copyright treaty, to which the US were not members until 1989, was not prescribing any ‘formalities for enjoyment and exercise of these rights’, the international recognition of the symbol cannot be traced there.\(^{52}\) The manner in which the symbol took its international prominence can be located in the *Universal Copyright Convention* signed in 1952 in Geneva.\(^ {53}\) Conducted by UNESCO, the UCC had a purpose to unite those states that were in disagreement with the principles of the Berne Convention, including the United States, the Soviet Union and most of the countries of Latin America. Hence, a second proposition – the wide dissemination of the symbol © has a political relevance, it is an outcome of political oppositions, thus politically determined.

Today, as most countries are signatories of the Berne Convention, copyright subsists automatically and formal requirements are either not obligatory or processed on a voluntarily basis. Nevertheless, the copyright’s representation has become universal not only as a visible trace of copyright works, but also as a feature of marking a particular possession. The act of leaving a visible trace, or enclosing, is what

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\(^{52}\) The original text of *The Berne Convention for the Protection of Literary and Artistic Works 1886* provided, however, in Article II that for a right to be secured the ‘conditions and formalities to be prescribed by law in the country of origin of work’. It is only with the revisions of the *Berlin Convention of 1908* when the change to no formalities required took place. Ibid, p.24.

\(^ {53}\) *Universal Copyright Convention 1952*, Article III (1) Any Contracting State which, under its domestic law, requires as a condition of copyright, compliance with formalities such as deposit, registration, notice, notarial certificates, payment of fees or manufacture or publication in that Contracting State, shall regard these requirements as satisfied with respect to all works protected in accordance with this Convention and first published outside its territory and the author of which is not one of its nationals, if from the time of the first publication all the copies of the work published with the authority of the author or other copyright proprietor bear the symbol © accompanied by the name of the copyright proprietor and the year of first publication placed in such manner and location as to give reasonable notice of claim of copyright.
1.3. Internal and external aspects

Copyright law functions by holding on to two main aspects that support its apparatus. The first aspect is focused on recognising subjects, which create and make use of copyrighted works, and also on establishing criteria and categories that give rise to such works. It is in this domain that copyright acknowledges and provides mechanism to judge the principles upon which one work is differentiated from another, or the extent to which a content of one work has been (illegally) used by another. The main objective of this aspect is to recognise the origin of creation. This is performed by granting proprietary rights to the originator of the work, and as such enables the owner to assert in time-restricted period an exclusion of all those without an authorised consent to copy or to take parts of the work in question. This implies that this aspect is internal as it deals with the idea expressed in a particular form that constitutes a copyright work. It is not the actual work that is protected but the matter that is expressed and which informs the work. That said, the modes in which expressions are actualised always respond instantaneously to the available technological background of means and processes it enables.

The second aspect, inseparably related to the first, is focused on regulating the conditions upon which reproduction and distribution of those copyrighted works are delivered or communicated to the public, and is thus external. From this perspective, copyright enables the owner to circulate copies of the work, but also assures control of any unauthorised reproduction, displacement and/or dissemination of the work in time-restricted period that copyright law prescribes. Even though the former

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54 ‘The first man who, having enclosed a piece of ground, bethought himself of saying 'This is mine' and found people simple enough to believe him, was the real founder of civil society.’ From ‘Discourse on the Origins and Foundations of Inequality among Men’ in Rousseau, J.-J. (1986) A Discourse on Inequality Harmondsworth: Penguin Books; p.109.

55 Copyright laws, however, prescribe copyright exceptions, also known as fair dealings in the UK and
aspect forms the basis, it is in the latter that copyright effectuates its economic purpose for the copyright owners, and ensures those copies to reach the public and with this very act to – achieve its cultural purpose – promote human creativity and knowledge. This condition of reproduction and distribution has been underpinned solely by technological ‘materiality’, which guided and inscribed copyright’s development and its history.

What both these aspects indicate are two simultaneous, almost contradictory but complementary, processes that constitute copyright. While the first aspect internalises the matter upon which copyright’s subsistence is possible, the second deals with the act of externalising it. The first is manifested in the very act of individualising/singularising the origination and the emergence of a copyright work. The second, in contrast, is manifested in the very act of multiplying the copyright work, both in number and different forms, aiming to reach a multitude of end recipients. Whereas the internalisation conducts a circumscription of one work, but also its transformation into another copyright work, the externalisation actually provides conditions for communication of works between legally recognised subjects. This leads us to an understanding that copyright simultaneously effectuates and depends on two distinctive but inextricable processes. In short, whereas the former is dealing with content-making, the latter is dealing with copy-making.

Although it might seem that copyright’s first aspect gave rise to the second, it is the actual copy and the means of copy-making that engendered the conditions for copyright to emerge in the form we know today. Copyright only developed into a legal instrument at the beginning of the eighteenth century, following its precedent

fair use in the US, which for the purposes of promoting creativity and knowledge permits under specific conditions use, reproduction and distribution of copyright work without previous authorisation. In the UK, see Copyright Designs and Patents Act 1988, c. 48, (sections. 29- 30); In context of EU, see Article 5 of the Directive on the harmonisation of certain aspects of copyright and related rights in the information society, 2001/29/EC.

56 In this context, the term ‘transformative’ comprises several instances of copyright regulation. It refers to adaptation (for instance, book to film adaptation); it refers to translation (one work being translated from English to French); it, also, refers to transformative works or use (works of appropriation art and sampling) when one work is created from another copyright work. While in the UK there is a necessity of a licence for such an act to be performed, in the US instead, the principle of ‘fair use’ allow such act to take place if the prescribed factors are met. See 17 US Code § 107.
of privileges that were established as an instrument that regulated the book copies, and proliferated out of the possibility of mechanised copying introduced with the Gutenberg printing press. However, as the printing contributed to dissemination of books carrying content disfavoured by the Crown they were primarily subject of censorial control. It is only with the Statute of Anne 1709, as the first legal act that prescribed provisions on the right to copy, having the aim to ‘encourage learning’ by vesting copyright in the author and introducing time-restricted period in which such rights were effective and thus giving rise to a literary property.

The purpose of the argument here is to contend with the fact that copyright was conceptualised as a proprietary category following an already established censorial form of control in the circulation of texts. The control of a text as subjected to various kinds of power stretches back to its very first inscriptions and transcriptions. However, while censorial controls were focused on the singularity a text borne, the proprietary control was focused on the (potential) multiplicity of books. This leads us to primarily comprehend that circulation of texts, as a particular mode of communication, is what preceded and gave rise to copyright as a mode based on property. Under the historical contingency of that time, copyright became modus operandi, an order of forms and actions according to which communication of expressions and creations between humans was deemed to advance. But in order for it to operate, it required justifying the matter of protection, recognising subjects as agents of relation, setting principles and recognising the criteria and categories according to which these would be possible. This is the instance when the two aspects of copyright took shape and came to support each other. The condition of copy-making had to source out validation for its apprehension by furthering and establishing the content-making as a mode that will set the basis and become

59 Foucault indicates that the texts, books and discourses were only assigned ‘real authors...only when the author became a subject to punishment to the extent that his discourse was considered transgressive.’ Foucault, M. ‘What is an Author?’ in Foucault, M. (1977) Bouchard, D.F. (ed.) Language, Counter-memory, Practice: Selected Essays and Interviews Ithaca: Cornell University Press; p.124.
subsistence for it to function. These two aspects are still irreversibly tied together as they intrinsically justify each other while informing the institution of copyright. The process of legal conceptualisation of the *content-making* mode gives rise to various principles by which copyright’s apparatus operates and continues to be a main resort for any interference or challenges copyright is affected by. Focusing on the current dissonance between copyright and technology these two aspects of copyright can help us to situate the effect of technology in that respect.

The technological means have always been a constituent part for any kind of expression, and therefore crucial for establishing communication. In that sense, technology introduces formats; it is the medium that can carry different expression and forms of creation, thus actualises the *content-making* mode of copyright. From having the book/text as a primary subject of regulation, copyright has recognised a range of modes of expression within the categories of copyright protection.\(^{60}\) Although this is a subject of another inquiry, it is important to stress that, as history shows, the recognised categories of copyright works are not an exhaustive list, but as technology advances and introduces new forms of expressions, they are recognised and integrated by the established proprietary apparatus.\(^ {61}\)

In contrast to the formation of expressions in which technology manifest as a medium, it is in the second aspect that technology attains its other meaning, of establishing itself, or rather attaining the notion of a means, which makes possible communication of those expressions to take place. If ‘copyright was the creature of particular technology: the printing press’,\(^ {62}\) it is the actual mechanisation of reproduction and multiplication of books, which played a significant part in founding copyright. Moreover, the intermittent disruption by technology, in its most general sense, has been constant if not immanent to copyright’s actualisation and functioning, as its history shows. Therefore, it can be said that, paradoxically, copyright has continuously struggled with the very same technology, which has a tendency to metamorphose resulting in yet another qualitative mode that is now

\(^{60}\) Copyright Designs and Patents Act 1988, c. 48, (Section 3-8).


known as the digital. Accordingly, the processes of externalisation, manifested by reproduction and distribution is where technology largely affects copyright’s edifice. In today’s context, digitisation as a most recent medium introduced new communication channels, which directly affect copyright and its responsibility of being a social, legal, economic and political instrument that protects circumscribed properties of creativity and promotes continuance of culture.

While it could be held that technology in its current digital embodiment is new, this ‘newness’ was always around as a counterpart or a mirror reflection of copyright and its subsistence. However, the technological processes that emerged in the second half of the last century epitomised by the current offline and online digitisation have certainly had a strong impact on both copyright principles and copyright operation in that respect. They have not only challenged the justifications upon which copyright subsists, but also directly interfered the relations that copyright has been assigned to order. Digitisation has become a great challenge for reconsidering the already contentious traditional premises upon which copyright is based. Generally speaking, the landscape of copyright is undergoing tectonic shifts that are directly striking its edifice, inducing engagement from diverse backgrounds (cultural, social, economic, political) that either support or diminish its pertinence. As digitisation became a widespread quality of our everyday lives, it naturally propelled copyright in the centre of attention. Moreover, from being a marginal and arcane legal discipline, its disposition of values, rules and principles became a subject of scrutiny from different positions (and perspectives). Streams of academic excogitations, juridical rulings and policy decisions have thus become significantly engaged in sounding out copyright’s valence and relevance for the ‘new-in-appearance’ but ‘old-in-presence’ technological background.

These aspects of internalisation and externalisation are dealing with the essence of

63 In addition, the communication that copyright regulates is not reducible only to reproduction and distribution. Borghi and Karapapa investigate the current technological advancement of mass digitisation projects which go beyond mere reproduction and distribution of copyright works, informing works that should primarily be used as data, thus challenging copyright’s ‘perception of the concept of use’ and ‘the meaning and function of the work as protected subject matter’. Borghi, M. and Karapapa, S. (2013) Copyright and Mass Digitization Oxford: Oxford University Press; pp.15-8.
copyright – the intangible matter – that they conceptually and normatively reify. The relation between copyright and technology is a multi-layered issue not easily penetrable for a discussion that continuously generates diverse and manifold approaches to its understanding. For that reason, in order to encapsulate it, I propound the ‘intangibility’ as an all-inclusive, but also, an exclusive notion in order to embrace all mini-narratives situated within the meta-narrative of the contemporary copyright law. Moreover, the reasons for extracting and modifying the notion of ‘intangibility’ out of broad theory and practice allows commenting not only on the processes separately corresponding to copyright and technology, but most importantly identifying it as a ‘material force’ that irreversibly ties them together. The resonating discord between copyright and technology is to be located in the intangible.

1.4. Intangibility in tangibility

The most general understanding of intangibility is associated with the ideas, creativity and knowledge expressed in the works that copyright is entrusted to promote and protect. These expressions of the human mind, as ‘abstract objects’ or ‘intellectual objects’ constitute ‘things’ for copyright law. The justifications, that reify these ‘ideal objects’ into a proprietary category, both validate themselves and infuse social, economic and cultural values to copyright’s prominence. This could be asserted not only through different justifications that sustain copyright but also through various sub-notions — such as value, benefit, culture, knowledge, growth, information, progress — these justifications have introduced throughout copyright’s history. For this reason, it can be stated that within copyright discourse the

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abstractness of intangibility serves different agendas, but also contextualises and materialises diverse economic and cultural values that necessitate its protection and promotion. Regardless of what copyright justification is employed, the intangible arises and simultaneously signifies an economic asset and a cultural significance embodied in the notion of property that copyright law protects and promotes. The peculiarity of copyright, thus, lies in its act of grasping the elusive character of intangibility and its concretisation into a proprietary category, that is, in asserting a property right in an intangible matter.

While the Western history is well known for its ‘ever increasing disposition to recognise the right of individuals to the exclusive possession of certain things under the word property’, the meanings we attach to the property are socially constructed and shaped by the discourse in which we conceive of it. The ‘thing’ or the ‘intangible product’ around which intellectual property rights are organised is a conceptual construction that concurrently applies to the intangible mental activity, labour or creativity of the human, expressed in a material form by which we can perceive, enjoy and use them. The property in question does not deal with properties of physical objects, thus if property is the notion by which copyright holders are protected, it is commonly argued that this property is far different from the material one, 'to be subject to access and possession to the exclusion of all the others'. Accordingly, the concept of 'intellectual property' has constantly been under scrutiny, since the 'thing' it does protect is intangible and cannot be identified with the notions of exclusivity, scarcity and ownership found among the western property theories. Even though the notion of property is an artificial right for both

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73 Whereas ‘intangible property’ is founded on non-scarcity as any expressed idea can be enjoyed and used as many times (listening to a song over and over does not diminish its quality), the ‘tangible property’ is founded on scarce resources (a land or natural goods). In addition to this, while property rights in tangible or intangible matter are exclusive rights, in case of copyright they are limited in time, after which the copyrighted work enters (or goes back) into the public domain. The time duration
the tangible and intangible property, it is the latter that gives rise to copyright. Rahmatian gives an appropriate difference between tangible and intangible property:

In the first case, the law attaches rights to material things which exist in the physical world independently from the law (i.e. abstract concept of the legal entitlement to a physical object), while in case of intellectual property, the law creates an abstract object and, additionally, confers rights over that abstract object (abstract legal entitlement to an abstract subject-matter). Along the same lines, Gibbs-Smith offers yet another apt definition:

Copyright is a right of property. The best way to regard the copyright in any object is to think of it as a piece of incorporated property, or an abstract entity, which is related to, but exists quite independently of the physical object itself.

This abstract entity is the intangibility that copyright, under statutory mechanisms and justifications that underpin it, has as an essential subject matter of regulation. Drahos provides an interesting example of the abstract entity by drawing on the Stoic incorporeal category of meaning (lekta). Meanings are expressible but distinct from representations – image, text, or sound – by which they are conceived. The incorporeity is dependent on producing a physical representation in order to express, thus once an abstract entity attains corporeality and becomes expressible it can have a role in the 'social and productive relations of people' and becomes a feature of legal regulation.

I propose yet another conceptualisation of the intangible by associating it with

depends on the type of copyrighted works and is subject of diverse treatment in different countries. For the UK, see Copyright, Designs and Patents Act 1988, c. 48, Sections 12-15A.


75 Rahmatian rightly argues that copyright law is not designed to protect ‘artistic creativity’, such a protection is only corollary. Once the criteria of work, originality and fixation are complied with, copyright arises automatically, and in this way, the law creates a property right or ‘commodifies creativity’. The only way, in which the law can incorporate the elusive concept of ‘intellectual creation of the human mind’ or even ‘creativity’ into its system, is by transforming it into property. Rahmatian, A. (2005) ‘Copyright and Commodification’ European Intellectual Property Review, Vol.27, No.10, 371-378; p.373.


sound, understood not as an object of copyright, but as a conception that caries similar qualities to that of intangibility. The sound *per se* is an elusive quality, which does not have a shape or size and could not be grasped.\(^78\) However, it always emerges through a material medium. The material medium of sound should not only be understood in the context of copyright, as a sound recording for instance, but also through the air that carries and dissipates it. Even though ‘it cannot be expressed outside its embodiment in such a medium’, as Rahmatian notes in respect to music, ‘it is in itself entirely immaterial and insubstantial.’\(^79\) Yet, if sound is inseparable from the medium (such as the air), then it is not immaterial but, instead, intrinsically material.\(^80\) Similar to Drahos’s statement above, sound, although it is intangible, in order for it to be heard it must be material. However, sound, same as intangibility, is not reducible to an object – it is a ‘process or event, not a coded representation but medium’\(^81\) – thus difficult to be encapsulated by copyright. It is in this capacity of the intangible, as argued below, where digital technology challenges copyright the most – primarily, because the intangible is inscribed within the digital medium that supports it, and secondly, akin to the quality of sound, it actualises its elusiveness and potential to be spread, disseminated beyond the confines of copyright (law).

In view of its elusive quality, the intangible in the copyright discourse is often regarded as ‘dematerialised’.\(^82\) The immaterial essence, as Griffiths notes, has been a guiding principle for the scope and attribution of rights being a ‘threshold for legal


\(^{79}\) Rahmatian, in addition, comments on the similarity that law and music share, as they are both abstract and have to be performed or expressed in order to have an effect. Rahmatian, A. (2005) ‘Music and Creativity as Perceived by Copyright Law’ *Intellectual Property Issue*, 3, 267-293; pp.267-68 and p.279.

\(^{80}\) Pottage and Sherman, commenting on the conception of the invention in patent law, however applicable to that of copyright law as well, argue that ‘intangibility is a figment’ as ‘[t]here is no intangible or immaterial dimension of reality’ but the things considered as intangible objects are always ‘sustained by real-world acts of representation’. The things, as they note, ‘are effect of communicative action rather than spectral physics.’ Pottage, A. and Sherman, B. (2010) *Figures of Invention: A History of Modern Patent Law* Oxford: University Press; pp.7-8 [Emphasis added].


\(^{82}\) See, for example, Griffiths, J. (2013) ‘Dematerialization, Pragmatism and the European Copyright Revolution’ *Oxford Journal of Legal Studies*, Vol.33(4), 767-790; Referring to this abstract entity with the term ‘dematerialised’, I find it problematic and misleading for reasons that I address in this and the last chapter. The ‘intangible’ as a term that is employed by Sherman and Bently, for instance, implies its material quality, even though it is not visible or graspable. Sherman, B. and Bently, L. (1999) *The Making of Modern Intellectual Property Law* Cambridge: Cambridge University Press.
protection, as a marker of authorship and as the key concept in the assessment of infringement. However, despite this abstract nature, the boundaries of the material form have remained a reference point according to which copyright is capable to apprehend the intangible in an object and protect it from copying. Thus, as Sherman and Bently note, whenever there are disputes over an intangible property the law must locate and identify its essence, in the ‘representation or sequel of the physical object’, making the subject matter of the intangible ‘always already secondary’ to deal with.

In order for the law to incorporate this elusive concept of ‘intellectual creation of human mind’ or creativity into its system and recognise its existence, it had to turn ‘them into a property right as the only legal category it perceives and recognises.’ However, the property right in question is not the thing itself but a right to a thing. As such, property rights in their legal disposition are in fact mediators regulating the relation between persons and a particular object. On that basis, copyright recognises rights for the author and/or owner to control the copy, distribution and adaptation of his or her work, and obligations on the part of the public to restrain from unauthorised actions in respect to the use and copying of the work. In order for this to take place, copyright law created mechanisms and categories so as to grasp or make the intangible tangible in copyright works. Law categorises and comprises the criteria by which one work of creation is granted copyright and with this act of recognition, if necessary, protects it from infringement.

The elusiveness of intangibility establishes its significance only through a legal reification performed by copyright law. Copyright law recognises and protects any work of creation in two instances. The first instance is silent (still) application: a copyright subsists in a work upon creation if it falls in one of the categories of

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83 Ibid, p.768.
86 Ibid, p.12.
87 For a discussion on how the intangible (as mind labour and creativity) was incorporated within legal conceptualisation see, for instance, Sherman, B. and Bently, L. (1999) The Making of Modern Intellectual Property Law Cambridge: Cambridge University Press; pp.11-59.
copyright works, it meets the criteria requirements of an original work, and it is fixed or recorded in a material form. Once the criteria of work, originality and fixation are satisfied, copyright arises automatically, and in this way, law creates a property right. However, copyright’s silent application, paradoxically recognises every work that has been created regardless of whether a creation fully meets the requirement of originality. The second is the instance of noisy (uttered) protection: the moment when copyright recognises an infringement, that is, when a copyright work has been a subject of actions that directly violate the rights of the owner. Subsequently, noisiness emerges as the criteria and categories are challenged and law is given a task to decide whether an infringement has taken place. As stressed by Judge Laddie, the legal practice has shown that the originality concept, for instance, is more relevant when there is an infringement issue, rather than to whether copyright subsists. It is in this instance when copyright law confronts its own attributes and understandings, in deciding over what is an original and what a copy, whether a particular work falls within the categories of protection, and whether a particular reproduction and use is permitted under the exceptions that copyright proscribe.

88 Copyright, Designs and Patents Act 1988 c. 48 – Section1(1) Copyright is a property right which subsists in accordance with this Part in the following descriptions of work — (a) original literary, dramatic, musical or artistic works, (b) sound recordings, films, or broadcasts, and (c) the typographical arrangement of published editions. The manner of fixating or recording in a material form depends on the copyrighted works.

89 While the quality of an original work is differently applied in various legal systems, in the UK has a low threshold, indicating that a work would be original as long it was not copied. See University of London Press v. University Tutorial Press [1916] 2 Ch 601; Litman argues that authorship’s originality is actually a concept for drawing property boundaries/fences. ‘What we rely on in place of physical borders, to divide the privately-owned from the commons and to draw lines among the various parcels in private ownership, is copyright law’s concept of originality.’ Litman, J. (1990) ‘The Public Domain’ Emory Law Journal, Vol.39, 965-1023, p.1000.

90 For every line that is drawn, in theory and in practice (provided no claim for infringement is made) is protected by copyright. That means that even a work that has been copied (not original) would subsist protected until the contrary has been proven, a sort of copyright’s presumption of innocence. As Patry notes ‘scope of copyright is always determined after the fact’, that is, a particular copy infringes only after a judge delivers a decision upon it. For this reason, it is a strange form of property ‘that does not exist (to the extent claimed) until after litigation.’ Patry, W. (2009) Moral Panics and the Copyright Wars New York: Oxford University Press; p.122.


94 This particularly is the ongoing issue not only in the cases of appropriation art, sampling and derivative works, but also in the context of the digital possibilities of accessing copyright content. See, for instance, Sherman, B. ‘Appropriating the Postmodern’ in McClean, D. and Schubert, K. (eds.)
For the intangible matter to take form and become a subject of copyright protection, it requires an idea to be expressed in some tangible form. Therefore, the well-known copyright refrain is that there is no monopoly over ideas since copyright protects only an expression of an idea. As Paterson has observed, ‘[t]he fundamental problem in copyright law is how to secure a property right in the expression of an idea that does not at the same time give a property right in the idea itself.’95 Particularly, common law systems, both in theory and practice, reflect upon this by the non-statutory provision – idea/expression dichotomy – that remains a perennial subject of concern for contextualising and actualising what constitutes a copyright work and the extent to which an expressed idea can be exploited.96 Cohen has identified how ‘[i]f ideas are the basic units of cultural transmission, disputes about copyright scope become disputes about identifying those expressions that should be treated “like” ideas’.97 In this regard, the copyright’s subject matter eludes constantly, and is never fully capable to grasp intangibility.98 The dichotomy, however, does not only relate to judging the original work from a copy, but also resonates the balancing line upon which copyright uneasily resides — the distinction between the private and public, copyright and public domain, and the extent to which a copyright can be exercised to both secure the rights of the owners and assure its dissemination to the public.99

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98 For instance, for cases of ‘artistic works’ this distinction is difficult to be drawn; therefore Laddie J refers to it as an idea/expression fallacy. He considers that the confusion is caused by the phrase that the law protects ideas ‘only in the form of their expression’, thus arguing that even an original combination of ideas can amount to a substantial part of a copyright work. See Laddie, H. et al. (2000) The Modern Law of Copyright and Designs, Volume I 3rd Ed. London: Butterworths; p.97 at 3.74 and p.212 at 4.4.
99 The idea/expression dichotomy was introduced in order to differentiate between ideas underlying the work and the form in which they were expressed. Rose notes ‘[t]he eighteenth-century lawyers sought to fix the notion of literary property, and that project continues today in the vast legal literature devoted to such problems as exactly where to draw the line between idea and expression or exactly how to define the nature of “fair use”.’ Rose, M. (1995) Authors and Owners: The Invention of
In consequence, the ongoing conflict of copyright could be identified in its perpetual and paradoxical position of being an instrument to promote a flow of creative ideas for the public while simultaneously protecting the expression that constitutes a right of property. On the one hand, copyright as a property right secures remuneration for the created works and remains a principle instrument for protecting economic growth for the creators and the creative industries at large. On the other hand, by assuring the above, it promotes creativity and knowledge as its inherent objectives to encouraging learning, or promoting ‘the progress of science and useful art’.

The pertaining issue between economic and cultural aspects of copyright have reached its peak with the emergence of the digital technology. Its impact has not only elevated the contentious property conception to the surface, but it has also stirred a demand to further question the ordering principles this proprietary apparatus entails. The inherited tension between the private and public interests in the ‘intangible’ that copyright circumscribes has become an ongoing thread by which arguments are led and further reforms proposed. In short, digitisation has affected both the modes of creation and communication of the intangible, but also disrupted its economic and cultural value.

Copyright circumscribes creativity. Creativity is the intangible matter that copyright law protects and promotes. Copyright actualises itself with the very act of creation, thus it could be stated that it encircles creativity in order to justify itself. Copyright is not designed to protect creativity, such a protection is only corollary. As such,

101 This was inscribed in title of the first copyright act: (The Statute of Anne) An Act for the Encouragement of Learning by Vesting the Copies of Printed Books in the Authors or Purchasers of such Copies, during the Times therein mentioned 1709, 8 Anne, c. 19. Statute of Anne, London (1710), Primary Sources on Copyright (1450-1900), Bently, L. and Kretschmer, M. (eds.) www.copyrighthistory.org (Accessed 02 May 2014).
102 To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries. U.S Constitution Article I, Section 8, Clause 8, known also as a Copyright Clause.
copyright is not a prerequisite for creativity; it is only an instrument that supports the property rationale, which often works in favour mostly for the content industries that ‘parasitically’ attach on the works of others. Accordingly, in the ongoing copyright discourse, creativity has become a rhetorical means that supports the proponents of a stronger and expanding copyright regime, making creativity outside of the copyright paradigm a seemingly ‘de-legitimated, unimaginable, and valueless’.  

Creativity and knowledge have become more than justifying objectives of copyright. They are currencies of an infused value for the growing economies that gain on commodifying ‘information’. Under the principles of copyright’s institution, employing creativity as a purpose raises several issues. Creativity and its cultural value, while still remain the main counter-arguments against the growing expansion of copyright, preserve the conflicting positions already underpinned by copyright’s dichotomous regime. Approaching creativity and its cultural value as a purpose and principle according to which copyright should amend and respond to the new technological possibilities, tends to idealise it as a pre-given state that copyright must achieve. I contend here that creativity is an outcome of an established communication between subjects that takes form only after a particular gesture, trace, or utterance has taken place. As such, it could be said that creativity actualises or appears in any form or communication regardless of the system, such as copyright, which tends to conceptualise, recognise, reify, and encourage its circulation. For that manner, if creativity (knowledge) is only a corollary to an established communication, I hold the act of communication to have a primary significance, which simultaneously carries and dissolves the necessity of creativity’s value assertion. Bearing in mind the ambiguity that creativity and knowledge


106 For a similar criticism on creativity (and knowledge), Borghi drawing on Fichte, argues that the ‘value of an object of creativity’ is not to be found neither in the materiality of the object nor in its
bear within the copyright discourse, it is here that I propose the notion of ‘intangibility’ to encompass their quintessence, but not fall into a loop of objectifying them for the purpose of an argument.

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The intention here is to suggest that, in contrast to the silent application of copyright, it is in the noisy protection where technology directly affects copyright and disturbs its regime of regulating the intangible. Technology, in both offline and online context of digitisation, did not only trigger the debate about the criteria and categorisation of new forms of creation,\(^\text{108}\) but it has also condensed already contentious concepts of copyright’s justifications, the notions of intangible property and copyright infringement – thus requiring new approaches, which as argued by many differ from the traditional basic principles copyright law rested upon.\(^\text{109}\) In addition, contending that copyright is a system that is structured on two far ends – authors and users – this undoubtedly underpins the distinctions between the private and public. However, it is along these divisions and distinctions where technology has struck the most.

Copyright, premised on the justification as a property right, needs an author (creator) in order to actualise itself, that is, once the ‘author individual’ was brought into copyright legal existence, it became an essence around which most of the legal

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\(^{107}\) In the copyright discourse, it was suggested that knowledge surpasses that of creativity because of the value it carries. Madison, for instance, has argued that digital technologies are challenging the ‘usefulness of creativity as organizing principle of copyright law’, thus knowledge should be restored as copyright’s core principle. Madison, M. ‘Beyond Creativity: Copyright as Knowledge Law’ *Vanderbilt Journal of Entertainment and Technology Law*, Vol. 12(4), 817-851; p.817; See, also, Tian, Y. (2009) *Rethinking Intellectual Property: The Political Economy of Copyright Protection in the Digital Era* Abingdon and New York: Routledge (Discussing copyright issues through a theoretical framework of ‘Knowledge equilibrium’ in the growing knowledge-based economy environment).


notions and rules were organised.\textsuperscript{110} The notion of authorship has solidified copyright and remains a prevailing issue in explicating the extent to which copyright depends and shapes its operation.\textsuperscript{111} However, since authorship within copyright metamorphoses and takes different forms — amateurs, professional authors, or producers — different interests are in place in respect to the work of creations. Despite this qualitative internal difference of the notion of authorship, it should be borne in mind that it still remains the most central and ‘resonant’ concept associated with copyright doctrine,\textsuperscript{112} as it is implied in the origination upon which property rights actualise. While legal scholars, engaged with the post-structuralist thought, have challenged the relevance of the romantic author,\textsuperscript{113} in light of the technological developments that have enabled convergence of content creation and use, the authorship became polyvocal, increasingly collective and collaborative.\textsuperscript{114} For that reason, Jaszi has argued, even before the great Internet impact, that the ideological pertinence on the ‘Romantic’ authorship would rather mislead than guide any suitable interventions of the legal regime in the realm of the new communications technology.\textsuperscript{115} On the other side of copyright’s spectrum, the position of the user has also changed. In the networked setting associated with the Internet and the communications technology, the user has become an active player in the everyday practices of communication through the possibilities to access, share and re-use of copyright works. As such, technology affected not only the position of the author but

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also enabled evocation of the user as an equal participant in the processes of creation and use. Technology disturbed the inherent binary arrangement of copyright by blurring the distinctions between an active author and a passive user. The steady distinction between the far ends of authors and users has collapsed, flattening of the hierarchy from ‘author-to-user’ to ‘author-and-user’. In consequence, this has initiated both a conceptual and pragmatic refocusing, or defocusing in the discourse from the centrality on the author onto the user requiring recognition of user’s rights. Accordingly, although copyright continuously tends to solidify creativity or knowledge as a product or commodity, the very act of creation has become to be regarded as a process, ‘a feature of human expressive activity’, where the user takes an active role in the creation, invoking a reposition of the user inside the creativity-centred copyright system. The digital times, in contrast with the analogue that seems so far away, brought ‘de-subjectification’ and multiplication of actors engaged in the proliferation of culture or/and knowledge transmissions.

The disturbances of copyright’s far ends actually emanate from the middle, from the intangible matter that is ‘object’ of communication between those two ends. Depending on the position one holds in a communication, the object of communication has different meaning to the participants, hence different apprehension of copyright’s value in digital information. In light of the


119 Gibson, J. (2006) Creating Selves: Intellectual Property and the Narration of Culture Aldershot: Ashgate Publishing; p.34; Drassinower, also, commenting on the significant decision of CCH Canadian Limited v Law Society of Upper Canada which affirmed user’s rights as a concept that is integral to copyright law, argued that user’s rights are a constitutive part of copyright and their significance does not result only from the defence of fair dealing that copyright prescribes. He rather argues that the integrality should be understood in a manner that author’s rights are ‘exception to the normal operation of user rights.’ Drassinower, A. ‘Taking User’s Rights Seriously’ in Geist, M. (ed.) (2005) In the Public Interest: The Future of Canadian Copyright Law Toronto: Irwin Law; p.468.

communication technology, the intangible started to be associated with information, but as information could mean many things, it became a value, feature or condition to which various copyright notions apply. The reasons for this can be traced in the potential of information to designate both static and dynamic quality. Whereas the former is related to the content as a subject matter of copyright, the latter is associated with the process of information as an essential feature of communication. These different approaches in making sense of digitisation and the new dynamics of economic and cultural communication it has entailed, can be identified in Cohen’s distinction of approaching the new information society - ‘information-as-freedom’ and ‘information-as-control.’ The proponents of the first aspect embrace the potentials of unimpeded communication that the network of information technology enables. They hold that the growing commodification of the copyrighted content is detrimental to the ‘commons’ and it affects the realm of social and cultural interaction, thus any normative amendments of copyright must seriously take this into account. The latter, in contrast to the views of the networked information technologies as a realm that facilitates and flourishes information markets, insists on stronger property rights that would increase commodification and bring economic welfare. Accordingly, this leads to an understanding that technological advancement, although it blurs the distinction between the authors and users, it reasserts the intrinsic copyright’s division of private and public interests. As such, the technological disturbances become a subject of opposing perspectives trying to validate and make sense of their positions by addressing the scope of copyright as a principle upon which technology and the effects it has on it should be tackled.

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121 Efroni argues that even though information might closely be related to intangible property their distinction depends on what conception of information one would take, thus appropriately noting that intangibility is more of an attribute of information then its essence. Efroni, Z. (2010) Access-right: The Future of Digital Copyright Law Oxford: University Press; pp.4-6. On the information and its relation to copyright I will return in the next chapter ‘Communication’.


123 Ibid, pp.6-15; Cohen argues that none of the approaches tackles culture and cultural processes in its essence, thus proposes that there is a necessity to understand how cultural processes work, what is their value, and what kind of legal arrangements are needed for such recognition.

124 As Borghi comments, since digitisation disturbed the difference between form and content, the difference in deciding between a ‘protected form’ and ‘unportectable content’ actually ‘depends more on contingent considerations of interests that on any substantive grounds.’ Borghi, M. ‘Owning
For these reasons copyright is summoned more than ever to strike a right balance between those two. While the notion of balance is a principle that could be traced from the very inception of copyright, with the digitisation it became an orienting principle in the debates and political solutions attempting to overcome the conflict between copyright and technology. However, the act of striking the right balance underlines the conflictual positions, as the very notions of balance, as it was argued, often are employed ‘to support radically different agendas’ – that of the owners and the public. As such the intangible as a subject of different value appraisals, according to which a balance is achievable is difficult to be attained, not only because of the disturbances of technology but also because it is primarily incommensurable. The focus is on the intangible, regardless of the value that different positions (and rhetorics) make out of it. However, while the digital revolution is advantageous, as Lessig notes, ‘a set of ideas about a central aspect of this prosperity – “property” – confuses us.’ The metaphor of property continues to perplex around the creator and his or her work, whilst dovetailed with copyright’s law higher aspiration of protecting human creativity and knowledge. While, these


On copyright metaphors, see for example, Patry, W. (2009) Moral Panics and the Copyright Wars New York: Oxford University Press; pp.61-86; ‘The cultural expression doesn’t work like other tangible goods, even in its most tangible forms, is a problem only because we have chosen to embrace the
notions in this digital era are becoming even more pertinent within the copyright discourse, the question is whether they offer any substantial recourse to the ongoing issue surrounding copyright and technology. For these reasons, taking into consideration that property as a category entails two different positions, any engagement to investigate the affect of technology and articulate its quality, unavoidably slides into one of them. Focusing on the scope of copyright overlooks and externalises the middle in which technology is not only a means that enhances or impedes the relations copyright is set to regulate, but it is a condition that must be considered in its own right. The oppositional approaches further demarcate the binary paradigm of copyright subjecting technology to the copyright’s apparatus. Taking the property paradigm as impediment in understanding the conundrum between copyright and technology, in consequence, I propose an approach of investigating the relation between copyright and technology not from the ends but from the middle. This will be demonstrated in the next chapter.

1.5. Double intangibility

The intangible property as a carrier of economic and cultural value, once associated with a physical representation in a copyright work, found itself diluted into a digital bits which attracted diverse comprehensions of its essence. As Sherman and Bently indicate, ‘just as the law continues to find grappling with issues of reproduction and identification, questions as to the essence of the intangible property continue to reappear when the law finds itself confronted with new subject matter.’

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130 This approach draws on Drassinower who argues that instead of focusing on the scope of copyright we should address more closely its subject matter. While his approach is related with the ‘communicative act’ of the copyright works between authors and users, and as such recovering the public domain, I extend this further in the context of investigating the relation between copyright and technology, and recognising the technological presence. Drassinower, A. (2009) ‘From Distribution to Dialogue: Remarks on the Concept of Balance in Copyright Law’ The Journal of Corporation Law, Vol.34; 991-1007.

technology enabled instantaneous copies, the works of copyright evolved from being 'static' and 'fixed' and the object of propertisation became 'moving, dynamic, and malleable.' In this manner, already in the dawn of digitisation, Barlow famously proclaimed that ‘digitalization is detaching information from the physical plane, where property law of all sorts has always found definition.’ The already ambiguous materiality of a copyright in a work faced itself with an object that began to ‘dematerialise’. As such, the required material form for copyright is diluted into digital bits challenging its fundamental principles. The reification of the intangible into a material form with its digital embodiment has disappeared from our view, becoming elusive, vaporous and transient. In consequence, the notions of ‘form’ and ‘content’, as Borghi suggests, ‘lose all normative effect and become notion more than a functional hypotheses that set the boundaries of copyright protection.’ As such it can be said that it is not a matter that law ‘dislikes’ adapting to the novel technology – it is the ontological grounding that copyright is based upon property that is not applicable to new technologies.

One of the main features of technology is its potentiality of connection. Namely, to connect beyond a visual ability of the human to see, and even beyond a mental capacity to understand to what extent the information networks extend. The momentum of these possibilities of connection enter and pass through various norms or regulations, but also ‘open’ the properties which exist in their own right, posing a great challenge to copyright in regard to the copies it is set to regulate. The intangibility in this context is intertwined with the notions of ‘reproduction’ and ‘distribution’, which in turn are the salient processes by which technology both

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enables and embodies the communication of copyright’s subject matter. In the eyes of copyright law unauthorised copyright reproduction and distribution are seen as an infringement, which require at least a legal redefinition in a digital context.\(^{137}\) The discord between copyright and technology, thus can be said, emanates from the fact that the intangible is intertwined with the digital, and as such reveals its qualities of dynamism, process and activity. Moreover, the intangible is intertwined with the digital possibility that enables instantaneous distribution, multi-reproduction and endless dissemination affecting copyright’s control and regulation. Digital technology, I suggest, attains an ‘intangible’ characteristic, hardly graspable by law under both conceptual and practical terms. It enables instantaneous and multiple processes,\(^{138}\) and as such makes possible relations, interactions and communication that not only affect the methods of reproduction and distribution, but also the manner by which copyright works are used.\(^{139}\) Accordingly, technology does not only manifest its intangibility in the processes it enables, but also by introducing invisible, non-display uses of digital works. Such use takes place ‘without displaying the expression of digital copies of works to the public’ and is carried for automated processing of data – thus the digital works become ‘containers of data’ subject not to human use but use by machines.\(^{140}\) For that reason, if copyright is the apparatus that actualises and regulates intangibilities, and is now affected by a technological ‘intangibility’, I suggest that what copyright confronts, as a result, is a double

\(^{137}\) 'Today, making digital reproductions is an unavoidable incident of reading, viewing, listening to, learning from, sharing, improving, and reusing works embodied in digital media. The centrality of copying to use of digital technology is precisely why reproduction is no longer an appropriate way to measure infringement.' Litman, J. (2006) Digital Copyright New York: Prometheus Books; p.178.

\(^{138}\) 'Even though we speak of the “immaterial” or “virtual” nature of digital space, it is important to remember that digital processing is always based on simple physical operations on physical representations of 0 and 1: deletion, substitution, sorting, ordering, pointers, to a given storage area or transmission channel.' Lévy, P. (2001) Cyberculture Minneapolis: University of Minnesota Press; p. 33.


\(^{140}\) Borghi and Karapapa note that this concept has been introduced in the Settlement Agreement between Author’s Guild of the United States and Google in relation to the Google Books project. Ibid, p.21 and p.45 [Emphasis in original]. They refer to the Settlement Agreement, Author’s Guild, Inc. v Google, Inc., No 1:05-CV-08136 (28 October 2008), later amended (13 November 2009).
intangibility, which fundamentally disturbs its apparatus.\textsuperscript{141} That is to say that the conundrum between copyright and technology lies in this double intangibility.

Whatever notion of interpretation the theoreticians or practitioners would put in use, the intangibility of ideas and their protection is an ongoing impediment for the fixed, form-dependant copyright law.\textsuperscript{142} Being static and superficial cannot follow the changes and cultural fluctuation that society is bringing upon, the processes of multiplication, changing modes of production and distribution, in one word, communication. This indicates that copyright law should look at the process behind communication and in this way diverge from fixity, that is, its static condition.\textsuperscript{143} The main challenge for law is, therefore, to provide a mechanism that will acknowledge the significance of the processes occurring in the channels it is given the authority to regulate and order; and also to recognise the active processes of the intangible beyond the boundaries and fixity in which it performs.

Sherman and Bently provide us with insights that are relevant when addressing the nature of the intangible. One of the accounts in analysing copyright law is their pragmatic distinction on pre-modern and modern intellectual property law. They find this distinction in the middle of the nineteenth century when the legal ‘common’ sense and thought in dealing with intangible property took its transformation. Although, they argue, there is no strict distinction of this sort within the copyright legal discourse, this could be a ‘useful basis to explore and understand intellectual property law’.\textsuperscript{144} Sherman and Bently show that the essence of the intangible in the pre-modern intellectual property law’s attributes had been ‘specific and reactive’,

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\textsuperscript{143} Griffin, for instance, argues that copyright should ‘move away from property conceptions and require the development of a system which emphasises the creative process.’ Griffin, J. (2010) ‘Copyright in Music: A Role for the Principles of Reverse Engineering’ Legal Studies, Vol.30, 653–673; p.660. Additionally, the word ‘static’ stands for a lack of movement or change, but also for the crackling and hissing noise on any broadcast signal. Thus, copyright (law) could be considered as static in the communication of cultural material. This will be discussed in the chapters 3 and 4.
\end{flushright}
focused on the intangibility of the protected subject matter. In other words, in the pre-modern intellectual property the intangible was not conceived as a thing but as ‘something which was done’, often described as a form of action or performance. In contrast, the modern law has become ‘more abstract and forwardly looking’, focused on the form and thus shifting from the intangible to the object. The pre-modern law viewed the intangible ‘action’ as embodying the work instead. Along the same lines, Rose notes that ‘in the early modern period it was usual to think of a text as an action, not as a thing.’ In addition, Edelman suggests that the French juridical system still understands the work as ‘nothing less than a specific formalisation of the personality of the author or, better still it is the author’s personality in action.’ The incorporeal creation that embodies the material form is nothing but a performance. And this action or performance is nothing but creativity, which as Sherman and Bently argue, even though disguised and not being in use as such until the early part of the nineteenth century, was a common denominator of the mental labour that embodied a work and upon which property rights were granted. For the pre-modern law intangible property was seen under its ‘abstract and dynamic terms’ in contrast to the more ‘concrete and static’ of the modern law. In other words, even though the modern law recognised and it was capable to ‘deal and process the intangible, it was unable to represent the intangible

145 They provide sources in which book was considered more as ‘action of communication’ than a mere thing. Ibid, p. 47, and note 16 on the same page.
146 Ibid, pp. 3-4 and pp.43-59.
151 In this manner, although creativity has never been subject matter for the pragmatic and positive law of the common law, they address its disguising presence; Ibid, pp.43-47; See, for example, CJEU’s judgment Infopaq International A/S v Danske Dagblades Forening, Case C-5/08, 16 July 2009 recognised the ‘intellectual creation of the author’ as a principle over deciding a copyright infringement. The recognition of creativity as a principle of creation of the Court might impose great challenges on the notions of originality in the UK. For a comment on this see Griffiths, J. (2013) ‘Dematerialization, Pragmatism and the European Copyright Revolution’ Oxford Journal of Legal Studies, Vol. 33(4), 767-790.
in a way which reflected its active or dynamic nature. For those reasons, since law lacked a language for the performative nature of the intangible it required a form, trace or representation such an act or performance would leave behind it.

Therefore, while the manner in which law has engaged creatively in comprehending and making sense of the intangible, the ongoing ambiguity of the intangible causes law to ‘pursue something that it can never completely imagine, which is always beyond representation.’ Despite the copyright works in which copyright subsists, the intangible remains elusive for copyright as, something that cannot be seen or measured. As history shows, copyright has had the intangible as an ongoing subject of containing and restricting – that is circumscribing – while its object of representation was constantly a subject of reconfiguration, as digitisation evidently confirms so.

Drawing on these insights by Sherman and Bently, I extend further the quality of the intangible as known to the pre-modern law, into a digital realm. As such, it could be argued that the digital has manifested significantly the dynamic nature (action, performance) of the intangible quality that embodies copyrighted works. In other words, it has not only diluted their fixity, but has become a medium that actualises their potential. Assuming that copyright still carries instances of that ‘pre-modern’ (intangible) model, it faces a difficulty in ‘identifying and demarcating the scope of the property’, especially in a digital context. It is precisely this difficulty that I attempt to avoid as a subject of investigation. I argue that copyright is not about protecting the content as an end-product, but the content’s potential of being an

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152 Ibid, p.49.
153 ‘Given that action or performance can only be displayed in terms of its forms and composition, this meant that no matter how much the law wished to present itself as protecting the performative aspect of creation, it was unable to do so. This was reinforced by the fact that law regularly spoke of intellectual property in terms of the tangible objects it regulated [such as books]... The law thus found itself in a paradoxical position in that although the intangible was seen primarily in dynamic terms, the law could never properly account for the performative nature of intangible property’. Ibid.
154 Ibid, p.58.
'activator of communication’ an experience,\textsuperscript{158} or a relation. Such an approach draws on recent scholarship engaged in reconstructing the subject matter of copyright from a thing to an action, a communication between the author and the public.\textsuperscript{159} By this recourse, they argue against the binary paradigm of copyright and attempt to explicate new principles and qualities which copyright should recognise when dealing with its subject matter.\textsuperscript{160}

However, the approaches that begin from the normative and descriptive positions and divisions of copyright’s apparatus – such as author/user, private/public – in dealing with the disturbances of the digital age, provide little to comprehend the crux in which the intertwinement of copyright and technology takes place. Therefore, whilst these divisions and notions in the digital era are becoming more pertinent than ever, the question arises whether they offer any substantial understanding of the ongoing issue surrounding copyright and technology.

\textbf{1.6. Intelligible Intangibility}

The intangible is foundational for copyright to actualise itself, and is the basis upon which justifications have developed and validated themselves. But also it manifests the paradox of copyright. On the one hand, it has a positive quality because it bears different values that copyright attaches to it. By securing an intellectual force, creativity or mental labour as a property right, copyright not only protects the

\textsuperscript{158} Gibson states: ‘It is not just the idea. It is not just the form. It is the experience, the sensation, the creations of cultures’. Gibson, J. (2006) Creating Selves: Intellectual Property and the Narration of Culture Aldershot: Ashgate Publishing; p.140.


creator but also enables the copyright works to promote their cultural and creative significance for the public at large. On the other hand, the intangible has a negative quality, since it is constantly ungraspable. Despite the legal mechanisms of reification, it constantly eludes and challenges copyright law in regulating such abstract but valuable matter. Moreover, as digital technology presented its intangible features of instantaneous reproductions and distributions it has irreversibly disturbed and actualised the intangible as a process, a feature of communication, far beyond law’s comprehension.

Accordingly, I propound that digital technology ‘materialises’ the intangible in manifesting its potential, fluidity and dynamism. By being interwoven with the intangible, as a subject matter of copyright, it not only actualises its inherent dynamic characteristic but also sustains its subsistence. The intangible becomes conjoined with the digital, making it difficult to separate them. In other words, the disturbances of technology are not externally imposed but they are intrinsic to copyright’s comprehension of the intangible. If copyright law’s purpose is to succeed in grasping (perceiving) the intangible, it is only through technology that such an act is attainable, since technology ‘materialises’ the intangible as a feature of copyright’s protection and promotion. Moreover, if ‘[t]o our modern eyes, which are used to seeing the intangible as an object, the idea of the intangible as a form of action may be difficult for us to comprehend’, then ‘hearing’ the action as a process might succeed in such apprehension. I suggest, in the last chapter, that digital technology makes possible such sensory shift for the law.

It can be reasonably argued that the current debates surrounding copyright are being ‘technologised’. In other words, they are becoming a matter only viewed through digitisation process of easy accessibility, potentially multipliable commodities and ‘digital intangibilities’. In that sense, technology actualises copyright in its most general sense, by simultaneously rearranging or re-defining copyright’s far end positions and challenges the landscape in which copyright resides. Even though technology remains a contested feature to copyright’s apparatus, it seems that the

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contested notions of copyright law were reinitiated once digital technology entered the ‘game’. As discussed above, regardless of the fact that technology disturbed the division between author and user it has simultaneously reinitiated the notion of authorship, deeply embedded in its system of protection. While it has obliterated the realms between the public and private it has also emphasised their inherent overlap and interdependence, challenging copyright to face itself and its apparatus.

For these reasons, it can be argued that technology is not a direct antagonist in providing circumventions and enabling actions against the traditional copyright principles of creation, reproduction and distribution. On the contrary, it is a catalyst in disturbing and returning the focus on the remaining unsettled principles structured within the copyright law system.\textsuperscript{162} Therefore, instead of positioning technology as an outside entity where copyright law should find its ‘playground’, it is argued here that copyright is deeply rooted not only in its historical development and \textit{post hoc} justifications, but also intrinsically intertwined with that of technology.\textsuperscript{163} In that regard, any investigation of their relation must have technology as its counterpart. More specifically, there is a necessity to avoid the current opposed stances on this issue, addressing the scope of how and to what extent copyright should or could regulate technology, and instead find a mode where they meet/connect and create a new relation of possibilities. It is their ‘pure relation’ that must be investigated.

In line with this argument, there is a necessity to re-think the relationship between copyright and technology. On that account, I propose avoiding the far ends positions and focus on the middle where actually copyright and technology coalesce and where ‘intangibility’ in its most general sense actualises itself. In order to address the dynamic nature of the intangible, understood both as copyright’s subject matter and technology – what I have termed \textit{double intangibility} – the discussion takes recourse to communication in investigating the relation between copyright and technology.


Technology presents itself as an interference of the communication that copyright continuously tries to remove in order to pursue and maintain its image of stability and balance. As it will be discussed in the next chapter, the interference can never be removed, thus copyright law remains entrapped in its futile attempts to do so. Following this implosion of notions, facts, opinions and reflections surrounding the intricate relation between copyright and technology, the ensuing argumentation will swerve into communication and information theory. This attempt provides a possibility to encompass the critical positions made so far, and moreover, brings forth a different understanding of the relation between copyright and technology.
2. Communication

Taking into account what has been said so far, this chapter addresses communication in order to better grasp the dynamic nature of intangibility. Aligning with an emergent scholarship that analyses and critically challenges copyright through communication, this chapter applies it in investigating its relation to technology. The first part of the chapter considers the way in which communication is approached in the copyright discourse and identifies its limitations in considering the relationship between copyright and technology. The chapter proceeds further to apply Shannon's information theory in a copyright context by attesting its compatibility. The communication model employed here not only provides a new perception of the copyright apparatus, but also allows setting a new tone in the composition of copyright and enables ‘hearing’ its rather different relationship with technology. Most importantly, through Shannon's theory, this chapter introduces the presence and qualities of noise, which are associated with that of technology and identified as an integral part of communicative channels, where copyright in fact resides.

2.1. Relations

There are essentially three things that copyright deals with: subjects (persons), objects (things) and their interaction. The interaction between subjects in respect to objects is instrumentalised through ownership as a central, ‘legal technique of personification and reification’.¹ Subjects are those who have the techné² and create the objects, thus the objects depend on subjects, because they actualise their existence. On the basis of their labour, skill and judgment or creative impulse, the property in the object is justified and as such copyright subsists. The reification of the intangible matter (creativity, episteme) into a copyright object is achieved by

² Episteme and Techné are Greek words for knowledge and craft or art. It is often used today to make a distinction between theory and practice.
(silently) applying criteria and categories upon which one’s work is legally recognised. Under these principles, subjects are able to engage in exchanging and sharing those objects with other subjects. Depending on the objects’ origination and destination, copyright differentiates between active and passive agents, that of authors and users. It is within this interaction in which property right actualises itself as a relation between subjects toward an object.

This is the functional logic or the sound classification upon which copyright operates. In this logic, the interaction of objects between subjects is subjugated to a property notion and, as such, tends to be viewed only as its corollary. However, the interaction (relation) is what precedes the instrumentalism of copyright law, bearing values of social intercommunication imbued in other modes of exchange, entitlements and sharing the common. In contrast to the classical legal distinction between persons and things, the recognition of a third element is required – that of a relation. This relation simultaneously relates and collapses such classical distinctions and introduces a position from where copyright and technology can be addressed. I use the notions of relation and interaction concurrently in the text. Interaction should be understood as copyright’s instrumentalisation of communication through the notion of property, and its categories, criteria and principles, whereas relation should be regarded as an abstraction that goes well beyond copyright’s function, but can nevertheless be translated into communication that enables circulation of creativity and knowledge, as copyright’s main objective of promotion and protection.

The western legal systems are rooted in the distinction of persons (subjects) and things (objects), where the position of the subject is set as a principle upon which

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3 What is now considered to be a product (commodity) of interaction, in the oral cultures, for instance, the objects were seen as immediate carriers of communication, with no precise differentiation between subjects. See, generally, Ong, W. (1982) Orality and Literacy: The Technologizing of the Word London and New York: Routledge; On gift exchanges, see, generally, Mauss, M. (2002) The Gift London: Routledge.

4 I draw this distinction from Massumi, viewing interactivity as ‘an instrumentally contracted dynamic form that tends to shrink the parameters of its objectively embodied instrumental function’, whereas relation is referred as ‘the full spectrum of vitality that the dynamic form really includes, potentially, abstractly self-expressed in its semblance.’ Massumi, B. (2011) Semblance and Event:Activist Philosophy and the Occurrent Art Cambridge: The MIT Press; p.46.
legal interactions are organised. Accordingly, as Pottage comments, the institution of ownership is central to this distinction, being a ‘thematic channel’ through which legal theory and doctrine have comprehended ‘persons in relation to things’ and ‘made their way into general circulation of society’. Technically speaking, the common law theory ‘does not refer to a class of things, but rather to a type of relationship between persons with respect to things’. However, ‘in common speech in the phrase the object of a man’s property’, as Bentham writes, ‘words the “object of” are commonly left out.’ If the legal system still takes the division of persons and things as a silent premise, it does not allow any legal criticism to divorce itself from this distinction. However, the novel technological and social processes are already challenging this position by obliterating this division. In that regard, as Pottage notes, ‘persons and things are now problems rather than presuppositions’, thus in light of the social and technological developments, ‘[o]wnership as a setting in which the legal constitution of persons and things has become most vulnerable’.

As previously argued, this is specifically manifested in the current technological processes that significantly affect copyright and challenge its subject/object dichotomy – the principle upon which property inherently depends. The position of the author (as a principle subject upon which copyright as a property institution performs) and the user have largely been destabilised with the introduction of technological potentials of creating and sharing. The object, on the other hand, despite its ambiguous nature of being intangible, is ‘re-materialised’ into a digital signal in the very processes of digitisation. From being fixed and tangible, it has become unfixed and dynamic. In this changing surrounding, the object has challenged the traditional reification techniques and its proprietary quality,

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9 Ibid, p.1 and p.6 [Emphasis in original].
particularly when considering the sharing potentials that technology entails.

Drawing on Pottage’s assertion that ownership is a ‘thematic channel’ of distinctions, it is argued here that it is necessary to dissociate/detach from this embedded division existing in the copyright system by addressing neither the subject nor the object through the principle of property, but their relation or the interdependence between subjects and objects. More specifically, one can argue that the phenomenon of copyright occurred out of this relation in the first place, upholding the notion of property as one of the most important legal, if not social principles upon which subjectification and objectification can take place. It is in this setting that various justifications draw upon different theories and understandings of how copyright ‘objects’ should be promoted and protected; why both the objects and subjects should be protected; on what ground principles and rules should be applied and protected; what might be regarded as an object and what as a subject in all those prospective relations.

Underpinned by the notion of property and its paradigmatic framework, regardless of the position one might take, an investigation into copyright is predetermined to remain in one of the convoluted divisions that property apparatus presupposes. As such, the property from a ‘thematic channel’ becomes a ‘channel divider’ that instils the far ends, and overlooks the channel that enables a relation to take place. For that reason, there is a necessity to create a passage over the channel divider in order to avoid property as an orienting principle in discussing copyright. Taking into consideration the channels where interconnectivity emerges, and thus making an attempt to avoid the use of ownership as a primary element for investigation, it is in this dependence or interdependence where the interaction as a third thing emerges — in the notion of communication. Besides, it is in communication or interaction that copyright actualises itself and performs its assigned functions, and thus it is from there that its institution will hereafter be challenged.

In addition to its conceptualisation, to investigate into the ‘communicative aspect’ of copyright, requires an acknowledgment of technology as a materiality that gave rise to copyright in the first place. Technology actualises the processes of communication, which become a subject matter of copyright regulation. Technology
is what created the conditions for both production of objects and their distribution, by becoming a medium, a background and an intermediate, through which relations of objects and subjects arise. In that understanding, the digital technology both enables new passages of communication and disturbs copyright’s established principles according to which such communication is possible. I thus argue that communication provides a passage to better understand the relation between copyright and technology.

2.2. Copyright in communication

The binding nature of law has interactions, or better, relations between humans as its main subject matter. These relations, regardless of their cause and effect, are established communication paths in which law both implicitly and explicitly partakes by creating signs and patterns of interaction that give rise to its ordering nature. It could thus be argued that there is an intrinsic reciprocal action between law and communication since communication as a process actualises and constitutes law, while law holds communication as its main subject matter upon which it exerts influence. For these reasons, approaching ‘law as communication’ offered possibilities for the legal scholarship to investigate law as a framework of human interaction, considering its institutions and acts through communicative processes and dialogues that inform a pluralistic approach and thus challenge law’s hierarchical positioning within the society. Moreover, this approach has opened a way to viewing law as a system that communicates to other systems, questioning its role in meaning making; but also to understand law as a means of communication, as a text that is subject of interpretation, and investigating the manner in which it partakes in

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11 Hoecke, M.V. (2002) Law as Communication Oxford: Hart Publishing; pp.7-10. Hoecke takes communication as an approach through which law as a phenomenon and its traditional principles could be questioned. He draws on Habermasian theory of communicative action in which communication is what constitutes rationality, where language is the key element by which this is possible. Hoecke argues that the dialogue between human beings is what brings democracy, as the communicative rationality is created out of decentred and not subjective actors. For that reason, he insists that law is rational and if rationality is to be seen as communicative rationality then law is communication.
communication between people, but also in society at large.\footnote{See, for instance, Nelken, D. (ed.) (1996) \textit{Law as Communication} Aldershot: Dartmouth. In this interdisciplinary and theoretical compilation of texts investigating ‘law as communication’ Nelken questions the possibilities of such a field of study, and stretches further the investigation drawing on the autopoetic theories as developed by Niklas Luhmann and Gunther Teubner, but also theories focusing on law and language, semiotics of law, law and literature.}

In tune with this development, in recent years the ‘communicative’ aspect of copyright has become an intriguing field of interest in the discourse.\footnote{See, for example, Craig, C.J. (2011) \textit{Copyright, Communication and Culture: Towards a Relational Theory of Copyright Law} Cheltenham: Edward Elgar; Drassinower, A. (2009) ‘From Distribution to Dialogue: Remarks on the Concept of Balance in Copyright Law’ \textit{The Journal of Corporation Law}, Vol.34; 991-1007; Durham, A.L. (2004) ‘Copyright and Information Theory: Toward an Alternative Model of “Authorship”’ \textit{BYU Law Review}, Vol.2004(1), 69-126; Efroni, Z. (2010) \textit{Access-right: The Future of Digital Copyright Law} Oxford: Oxford University Press; Wu, T. (2004) ‘Copyright’s Communication Policy’ \textit{Michigan Law Review}, Vol.103, 278-366.} Communication attracts such attention as it enables applicable argumentation for addressing and tackling most of the processes and actions taking place within the copyright realm, particularly when deemed as a concomitant of the possibilities facilitated by digitisation and communication technology.\footnote{The copyrights’ right to be communicated to the public has been introduced with the development of broadcasting. With the advancement of communication technology this right has been extended in a digital context, thus raising and requiring continuous clarifications of whether linking, hyper-linking and streaming are considered as ‘communication to the public’. See, for instance, CJEU’s decision \textit{ITV, Channel 4 and Channel 5 v TVCatchup Limited Case C-607/11 ITV, 7 March 2013} (streaming, decided in affirmative); Nils Svensson, Sten Sjögren, Madelaine Sahlin, Pia Gadd v Retriever Sverige AB Case C-466/12, 18 October 2012, (hyper-linking, decided in negative); For what constitutes an infringement by the communication to the public, see, \textit{Copyright Designs and Patents Act 1988}, c. 48, Section 20.} Nevertheless, communication was always copyright’s underlying feature, or as Drahos notes, ‘[t]he recent rise of intellectual property to prominence masks the fact that the interaction between intellectual property and communication has always existed.’\footnote{Drahos, P. ‘Decentring Communication: The Dark Side of Intellectual Property’ in Campbell, T. and Sadurski, W. (eds.) (1994) \textit{Freedom of Communication} Aldershot: Dartmouth Publishing; pp.252-53.} Accordingly, when considering the historical evolution of copyright, what can be discerned is that communication is its prevailing essence, that is, it prescribes and regulates the modes and conditions according to which a particular object (a work of creation) is communicated between subjects (author/owner and user).\footnote{‘Copyright sustains a triangle of relationships. While industrial property tends to establish bi-polar linkages – between right-owner and user – copyright has, on the right-owner side, both creators and entrepreneurs.’ Cornish, W. \textit{et al.} (2013) \textit{Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights} 8th Ed. London: Sweet & Maxwell; p.415.} Copyright is contingent on communication. It regulates the communication between subjects toward an

\begin{thebibliography}{99}
\item[12] See, for instance, Nelken, D. (ed.) (1996) \textit{Law as Communication} Aldershot: Dartmouth. In this interdisciplinary and theoretical compilation of texts investigating ‘law as communication’ Nelken questions the possibilities of such a field of study, and stretches further the investigation drawing on the autopoetic theories as developed by Niklas Luhmann and Gunther Teubner, but also theories focusing on law and language, semiotics of law, law and literature.
\item[14] The copyrights’ right to be communicated to the public has been introduced with the development of broadcasting. With the advancement of communication technology this right has been extended in a digital context, thus raising and requiring continuous clarifications of whether linking, hyper-linking and streaming are considered as ‘communication to the public’. See, for instance, CJEU’s decision \textit{ITV, Channel 4 and Channel 5 v TVCatchup Limited Case C-607/11 ITV, 7 March 2013} (streaming, decided in affirmative); Nils Svensson, Sten Sjögren, Madelaine Sahlin, Pia Gadd v Retriever Sverige AB Case C-466/12, 18 October 2012, (hyper-linking, decided in negative); For what constitutes an infringement by the communication to the public, see, \textit{Copyright Designs and Patents Act 1988}, c. 48, Section 20.
\end{thebibliography}
object, the communication between the author/owner and the work of creation, and the act of communication between the work and its user.

Following from the discussion in the previous chapter, what constitutes an object of copyright law is the 'intangible matter' that becomes a matter of proprietary protection and promotion once it is expressed and ready to be communicated to the public. On that account, '[c]opyright is essentially a law that creates a property interest in communicative expression', and secures the manner in which this expression, as a carrier of intangibility (creativity and knowledge), could potentially reach the public, to which it is intended in the first place. Copyright safeguards the value of that expression and therefore it makes a positive contribution to communication by the means of incentivising production and dissemination through the economic principles that property establishes. However, what Justice Brandeis's famously expressed when he said that '[t]he general rule of law is, that the noblest of human productions – knowledge, truths ascertained, conceptions, and ideas – become, after voluntary communication to others, free as the air to common use', should not be overlooked. In that respect, the very same property principles that underpin copyright become also a potential impediment to communication,

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17 Here, I allude to moral rights, which provide the authors a protection from any deterioration, alteration or mutilation of the work even after the ownership of the work has been transferred to another person. See Copyright Designs and Patents Act 1988, c. 48, Chapter IV.
20 Drahos suggests that the complexity between idea-expression distinctions finds its difficulty because in essence there are no distinctions. Any unexpressed idea remains in the human agent thus it is not a subject of law, and moreover it is not a subject of communication. As Drahos suggests that '[a]t an analytical level, the idea/expression distinction is between expression and expression, and within the legal context it is between protectable versus non-protectable expression.’ Application of property right in the expression of some abstract objects thus finds its difficulty because ‘ideas are forms of expression.’ Drahos, P. ‘Decentring Communication: The Dark Side of Intellectual Property’ in Campbell, T. and Sadurski, W. (eds.) (1994) Freedom of Communication Aldershot: Dartmouth Publishing; p.257.
22 Brandeis J. continues: ‘Upon these incorporeal productions the attribute of property is continued after such communication only in certain classes of cases where public policy has seemed to demand it. These exceptions are confined to productions which, in some degree, involve creation, invention, or discovery. But by no means all such are endowed with this attribute of property.’ International News Service v. Associated Press, 248 U.S. 215, 250 (1918).
resonating the contentious nature of intangibility as copyright’s subject matter.

Subsequently, in this understanding copyright gives the impression of being an activator of communication by setting the principles or a framework through which it both limits and enhances freedom of communication. The role of ordering communication, nevertheless, establishes copyright also as a legal instrument that interferes and restricts communication, which goes beyond its subject matter of concern. Therefore, as Caenegem indicates, copyright law is often challenged in its potential to affect ‘freedom of communication’, not only because it grants exclusive rights to the author, by which it restricts any other form of expression that draws on another copyright work, but also limits access and use of the information comprised in a copyright work. Within this thread of reasoning, Drahos addresses communication as a feature that informs the society at large, thus questioning how intellectual property, and copyright as its sub-category, interferes, disrupts and also destroys patterns of communication that groups create within the social system. In this expanded approach to communication within the social sphere the boundary between freedom of speech and copyright is yet another aspect in which expression, as an intrinsic human quality, but also a human right, becomes a subject for questioning the extent to which copyright interferes with the public welfare.

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23 The grant-based or functional approach (common law) grants private rights as an incentive for production that encourages and maximises the circulation of knowledge and information for the public benefit, while the right-based approach (civil law) holds copyright as an enhancer of freedom of communication because it protects the author’s right of expression. Regardless of this apparent justificatory difference to copyright, Van Caenegem rightly argues, if the main issue is communication, the act of balancing and regulating remains relatively same for both the approaches. Caenegem, W.A.V. (1995) ‘Copyright, Communication and New Technologies’ Federal Law Review, Vol.23, 322-347; p.324.

24 Ibid. Caenegem maps the internal limitations (structure of statutory rights, doctrine and principles) and external limitations (right and freedom) to copyright in considering its relation to communication. See also, pp.326-335.

25 Freedom of speech has become one of the main tenants upon which the ever growing (en)closure of copyright is challenged. The freedom of speech especially has strong resonance in the US as it is constitutionally promoted and assured by the First Amendment. Interesting approach to this is Drahos’s argument that our interest does not lie on the extent to which intellectual property may interfere the right of speech, ‘but rather the way in which it can dentre the activity of processes of communication within groups’. Drahos, P. ‘Decentring Communication: The Dark Side of Intellectual Property’ in Campbell, T. and Sadurski, W. (eds.) (1994) Freedom of Communication Aldershot: Dartmouth Publishing; p.250-59; See, for example, Craig, C.J. (2011) Copyright, Communication and Culture: Towards a Relational Theory of Copyright Law Cheltenham: Edward Elgar; pp.203-35.

26 Drahos notes: ‘The nub of the problem has been that, for various reasons having to do with the central and sacred place of private property in the liberal state, judges in intellectual property matters
However, in comparison to speech, communication here applies to various kinds of forms of communication not necessarily contingent on, that is, restricted to the possibilities of speech. Whereas speech is related to the individual aspect and therefore becomes a ‘claim right’, communication cannot be traced on the same route as it is always consisted of an act that is established with others, either through ‘sharing and exchanging information, knowledge or feelings.’

Therefore, Drahos approaches communication as a ‘centre of belonging’ that marks a ‘territory of voice and sounds generated by the groups of which we are part’, and that is essential for a development of the individual human identity.

The main concern for Drahos is to question the extent to which intellectual property, and in this context copyright, is capable to decentre and interfere the modes of communication that groups have created for themselves.

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Copyright is communication. It regulates copies that have the intention to be communicated. Copyright is all about communication. Communication simultaneously encloses us and allows for the circumference to be crossed.

©

The extent to which copyright regulates/impedes the communicative activities has become apparent with the communication information technologies. More precisely, as copyright history shows, the technological developments made possible for copyright to instil and pursue its role as an enabler of communication, but also to become a constant interferer in the possibilities they capacitate. In the wake of digitisation and its possibilities for transformation/translation, reproduction, storage, and distribution, this dual effect of technology has predominately marked the challenges of copyright’s communicative potential. In addition to the way in which

have behaved as defenders of proprietarian faith, rather than regulators of public welfare.’ Ibid, p.258.

27 Ibid, p.249; Craig argues that communication is a richer concept as it involves senders and recipients, whereas freedom to express entails an expression of oneself that does not necessarily account its receipt. Craig, C.J. (2011) Copyright, Communication and Culture: Towards a Relational Theory of Copyright Law Cheltenham: Edward Elgar; p.226.

28 Ibid, pp.250-51 [Emphasis added].
copyright holds the ‘communicative expression’ as its main subject matter, it also deals with the means of communication through which communication is achievable. They are intrinsically related to the technologies through which creations are produced, reproduced and distributed. Digitisation has not only affected the forms in which expressions take place, but it has provided a great potential for reproductions and instantaneous dissemination of the ‘communicative matter’ copyright holds as its main concern.\textsuperscript{29} Thus any subsequent copy is not different in quality from its original and it is subject of storage and distribution that goes beyond the principles established within copyright’s apparatus. The making of a copy, its reproduction and distribution converged into becoming a simultaneous act. As a result, from being an instrument that regulates only the communication of ‘expressed ideas’, copyright performed an extension into becoming also an instrument for regulating the access and the use of communication means.\textsuperscript{30} Information technology has infused both information and communication as undercurrent notions through which copyright and technology are discussed. But it has also informed a changed environment in which copyright operates, initiating further alternative approaches to viewing copyright as information policy,\textsuperscript{31} or communication policy\textsuperscript{32} when addressing its function.

At this point, there is a need to further unpack the approaches of ‘copyright as communication’. This will help to explain the way in which the notion of communication is employed in this thesis and it will clarify the relationship between copyright and technology. It is a common view today that copyright claims its central

\textsuperscript{29} Caenegem notes that it is not digitisation the major change per se as much it is the potential that the new communication technologies enable. Caenegem, W.A.V. (1995) ‘Copyright, Communication and New Technologies’ \textit{Federal Law Review}, Vol.23, 322-347; p.335.

\textsuperscript{30} The ‘technological measures’ means any technology, device or component that, in the normal course of its operation, is designed to prevent or restrict acts, in respect of works or other subject-matter any unauthorised access and use of ‘copyright or any right related to copyright.’ \textit{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}, Article 6 (3).


role in controlling or structuring the information environment.\textsuperscript{33} However, as novel actors play or change their importance within a decentralised communication, it seems they have reclaimed this role, challenging copyright to develop not only new understanding, but also to acknowledge the potentials digitisation brings forth. Accordingly, the notion of communication has been integrated within the copyright discourse as an appropriate explanation to further challenge the intrinsic copyright division between authors and users. Moreover, it allowed expanding on the cultural significance, or the social benefit of communicating works, and as such, to become a strong counterbalancing position to now overly criticised expansion of copyright’s economic principle. Thus, on the one hand, communication has been considered as a dialogue between subjects (authors and users) that actualises through objects (copyright works).\textsuperscript{34} As a consequence, the contentious position of the author has been countervailed with an understanding of the users as active participants within the dominating author-centred system of copyright.\textsuperscript{35} And since the author-centred system is irreversibly tied to the object, that is, copyright work, the communicational or rather dialogic understanding of copyright, have also disrupted the autonomy and fixity of the object. In this understanding, the copyright work is of a contingent quality. Drawing from the post-structuralist critique of text (and subject) formation, it has been suggested to approach the ‘work’ not as a noun but as a verb that is capable to indicate its communicative activity.\textsuperscript{36} On the other hand, communication addresses the communicative potential of the object, especially in a digital context, by arguing for copyright to acknowledge them as carriers of creativity and knowledge.

\textsuperscript{36} Craig is drawing on Bakhtin’s dialogism that holds an understanding that any expression (work) is a response and constituted by previous expressions (works) – intertextuality. The author-centred system is deployed here to encompass both the author and the owner of copyright. Craig, C.J. (2011) Copyright, Communication and Culture: Towards a Relational Theory of Copyright Law Cheltenham: Edward Elgar; pp.17-21.
rather than mere commodities of transaction.\(^{37}\)

This is best reflected in the pioneering work by Craig, whose approach to communication is both deployed for challenging the ‘proprietary lens’, in which any communication expressed by the author becomes an object of ownership, but also in challenging the *static* conception of authorship by introducing a ‘vision of the relational author as a participant in a process of cultural dialogue and exchange’. \(^{38}\)

This understanding is founded not only in the scholarship that questioned the construction of authorship within copyright, but also in post-structuralist movement of recognising the ‘death of the author’ and including the inter-subjectivity as an ontological and communicational condition. \(^{39}\)

Accordingly, the communicative aspect of copyright is befitting for a destabilisation of the entrenched far ends upon which copyright rests, but also to affect the proprietary stabilisation of the object into mere commodity.

In that sense, Craig argues that the ‘intangible and communicative nature of intellectual expression’ embodying a copyright work must be recognised beyond the property limitations and be regarded as relational. If dialogue and communication are the essential processes that constitute our society and culture, these relations must be recognised within the copyright and internalised in its regime. \(^{40}\)

For those purposes Craig advocates for ‘re-imagining’ copyright law,\(^{41}\) thus detaching from the constraining property framework that underpins copyright and justify it on the basis of the communication processes. Similarly to Drahos, she holds that communication

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37 Drassinower, A. (2009) ‘From Distribution to Dialogue: Remarks on the Concept of Balance in Copyright Law’ *The Journal of Corporation Law*, Vol.34; 991-1007; p.1004; In addition, this understanding of communication can be identified through the notions of ‘sampling’, ‘sharing’, ‘remix’, ‘free culture’ emblematic for the ‘copyleft’ movement, and its sub-movements of Creative Commons, GNU, FLOSS (free open source software). In such view, production, reproduction and distribution are regarded through the lenses of a ‘remix culture’, free use and access, comprehended as an open realm of networks providing conditions for dissemination and actualisation of creativity and knowledge.

38 Craig, C.J. (2011) *Copyright, Communication and Culture: Towards a Relational Theory of Copyright Law* Cheltenham: Edward Elgar; p.3 [Emphasis added].

39 Ibid, pp.38-42. Apart of using Bakhtin’s dialogism, and the post-structural understanding of inter-subjectivity, Craig considers also the feminist’s critique of subjectivity and the self.

40 Craig argues that ‘the current copyright model is not well equipped to recognise either the communal and communicative nature of cultural expression or the significance of that expression to the society and the communicator.’ Ibid, p.43.

41 She argues that ‘[c]opyright is in a desperate need of re-imagination’. Ibid, p.3.
is essential to our developing and shaping of communities and identities, thus, if copyright is intrinsically related to communicative practices, it must allow dialogic processes to take place.\textsuperscript{42} Therefore, it has been argued copyright’s ‘real’ task is to pursue and recognise the ‘decentralising creativity’\textsuperscript{43} or Boyle’s ‘distributed creativity’,\textsuperscript{44} as a principle for its development. In particular, in the context of the potentials of communication that the digital age has entailed, such recognition is crucial for copyright’s function and purpose. Accordingly, by re-imagining copyright law as a communication policy tool, Craig concludes that copyright is in fact ‘relational rather than individualisable: copyright structures relationships between authors and users, allocating powers and responsibilities amongst members of cultural communities, and establishing the rules of communication and exchange.’\textsuperscript{45}

On that account, addressing the ‘communicative’ aspect of copyright successfully advances two appropriate features that are capable to challenge the current expansion of copyright and its overly directed focus on propertisation. Firstly, by detaching from the property notion and embarking on communication, or dialogue, this allows for a reconsideration of the actual copyright’s subject matter, thus disturbing copyright’s normativity. Secondly, it successfully challenges the embedded far end positions and their respective conceptualisation within the copyright. Accordingly, by introducing the dynamism of communication this advances an alternative approach that goes beyond the dialectical layout of copyright and recognises a process, an action that comes between them.


\textsuperscript{43} Cohen, for instance, addresses three preliminary accounts of decentring creativity by firstly, incorporating situated users, as active participants in the culture, who depending on their context act and therefore require a recognition beyond the author/consumer dichotomy implies; secondly, by recognising the networks of knowledge, creation, and practice as a realm in which interactions are not constrained and fixed by the boundaries that copyright seems to create; and thirdly, recognising the contingent encounters or play of culture that form and enable cultural progress. Cohen, J.E. (2007) ‘Creativity and Culture in Copyright Theory’ \textit{UC Davis Law Review}, Vol.40, 1151-1205; pp. 1177-192.


\textsuperscript{45} She further argues that the policy is to be designed to ‘further the social good by maximising discursive engagement in a collective conversation, and thereby encouraging improved relations of communication between members of society.’ Craig, C.J. (2011) \textit{Copyright, Communication and Culture: Towards a Relational Theory of Copyright Law} Cheltenham: Edward Elgar; p.248 and p.244.
On these accounts, the legal scholarship that takes communication as a notion of investigating copyright manifests itself as an appropriate perspective in challenging and grasping various aspects of copyright. Although not a direct subject of attention, it is an exceptional analytical tool to apprehend the multi-layered processes in which copyright and technology unfold. Accordingly, against the backdrop of proliferating digitisation, communication seems to provide a strong and plausible alternative to reconsidering the ever-growing proprietary model taking shape within copyright, particularly in underlining the processes of creation and use as intrinsic communicative gestures of culture creation which copyright, in addition to its economic aspect, is supposed to support. And while I am inclined to that objective, their approach bears little accounts to apprehend the interrelation and the manners by which copyright and technology converge.

Primarily, while the model of communication successfully disturbs the instilled far end positions upon which copyright apparatus performs, it is still grounded in the classical understanding of communication as linearity between two points, disengaged from the medium by which this relation is possible. Such engagement thus runs a risk to only reflect the already laid out interaction established by the property principle as a relation between two ends towards and ‘through’ an object. In that sense, it must not be overlooked that communication is not only an act of expression (a work) and use between two end points, but requires a place of a third which enables such relation to take place in the first place. Any engagement with communication cannot be divorced from the (technological) materiality that sustains such communication of objects (works, expressions, thoughts). Accordingly, while these attempts provide a significant challenge to authorship and redirect the focus onto communication, through which copyright can be analysed, critiqued and understood, in essence the arguments are developed from a position that view technology as an external entity to copyright. Even though technology is not their main and direct subject of concern, the proposals for reconsideration of copyright’s subject matter are responses intrinsically related to that of digital technology. The extraneous view of technology is therefore not that obvious, however all the current responses to the challenges of copyright are ‘technologised’ – irreversibly engaged with the possibilities that technology has historically enabled and presently
informed, regardless of whether being viewed as a means or medium through which communication takes place. However, overcoming the challenges that this technological condition of creation, sharing and distributing entails, requires an acknowledgment of its presence beyond its mere subjection to copyright.

Furthermore, deploying communication as recourse to challenge the property framework of copyright runs a risk of reasserting its dominance. Referring to Debray’s argument in a different context, they risk of falling into the ‘practices of organisation....grouped in recurrent axis, which was fortunately variable in its forms but unfortunately stable in its principles’.\(^{46}\) In essence, they assert and recapitulate the ‘stability of the principle’ that property entails. This is apparent in the two different instances, one referring to the author/user relation, and the other to the object epitomising a property. Since property as an axis around which copyright oscillates is difficult to dismantle, it firmly holds onto the relations of the end points towards an objectified utterance. For instance, Craig’s position recognises that the dialogic aspect of communication might well deface the author and construct a relational author that is dependent and engaged in a dialogue with the society or community at large. However, it is this insistence on redefining the author and the processes he or she partakes that reasserts the dominant status of a model that supposes to regulate the relation between subjects towards an object.\(^{47}\)

Furthermore, by inscribing a relational aspect to an author is a sort of tautology since the author is already in the relation, otherwise it would not acquire that status. As the silent application of copyright law implies, once it is expressed law recognises the author’s status and prescribes the relation between the subjects toward that object, regardless of their communication and quality it might entail for them.\(^{48}\)


\(^{48}\) From a different perspective Borghi provides a similar account. He notes: ‘A good, a commodity, remains the same regardless of whether it circulates or not. It can lie unemployed in a warehouse or stored in a database, and this does not alter its nature. By contrast, thoughts — contrary to what is commonly assumed — cannot be what they ought to be in the absence of communication. Thinking is
Furthermore, the attempt to recognise the cultural, as well as the economic, values of the object is an appeal for a reconsideration of the ‘proprietary’ object to be considered as an utterance that only informs itself in context of an established communication. However, employing the intertextuality of expression, as Coombe argues, does not necessarily weaken the rhetoric of the author function.49 To put it differently, it seems that communication has been employed in the copyright discourse to argue against copyright’s entrenched notions of an author, user and copyright work, where the notions and the relational building of creativity and knowledge are considered as enduring arguments upon which a copyright legal change is to be made.50 However, the relation that is established and the potential of communication that might arise go beyond the qualities that copyright establishes. The notions of creativity and knowledge as principles of culture are only outcomes of the purposes by which we organise and justify a regime. Having said that, this should not indicate that I refute the value of cultural processes in which humans engage and in which copyright partakes. Instead, I would like to argue that viewing culture as a principle upon which copyright should amend, runs a risk of idealising a condition that, although it deals directly with it, is beyond the reach of copyright. In other words, I would like to propose an understanding that regardless of the constraints and limitations that a regime such as copyright conducts on communication, it is still considered as a process of communication that bears a quality of its own. Or as Drahos has aptly indicated, communication does not require any additional claim or somehow intrinsically public, and this in two senses: firstly, thinking itself has immediately to do with something in which all humankind is likely to have an interest, and it is never a private affair — even when the act of thinking is carried out privately or in solitude. Secondly, and consequently, thinking is not fully accomplished unless it is publicly communicated, that is to say until it is shared with other men.’ Borghi, M. (2011) ‘Copyright and Truth’ Theoretical Inquiries in Law, Vol.12, No.1, 1-27, p.9.


50 The copyleft movement is a prototype of this approach, which attempts to adapt copyright on the expanding technological environment under the umbrella of promoting creativity and knowledge. For a criticism of the Creative Commons licences, being market-oriented and instilled in the constructed copyright system, and how the licences might prove restrictive for a creative material that is considered free, see, for example, Elkin-Koren, N. ‘Creative Commons: A Sceptical View of a Worthy Pursuit’ in Hugenholtz, P.B. and Guibault, L. (eds.) (2006) The Future of Public Domain Alphen aan den Rijn: Kluwer Law International; also, Pasquinelli, M. (2010) ‘The Ideology of Free Culture and the Grammar of Sabotage’ Policy Futures in Education, Vol.8 (6), 671-682.
assertion of what intrinsically communication represents, thus he notes ‘[t]he claim that communication is our centre of belonging does not depend on our amount to the claim that communication is essential to self-fulfilment’ and ‘essential for development of individual human identity.’

Communication often implies that it is an act by which meaning is generated. Recalling Coombe, our everyday communication and interaction are directly engaged in social and cultural meaning making, thus copyright and its commodification of symbols and signs through which we communicate must constantly be revisited to make sure it will not restrain our formation of identities. Taking this ‘meaning-making’ as an intrinsic feature in making sense of our broader social and cultural space we constitute and continuously remake, both in forming identities and communities, is what postmodern critique of copyright especially have focused on. As such, while understanding copyright as a field of a ‘signifying practice,’ it is a regime that directly partakes by setting principles upon which works of creation are created and communicated, often interfering and impeding the accesses and distribution of communication, thus critiqued for not recognising the interplay that takes place in the cultural space. In that regard, if copyright should make any meaning, or rather make any sense (a constructed meaning), these approaches have unavoidably considered copyright as a mechanism that has a significant role in meaning-making, and as such it must frame its normativity and performance. However, in contrast to these approaches, I argue that meaning is not a subject matter of copyright law. It deals primarily with communication, and its affect on meaning is just secondary. As argued below, the semiotics and the meaning making of copyright should be avoided when discussing copyright, especially when addressing its relationship with technology.

In addition, Drahos rightly stressed that communication is almost always

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53 Ibid, p.87.
apprehended in copyright context as situated between two end points. Such contextualisation of communication often overlooks the plurality of the group towards which copyright works are addressed, but also the potential how communication establishes groups with specific communication. While I agree with Drahos in the manner how communication is often regarded, I propose to go beyond the existing view of communication – firstly, as a process for establishing and developing identities, and secondly, as a meaning maker. What I argue for is that communication should be understood as the milieu out of which copyright emerges, thus its effect and the form of copyright is only corollary.\(^{54}\) Crucially, if one draws an attention to communication within the copyright discourse, principally, it should not be tackled as an outcome of copyright law and regulation, but on the contrary – only as its permanent (pre)condition.

Contending that communication is the fundamental principle upon which copyright developed, its property arrangement can be understood only as an effect of a communication. With such understanding, it can be argued that the challenge is not to re-imagine law, since re-imagination remains an imagination, but to reconfigure a whole debate by excluding the property, that is, its subjects and objects as a starting point and address instead the engagement between them, the *desmology*,\(^ {55}\) or communication as such. The proposition is that we need to address the communication or the intersection where copyright emerges and reverse the current views based on its far ends, that is to disengage from the axis and the stability the notion of property entails. From this position, the notions of intangibility, authorship, and property shift into another realm and they are undone to new possibilities of understanding. Accordingly, this approach allows copyright's edifice to be challenged, and in this framework, the actions and processes, and certainly the *intangibility* receive altered qualitative characteristics, where the intangible realm of technology and its multiplicity could be apprehended. In effect, both the observed (the subject matter) and the observation (the method) emerge in the relation, in the

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\(^{54}\) The communication is to be studied in the wider range as Finnegan puts it, which escapes the words, the images and is not rendered in the information technology as such. Finnegan, R. (2002) *Communicating: The Multiple Modes of Human Interconnection* London: Routledge; p.xv-xvii.

action, always from the position of the *third*.\textsuperscript{56} For such endeavour, a deployment of information theory provides a basis to articulate such a proposition, but also provides other intrinsic features and elements of communication that are apposite for addressing copyright and technology.

2.3. Information theory\textsuperscript{57}

Taking into account the communication approach, I will address Shannon’s seminal mathematical theory of communication that appeared in the middle of the last century. It dealt with discovering a mode in which messages as electrical signals can successfully with least of an error be transmitted from one point to another. While its initial purpose was of technical nature, it was subsequently applied to the understanding of systems of human communication of knowledge, opinions, ideas, experiences, and orders.\textsuperscript{58} Weaver stated that information theory is ‘deep enough so that the relationships it reveals indiscriminately apply to all these and to other forms of communication.’\textsuperscript{59} In that sense, as Pierce notes, the significance of the theory of communication lies in its ‘generally accepted soundness and usefulness’.\textsuperscript{60}

Communication studies could be divided in two different schools. The first is the process school that focuses on the coding and encoding of messages that have as their main focus the channel’s efficiency through which information is

\textsuperscript{56} This will be further developed in the ‘Medium’ section of this thesis. Such an approach draws on the work of Michel Serres.

\textsuperscript{57} Theories are strongly physical when they describe very completely some range of physical phenomena, which in practice is always limited. Theories become more mathematical or abstract when they deal with an idealized class of phenomena or with only certain aspects of phenomena.’ Pierce, J.R. (1980) An Introduction to Information Theory: Symbols, Signs & Noise New York: Dover Publications; p.8.

\textsuperscript{58} Ibid, p.1.


\textsuperscript{60} Pierce, notes that ‘[c]ommunication theory is abstract in that it applies to many sorts of communication, written, acoustical, or electrical. Communication theory deals with certain important but abstract aspects of communication.’ Pierce, J.R. (1980) An Introduction to Information Theory: Symbols, Signs & Noise New York: Dover Publications; p.2 and p.18.
communicated.\textsuperscript{61} The second school is of semantic nature and focuses on the meanings of the messages being communicated between senders and receivers. Fiske notes the first school is concerned with the ‘transmission of messages’, the ‘acts of communication’, and the second with the ‘production and exchange of meaning’, that is, the ‘works of communication’.\textsuperscript{62} Given the task of addressing the process and not the meaning making of communication, the former is where the further argument develops. The parts of the basic model of communication is shown in the following diagram:

![Diagram of communication system]

Figure 1. Schematic diagram of a general communication system\textsuperscript{63}

The first part is the \textit{information source} ‘that produces a message or sequence of messages to be communicated to the receiving terminal.’\textsuperscript{64} It is the source where the decision is made what message is to be sent to the other party in the course of communication. The \textit{transmitter} then turns this message into a signal ‘suitable for transmission over the channel’. The third element is the \textit{channel}, that is, the medium through which the signal is transmitted from a transmitter to a receiver. The \textit{receiver}, in this case, has the function to inverse the act of the transmitter – to turn the signal

\textsuperscript{61} Coding and encoding should be understood as processes in which the messages are turned into signals in order to be transmitted from one place to another.


\textsuperscript{64} Ibid.
into a message and in that form to reach the final part, the destination. 65 Shannon defines the final part, in non-differentiating manner as ‘the person (or thing) for whom the message is intended.’ 66

From a model that initially dealt with communication through electrical means and radio, it later became applicable to the representation of various communication modes. Simply put, in a conversation the human is the source and his/her mouth is the transmitter, which changes the message into a signal that resonates through the channel of air. It then reaches the ear, the receiver, and finally the destination. 67 It is important to stress that these parts can have interchangeable positions and sometimes simultaneously function as different parts. What is relevant at this stage is to explain the main contributions of this theory and set the basis for mapping out the conceptual framework for studying the relation between copyright and technology.

The information in this theory is the measure of possibilities and probabilities, that is, the ‘measure of one’s freedom of choice when one selects a message.’ 68 In other words, the concept of information is something that does not apply to a single ‘individual message (as the concept of meaning would), but rather to the situation one has an amount of freedom of choice, in selecting a message, which it is convenient to regard as a standard or unit amount.’ 69 No matter how many choices of messages there are, they are always considered to be a unit of information. 70 The word information in communication theory is embracing the potential, since it does not relate ‘so much to what you do say, as to what you could say.’ 71 Thus in the communication, the information source would be the human mind, or the author who in that freedom of choice, decides what message he/she wants to

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65 The terms sender and receiver, previously used in a copyright context, in the communication model correspond to an information source and destination.
66 Ibid.
69 Ibid.
70 Ibid. This unit is called bit, coined by John W. Tukey, as a combination of a binary digit.
communicate. However, the message is constituted of sequence of choices from a set of elementary symbols, which form the message itself.\footnote{However, the probability plays an important role since ‘[f]or as the successive symbols are chosen, these choices are, at least from the point of view of the communication system, governed by probabilities; and in fact by probabilities which are not independent, but which, at any stage of the process, depend upon the preceding choices.’ Ibid, p.11.} This process of producing a sequence of symbols under the condition of probabilities is called a stochastic process, that indicates the random processes that information theory has set to predict in order for a communication to be established.

Since there is a chosen message sent from the source, the ‘amount of information conveyed by the message increases as the amount of uncertainty as to what message actually will be produced becomes greater.’\footnote{Pierce, J.R. (1980) An Introduction to Information Theory: Symbols, Signs & Noise New York: Dover Publications; p.23.} In that case, the more predictable the message the less information it conveys. Accordingly, entropy in the communication theory is a measure of uncertainty of the message, or more precisely is the measure of the amount of information conveyed by the message.\footnote{The more we know about what message the source will produce, the less uncertainty, the less the entropy, and the less the information.’ Ibid.} The entropy is measured in bits, and it attaches different meaning found in the physics. In this context, it is sufficient to stress that entropy ‘increases as the number of messages among which the source may choose increases. It also increases as the freedom of choice (or the uncertainty as to the recipient) increases and decreases as the freedom of choice and the uncertainty are restricted.’\footnote{Ibid, p.81.} Therefore, the entropy known for the physical sciences, especially that of thermodynamics is a measure of randomness or ‘shuffledness’, associated with a propensity for systems to become less and less organised.\footnote{Weaver, W. ‘Recent Contributions to the Mathematical Theory of Communication’ in Shannon, C.E. and Weaver, W. (1972 [1949]) The Mathematical Theory of Communication Chicago: University of Illinois Press; p.12. Weaver quotes Eddington: ‘The law that entropy always increases – the second law of thermodynamics – holds, I think, the supreme position among the laws of Nature.’} If entropy demonstrates the randomness of choices, the opposite is the redundancy\footnote{For instance, taking the English language as example, Weaver comments that Shannon shows that the redundancy of the English language is about 50 per cent, which means that about half of the 50 per cent is not necessary for the recipient to understand the message.’} which is part of ‘the structure of the message which is determined not by the free choice of the sender, but rather by the accepted statistical rules governing the use of the symbols in question.’\footnote{For instance, taking the English language as example, Weaver comments that Shannon shows that the redundancy of the English language is about 50 per cent, which means that about half of the
success of the information theory is that in the condition of certain entropy and redundancy, the sent message from the information source will reach the destination in the form it was intended to. In order for this to happen, the elements of the channel and the coding are also important to be considered. Namely, as previously mentioned, the encoding and decoding are important elements for the message transmission. The message is turned into a signal through the transmitter and changed into a message by the receiver. The encoding is decisive for the message to be able to pass through the communication channel. In favour of illustrating the model, the capacity of the channel ‘is to be described not in terms of the number of symbols it can transmit, but rather in terms of the information it transmits.’

The final element, apparent on the diagram, is the noise in the channels of communication. Noise is anything that is included in the signal ‘between its transmission and reception that is not intended by the source.’ In other words, noise is any interference or distortion that affects the message or its transmission to the receiver and its recognition is where this theory is significant. Namely, Shannon succeeded in proving his theory of transmitting and encoding messages in the presence of noise. In that sense, he immaculately addressed not the message as a signal, but the mode of a signal to overcome the noisiness in the channel. As Pierce puts it, ‘[t]he problem, then, is not how to treat a signal plus noise so as to get a best estimate of the signal, but what sort of signal to send so as best to convey messages of a given type over a particular sort of noisy circuit.’ Finally, and most importantly,

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letters or words chosen in writing or speaking are free of choice, and the other half controlled by the ‘statistical structure of the language’. Ibid, p.13.

78 ‘If it is not possible or practicable to design a system which can handle everything perfectly, then the system should be designed to handle well the jobs it is most likely to be asked to do, and should resign itself to be less efficient for the rare task. This sort of consideration leads at once to the necessity of characterizing the statistical nature of the whole ensemble of messages which a given kind of source can and will produce. And information, as used in communication theory, does just this.’ Ibid, p.14.

79 Weaver further clarifies: ‘Or better, since this last phrase lends itself particularly well to misinterpretation of the word information, the capacity of a channel is to be described in terms of its ability to transmit what is produced out of source of a given information.’ Ibid, p.16 [Emphasis in original].


is the significance of noise affecting the channel, and its special function for the theory itself that thereafter are to be deployed for the resonating relation between copyright and technology.

In order to address the broad subject of communication, Shannon and Weaver identified three levels of problems: Level A, the technical, or the *engineering* problem is concerned with the ‘accuracy of transference from sender to receiver of sets and symbols (for instance a written speech), or of continuously varying signal (telephone), or of continuously varying two-dimensional pattern (television).\(^82\) Level B, the *semantic*, ‘are concerned with the identity, or satisfactorily close approximation, in the interpretation of meaning by the receiver, as compared with the intended message of the sender.\(^83\) Level C, or the *effectiveness* problem, ‘concerned with the success with which the meaning conveyed to the receiver leads to the desired conduct of his part.’\(^84\) In applying or using the information theory as a basis or model in analysing the ‘communicative’ side of copyright, only the first level is taken into consideration. Since, as it has been argued, copyright’s goal or normative role is not to communicate meanings – thus no references towards production and exchange of meanings is to be made. The reasons why the other two sets of problems are rejected, at least in this reading of the model, are firstly related to their irrelevance when addressing the dissonance between copyright and technology; and secondly, their potential of misleadingly being employed in the copyright model since copyright law does not deal with recognition of meanings and regulating their effectiveness.

Accordingly, the information theory primarily draws the distinction between information and meaning, that is *information* must not be confused with meaning.\(^85\) In that regard, Shannon himself comments that the ‘semantic aspects of communication are irrelevant to the engineering aspects.’\(^86\) After all, copyright law it

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\(^{83}\) Ibid.

\(^{84}\) Ibid, p.5.

\(^{85}\) Ibid, p.8 [‘...information must not be confused with meaning’].

is not concerned with information or meaning. What copyright is interested in is the materiality of the signal manifested in a copyright work. As the media theorist Terranova notes, ‘[b]ecause information proliferates, resonates, recombines, and interferes all over the place, it is hard not to become increasingly aware that is it neither mere meaning nor immaterial form.’

It is commonly argued that copyright engages with production and exchange of meanings, particularly if taken into account that it deals with works of art, commodities, messages, products, rights, knowledge, and creativity. However, this investigation attempts to remove itself from that discourse. The logic of this approach is to untangle the phenomena prior to attaching any meaning to the processes and things copyright is given to protect and promote. In other words, it does not refute, but reverses the method. Instead of arguing for copyright’s amelioration through understanding the notions of property and creation and its responsibility for culture’s continuation, this approach goes beyond those discourses and focuses on the ‘technical’ or engineering side that, I suggest, created conditions for copyright (law) to arise in the first place.

In the end, copyright as a statutory, artificially created, descriptive and normative

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91 Pierce writes: ‘One of these is that many of the most general and powerful discoveries of science have arisen, not through the study of phenomena as they occur in nature, but, rather, through the study of phenomena in man-made devices, in products of technology, if you will.’ Therefore, copyright law could be understood as a technical phenomenon, and it is studied as a phenomenon in a man-made device. Pierce, J.R. (1980) An Introduction to Information Theory: Symbols, Signs & Noise New York: Dover Publications; p.19.
system attains an engineering role, responsible for the ‘accuracy’ of transference of signals between senders and receivers. As such, the model allows articulating and demonstrating the position of copyright in the processes of communication. Weaver points out that even though Level A appears to be superficial and technical, incorporating the engineering features of the communication is exactly where Shannon’s mathematical theory truly applies.\textsuperscript{92}

\textbf{2.4. Information theory and copyright}

Shannon’s information theory provides a basis for encapsulating copyright through the prism of a communication model. To reiterate, one of the main features of this theory is its success in effectively encoding characters and signals in order for the message to be transmitted. Pierce states that the ‘chief aim of information theory is to study how such sequences of characters and such signals can be most effectively encoded for transmission, commonly by electrical means.’\textsuperscript{93} Copyright as a legal apparatus is in fact engaged with coding and encoding the transmission of copyright works, and while it is certainly not a means through which communication takes place, it manifests itself as an enabler of communication. Importantly, the relevance of the information theory is only applicable to continuous\textsuperscript{94} processes, that is, continuous activities. In the context of copyright, this continuance of work’s communication, especially with the technological ever-turned-on supply of information and works applies aptly to this debate.

The centre of attention for this theory is the \textit{information} and its successful transmission from one position to another. In this context, information should be understood as \textit{uncertainty} and the resolution of uncertainty’ rather than its


\textsuperscript{93} Pierce, J.R. (1980) \textit{An Introduction to Information Theory: Symbols, Signs & Noise} New York: Dover Publications; p.64.

\textsuperscript{94} Ibid, p.66.
association with the ‘idea of knowledge’ as common in popular use. Yet, this popular understanding of information, in the context of copyright discourse, asserts knowledge and creativity as a certain value for society and its orienting principles. As such, this theory supports the position for dissociating from copyright discourse’s over-inclusion of creativity and knowledge that re-emerged concurrently with digitisation and concerns it brought forward in that respect.

The copyright discourse has recently incorporated communication and information theory as a methodological platform to re-visualise the processes which copyright regulates. Although there is a small body of work, I will identify their approaches and further articulate different reading of the theory on both copyright and its relation with technology. In a first direct attempt at deploying information theory in a copyright context, Durham argues against the dominance of authorship in modern copyright law, thus he challenges the fundamental notions of originality and expression. Positioning his argument in the familiar purpose of copyright – progress of creativity and knowledge – he argues for acknowledgment of the public against the supremacy of author as provided by the existing copyright doctrine. In this manner, he aptly challenges the communication between the author and the public, thus contesting the notions of originality and expression as filters through which such dialogue appears.

More specifically, he challenges the model of authorship, questioning the notions of idea/expression and originality based on the principles of information theory. With detailed argumentation, he suggests two different alternative models to the romantic model of authorship. In the first, he equates ‘authorship with addition of noise to signal’, that is, the author is part of the noisiness accompanying every information or message that is sent. In this understanding, the notion of ingenuity of the author is challenged: instead of viewing him/her as an information source (see

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97 Ibid, p.111.
Fig.1) where creativity emerges, he situates the author on the ‘noisy’ channel, through which all the interferences/uncertainty in the message produce an original work ready to be recognised by copyright. In the second model, Durham draws on the redundancy and predictability of the messages transmitted from the author to the receiver. In that sense, this suggests, what the author actually does is a selection, a choice upon which certain work becomes a work of creation. As such this ‘unromantic authorship’ model challenges and avoids the undercurrent dominance of creativity as a principle upon which copyright subsists, and considers creation as a matter of random selection. By contrast, the former model is related to discussing the origin, the latter is focused more on the end product.

In contrast to Durham, Efroni investigates copyright as an access-right making use of this theory in a rather different way. Efroni sets his analysis in the group of legal scholarship studying the copyright subject matter through the notion of information. Since technology directly affects and actualises information, the general position in copyright law is to assume the importance of information as a value, feature or condition to which property notions apply. On that account, he draws on information theory to discuss property as a subject matter of copyright, which, as he affirms, has reluctantly been considered within copyright discourse. By acknowledging the distinction between intangibility and information, he appropriately states that depending on what conception of information one would take, ‘it appears that intangibility is an attribute of information, but not its essence.’ In that sense, information is erroneously associated with intangibility, as it is only a feature of much greater quality, which copyright and its apparatus neither is capable nor has an intention to regulate. However, because of their elusiveness a distinction is difficult to be made.

98 Ibid, pp.112-16. 99 He notes that, as such, there is a possibility to ‘define “original works of authorship” purely in terms of a selection from an array of alternatives, ignoring the romantic or unromantic origins of the selection.’ Ibid, pp.116-19. 100 Efroni, Z. (2011) Access-right: The Future of Digital Copyright Law Oxford: University Press; p.4. 101 Apart of Durham and Efroni, to the knowledge of the author, there is no other copyright scholarship that has referred to information theory in analysing copyright issues. 102 Ibid [Emphasis in original].
Efroni takes the communication model and in a linear fashion rearranges the model into the ‘Originator’, ‘Medial Message’ and ‘Recipient’, arguing that on and in between these parts is where law has its effects. A ‘Medial Message’ qualifies once ‘certain criteria are satisfied, namely perceptibility and comprehensibility criteria’, thus the concept of ‘Medial Message’, as he argues, is a subject matter of intellectual property rights. He makes a distinction between message and information, viewing information as something dynamic and as process within which messages play a key role – ‘[t]he intangible artifacts with respect to which the law allocates rights and duties are “Messages”, not “information” in the abstract.’ The ‘Originator’ is the one who has the will to communicate, or to be ‘aware’ as Efroni puts it, ‘of the fact that others might perceive their acts as communicative and as inviting interpretation.’ And finally a ‘Recipient’ is the human subject that receives the ‘Message’ through its sensory preceptors, which filter and then process, that is make sense of the received message. As for the media, or the channel, he qualifies everything between the creations of messages to their receptions.

Noticeably, both of them are addressing only the level B and C – that is, the semantic and pragmatic/effectiveness level. Accordingly, to support his argument, Efroni gives an importance to the criteria for the Medial Message, which appears to be its perceptibility and comprehensibility. He addresses perceptibility as a pragmatic straightforward materialisation of a message to be perceived (using perception as an underlying condition). Subsequently, the semantic comprehensibility ‘inquires whether the signals may convey message’, and eventually have an effect on the destination.

First, he addresses the fact that in order for a message to be actualised the originator has to use the form of encoding which already copyright prescribes – this would mean the categories and criteria that encode, that is, assert the works of copyright. Even though the categorisation has proved to fail to recognise new expressions, they

103 Ibid, p.12.
106 Ibid, p.15.
107 Ibid, p.16.
are pertinent formulations upon which copyright materialises intangibility. Second, in line with these messages and their encoding, he challenges the principle of authorship by claiming that the ‘origination act’ is done in the cultural background where it emerges,\(^\text{109}\) presumably allowing space for the user and the common to appear onto the copyright realm. However, Efroni further indicates that ‘originators cannot utterly ignore conventions of expression and at the same time still hope to be “understood”’, referring to the meaning-creation as a central to his comprehensibility criterion\(^\text{110}\) and by this applying semantics to the rationale of copyright. In the end, the noise is just superficially integrated as a signal that might affect the message meaning and interpretation, that is, to obscure or contribute to the message.\(^\text{111}\)

Conversely, as said above, I argue that meaning is not of concern to copyright law’s recognition and protection.\(^\text{112}\) Devoid of ‘comprehensible’ communication, copyright as a notion would be redundant. Meanings and semantics should be left out as copyright’s principle of communication. Although their different approaches provide important insights and arguments in studying the communication of messages within copyright law, they gravitate towards different subject matter. Whereas Durham’s approach is focused on authorship, that is the subject, Efroni’s addresses the ‘Medial Message’, seen as a proprietary feature of copyright’s subject matter, that of the object. Similar to the arguments raised before, what actually is missing is the relation, the third in the communication. Moreover, it is not the meaning that sustains communication, the actual relation does.\(^\text{113}\) Relation is there as it is, in the

\(^{109}\) Ibid, p.19. Further in the text, Efroni acknowledges the postmodernist criticism of the authorship’s originality, thus he also positions the authors as mere channels through which their works are seen as artefacts coming out of various sources. Ibid, p.39.

\(^{110}\) Ibid, p.20.

\(^{111}\) Ibid, p.21.


\(^{113}\) Atlan, a prominent biophysicist and philosopher, argues that information ‘is a property of the intrinsic organization of the message in the form of a frequency distribution of its elements. The meaning of the message, in contrast, is never intrinsic to the message; the meaning is the relationship of the message to some reference point outside of the information borne by the message. Something or somebody has to ‘read’ the message. Meaning is referential and contingent’. Atlan, H. and Cohen, I.R. (1988) ‘Immune Information, Self-organization and Meaning’ International Immunology, Vol.10, No.6, 711–717; p.713 [Emphasis in original].
background: as a condition, an intersection of communication, an actualising space, otherwise there will only be a vacuum of immediacy.

Instead of addressing the far ends and the relations in between from a position of copyright’s perspective, I propose situating copyright in the middle, on the actual channel. It is the milieu on/through/by which communication emerges, thus that is where the investigation should be situated. Communication is a connection. Communication is a condition, not a consequence. While it appears as if copyright through its ordering and regulation gives life to the communication, I contend that it is *vice versa* – the communication is the matter onto which copyright emerges. Accordingly, the communication model in the context of copyright as excogitated here requires a different arrangement:

![Communication Model Diagram](image)

*Figure 2. Copyright (law) in the communication model*

The utilisation of the communication theory differentiates from the previous readings when addressing or applying to a copyright context, as it requires recognition of an important pre-condition that must be considered. Primarily, it provides a position for understanding communication prior attaching any legal connotation to the far ends of communication. Therefore, this methodological tactic attempts to extract the processes upon which information theory’s value rests, while applying them to communication as an undercurrent of copyright subsistence. As such it enables externalising the author – the axis of copyright system – and the user as elements upon which property rights subsists, and primarily focuses on the communication out of which it emerges.
Considering that copyright is only the corollary of an already established ‘communication’ or interaction between subjects and/towards objects, the copyright model should be considered from the middle, where it emerges and establishes itself. Even though it manifests itself on the whole of the communication model (spectrum), here copyright is given a partial position – that of a channel – and that is where it resides. In such an understanding, copyright builds its edifice only after an established communication between two ends. The communication, although abstract, is confiscated by the models of communication, such as copyright, and becomes their instrument.\(^{114}\) In other words, it recognises the author (information source) and the user (destination) only after a message has been communicated. By holding the middle, it creates an authority over identifying the notions of author and user (public), defining and classifying the categories of copyright works, but also in prescribing the conditions and principles upon which communication between them, such as reproduction and distribution, is possible.\(^{115}\) As a result, it can be said that copyright has developed a parasitic or habitual activity of protecting and promoting communication, validating itself through justifications that support its presence.

Moreover, taking the ‘engineering’ aspect of the information theory allows us to avoid its pragmatic and semantic aspects, and provides more of a technical view on copyright and its mode of functioning. Namely, it is the sound, the text, the voice or the image produced by the source, which through the \textit{transmitter} becomes a \textit{signal}, and through the \textit{channel} arrives to the receiver, where the signal is turned back into a message, and eventually arrives at the \textit{destination}. However, as the theory acknowledges that an element could attain a position of another element in the model, copyright law, apart from being located on the channel, takes the positions of


\[^{115}\text{It can be said that the uncertainty of information, as understood in the communication theory, is well expected and articulated by the \textquote{deciphering} system of copyright law, which through its criteria and categorisation identifies and filters the information eligible for circulation within the copyright system. On the manners in which copyright manifests its presence and authority from the middle, but also in viewing it as a noise that \textquote{interferes} communication, is further developed in the following chapter \textquote{Copysite} that draws on Serres’s concept of noise/parasite.}\]
a transmitter and receiver simultaneously.\textsuperscript{116} More precisely, the encoding and decoding run parallel with copyright law’s normative criteria and classification determining what signals of a message, that is, works of copyright, and what subjects are allowed in the channel of communication. Referring to the silent application, the sound produced through the transmitter becomes a signal and is then reversed by the receiver back into a message – a musical work (a composition or a work of sound art). The written word through the transmitter becomes a signal and is then reversed by the receiver back into a message – a literary work (a poem or manifesto). The ‘expression’ through the transmitter becomes a signal and is then reversed by the receiver back into a message – a copyright work.

Even though some of the messages reaching the transmitter would not ‘pass’ the test of originality for copyright to subsist, in that very same process they are already encoded into signals and added to the channel – that is the silent application discussed before. Once it is a signal, it is intended to reach the receiver, and it is inseparable from the ‘gravitation’ of the channel. Signal is the ‘physical form of a message – sound waves in the air, light waves, electrical impulses, touchings, or whatever.’\textsuperscript{117} However, they could also become noisy particles which attack the communication channel, especially when reaching the receiver, when decoding occurs and infringement is detected – the noisy protection. Therefore, an infringement is to be deemed as an act of communication itself.\textsuperscript{118} Since the receiver or copyright law differentiates between legal and illegal works, the distortions of its signals are considered as noise.

Most importantly, taking into consideration that technology is actualising the channels by which communication occurs, copyright and technology are juxtaposed in the middle or better on the channel of communication. Taking such recourse


\textsuperscript{118} Efroni states, for instance, that ‘[o]bviously, not every unauthorized communication of copyrighted material violates exclusive copyrights, but as a descriptive matter, every infringement involves communication or has a communication-related aspect.’ Efroni, Z. (2010) Access-right: The Future of Digital Copyright Law Oxford: University Press; p.45.
allows comprehending their relation directly and avoids, primarily, the common
treatment of technology as an exogenous feature to copyright; and secondly, related
to the former, comprehending technology as a subjugated means to the far-end
positions which copyright entails. If there is a necessity to comprehend the
interrelation between copyright and technology, such exploration must avoid, at
least temporarily, the far-end’s perspectives and set itself in the middle.

2.5. Dissonance of copyright and technology

The most valuable contribution made by Shannon’s theory was the success in finding
a mechanism to transfer a message through a noisy channel. Pierce notes: ‘[t]he fact
that such error-free transmission can be attained using a noisy channel was and is
surprising to communication engineers and mathematicians, but Shannon has
proved that it is necessarily so.’ Communication theory fully succeeds in
recognising noise onto the channel to articulate an additional or potential
uncertainty (contingency) in the communication. Shannon provided a mode and
advanced an understanding of noise as the main condition of communication, in
other words – noise is everything that is added to the signal and which cannot ever
be fully hauled out. As such, although noise is a disorder that distorts the messages
and interferes their transmission, it adds value to the message as even a distorted
message carries information. Shannon concludes that the more distorted messages
are, the more information they carry, hence his significance for understanding
information as a carrier of entropy or disorder. As Shannon and Weaver observe,
with the addition of noise ‘the uncertainty is increased, the information is increased,
and this sounds as though the noise were beneficial!’ Although Shannon was
concerned with noise on the level A, occurring as a technical problem, ‘the concept
of noise has been extended to mean any signal received that was not transmitted by

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Publications; p.163 [Emphasis in original].
120 Weaver, W. ‘Recent Contributions to the Mathematical Theory of Communication’ in Shannon, C.E.
and Weaver, W. (1972 [1949]) The Mathematical Theory of Communication Chicago: University of
Illinois Press; p.19.
the source, or anything that makes the intended signal harder to decode accurately.'

It is along these lines that the information theory provides a significant insight into the relation between copyright and technology. If copyright, as demonstrated in the Figure 2, resides on the channel, technology receives the characteristic of noise that is directly confronting copyright. Accordingly, it could be argued that the uncertainty that noise informs in the information theory is that of the uncertainty introduced by digital technology in the realm of copyright. Since copyright law establishes itself on the channel, and manifests itself as a regulator of communication, it continuously finds the disturbance and the interference that technology presents as external noise that impedes or affects its function. It threatens to corrupt the intended messages (copyright works), it distorts not only the signals that pass through the channel (copyright law), but also the processes of communication, such as reproduction and distribution which copyright tends to be in control of. However, this discordant relationship between copyright and technology, history shows, is ongoing from the printing press to current digitisation, as copyright law has always been confronted by the challenges and interference new technological developments have given rise to. Similar to noise, technology accompanies signals and informs information.

While the information theory has been employed in different models and systems of communication, Pierce acknowledges that not everything is susceptible to one common word or notion, such as communication or information. In view of the fact that currently copyright operates in so-called information society, the notion of information has been differently employed within the discourse, often signifying

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124 Pierce notes that information theory ‘deals in a very broad and abstract way with certain important problems of communication and information, but it cannot be applied to all problems which we can phrase using the words communication and information in their many popular senses…. We have no reason to believe that we can unify all the things and concepts for which we use a common word.’ Pierce, J.R. (1980) An Introduction to Information Theory: Symbols, Signs & Noise New York: Dover Publications; p.18.
both copyright work’s form and content. By such conflation, the information becomes an object of ownership and legal regulation. However, drawing on the understanding that information theory provides, information is comprised not only of messages, but also integrates in it all the noise from the channel. As such, the information is not a steady entity, but it is constantly affected by noise from the channel, infusing change and different quality to it. As Bateson famously said information is ‘the difference which makes a difference’.\textsuperscript{125} The noise that enables the message to be transmitted thus informs the message – thus, what was sent as a message comes as a new, integrating noise within. Noise is simultaneously making communication possible and is part of the information. Copyright, in contrast, idealises the information and with that restricts it as a mere message, however there is more to the information than law is capable to comprehend.\textsuperscript{126} Noise is not only integrated in the signals that become copyright works but it is also the underlying condition by and through which communication occurs. Noise is not anti-information, it is rather unexpected information, an instance of randomness within a communicative transmission.\textsuperscript{127}

Although noise has gained a quality that affects information as such, in the understanding of Shannon and Weaver, nevertheless, noise was considered as an external feature that interferes the path or the signal between two ends. However, the scholarship that extended information theory onto other fields of study provided a novel view by recognising noise as an intrinsic condition to any communication or relation. In such understanding, for instance, Atlan in studying biological systems claims that in contrast to information’s theory externalisation of noise, they are internalised as they perform a vital role or a background ‘against which the signal stands out as something different,’\textsuperscript{128} but also as something which allows that system


\textsuperscript{126} ‘Information exists. It does not need to be perceived to exist. It does not need to be understood to exist. It requires no intelligence to interpret it. It does not have to have meaning to exist. It exists.’ Stonier, T. (1990) \textit{Information and the Internal Structure of the Universe: An Exploration Into Information Physics} London and New York: Springer-Verlag; p.21 [Emphasis in original].


to constantly change and adapt.\textsuperscript{129} While Shannon was concerned with noise from an aspect of the actual transmission and successful preservation of the message, the scholarship engaged with the concept of self-organisation approached it as a constitutive element of the systems.

Translating the communication model into a copyright context, noise should be interpreted as something that interrupts the sent message, its formation principles and criteria upon which copyright subsists. Moreover, it attacks and interferes the communication processes, that is, copyright’s salient rights of reproduction and distribution between the far-ends. But as these actions are also ontological to the current digital technology, it can be argued that technology obtains the quality of noise that interferes the communication and channels copyright claims to hold and regulate.\textsuperscript{130} This paradox of intertwinement between copyright and technology is thus situated on the ‘noisy channels’, where in fact, copyright emerged from and is still conditional upon. In such understanding, technology as interfering noise presents itself conditional for the channel to subsist, that is, for the copyright to establish its edifice.

As the emergence of printing press proves, the means of communication are the basis from which copyright primarily originated and upon which it further actualises its purpose/function. Noise, that is technology, is not an external feature but it is internal to its subsistence. As noted before, copyright emerged and actualised itself out of the possibility of copy-making that technology made possible. Copying is not an instance that performs itself out of nowhere, but it is proximate with the mode of technology that sustains such operation. Accordingly, as the media theorist Parikka argues, copying in itself comprises the idea that the copy is to be shared and distributed, thus revealing the intricate relationship between copyright and technology:

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\textit{Culture & Society, Vol.19 (3), 1-27; p.7.}
\textsuperscript{130} Nevertheless, since some of the elements of the model change their role one would admittedly view technology as also having the role of a channel, transmitter, or receiver.
\end{flushright}
There is no point in making copies without distributing them. Copying is not merely reproducing the same as discrete objects, but coding cultural products into discrete data and communicating such coded copies across networks. Copy routines and distribution channels are intimate parts of the digital network paradigm: connecting people, but also copying machines.\(^\text{131}\)

Consequently, there are two things to be identified in respect to copyright, especially in a digital context. First, the copy in the digital realm is determined for a distribution. Moreover, the act of duplicating is an act of coding various utterances that are basis for communication. Second, the copy routines and distribution channels introduced with the information communication technologies are becoming copying machines themselves. Since copyright is positioned in the channels where communication emerges, it is proximate to the copy routines and distribution. In other words, copyright presents itself as a machine that actualises and defines copying. However, in contrast to the technological praxis, the copyright’s normative framework, upon which its rationale and functions of protection and promotion perform, is embedded in the distinction between copying and distributing, which in turn is the continuous impasse of copyright law. Moreover, it seems that the control over reproduction has been disturbed as digital technology enables reproduction processes way beyond copyright’s control. Since technology disturbed and re-conceptualised the notion of reproduction, taking Litman’s observation than the word *copyright* no longer describes what copyright stands for.\(^\text{132}\) The technological basis is the process through which communication occurs, the process that materialises the signals and informs the information as a ‘material’ quality of that communication. As Terranova aptly notes, information ‘emerges as a content, as some kind of ‘thing’ or ‘object’ but one that possesses abnormal properties (ease of copying and propagation intangibility, volatility, etc.) that contemporary technological developments have exacerbated and amplified.\(^\text{133}\)

Technology was indeed the condition for the copyright emergence, but also for its ongoing continuance. The model (Figure 2) illustrates their constant confrontation,


reaching its peak with digitisation. In order to comprehend the ‘intangibility’ of technology and, at the same time, comprehend the discord of copyright and technology, an immersion into the communication channels is crucial in order to identify the noise that threatens to corrupt the intended message, the works of copyright. The noise is threatening the seeming ordered and balanced legal communication of signals and once it interferes it becomes a subject of treatment either through copyright law’s normativity or through its reformativity of norms, which is intrinsically installed in its justifications. The discord between copyright and technology is the noise that emerges from the channel; it is the uncertainty and interference, a constant contingency, but also a beneficial element that must be acknowledged.

Communication in its modern conception, and especially as often taken by the copyright discourse, remains to be viewed in the classical linear model as being a transmission between a sender and a receiver through a channel. However, especially in context of the digitisation and the networks as a representational tool, the multiplication of communication channels has generated ‘non-linear dynamics in the unfolding of sociocultural effects.’ These processes are not linear but encompass relations between signals and noise, constantly fluctuating, becoming, as Terranova terms them, ‘informational dynamics’. In that sense, copyright law must acknowledge the dynamics of the technological noisy background and the processes it entails.

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134 Weaver notes: ‘These unwanted additions may be distortions of sound (in telephony, for example) or static (in radio), or distortions in shape or shading of picture (television), or errors in transmission (telegraphy or facsimile), etc.’ Weaver, W. ‘Recent Contributions to the Mathematical Theory of Communication’ in Shannon, C.E. and Weaver, W. (1972 [1949]) The Mathematical Theory of Communication Chicago: University of Illinois Press; p.7.


II. MEDIUM
While the communication model detailed in the previous chapter provided one approach for comprehending copyright and its relation to technology, this section proceeds to move on to further develop this by investigating noise as an internal, ever-present feature of communication. This entails two distinct, but intrinsically related, aspects of this thesis. It not only liberates the exposition from copyright’s established principles of operation and epistemological positions, but crucially makes possible re-articulating its relationship with technology. In order to explicate further these two aspects of my research project this section introduces the notion of the parasite, that is, noise, as developed by the French philosopher Michel Serres, specifically in his seminal work *The Parasite*, but also draws on his understanding of the notion of relation (and communication) that reverberates in his extensive and diverse body of work.

The notion of the parasite enables us to address a number of different aspects of the thesis. In short, it provides a possibility to address the principles of production, reproduction and use, that is communication, which are essential to copyright, but also to encompass the parasitic activities that copyright deals with. Moreover, it enables us to view copyright and its normative capacity as a parasite that attaches on to a relation and establishes principles with which it interferes and intervenes within the communication it regulates. Furthermore, in associating the parasite with technology, it offers an alternative articulation of understanding the relationship between technology and copyright. Finally, aside from these trajectories, the methodological potency of the parasite becomes an agent through which the whole discord between copyright and technology can be untangled. The parasite is thus both subject matter and methodological tool for the thesis.

This chapter begins with an introduction to the work of Serres and identifies the reasons why the concept of the parasite is utilised. It proceeds to address the main features of the parasite and develops the concept by applying it specifically within the context of copyright and its history. By illustrating characteristics of the parasite
that copyright both explicitly and implicitly deals with, it further extends the notion in considering copyright law as a parasite itself. As such, it provides a model through which its relation with technology is further investigated.

3.1. Parasite

Copyright, it could be said, deals with subjects (senders and receivers), objects (signals constituting a message, that is, a work of copyright) and interactions (production, reproduction, distribution, communication of works to the public). In each of these segments, copyright has determined a partition on the basis of its justifications — the property principle — and prescribed precepts (rights and obligations) for each of its subjects through its legislative processes. Copyright protects the rights and interests of the authors, owners and users in respect to the copyright works, and also regulates their access, reproduction and distribution. The objects regulated by copyright emerge primarily grounded upon an unbiased principle, where their legitimacy remains unquestioned as long as the principles of originality and fixation are applied and they fall into one of the categories of copyrighted works — the instance of silent application. The works are divided into primary and secondary, and emerge with their potential of interaction, multiplication and sharing.\(^1\) As such, copyright subsists with the very act of informing an object and its eligibility for copyright protection and promotion is questioned only when it takes part in an interaction between subjects. The segment of interaction is where the ‘bundle of rights’ (control, reproduction, distribution, performance, display) is actualised, and it is on the basis of these rights that communication between senders and receivers is regulated. Every copyright infringement that interferes with copyright’s set orders is recognised as a sort of noise that must be expelled from the system in order to maintain its ‘equilibrium’ — the instance when noisy protection manifests itself in the contingency of legal interpretations that call forth the existing copyright’s normative framework and therefore challenge the principles (criteria,\(^1\)

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\(^1\) Copyright Designs and Patents Act 1988, c. 48, Section 1 defines the primary works as ”(a)original literary, dramatic, musical or artistic works, and the secondary works as ”(b)sound recordings, films or broadcasts, and ”(c)the typographical arrangement of published editions.
categories and rights) and the propriety of the property notions that constitute it. As stressed before, this interaction is deeply embedded in the technological medium, now predominantly actualised as digital in contrast to analogue forms,\(^2\) which intensifies the noise in the channels in which copyright subsists.

The information theory that I have discussed before shows the presence of the medium upon which copyright as an apparatus attaches itself and sets normative principles, criteria and categories by which it operates and affects communication. Situating copyright within a model of communication views the subjects (authors, users, owners) as nodes that interact with objects (works of copyright) through an interaction that bears a double meaning — an act of communicating objects and a means through which communication occurs. In addition to the far ends that take part in communication, the third element is recognised — that of noise — as an intrinsic feature of the medium that primarily enables communication to take place, but which, then, also informs the content of that communication. This objective approach to noise as a positive quality, nevertheless, does not and cannot dismiss its negative qualities of appearing as ‘static’, or as background noise that affects, distorts and interferes with the channels of communication. In order to further question its presence within the copyright realm, it must be stressed again that communication should not only be reduced to an understanding of being a process through which copyright works of words, sounds and representations are transferred for the reasons of meaning-making, neither as a means through which exchange takes place; but it should be apprehended also as a condition that constitutes a set of specific relations manifesting themselves in different forms of relationships, which are not reducible only to human agents.

These different forms of relations, or connections more precisely, constitute the life project of Michel Serres.\(^3\) Bearing the title of a philosopher of science, his work

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\(^2\) I deploy this distinction between analogue and digital, as it is commonly understood. However, Manovich, argues that: ‘New media is analog media converted to a digital representation. In contrast to analog media which is continuous, digitally encoded media is discrete.’ Manovich, L. (2001) *The Language of New Media* Cambridge: The MIT Press [http://www.manovich.net/LNM/Manovich.pdf](http://www.manovich.net/LNM/Manovich.pdf) (Accessed 15 November 2013).

transcends the limitation of knowledge categories, continuously engaging in bridging the soft and hard sciences while drawing on fields as diverse as mathematics, information theory, philosophy, literature, thermodynamics, religion, and fables, to name a few. What connects together his body of work is the subject of relation, held as a complex process that constitutes structures and precedes any system formations, understood as broadly as possible, such as society, knowledge, or culture. More specifically, it is in his exegesis of communication that Serres identifies the third element, that of noise, as a constitutive element of the relation that connects two ends, where the act of creation, transformation and potential for systems to emerge and collapse actually lies.

This aspect of communication, particularly the quality of noise, becomes a main subject of concern in his book The Parasite in which he pursues but expands his project developed in his preceding series Hermès, which consisted of different books addressing elements and processes of communication. By drawing on information theory, in an idiosyncratic stylistic manner Serres takes the parasite as a point of departure to introduce a sort of 'parasite logic' to an array of different relationships, and elaborates, as Brown notes, 'a generalised theory of ordering, of mediation and relationships'. The equivocal potential of the parasite lies in the different meanings it has in the French language, denoting 'noise' or static in addition to the two other meanings present in the English language – a biological and a social parasite. This etymological deployment and displacement of words works in favour of his methodology as it breaks and interconnects different realms of knowledge into a productive assemblage of interventions and demonstrations in order to explicate the parasite. In this manner, the parasite becomes a feature that carries a manifold of

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characteristics that cannot be comprised in one take. Hence the cogency of the ‘parasite’ and its relevance to the investigation will be achieved in course of the arguments developed in this and the following two chapters. In line with Serres’s approach to investigating the intricate nature of noise (parasite), together with all its features and the indeterminate effects it might have, I deploy it as both an ontological proposition for comprehending relations and an epistemological tool of investigation. In turn, this makes it possible to open up an aperture for not only comprehending © but also a passage to a different understanding of the relation between copyright and technology.

Developing all three meanings that the parasite entails, Serres propounds the argument that it is an unavoidable universal and internal feature of relationships regardless of the system they represent. They become the intermediary or a medium upon which the system in question depends. The parasite, akin to the noise discussed before, is the third element that informs the communication in question. In order for two ends to be connected there is always a presence of a third element, a space that is needed for them to connect and thus for communication to occur. In this sense, the third plays a trick on our logic focused on the two end points, revealing itself as an element that precedes the second, or rather, in Serres’s own words, 'a third exists before the other...I have to go through the middle before reaching the end. There is always a mediate, a middle, an intermediary.' This condition, while 'ostensibly forbidden by classical logic' introduces the third as middle in which relations break, exchanges take place, things pass through and events occur – it becomes a fuzzy field between two oppositions. Accordingly, the parasite as a third element could be everything that plays the role of a medium (an object, a subject, a means), regarded as a condition that connects the other two and makes it into a model or a system. For these reasons, his work in general and the notion of parasite/noise in particular has found its way into diverse fields of

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10 A fuzzy logic in contrast to the binary oppositions ‘between yes and no, between zero and one’ ‘recognises an infinite number of values [that] appear’ in between. Serres is praising the mathematicians who have introduced this, as he notes ‘we have needed this fuzziness for centuries.’ Serres, M. (2007) [1980]) The Parasite Minneapolis and London: University of Minnesota Press; p.57.
knowledge, including literary theory, art, sociology and organisational theory, and sound studies. However, apart from incidental instances, his work has on no occasion been employed within a close reading of law, and this thesis goes some way to redressing this omission.

Nevertheless, it must be noted that the model is never a pre-given model that applies globally, but it emerges out of the specificity of the third element that enables such a relation. While the parasitic condition might be global, the specificity of the relation is always local, demonstrating a particular set of relationships between the elements, and as such ‘[e]ach demonstration puts the model to work in a different way.’ In this sense, while the model could be viewed as a ‘readymade’ model for investigating copyright (and technology) it certainly corroborates its own specificities, as it will be demonstrated below. The claim that the ‘global does not necessarily produce a local equivalent, and the local itself contains a law that does not always and everywhere reproduce the global’ certainly

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15 It was a great surprise to the author to learn that Brad Sherman, a recognised scholar of intellectual property law has used Michel Serres’s notion of ‘quasi-object’ to consider the nature of copyright works, which is yet another denomination of the parasite, which I will refer to in the next chapter. This is shown in the abstract of the paper ‘Hybrid Property: Defining the Limits of Copyright Law’ for the International Conference “Copyright Culture, Copyright History” at Tel Aviv University, The Buchmann Faculty of Law, January 4-6, 2010. However, the published paper as an outcome of the conference ‘What is a Copyright Work?’ in the Theoretical Inquiries in Law (2011), Vol.12 (1), did not refer back to Michel Serres. To the author’s knowledge the notion of ‘quasi-object’ has never been actualised in any other study by Sherman.


17 ‘The position of the parasite is to be between. That is why it must be said to be a being or a relation. But the attribute of the parasite...is its specificity.’ Serres, M. (2007 [1980]) The Parasite Minneapolis and London: University of Minnesota Press; p.230.

18 Ibid.

needs to be taken into account when addressing the universal position of copyright, which does not necessarily apply to the locality of interactions supported by the technological medium nowadays. This insistence on the local reflects the strategies of post-structuralist thought, of which Serres himself is contemporaneous,²⁰ to destabilise ideologies and universal paradigms of knowledge from their claims to universality and instead re-situate them on the local.²¹ The locality of any relation demonstrates the presence of the parasite as a feature that makes it possible for an exchange between two ends to take place. Taking into consideration the fact that copyright is empowered to ensure exchange between two ends and balance their interests necessitates recognising the parasite that allows and establishes the relation, or rather creates the model of copyright.

### 3.2. Copyright and parasites

The intention to displace, or even misplace, copyright from a property to a communication model is futile if it does not address the origination that establishes its mechanism. In other words, while it has previously been argued that copyright has the act of communication as its main subject matter, its emergence and edifice, as it stands, actualise with and depend on the act of production.²² Copyright’s

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²⁰ Serres nevertheless considers himself to be a structuralist, but indebted not to the linguistics and anthropology generally associated with structuralist thought, but to the mathematics of the Bourbaki group. For Serres: ‘A structure is an operational set of undefined meaning (whereas an archetype is a concrete set whose meaning is overdetermined), bringing together a certain number of elements, whose content is not specified, and a finite number of relations of unspecified nature, but whose function, and certain results concerning the elements, are defined’. Paulson, R.W. (1988) The Noise of Culture: Literary Texts in a World of Information Ithaca: Cornell University Press; p. 32, quoting Serres, M. (1968) Hermès I: La Communication Paris: Les Éditions de Minuit; p.32 [Emphasis in original].

²¹ Hayles has criticised this paradoxical position of Serres, which by setting out to oppose general theories he proposes ideologies of the local that often tend to become a new general theory. For Hayles, Serres’s ‘parasite’ is such paradigm that is equally applicable to ‘everything’. However, it is actually this paradoxical positioning that helps us to address different ‘localities’ in which copyright and technology partake. See Hayles, K.N. (1990) Chaos Bound: Orderly Disorder in Contemporary Literature and Science Ithaca and London: Cornell University Press; pp.196-208.

²² ‘The origin of property is in production. As to works of imagination and reasoning, if not of memory, the author may be said to create...new books [which] are the products of the labour skill and capital of the author.’ Erle J Jefferys v Boosey 1854 10 ER 702, quoted in Sherman, B. and Bently, L. (1999) The Making of Modern Intellectual Property Law Cambridge: Cambridge University Press; p.47 (footnote 15).
protection and promotion starts with the act of production. By recognising a created work in the name of an author, it endows him or her with a property right to regulate the manners of any subsequent use by and transference to the end-user (actant).  

It utilises an original production (creation) as its main principle. This understanding of copyright embedded in property justifications prevails as a veridical principle from which all amendments and challenges of law are considered. Every act of unauthorised reproduction and use of copyright material entails a presence of the parasite that becomes a relevant notion for those who are claiming their ‘intellectual lands’ and fight against parasites attempting to feed (or are already feeding) on their ‘intellectual lands’ — the host’s copyright works.  

Firmly actualised in a property paradigm, they pursue fencing off any activity that affects and disturbs their ‘intellectual holdings’. While this is the common topos of copyright’s narrative, the presence of parasites has been multiplied under the conditions of digital technology that obliterates those fences. In turn, this initiated great attempts to find legal and political solutions that would demarcate the lines of their ‘lands’ in a digital realm. In addition, the notion of the parasite is associated not only with that of the pirate, the copy-maker, but often exerts a quality, mostly associated with the major entertainment or content industries that try hard to secure their main financial gains based on the production of creative works coming from specific authors.  

Conversely, on the same account of (re)production, from a different perspective, the parasite resonates with those who argue and demonstrate that humans create and share beyond the boundaries set by the proprietary legal model of copyright. This therefore accentuates the cultural potential of copying and sharing, as invigorated by

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23 For instance, the question of what constitutes the legal regulation of production has been the subject of various approaches by Marxists. While Marx considered law as a consequence of economic relations based on production, Pashukanis viewed law as a product that attaches to commodity relations. See, Pashukanis, E.B. ‘The General Theory of Law and Marxism’ in Beirne, P. and Sharlet, R.S. (eds.) (1980) Pashukanis: Selected Writings on Marxism and Law London and New York: Academic Press.

24 ‘The world of pop music is in these times richly endowed and prosperous. It is not therefore surprising that it is much afflicted by parasites.’ Shaw LJ in Ex parte Island Records Ltd [1978] 3 All ER 824; at 831.

25 I refer here to both meanings that the word topos bears. In Greek, it means (common) place, but also has a meaning of a traditional topic, a recurrent theme or motif in literature, or in this context, in the legal narrative.

26 This is not only because of the possibility of alienation and divesting property rights but authors are often viewed as ‘victims of monopolist “content owners.”’ See, Ginsburg, J.C. (2009) ‘The Author’s Place in the Future of Copyright’ Williamette Law Review, Vol.45, 381-394; p.382.
technological developments. However, the understanding of copying must not be reduced to legal and political contextualisations. Instead, it should be viewed as a condition that precedes the regulatory framework of copyright, recognising the 'omnipresence and nature of copies and copying in human societies – and beyond'.

Thus, Waldron observes that ‘the would-be copiers are the ones to whom a justification of intellectual property is owed.’ The claim that copyright authors have never created out of nothing goes back to, for example, the Newtonian acknowledgement of ‘standing on the shoulders of giants’, which indicates the perception of creation and progress as gestures of parasitism. Therefore, the parasite does not only possess the negative connotation it most often has within the copyright discourse, but, rather in the words of the prominent Justice Hugh Laddie may attain and carry a positive quality:

> The whole of human development is derivative. We stand on the shoulders of the scientists, artists and craftsmen who preceded us. We borrow and develop what they have done; not necessarily as parasites, but simply as the next generation. It is at the heart of what we know as progress.

Accordingly, parasitism itself also becomes a manifestation of the manner in which production, communication and creation take form. This understanding has been impregnated especially by the postmodern discourse, claiming that creation as an act of production is always drawing on the work of others, that it is an act of appropriation never finite in its form — thus challenging the dominant author-centred principle of copyright. Moreover, this has manifested itself strongly with the emergence of new technology and the possibilities of reproduction it has entailed, influencing an array of creative and artistic practices that proliferate, challenge and inform such recognition within copyright discourse and its policy-making. In other

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32 For both cultural and political aspects of appropriation and collage across different media and their conflicting relations to copyright see, for instance, McLeod, K. and Kuenzli, R. (eds.) (2011) Cutting
words, this approach recognises the potential of such parasitic activities as an ongoing process, a matter of communication of cultural significance that has to be supported and encouraged, and thus acknowledged within copyright law – copyright ought to sustain creativity and knowledge and assure their value to be accessible, shared and secured.

The parasite metaphor, together with those of the pirates and predators, is prevalent in the copyright discourse as it makes it possible to address wrongdoers in the name of law.33 Law in general deploys metaphors, in so far as these are fundamental to any grasp of abstract subject matters, and they often become strong rhetorical means for the interest of the owners and producers of copyright.34 In this way, the metaphor of the parasite is narrowed down to its negative connotation creating, as Loughlan points out, ‘a conceptual model of copyright which disguises (or at least does not highlight) the inevitable contribution of predecessors and others in the field of the creation of any intellectual work, and to the common cultural heritage which makes any such work possible.’35 In consequence, bearing in mind the cultural and economic accounts of copyright, parasitism should be conceived of broadly. Not only in the context of being an impulse for stimulus of production or creation, as Justice Laddie comments, but also as a cultural condition of everyday enjoyment, consumption and re-use of creative and cultural works, especially achievable with today’s digitisation. Moreover, this very digitisation and the potentials of reproduction in turn introduced novel adverse parasitical activities that entrench ‘intellectual lands’, and indisputably take advantage of free-riding for their own

financial gains. Copyright as a system of law deals directly with a differentiation between ‘good’ and ‘bad’ parasites, and while such a distinction is an objective purpose and necessity of copyright, it also affirms this very condition as its essence. Whatever position one might take, ‘parasitic activities’ were always a subject matter around which divergent camps have built their arguments in consolidating the copyright discourse. In other words, whether discussed in relation to copyright’s economic or cultural aspect they were always subject matter upon which the former (economic) seeks to ground a property paradigm, and the latter (cultural) to recognise it as a creative act. The chain of parasitism is what constitutes copyright. Parasites intensively populate the realm of copyright. Indeed, this condition of parasitic (re)production is an unwritten principle that copyright law and its discourse not only acknowledges but also asserts through its entrenched mechanism for regulating parasitic habits. The apparatus of copyright ascertains the presence of the parasite, the copy-maker, the infringer through which its mechanism is justified. Thus it operates continuously to exclude the parasite in order to assert its encirclement.

While the metaphorical usage of the parasite within copyright discourse supports the arguments developed hereafter, nevertheless this thesis goes beyond its narrow usage and employs it as a feature that carries a capacity to address some inherent conditions upon which copyright emerged, as well as applying it across different layers in which copyright and technology coalesce. The notion of parasite enables us to avoid the far ends upon which law constitutes and regulates relationships. As such, it identifies the ‘third’ as intrinsic to copyright’s emergence, but also as an underlying and ongoing feature of its subsistence. The intent is not to simply

36 Levine comments on the new forms of digital parasitism and free-riding veiled behind media platforms that distribute content legally or otherwise, building their business on a content they have not funded or produced (YouTube for instance), that is, depending on free media or user-generated content. Levine therefore argues for ordering and fixing the manner how technology is used, not under the rubrics of free information but of the free market instead. See, generally, Levine, R. (2012) Free Ride: How Digital Parasites are Destroying the Cultural Business, and How the Culture Business Can Fight Back New York: Anchor Books.

37 ‘Parasitism is the name most often given to these numerous and diverse activities, and I fear that they are the most common thing in the world.’ Serres, M. (2007 [1980]) The Parasite Minneapolis and London: University of Minnesota Press; p.11.

substitute the parasite with piratical practices or acknowledge parasitism as a rationale for copyright and its normative relevance. The discussion is not reduced on the ‘reappearing’ parasites attacking copyrights and ‘intellectual lands’, nor as a justification for already prevalent processes and practices initiated or rather offered with the advent on new digital technologies. On the contrary, it is deployed in order to view the parasite in a ‘communicative thread’ that, as argued, precedes production and in that manner establishes a different position for addressing both the emergence and exertion of copyright. As will be discussed in the next chapter, it also enables recognition of a different interrelation between copyright and technology.

3.3. Para-historicity of copyright

For Serres, the parasitic condition is the very founding principle of relations. He begins by drawing on a fable from La Fontaine in which the city rat invites its cousin rat into the tax farmer’s house and they feast on his leftovers. Abruptly, they hear a noise at the door; it is the tax farmer, an interruption of their feast. The country rat flees to the countryside where it can eat soup ‘quietly and without interruption’, while the city rat returns to the leftovers and continues to feast. However, the food of the tax farmer is not a food that he has produced, as he is himself also a parasite that feeds and lives off the labour of the farmer who parasites the land which produces food. The manner in which the parasite survives, Serres explains, is always one-directional, denoting a ‘single-arrow’ of parasitism which is irreversible. The parasite, regardless of its form, is always interference, an uninvited guest on the table, within the organism, or on the land of the host. It is important to stress that in French ‘host’ and ‘guest’ are designated by the same word: hôte. As such, the parasite as a guest to the host can easily become a host to another guest, that is, another parasite. This, for Serres, is fundamental to social relations thus the parasite is anthropomorphised: ‘Man is a louse for other men. Thus man is a host for other men. The flow goes one way, never the other. I call this semiconduction, this valve,

this single arrow, this relation without a reversal of direction, “parasitic.” In this regard, the discussion begins with Serres asking the question of what, if in the beginning is production, produces the means for that production. He continues:

Those who call production reproduction make the job easy. Our world is full of copiers and repeaters, all highly rewarded with money and glory....Real production is undoubtedly rare, for it attracts parasites that immediately make it something common and banal. Real production is unexpected and improbable; it overflows with information and is always immediately parasited. The real production is hardly to be seen, as it is immediately parasited, making a chain or rather cascade of parasites — ‘the parasite parasites the parasites.’ Similar to the noise that interferes in communication between two points, the parasite always intercepts and finds itself in the middle. The parasite does not relate to the station but to the relation, putting the relation in some sort of cantilever. The established communication between two ends is interrupted by a third element that attaches onto the reproduction, where ‘energy’ flows for it to sustain. I argue here that the emergence of copyright confirms this proposition.

If histories of copyright, as discussed before, might conflict in their veracity, there is one thing that all of them include and that is the act of making book copies that brought about regulative arrangements that would culminate with the emergence of copyright. In England, the possibility of book reproduction and circulation of an undesirable content was intervened by the Crown already in the sixteenth century by charting the Stationer’s Company, which regulated and assigned rights for the printing and publishing of books. While this primarily had political responsibility to control (or censor) book circulation among the masses, the regulation of printing and publishing books also became a monopolistic basis for propertisation, which, as

40 Ibid, p.5.
41 Ibid, p.4.
42 Ibid, p.55.
43 Ibid, p.33.
Patterson notes, took the form of a publisher’s right. The control of publication by the Stationer’s Company as an association of London publishers was a result of being politically supported by the sovereign to control the dissemination of books together with their interest in monopolising the trade of publishing printed books. The establishing of principles upon which control of prints, later acquiring the name ‘copies’, were to be regulated marks the beginnings of a pre-copyright model that Patterson names a stationer’s copyright. The origin of copyright emerged out of parasitic interference.

A third arrives who has no relation to the people or things but who only relates to their relation. He branches onto the channel. He intercepts the relation. He is not mediation but an intermediary. He is not necessarily useful, except of course for his own survival: the relation to the relation allows him to exist.

The parasite interferes with the established relation by its initial act of abuse. However, it is only the abuse of the relation that introduces a new logic into the relation, upon which exchange and use are made possible. In this sense, any interference by the parasite marks a difference to that relation and establishes a new system of relations. It interrupts the relation in its one-directional flow of conduction, making the notion of exchange ‘neither principal nor original nor fundamental.’ Thus the paradoxical condition is that ‘[t]he relation is there in third position, and it is there in first position. Exchanges are possible only if relation is instituted. Thus the third man precedes the exchange.’ In that regard, the parasitic behaviour asserts the conduct of the publishers who abused the established relation of communicating books and introduced a new regulative exchange of disseminating books. This is manifested not only in the manner in which stationers established rules for regulating copies, but also in enabling exchange between those who create and those who receive. What seems to be a parasitic abuse, soon after becomes use

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46 Patterson, R.L. (1968) Copyright in Historical Perspective Nashville: Vanderbilt University Press; p.43.
48 Ibid, p.5.
49 Ibid, p.80.
and only then is followed by exchange.\textsuperscript{50} The irreversible single arrow manifests a kind of reversibility; what seemed to be a parasitic one-way activity of ‘taking without giving’ becomes a system of exchange, and while it is not necessarily symmetrical, it is beneficial for both the host and the guest.\textsuperscript{51}

Accordingly, aside from the developments upon which the publishers were able to build their monopoly, Patterson specifically recognises the manner in which the relations with creators of those manuscripts were established – this is particularly important given that at that time such creators were still not legally recognised as authors.\textsuperscript{52} Even though the authors were not allowed to become members of the Stationer’s company, an understanding that authors did not therefore have any rights is rather simplistic. Stationers have recognised a sort of property right in the work of the authors, manifested in the duty to pay and obtain author's permission for publishing. As such, their relations were rather more cooperative than competitive, serving both their interests.\textsuperscript{53} This resonates with the parasitic relation between the guest and the host, as discussed by Serres. While the established relation is primarily abusive it often winds up becoming a ‘common habit [usage].’\textsuperscript{54} The guest and the host depend on each other as ‘to be maintained [one requires] survival of another.’\textsuperscript{55} For Serres, this ontological condition of abuse is traced in information theory, biological organisms, social and economic relations. If the abuse does not pass the line of no return, when the parasite does not kill the organism or fill out the space with noise in which communication is not possible, the relation sets itself into another equilibrium. In this way, an exchange is born and the ‘parasite adopts a functional role; the host survives the parasite’s abuses of him…his life finds a reinforced equilibrium, like a sur-equilibrium.’\textsuperscript{56} However, it is important to note that in this parasitic relation the ‘stationers, as businessmen’, were, as Patterson

\textsuperscript{50} Ibid, p.168.
\textsuperscript{52} Patterson, R.L. (1968) Copyright in Historical Perspective Nashville: Vanderbilt University Press; pp.65-70.
\textsuperscript{55} Ibid, p.168.
\textsuperscript{56} Ibid.
relates, ‘primarily interested in themselves and their profits; any creative rights of
the author they recognized were a by-product of the copyright they shaped to their
own ends and purposes.’

Under these circumstances, the London publishers established a monopoly in
controlling and licensing books, which soon became a target of the anti-monopoly
affairs by the Crown, manifested with the act of not renewing the Licensing Acts in
1695, which recognised their position, excluding the stationers from the relation that
secured their sustenance. In concert with anti-monopoly sentiment and the
Enlightenment dedication to the ‘free’ circulation of knowledge and science, this
pushed the booksellers to find a new way to retain the position they held, and
hence restore their monopoly powers. Therefore, it is true when Serres notes that
the last parasite in the chain holds the dominating position, however in that
arrangement it ‘has but one enemy: the one who can replace him in his position of
parasite.’ For the parasite, the danger is to become visible as ‘he can be excluded
by an association, grouping, the two subjects whose relation he parasites, or by one
subject who wants to keep the object exclusively for himself. However, the one
that is excluded always returns; the parasite must be close to the food that makes its
survival possible. The excluded (chased) parasite always returns and thus, in order to
secure their position, the London book publishers came up with a tactic to recognise
the author in order to justify their middle position, by making sure authors would
still assign their rights to them. As Patterson notes, as stationers ‘developed and
shaped it [copyright] to their [publishers’] own ends, there was little or no regard for

Public Domain’ Law and Contemporary Problems, Vol.66, 75-87; p.78. Mark Rose refers to the Locke’s
anti-monopolistic sentiment, as seen in the letter to Edward Clarke, a Member of Parliament, where
he opposes the monopoly of the booksellers by stating that the works of the Latin authors claim to be
theirs ‘whereby these most useful books are excessively dear to scholars, and a monopoly is put into
the hands of ignorant and lazy stationers.’ Ibid, p.78, Rose quotes from ‘Letter from John Locke to
Edward Clarke (Jan 2, 1693)’ in Rand, B. (ed.) (1927) The Correspondence of John Locke and Edward
Clarke; p.366.
p.107.
underlying principles or a sound theoretical basis for copyright’.64

In light of the Enlightenment’s high regard for reason and science, and with due recognition of the Lockean model of individual ownership based on labour, it was only with the Statute of Anne (1709) when the author’s rights were recognised, marking the emergence of an author and granting him a property right over the book for a limited period of time.65 However, the reasons for such a ‘contract’ were not primarily related to recognising the subjectivity of the author, but were rather a matter of fighting monopoly.66 In turn, as Deazley notes, this ‘was not entirely the legislative panacea which the booksellers had sought’, since although the introduction of property in books brought stability to the unsteady trade, the act also ensured ‘no monopolistic abuses could be brought to bear upon that trade.’67 This is evident in the ‘battles of the booksellers’ that raised the question of whether the property right was perpetual common law or statutory right.68 Although the author was recognised within Statute of Anne it is through these battles and the cases marking that period, particularly the decision of Donaldson v Beckett, that the notion of an author took shape.69 The complex issue of the author’s emergence within copyright law has been a subject of contentious and extensive scholarship.70

69 The question of whether the right of the author’s right was a statutory or a common law right was a subject of debate until the Donaldson v Beckett (1774) decision which held that literary copyright was a statutory right and therefore of limited term, rather than a common law right of perpetual duration. Even though this case remains a formative case of the author-centred discourse within copyright, Deazley argues against those commentaries which view the Donaldson case as an initial gesture in recognising the author as a proprietor of his own labour, by removing the connotation of natural rights and instilling it as a statutory right. In essence these readings suggest that the Statue of Anne recognised the balance of interests between the author and the public, and thus it limited the natural rights allowing knowledge to spread. He argues conversely that the decision of Donaldson should be read as a decision that addressed the wider interests of the society, the encouragement of learning and production of books. See more Deazley, R. (2003) ‘Myth of Copyright’ Cambridge Law Journal, Vol.62 (1), 106-133; p.132; Donaldson v Beckett (1774) 4 Burr. 2408.
However, regardless of its historical and contextual formation and development, what I would like to stress here is that its emergence as a factor of origin and production, and therefore as a copyright principle, was only a result of an intermediary intervention within reproduction that sought to secure a middle position. Accordingly, this ternary model of parasitic relations attests to the presence of the intermediary that interrupted communication and set out the rules and principles upon which the reproduction of copies is made possible. Moreover, the principles took a form of a contract embodying the Statute of Anne, recognising the three elements in the communication of copy making – the author, the intermediaries and the public – and transforming a parasitical one-directional chain into an exchange model based on property rights between legal subjects.

This attempt to demonstrate a parasitic factuality to copyright is not only due to the need to locate the origination of copyright, but rather to reassert the well known – that is, the emergence of copyright in the intermediary activity of those directly engaged with making and controlling copies. Regardless of copyright’s further normative developments and recognition of the justifications/aims it has entailed, it is nothing but a right that results from a relation on which an intermediary has attached and installed its interests. Indeed, what precedes the contextualisation of production and therefore propertisation within copyright was actually not the production of books but the actual reproduction on which an intermediary as a parasite attached and set rules that would respond to their needs. Copyright was only a right entitled to a particular group that emerged as an outcome of policies of censorship and press control, which allowed them to impose their regulatory acts and uphold the protection of those rights. On that account, as Saunders argues, the Statue of Anne made property right an ‘alienable right’, serving the economic interests in the copies of books, and delegated rights for regulating a ‘specific


Consequently, this brings to attention the fact that the act of production or creation on the part of the author was only incorporated within the copyright discourse afterwards, by legally informing the author’s subjectivity, and conceptualising his or her property as a site – understood here both as a location in which production takes place, and as an event that concretises an author’s expression into a form – that belongs to him under the statutory regime which law has conferred. As the etymological basis of the word parasite shows, it is always beside (para) the location or event (site), which enables its own survival. Even before the notion of property provided a legal ground for copyright, the site is to be comprehended as a relation marked by the copying and dissemination of books upon which the stationers, the publishers, the intermediaries, or the parasites attached themselves – hence copysite.

This is exactly where the ‘para-historical’ account advanced before provides a possibility for comprehending the emergence of a system that was not founded on a form of production but rather resulted from abusing the reproduction of printed books. It also aligns with the copy-making and content-making aspects of copyright discussed before, in relation to which I have put forward a position that the former, the technological possibility of reproduction, is what engendered the conditions for copyright to emerge. More specifically, the emergence of copyright was not based on the origination of a production typified with originality as a criterion. The origination lies rather with the process whereby copies were made, that is

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75 It is important to note here Saunders’s criticism of the manner in which the history of authorship has ‘romantically’ tended to interpret copyright law as a mechanism that serves and realises the human subject. In contrast, he argues that the circumstances upon which authorship acquired legal specification were historical, not pre-ordained, subject to technological, cultural, legal, commercial and social imperatives, which came to ‘fortuitously’ overlap only with the introduction of the statutory personality of the copyright owner. Saunders, D. ‘Dropping the Subject: An Argument for a Positive History of Authorship and the Law of Copyright’ in Sherman, B. and Strowel, A. (eds.) (1994) Of Authors and Origins: Essays on Copyright Law New York: Oxford University Press; p.96.
77 Even though this seems to fall within a technological determinism to copyright’s emergence, in the next chapter, by employing the notion of the noise I demonstrate rather different quality to technology.
reproduced. It is the parasite what gives a particular system its subsistence. While this ‘para-historical’ approach confirms the parasitical conditions upon which copyright emerged, the model established in its foundation has not much changed, only now it covers a larger number of works beyond books. The only difference is that from being a right in reproduction it became a right of production (that is, to emerge only with a creation) as the notion of property was integrated in order to uphold the exchange and use values of copyright works.\textsuperscript{78} The production became an act of enclosing and giving rise to a property that constantly attracts parasites. Therefore, the notion of the parasite allows us to question the principle of production and property, and assert reproduction as the principal relation on which copyright subsists. Moreover, this provides a different thread through which to understand the ‘parasitic activities’ that copyright in essence constantly tries to expel, exclude and assure they remain outside its circumference. The property is circumscribed with parasites all around, always beside the site and with a constant urge to encroach upon the land.

The circumference of copyright represents an enclosed land.\textsuperscript{79} But the production of the land and its enclosure are not primary, but rather they are only following the abusive nature of the parasite. In that regard the notion of the parasite puts forward an understanding of production and therefore an origin of property. For a production to take place it is necessary for a parasitic act to take place. Serres draws on the origins of agriculture that needed a cleared space in which sowing of seeds and cultivation could take place, a space where all the weeds are excluded for the vegetables to grow. Before production could take place, the place is abused by way

\textsuperscript{78} Bently and Sherman provide an excellent reading of the different processes by which the subject matter of copyright, that of the intangible, took the form of a property. The clarification of property was subject of diverse interests, debates and case that concretised more solidly in the middle of the nineteenth century together with the emergence of intellectual property rights. Sherman, B. and Bently, L. (1999) The Making of Modern Intellectual Property Law Cambridge: Cambridge University Press.

\textsuperscript{79} Property establishes an understanding through the notion of taking place, marking a piece of land, intrinsically related to the solid of the soil. This conceptualisation therefore cannot be divorced from the agricultural activities that mark one property, the \textit{pagus} as a boundary delimiting a territory. Western societies has extended property, as intellectual property shows, from hard to soft materials of possession, from lands to a ‘simple signature on paper, from \textit{pagus to page}; an ancient word is repeated as it goes from hard to soft.’ Serres, M. (2008) Malfeasance: Appropriation Through Pollution? Stanford: Stanford University Press; p.23 [Emphasis in original].
of cutting, centring and purifying in order for an enclosure to be marked.\textsuperscript{80} However, as soon as a space is delimited, the parasites are all around, as there is always a hole in the hedge. In that sense the paradox of the parasite reappears: it is both the included and excluded. The enclosed land however according to the logic of the parasite cannot be closed, there must be a passage or a hole since there is always a third, noise, parasite present in the system. For that reason Serres argues the system is always open, and thus there are ‘always relations and parasites.’\textsuperscript{81} Indeed property for copyright cannot be foreclosed, since its very existence is based on being open; thus its hosting lands are always subject to parasites.\textsuperscript{82}

The animalistic character of the parasite suggests yet another aspect in which it occupies space. Serres understands property as the very act of appropriation, which in contrast to humans who establish it through a powerful tool such as law, for animals is established by marking their habitat with the fluids they excrete. However, he advances a natural right of appropriation by which property as ‘one’s own’ is established only through dirt, marking a clean space with its own fluids – thus what is one’s own dirt is actually clean.\textsuperscript{83} In French propre means both ‘clean’ and ‘one’s own’. If this is the ‘natural’ foundation for property rights, Serres assigns it an animal origin that precedes any conventional or positive right.\textsuperscript{84} Thus Serres takes Rousseau’s imaginary act of description, in which ‘[t]he first after enclosing a piece of land thought of saying “This is mine” and found people simple enough to believe him was the real founder of civil society’, to be false, as this act is preceded by marking a territory firstly by inhibition and then followed with possession – ‘I inhabit, therefore I have.’\textsuperscript{85} However Serres also takes notice of an important word in Rousseau’s


\textsuperscript{81} Ibid, p.85.

\textsuperscript{82} Serres writes ‘the first founder was the first who, having made a hole in a hedge that enclosed an area: said this is my passage...’. Ibid, p.84.

\textsuperscript{83} Serres calls this a stercoral origin of property rights. Ibid, pp.139-46.


\textsuperscript{85} Ibid, p.8 and pp.12-3: The Lockean labour theory, which rests on natural law, argued that the cultivation (labour) precedes entitlements. However, it was criticised overlooking the question of occupancy, as for a cultivation to take place it must be taken first. For that reason Blackstone addressed occupancy as the moment when property starts, with the first separation from the
account where the word ‘enclosed’ (*lustrare*) means to 'travel all over a place, go around its periphery, circle it, inspect it', but also to purify and clean the space.\textsuperscript{86}

Thus again the parasite indicates its paradoxical position – it abuses, and thus occupies through pollution, making it ‘clean’ and ‘one’s own’.\textsuperscript{87} In this understanding the parasite is both guest and host: it uses the white clean space by marking it and making it dirty, but then it is also clean, a hosting spot for other parasites. Locating this natural foundation for the emergence of property rights is not an attempt to justify any natural qualities of copyright, it is rather a demonstration of the intrinsic and ineluctable presence of the parasite in the property domain in which copyright resides. This brings to attention, nevertheless, the degree to which the very act of establishing copyright property is certainly not related to dirtiness, as copyright works remain clean, always subject to being used and re-used. In view of digitisation in particular, which makes uncorrupted ‘identical’ copies of copyrighted works, always clean and ready to be used, such understanding asserts the proliferating ‘parastism’ always already encroaching upon copyright’s lands. The system of copyright is a hosting environment.

With the para-historical account and the manner in which production and property take place, the parasite demonstrates that it is an operator that interrupts any system of exchange. Yet, paradoxically it still constitutes their very foundation. Moreover, even though it seems that it takes without giving, the parasite by its very abuse sets up an exchange of a different kind.\textsuperscript{88}

The parasite invents something new. He obtains energy and pays for it in information. He obtains the roast and pays for it with stories. Two ways of writing the new contract. He establishes an unjust pact; relative to the old type of balance, he builds a new one. He speaks in a logic considered irrational up to now, a new epistemology and a new theory of equilibrium.\textsuperscript{89}

\textsuperscript{86} Ibid, p.16.

\textsuperscript{87} Serres notes that *sitos* in Greek sometimes means excrement, indicating that what is one’s own is always clean. Serres, M. (2007 [1980]) *The Parasite* Minneapolis and London: University of Minnesota Press; p.145.


Therefore, with its every interception the parasite breaks the previous equilibrium, and induces a new one, which remains as such until is not disrupted by another parasite. The para-historical discussion shows that parasitic activities not only enabled the emergence of a system that would become known as copyright, but also informed a system upon which exchange of intangibilities is possible. ‘The parasite always plugs into the system; the parasite is always there; it is inevitable.’ In that exchange the authors receive their reward, the right-holders actualise their rights, and the users have an access to knowledge, creativity, in order to equip themselves with new objects for future exchange; the intangibilities i.e. the objects of knowledge and creativity become currencies of a regulated exchange. The parasite, therefore, is not only a subject that exemplifies (or personifies) particular activities that constitute the essence of copyright regulation, but it is also an object that has significance in constituting relations. Thus it is only with copyright law in place that we have been able to design a cultural sphere premised on the assumption that work will circulate through the market and enjoy financial rewards, and that, by law, authors are owners. However, the system is not in equilibrium as it is constantly subject to interceptions by the parasite. Hence the parasite is the quality of transformation, turning the cleared white space into a productive domain. The system of law engendered by the parasites, in all their disguises, is thus not closed, or, as Serres puts it: ‘The system is very badly named. Maybe there is not or never was a system. As soon as the world came into being, its transformation began. The system in itself is a space of transformation.’

3.4. Parasites today

Historically, as we have seen, copyright has privileged the middleman and not its

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90 Ibid, p.63.
92 Serres draws on the Lucretius’s atomism where the clinamen is the smallest deviation from a laminar flow of atoms, which gave rise to the world. The clinamen is the ‘minimal operator’ that gives order out of chaos; thus it is associated with the parasite. Serres, M. (2007 [1980]) The Parasite Minneapolis and London: University of Minnesota Press; p.188. See also Serres, M. (2000 [1977]) The Birth of Physics Manchester: Clinamen Press; pp.85-99.
authors. Thus what has become a legal instrument that rewards the authors, as Gillespie notes, was never the purpose of copyright but only its ‘preferred strategy.’

This has become especially evident as the advent of digital technology enabled accessing and bridging the boundaries that copyright’s property principles have set. Moreover, it has unfolded a realm in which strict divisions between private and public, producers and consumers are more normative conceptualisations than real conditions of communicating copyright works, disturbing the position that the middlemen in copyright’s history held. While current communication activities call into question the legal arrangement of copyright, the response from the middlemen has been to pursue stronger property rights employing various rhetorical means to serve their interests. At the same time, while the prevention of easy copying remains at the forefront of their strategies, the potential of distribution at very low cost has undoubtedly expanded/augmented the possibilities of greater income, manifested in today’s information economy, where information is assumed to be an object of property.

As the parasite allies with the powerful rhetoric of property, middlemen’s strategy also involves rhetorical means of reasserting property rights through two simultaneous processes of subjectification. The first process is related to pirates and the parasites that must be expelled from the system, as they are detrimental to economic growth and the producers that depend on their intellectual work; and the second is related to authorship. Even though in many instances these concerns are valid for copyright’s apparatus, the problem is that they often tend to be generalised in jumbling together qualities that do not necessarily apply to each of the subjects and their rights and obligations in question.

Recalling the metaphor of the parasite and its negative connotations does not only


96 Ibid, p.46.
rest on the entrenchment of the property that © has encircled (enclosed), but as Patry observes, together with the thieves, trespassers and pirates, become a metaphorical device to secure and further instil the metaphor of property. The middlemen not only continuously seek to keep their ground, but the property notions, requiring new explications in the digital age, are still strongly held to be an aspect that must be taken into account. As William Patry remarks:

Before the law says you own something, it cannot be said that those who act contrary to your wishes are thieves, trespassers, pirates, or parasites. Describing someone as a thief or trespasser must be seen, therefore, as a metaphorical step in gaining property rights, and not as is usually thought, the result of having a property right in the first place.97

The middlemen that currently characterise the entertainment businesses have an interest in the protection of their copyright, which often tends to be conflated with that of the authors. Especially in the context of commodifying creativity, as Macmillan has stressed, there is a necessity to differentiate between the ‘romantic notion of copyright’ that emerges out of the actual creative act by the author, and that of the ‘unromantic notion of copyright’ that emerges from the secondary works, more often viewed as entrepreneurial rights.98 In this context, copyright deals with creative works but does not have creativity either as its cause or as a final object of protection99 – the entertainment industry merely depends upon and thus attaches

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98 Macmillan, F. (2003) ‘Copyright’s Commodification of Creativity’ ICFAI Journal of Intellectual Property Rights, Vol.2, 53-70. The secondary copyright works comprise films, sound recordings and broadcasting as works which give rise to another set of rights known in the civil law countries as related or neighbouring rights. UK law does not make a clear distinction, as those rights fall under copyright. These rights are granted to those who are not technically ‘authors’ such as performers, producers of phonograms and producers of films and broadcast and they derive from primary copyrighted works (literary, musical, artistic and dramatic). These rights arise from the investment rather than any creative endeavour. In the context of this discussion, it could be argued that they are parasitical rights (para- beside, adjacent to), neighbouring rights or rights related to someone else’s work.
itself to already established creative works. Accordingly, Bently has argued that ‘copyright serves paradoxically to vest authors with property only to enable them to divest that property, the author is a notion which needs only to be sustainable for an instant.’ In a similar manner, the middleman needs the author only to attach the right to and divest it, as copyright is an alienable right. In this manner the right enters into the circulation of the market, reaching as many ends as possible to maximise exploitation. Also, as it accrues in return the owner of that right, copyright turns the works into commodities. As Patry notes, modern copyright took its familiar form when the book publishers employed the metaphor of the authors ‘to justify their assertion of perpetual commodity rights in author’s work’ that even today remain a rhetorical means or ‘the basis for and beneficiaries of rights that are in truth owned by publishers and other corporations.’

In light of the digitisation processes that affect the once controlled communication paths of copyright works, the entertainment business in turn claims stronger rights based on the property notion of the author as an incentive for further production. These statements are supported rhetorically by identifying themselves with the ‘creative’ individuals/authors. As Shaviro comments, individuals do not have the same right as corporations, but also not every corporation is on the level of an individual person. This paradox of conflating and collapsing the individual and the corporation is one of the ongoing issues within the copyright discourse. Shaviro adds that corporation property and individual property are not the same thing because the ‘[c]orporations are not subject to “the same rule of survival” as individuals’ as their struggle is more related to an increase of their dominance and power rather than simply to survival. Therefore, the act of conflating is not only based on tensions between middlemen and creators, or better, the guest and the host, but it

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also includes insisting on proportional economic incentives that actually are different for the two. In a way, this supports and instils further the one-arrow irreversible parasitic direction explained before, while adding an additional quality to that of the corporations holding the middle position. Their parasitic attachment is not only to survive but also to increase reproduction and therefore their dominance and power. The parasite manifests its particular position of domination in terms defined by Serres:

The producer plays the contents, the parasite, the position. The one who plays the position will always beat the one who plays the contents. The one who plays the contents plays the object. The one who plays the position plays the relations between subjects. To play the position or to play the location is to dominate the relations. It is to have a relation only with the relation itself. Never with the stations from which it comes, to which it goes, and by which it passes.  

This is even more evident from parasite’s technological disguise. The networks of peer-to-peer sharing are continuously trying to establish a symmetrical communication free of any exploitation. Their efforts resulted in the emergence of movements, such as Creative Commons and Open Source, which celebrate new modes of free digital reproduction that would finally affect the asymmetric expansive modes of production. Under this arrangement, the cultural artefacts as embodied information finally have a prospect of actualising the social purpose of copyright, to enable a free flow of information; but also of re-modifying the market economy by enabling common-based peer productions that sustain a non-proprietary social model rather than a proprietary market model – what Benkler has termed a social production. However, as Pasquinelli argues, peer production is still represented as an abstract binary model overlooking the fact that any production requires the presence of the third in the network. Or to put it in Shaviro’s words, ‘[e]ach individual may be a node in the network, but the corporation is the network itself.’

The parasite metamorphoses into a technological parasite. The emergence of peer-

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to-peer networks enabled direct transmission of works of information from one node to another. In the process of their emergence, excluding the intermediary posed a great threat to the industry’s positions on the relations they held prior to digitisation. This is particularly evident within the music industry, as once the format became elusive and easily transmissible through digitisation, by reducing the costs to a minimum but maintaining the quality of the original, the industries initially found themselves losing their dominance over the communication paths that they hitherto controlled. The new condition resulted not only in their ‘noisy’ fight against the parasites based on more rigid property rights, but also to simultaneously changing their own strategy in reorganising their domination over the monopoly of hardware media and infrastructure for controlling access to the Internet.\textsuperscript{108} Moreover, in context of the immaterial labour that feeds contemporary capitalism, Pasquinelli notes that this ‘represents a passage from an economy based on IP to an economy based on the parasitic exploitation of a commons space and shared resources (the legal or illegal status of these resources is not a crucial factor for major corporations).’\textsuperscript{109}

In light of what was said above, therefore, I argue that although production is the ongoing background against which copyright justifications revolve, in essence, it is the reproduction that gave rise and continuously remains the main subject of concern for the middleman. That said, engaging in this kind of explication, nevertheless, does not have an intention to over-simplify the contingent processes that engender(ed) copyright, but rather to encapsulate its emergence on the middle, and therefrom challenge its relation to technology. The parasitism is the underlying order of how copyright functions. Against the binary model of thought the ternary model of Serres allows to dismantle the dichotomy and introduce the third element that is affecting the other two. However, parasite’s presence does not necessarily fall within the distinctions of ‘good’ and ‘bad’. As such, it goes beyond issues concerning the entertainment industries ‘sucking the blood’ of the authors, author's originality, and user’s piratic practices. Instead, the parasite exerts a possibility for a ‘materialist

\textsuperscript{109} Pasquinelli observes that the economic model reorganised itself around the control of the media and not intellectual property rights. While this might be the case, intellectual property rights still remain a strong justificatory basis for content industries’ actions. Ibid.
description of the distribution and interruption of relations’ that copyright emerges from and upon which it depends.\textsuperscript{110}

\subsection*{3.5. Copyright as parasite}

If parasitism is a (social) condition of setting up one-way relationships based on abuse and appropriation of things for the parasite’s own good, it is the law, with its legal right and morality on top of that, that intervenes and attempts to reverse the one-directionality of the abuse, set an exchange as a principle, and establish a balancing order of such relations.\textsuperscript{111} Regardless of whether law is comprehended as an instrumental or ideological device, it is the apparatus that intercepts the parasites. This is evident not only for the reasons explaining why the Statute of Anne emerged in the first place, but also in copyright law’s perennial and essential function to restrain parasitic activities and assure they remain outside its circumference. On that account Serres is right when he notes:

\...law in general can surely be defined as the minimal and collective limitation of parasitic action. For parasitism, in fact follows the simple arrow of a flow moving in one direction but not the other, in the exclusive interest of the parasite, which takes everything and gives back nothing along this one-way street. The judicial, on the other hand, invents a double, two-way arrow that seeks to bring flows into balance through exchange or contract; at least in principle, it denounces one-sided contracts, gifts without countergifts, and ultimately all abuses. The just scale of the law contravenes the parasite from its foundation; this scale sets the equilibrium of a balance sheet against any abusive disequilibrium.\textsuperscript{112}

Copyright law manifests itself not only in limiting parasitic activities, but also in its continuous striving to establish and maintain a balance between private and public interests. Copyright law establishes this kind of ordering that tends to balance. In other words, it is a ‘balancing act’\textsuperscript{113} as it binds and joins two ends together by


establishing its presence on the middle. However, as has been argued, if copyright holds the position of a communication channel, in which it simultaneously enables and affects communication, the question that arises is whether the parasitic model that Serres advances could be also applied to that of copyright law? It should be stressed again that the notion of the parasite, that is, noise, is applicable to different set of relations in which it holds the position of a third, middle or intermediary, regardless of the form or attribute it has.\textsuperscript{114}

In the previous chapter (see Figure 2), I have demonstrated the communication model in which copyright law emerges from the middle and is situated on the channel. The law attaches itself to the middle and arranges the principles and conditions through which a communication of copyrighted works is considered to be legitimate. Copyright law both abuses and sustains the relation. Moreover, manifesting itself as a feature without which relation between its agents is not possible, it functions in the interest of the two ends; that is, it enables the functioning of a system that it both engenders and impedes. In recognising the reproduction of objects (initially the book) it established principles through which they have become an object of legal regulation. However, in order for the reproduction to be maintained, it recognised legal subjects and entrusted them with respective duties and obligations, by founding exchange and charting a balancing sheet in which communication occurs. By such arrangement, copyright law manifests itself holistically and creates a system in which both ends and everything in the middle works towards its own sustenance. Akin to the parasitic behaviour, it firstly abuses the relation and only then establishes an exchange that sustains its own survival. In that sense, the parasite resonates with a similar logic to that of copyright law being attached onto an already customary communication, while setting new rules, principles and rationales concerning how and in what context any particular communication and circulation of objects is permissible.

\textsuperscript{114} Assad eloquently explains Serres’s ‘third’, that is, the parasite (noise): ‘In Serresean texts, the “third” is therefore not only a logical exclusion to be unearthed from the simple dictum of “tertium non datur”; it also appears in the form of material, concrete entities, be they humans, any living being, an inanimate object or the world, in short, any entity deemed irrational by the norms of traditional logic.’ Assad, M. ‘Ulyssean Trajectories: A (New) Look at Michel Serres’ Topology of Time in Herzogenrath, B. (ed.) (2012) Time and History in Deleuze and Serres London: Continuum; pp.88-9.
If the parasite logic is at play within this articulation of copyright, it surely positions copyright to become simultaneously a fundamental and instrumental feature of such communication. That is to say, it positions copyright in the centre and, by this very position, law centralises its dominating power. If copyright law is installed on the communication in order to establish a double way relation between the subjects, it certainly expelled the parasite. As noted before, against the interest of the Crown, the stationers that held the central position in regulating the reproduction of books, were destabilised by the introduction of the Statute of Anne that conferred authors a copyright in order to attack their centralised position.115 However, in spite of the fact that copyright law succeeded in inauguring a double way relationship, in which balance would irreversibly mark its aspiration, it instead supplanted it and recreated a new centralising mode, which clearly manifests as such today. Bearing in mind the manner in which the parasite attaches onto an already established relation, I would extend the notion of parasite to copyright law and question its centrality.

Copyright law may have indeed attained the form of being an author-centred system. However, it emerged against the backdrop of reproducing books, or objects. Serres is right when he notes that law had and has ‘the genius of delimiting objects, which are attributable by the law to subjects the law also defines.’116 More precisely, laws ‘steady society by using ponderous objects to weigh down fickle subjects and their unstable relationships.’ 117 Therefore, as Serres comments, the first legal object is the bond that obliges, that attaches ‘a cord that materializes our relations or changes them into things.’118 In this sense, if the relations fluctuate, the law has the power to solidify and settle those relations,119 to organise our ‘concrete life’ as a group and the

115 Geller makes an interesting observation that these rights were enforced not by a central institution, but by common courts scattered in different jurisdictions - thus concluding that copyright law ‘played a strategic role in decentralizing power, among other things, over creation and communication.’ He makes similar point about the French Laws of 1791 and 1973. See Geller, P.E. ‘Must Copyright Be For Ever Caught Between Marketplace and Authorship Norms?’ in Sherman, B. and Strowel, A. (eds.) (1994) Of Authors and Origins: Essays on Copyright Law New York: Oxford University Press; p.163.
117 Ibid.
118 Serres writes: ‘Sometimes I imagine that the first legal object was the cord, the bond, lien in French, which we read only abstractly in the terms of obligation and alliance, but more concretely in attachment,…’. Ibid., also pp.105-10 [Emphasis in original].
119 Ibid.
relations among people. Craig rightly stresses that ‘[l]egal doctrine has a self-perpetuating power: the power to naturalise its constructions, and to solidify its abstractions.’ But this power comes from the position copyright law has – it is the ‘being of the relation’ – as it simultaneously emerges from a relation and establishes a legal relation between subjects. In being positioned on the relation, like the parasite, law generates its power as not being fixed in essence and not fixed in a station ‘but in the functioning of the relation’. Hence it is in law’s interests ‘for everyone to be fixed in place and fixed in essence.’

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The symbol of copyright signifies its centrality. It establishes itself in the middle, in the centre of relations. It presents itself as central to the relations it determines. By holding the central position it manifests its role in acting on behalf of the entities it represents. The circle of copyright embraces all.

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The distinctions, the two far-ends, the private and the public, are the fixed points in which copyright discourse finds itself. Moreover, this resonates with copyright’s justifications: the notions of creativity and knowledge as essential principles upon which the system functions. The binary is just a result of the third that is simultaneously present and absent, excluded and included. This parasitic quality of law that have I put forward does not seek to create a general theory of copyright law, nor to diminish the contingent historical and social conditions upon which it emerged, but aims to trace the third element which provides a passage through which to identify a model that is outside of the binary framework generated by copyright. This is important not only to understand how copyright takes place and

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123 Ibid, p.64.
both informs and disturbs relationships, but also to provide an understanding of its relation with technology.

It thus becomes apparent that not only the subject matter of investigation, but also the arguments developed, in that respect, remain in the middle. This is especially problematic when engaging with an established discourse, such as copyright, which provides no more than two positions of observation. For reasons related to its normative system, justifications and the interests it aims to represent, it seems that the advent of digital technology has just widened the distance between those two. Therefore, this thesis attempts to intervene by setting itself in the middle. Such deflection of the given route, as has been shown, has the purpose of relating, rather then further dividing the discourse. Bearing in mind that copyright is an instrument of delimitations and establishing borders, this methodological approach is useful. Such positioning in the middle is not only related to the object of concern, but it also draws on the stylistic and methodological course set out by Serres, who conducts his investigation without choosing camps or positions, constantly situated in between, on the relation that connects two separate domains.\textsuperscript{124} For these reasons, as Latour comments, Serres's approach is ‘enlightenment without critique’.\textsuperscript{125} For Serres critique is related to analysis, which always tends to reduce and dissect, and through which the act it performs is always an act of centralising.\textsuperscript{126}

When dealing with system formations such as law, its normativity is based upon the disposition of stations and paths. The normative system of copyright law is constructed on stations (from subject to subject) and on a path of communication through which the circulation of copyright works (objects) is managed. However, the diagrammatic schema is disarranged when the question is raised of whether the

\textsuperscript{124} Latour’s explains Serres work in essence: ‘Instead of believing in divides, divisions, and classifications, Serres studies how any divide is drawn, including the one between past and present, between culture and science, between concepts and data, between subject and object, between religion and science, between order and disorder and also of course, divides and partitions between scholarly disciplines. Instead of choosing camps and reinforcing one side of the divide, of the crisis, of the critique—all these words are one and the same—Serres sits on the fence. Instead of dealing with a set, he always takes as the only object worth the effort the extraction of the set from its complement.’ Latour, B. ‘The Enlightenment Without the Critique: A Word on Michel Serres’ Philosophy’ In Griffiths, A.P. (1987) \textit{Contemporary French Philosophy} Cambridge: Cambridge University Press; p.93 [Emphasis in original].

\textsuperscript{125} Ibid.

\textsuperscript{126} Ibid, pp.85-91.
system is constructed by points and lines, or the actual ‘flow of messages passing through the lines.’ Posing this question is not intended to provoke a straight answer, but to open a possibility for further investigation of the formations of models and categories according to which copyright law in particular organises and arranges its subject matter. This turn follows the downstream of Serres’s methodological manoeuvre, particularly as it is set forth in his work on the parasite. Accordingly, the notion of parasite offers an approach to reverse the distinctions of subjects, as primary point upon which law constitutes and regulates relationships, and instead take the relationship as a process through which law defines subjects and envisions a possibility of a different relationship. Therefore, the construction of a model, in this case copyright, is distinct and a question of changes, interceptions, and metamorphoses that ‘flow along the way between the stations’ must be taken into account when dealing with the discord of copyright and technology. More specifically, it enables to reverse the point of observation from copyright’s far ends onto the middle.

Another aspect to this parasitic positioning of copyright is quite extraordinary in this sense. Because the law actualises the two far ends and sets up the principles upon which their relation is possible, every noisy interruption (such as technology) that occurs and disturbs the relation between those two is viewed as a parasite that must be expelled. And only because copyright occupies the central position, does it allow itself to act on behalf of the two far ends and take all the necessary measures to expel the noise that threatens its position. The parasite parasites the parasite. The last in the chain is fully in control; the only thing it fears is to be replaced by another parasite. This articulation of the flow offers a prospect of reconsidering copyright’s formation not on the basis of stations and lines but rather on the fluctuation that occurs between the stations. To put it differently – what could be law’s

127 ‘Stations and paths together form a system. Points and lines, beings and relations….Or it might be the flow of messages passing through the lines. But one must write as well of the interceptions, of the accidents, in the flow along the way between stations – of changes and metamorphoses.’ Serres, M. (2007 [1980]) *The Parasite* Minneapolis and London: University of Minnesota Press; pp.10-1.

128 Ibid, p.11.

129 For Serres it is the relations that bind things together and as a methodology he insists to find this prepositions of cords, links and relations in the multiplicity wherefrom a form emerges. ‘Relations spawn objects, beings and acts, not vice versa.’ Serres, M. with Latour, B. (1995 [1990]) *Conversations on Science, Culture, and Time* Ann Arbor: Michigan University Press; p.107.
normativity when understood as emerging from the flows and fluctuations between the stations and not the stations per se? What could be this disordered order upon which copyright law emerges? The inclusion of the parasite entails that there is no system without a parasite or noise and ‘this constant is a law’. This constant, I argue, is the blind spot of copyright law (and its discourse) in dealing with technology.

4. Technosite

The following discussion sets forth a tactic to apprehend the interrelatedness, or more precisely the interaction, between copyright and technology. The ternary model that the notion of parasite advances has provided recognition of the middle as a constitutive element of a system such as copyright, where both interference and transformations take place. Having discussed the communication model and recognised the middle where both copyright and technology meet, I argue that the channel embodies the true dissonance between copyright and technology.

This chapter begins by addressing the relation between (copyright) law and technology, reconnecting some of the accounts made so far. It proceeds to argue that technology is intrinsic to copyright, by analogically extending the notion of noise, that is parasite, to address technology. This allows the acknowledgment of different qualities and possibilities of technology, as something that interferes, disturbs, and attacks the body of copyright; but also as something that creates, enables and transforms the space in which copyright resides. Associating technology with the parasite/noise, for the purposes of clarity and argument, I will employ the neologism technosite (technology + parasite) that will support and give nuance to address different features of technology and investigate its relation with copyright. The chapter also considers different aspects through which the technological ‘noise’ poses challenges on copyright. Finally, it shows how different legislative, juridical strategies, and content industry’s tactics manifest ‘noise’ qualities themselves.

4.1. Copyright law and technology

In recent history, the first major shift in copyright took place in 1970s under the influence of, at that time, newly developed communications, which, as Grosheide elaborates, ‘had a profound influence on thoughts and actions in the field of
communicating cultural information’. With the emergence of digitisation and the Internet, as argued before, technology disturbed copyright’s arrangement and accordingly, both the subjects (authors, users) and the object (copyright work) of copyright law evolved from being ‘clear and well-defined’ to become ‘diffused and relative term[s].’ However, it could be said, it has also generated an interference, disruption or disorder in the channels of communication, thus enabling novel modes of production, reproduction, distribution, and access uncontrollable for the copyright mechanism and its regulatory system. For that reasons, from a copyright owners perspective, Grosheide argues, there are two major issues today – first, the issues of a social acceptance and copyright law’s legitimacy concerning new modes of cultural transmission (piracy, peer-to-peer networks), and second, the question of ‘elasticity and consistency of the available legal concepts’ in dealing with technology. In consequence, there are two identified acts in response to these problems – on the one hand, an approach in which the technological issues are viewed as attacks on the established copyright law but also as obstructions to making new law, and on the other hand, as subject matter that must be approached by finding new legal treatment for regulating the information society, ‘using the law of copyright as an appropriate tool.’

This manner of approaching the subject matter has been replicated in the modes of understanding and regulating copyright on both international and national level. Technology is either viewed as an interferer that disturbs and attacks the constructed normative/legislative body of copyright, or as an entity that creates and

1 Grosheide F.W. ‘Globalisation, Convergence and Divergence in International Copyright Law: A Question of Expediency or of Right?’ in Macmillan, F. (ed.) (2005) New Directions in Copyright Law, Volume II Cheltenham: Edward Elgar; p.46; For instance, the introduction of video tape recorder in the 1970s allowed a possibility to record and access audio-visual broadcast at a time chosen by the consumer. Threatened by such a technological device, the entertainment industry sued the manufacturers for a contributory infringement. The U.S. Supreme Court delivered a landmark case in which it was decided that manufacturers of video tape recorder do not contribute in infringement as such and that making of individual copies falls under the fair use. Sony Corp. of America v. Universal City Studios, Inc., 464 U.S. 417 (1984).
2 Ibid.
4 Ibid.
enables possibilities yet to be recognised by copyright law. Certainly, in view of the
discourses and policies being implemented, this distinction is not foreign to copyright
law and remains an ongoing issue at stake. However, these approaches often risk
becoming superficial as they engage in viewing and tackling technology as an
external entity that affects copyright law, that is, has the potential to often subvert
its normativity. In other words, they are grounded firmly in the copyright paradigm
and therefore turn a blind eye to the actual property of technology and its relation to
copyright. These approaches are affirmed by multiple interpretations and embedded
treatments of technology by/in/through copyright law and its normativity, which
nevertheless, resonate the familiar views of understanding the interrelationship
between technology and society at large.

Feenberg, a prominent philosopher of technology, elaborates a major distinction of
two approaches to technology – substantial and instrumental. The former views the
potential of technology to engage, structure and inform society, and thus
understands society as an object of technological control.\(^6\) Often having a pessimistic
undertone, this view holds technology, in Ellul’s words, to be ‘autonomous’,
constituting not only a means but also an environment that constructs and
rearranges our life.\(^7\) By contrast, the instrumental approach views technology as a
tool, that serves only the purposes of those employing it, corresponding to the most
common understanding of technology – thus viewed as neutral and indifferent to
social, cultural, political and legal processes.\(^8\) Despite their differences, Feenberg
identifies in both much the same view that ‘technology is destiny’ since for the
former, technology is a vehicle of domination that we must succumb to, whereas for
the latter, it is a question not of a political debate, but rather of technology’s range

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\(^7\) For Ellul technique is not reducible to machines but it is something that includes everything and
envelopes the human as well, providing a model and specifying attitudes. The technique is
autonomous, and ‘its evolution is too rapid, too upsetting, to integrate the older traditions’, however
they did not evolve autonomously, but depend on many factors. Ellul, J. (1964) *The Technological

pp.5-6.
and efficiency of application.\textsuperscript{9} Regardless of the position one holds in the copyright discourse, the ongoing call for copyright’s adaptation to technology resonates this ‘technological’ fate.

The way in which the relation between copyright law and technology is discussed, however, is founded in a more general debate about the relation between law and technology. In a synoptic manner, Tranter argues that there is a strong 'law and technology enterprise' that deals with the ever-growing technological development, but remains tied to the law’s ‘positivist orientation' that undervalues their deeper connections.\textsuperscript{10} In that regard, he suggests that there are three trajectories often ignored when discussing law and technology. First, law often views the impact of technology through populist lenses in which technology is reduced only to a specific technology, overlooking its broader interrelationship with law. In addition, this trajectory is concerned only with the future, ignoring the historical perspectives in which law and technology inform each other. Second, to the extent that it is embedded in a positivistic ground, it shuns the ‘cultural and social mediations of law and technology’, overlooking the society and culture as a place whey they meet and emerge. Third, it ignores the fact that 'technology seems to bring out the law as a form of technology'.\textsuperscript{11} Within this constraining approach, law is concerned with

\textsuperscript{9} Ibid, p.8. Drawing on Feenberg’s distinction, Cockfield and Primadore have argued for a synthetic theory of law and technology that embraces the instrumental and substantive theories of technology. The instrumental theories often view technology as a neutral tool detached from the social, cultural, political and economic conditions in which it appears. The substantive theories view technology as something that affects and therefore controls the individuals. Cockfield and Pridmore argue that in context of legal analysis both of them must be considered together, as the former overlooks the ‘contextual complexities in which law performs, whereas the latter, undervalues the affect that human agency plays.’ Cockfield, A. and Pridmore, J. (2007) ‘A Synthetic Theory of Law and Technology’ Minn. J. L. Sci. & Tech., Vol.8:2, 475-513, p.501; In addition, Cockfield also identifies a ‘liberal’ legal approach that is sensitive to technological change thus ‘less deferential to legal precedents and traditional doctrine’ (substantive), and a ‘conservative’ legal approach that is more doctrinal in treating technology and promotes ‘legal consistency and certainty’ (instrumental). For a more detailed discussion see Cockfield, A.J. (2004) ‘Towards a Law and Technology Theory’ Manitoba Law Journal, Vol.30, No.3, 383-415.


responses to technological changes, responses to public opinions about technology, and in making sense of itself within the current technological surrounding.\textsuperscript{12}

Comparatively, in the context of copyright, this is not fully the case: its origination, arrangements and normativity have always been closely related to its technological background. Therefore, within the copyright discourse, the interaction with technology is commonly held and related principally to the invention of printing press, as a technological condition by which the production and dissemination of books were controlled, first by the form of privileges and then copyright. As it has been argued before, this position does not reject the social underpinnings in which technology was framed, but holds that copyright has always dealt with technology, situating and redefining itself alongside ‘new’ technological advances penetrating the realm of creativity and knowledge, invention and protection – indeed, copyright ‘is, and has always been, a creature of technology.’\textsuperscript{13} The copyright discourse can never detach itself from technology. That said, however, it does not imply that currently is not limiting and inclining to a positivistic approach in tackling technology. Imbued in its justification constructions, copyright law has a tendency, often successfully, to reconstruct itself with concurrent social, political, cultural and technological circumstances and internalise them within its positive structure.

Although 'long, deep and complex past engagement with technology' have been absent in general debates about the relationship between law and technology,\textsuperscript{14} that is not the case for the copyright discourse, which has developed in parallel with technological advancements. However, copyright has often adopted a view of technology as an external entity, and as such manifested a restrictive approach to their relation, which as it seems it has become even more apparent with the digital technology. This superficial approach is detectable when viewing the developments

\textsuperscript{13} Sherman, B. and Wiseman, L. ‘Copyright: When Old Technologies Were New’ in Sherman, B. and Wiseman, L. (eds.) (2012) Copyright and the Challenge of the New Alphen aan den Rijn: Kluwer Law International; p.1. This remarkable edition moves away from the printing press and addresses particular technologies (telegraph, radio, tape, photography, film), and considers the way in which they have affected copyright law.
in still short history of discussing the relation between copyright law and digital technology. Since, as noted before, copyright manifests its holistic presence, what appears is that it persistently views technology as an external feature, thus any interference posed by this external entity is a subject matter of its apparatus.\textsuperscript{15} Moreover, this image of copyright as being ‘separate and distinct from technology’, which presupposes ‘that the “principles” of copyright are technologically neutral’, has recently and rightly been challenged by Sherman and Wiseman, who argue that ‘[b]y ignoring or denying the role that technology plays within copyright law while attempting to fix ‘copyright’ to a particular set of principles, this serves to freeze copyright law to a particular set of technologies.’\textsuperscript{16}

In line with this, there is nothing deniable in the proposition that copyright has been entangled with technological change. However, there are two latent assumptions that Bracha appropriately identifies in the context of how the historical relation between copyright and technology is often undertaken in the discourse, which I suggest, in addition, are still prevalent today. The first one is that copyright is often seen as ‘purely reactive’ to technology.\textsuperscript{17} In that sense, copyright is held to react and recreate itself with the technological development, as with the case of the printing press, photography or phonographs in which copyright constantly adapts and provides new legal entitlements. The second assumption is that law and technology ‘appear to be completely exogenous to each other.’ As if technology develops in a separate sphere to law, in which law as ‘a social area completely detached from that

\textsuperscript{15} The holistic aspect of copyright, it could be argued, does not only establish the confinement of its apparatus, but also extends beyond the boundaries. Foucault comments on the question ‘Where is the law, and what does law do?’ in his essay ‘Thought of the Outside’: ‘the law is not the principle or inner rule of conduct. It is the outside that envelopes actions, thereby removing them from all interiority’. Foucault, M. (1998) Faubion, J.D. (ed.) Aesthetics, Method and Epistemology New York: New Press; p.157.


\textsuperscript{17} Bracha identifies two variants of the reactive model. The first is related to the emergence of functional legal forms that would respond to the social or economic ‘needs’ that the technological development entails. The second moves away from functionalism and replaces the needs with economic interests that technological developments create. Bracha, O. (2013) ‘Copyright History as History of Technology’ W.I.P.O. Journal, Vol.5(1), 45-53; pp.46-7.
process, reacts to the output of the technological developments.’\textsuperscript{18} Under such perspectives, copyright discourse appears to be embedded in determinism, which implies that copyright is what it is only because of technological developments, thus the proposals for legal adaptation, shaping and change are continuous responses to technology. For these reasons, Merges is right when he argues that an emerging number of IP scholars are becoming ‘digital determinists’ who ‘believe that digital technology has an inherent logic which society ought to conform to by way of IP policy.’\textsuperscript{19}

This reactive and exogenous approach to technology is evident particularly with the advancement of Internet, through which a division of real and cyberspace emerged on the surface of the copyright landscape. On the one side, the open liberals claimed that the cyberworld represented by the Internet introduced new democratic practices of creativity and knowledge, thus declared that real-world legal rules do not apply in this new space.\textsuperscript{20} On the other side, the conservative position held that this ‘outside’ space must be overseen and fully enclosed in an environment that requires more rigid legal regulation.\textsuperscript{21} This tension in the discourse was disturbed by Lessig’s key text, which argued that the ongoing debates failed to acknowledge the four ‘modalities of regulation’ (law, social norms, the market, and the ‘code’ architecture), which exert their control together and affect the manner in which cyberspace is used and regulated.\textsuperscript{22} As such, in particular, he addressed the architecture of cyberspace as a code that regulates the behaviour of those who use it by applying a set of constraints – it is a designed feature by code writers, which can constrain or make possible the access and use of encrypted files that circulate in the

\textsuperscript{18} Ibid, p.45.
\textsuperscript{19} Merges identifies two scholarly trends of IP policy for digital age, the ‘digital determinism’ and ‘collective creativity’, which share similar challenges to the notion of property. Merges, in contrast, takes a position that digital technology should be shaped and adapted ‘to our ends and goals, rather than striving always to adapt ourselves in it.’ See, generally, Merges, R. (2008) ‘The Concept of Property in Digital Age’ Houston Law Review, Vol.45(4), 1240-1274; p.1245, footnote 12 [Emphasis in original].
cyberspace. In this manner, Lessig recognised the ‘code as law’ and brought to attention technology’s internal infrastructure as a subject of state and legislative interventions in regulating the processes of communication and access.

Notwithstanding this, the discourse of Internet as a cyberspace has maintained the spatial separateness between the real and the cyberspace, reducing the latter to an external space in which the ideals of different agendas can be pursued, often undervaluing its cultural and social potency. In that sense, as Gillespie comments, these approaches to the Internet (cyberspace), either as an error or a rhetorical claim, have held technology as a stable and exogenous object, overlooking it as a dynamic feature entangled with the social. Along these lines, and relating to Tranter’s second trajectory, the contingent social and cultural realms in which copyright and technology interrelate, while recognised in principle, are still of a most urgent requirement to be recognised within the copyright’s normativity and policy-making. Technology and its manifestation as a digital means or the Internet, remains to be viewed as something exogenous, as a fixed object that, depending on the side one holds, threatens or enhances communication. And since this division remains enclosed by the ongoing policies, initiatives and reflections, more to the point, the result is viewing technology as an external entity, which could be tamed as a tool of control and regulation, but that fails to embrace it as a socially embedded material thread that enables cultural and social practices beyond the normativity of copyright.

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26 Cohen, J. (2012) Configuring the Networked Self: Law, Code, and the Play of Everyday Practice New Haven and London: Yale University Press; Chapter 4. Cohen argues for recognition of a decentred model of creativity, understood as a contingent process in which cultural works are produced and used. She thus suggests a copyright model that would be capable to recognise ‘the play of culture’ and cultural progress as its central aim.

27 By drawing on the Social and Technology Studies (STS), Cohen states that this approach is an analytical ‘black boxing’ of technologies and artefacts and that it turns a blind eye to how socially they are shaped. Ibid, p.27.
While the accounts of recognising the ‘code as law’ successfully reinstated the intertwinement between law and technology, this has, as Cohen argued, only underscored the lines of different positions since those viewing ‘information-as-control’ pushed for stronger control over the information flow relying on the ‘code’ as a technological instrument that should serve the interests of those who copyright is set up to protect. Those aligning with ‘information-as-freedom’ viewed this utilisation of technology as detrimental to fundamental rights and narrowing of its potentials.\(^{28}\) Technology thus began to be approached as a regulatory target that must be aligned with the normativity of law, or as a regulatory tool that would sustain and enforce legal norms and even supplant law as a regulatory instrument.\(^{29}\)

In particular, the regulative technique of law over the technological, and vice versa, has been recognised as a perplexing, if not sensitive question when addressing the intertwinement of legal and technological normativity, calling for rearticulating normativity as a hybrid that carefully encompasses law and technology, but does not favour one over the other.\(^{30}\)

For all these reasons, Bracha is right when he concurs that the reactive model of copyright, by which society arranges its needs and interests in respect to technological advancement, provides a distorted image of copyright’s emergence overlooking the intrinsic social ‘spheres of technology, markets and politics.’ In this sense, he continues, the reactive model is not only deterministic but also

\(^{28}\) Ibid, pp.12-5; In addition, Reed notes that both cyberlibertarians’ and cyperpaternalists’ approaches are manifesting their stance in viewing law only through control lenses, which instructs and sanctions behaviour according to its normativity. See Reed, C. (2012) *Making Laws for Cyberspace* Oxford: Oxford University Press; p.9.


reductionist in ‘treating legal forms as the necessary results of exogenous technological developments.’

In order to bridge this reactive view of copyright from the exogenous force of technology, in which copyright discussions predominantly reside, there has been in recent years an acknowledgment of the scholarship that investigates the complex relations between society and technology. As such, any investigation of copyright and technology necessitates recognising the insights from the science and technology studies (STS) in comprehending the manner in which society and technology are not separate spheres but ‘mutually constitutive’. In this context, technology is not an external feature of a neutral quality, but it is continuously socially shaped, while also exerts its own materiality according to which complex social arrangements take place.

In a similar vein, Feenberg therefore argues for a critical approach to technology by treating it as an ‘ambivalent’ process that is far from being neutral since ‘it attributes to social values in the design, and not merely the use, of technical systems’ – technology is not a destiny but rather ‘a scene of struggle’, that is, a ‘social battlefield’.

The question of technological impact is often subject to discussion across disciplines and practices. These ‘impact’ narratives view technology as alien, somewhat cold and foreign, or ‘mysterious beings with obscure origins that come down from the sky to

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“impact” human relations’. However, technologies are not only our condition, or tools that constitutes humanity, but also fabricated and imagined matter for the use by humankind, ’repeatable social, cultural, and material processes crystallised into mechanisms.’ The conundrum of the relation between copyright and technology lies in the act of treating technology as a condition coming from outside, which disturbs communication between subjects. In other words, the tendency is to view it as an external threat disturbing not only the creation of an object, but also its reproduction and dissemination, thus directly attacking copyright law’s operational scheme. Therefore, especially in the context of digital technologies, which destabilise copyright’s principles, there is an urgency to recognise their intertwining and avoid their separateness. In that regard, Sherman and Wiseman appropriately comment:

Inevitably, as technology changes and the law responds, so too does the shape and nature of copyright law. While it may serve a particular perspective to argue otherwise, it does not help us to understand the nature of copyright law to deny the important role that technology has played in how the law has developed in the past and how it should change in the future. This should not be taken as a plea for technological determinisms, nor to deny the impact that social, political, cultural and economic matters have on copyright law, so much as a reminder that rather than being external to copyright law that technology forms an integral part of the very fabric of the law.

Therefore, there is a necessity to recognise a rather different quality of technology within the copyright system. Instead of positioning technology as an outside system where copyright law should find its ‘play ground’ in dealing with the issue, it is argued here that copyright’s ‘play ground’ is deeply rooted in its technological milieu, which in concert with other social and political condition gives rise to different qualities of copyright’s subject matter and its regulation. Along the same lines and

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41 In his historical tracing of telegraphy and its impact on copyright, Bently notes that technology is not a single moment and has often a ‘multiplicity of potentially conflicting policy implications.’ Moreover,
upholding the recent appeals for such an approach, I pursue further to show and argue for the same. However, recognising the intertwinement between copyright and technology, technology is here approached as a medium, milieu and a means integrating the middle where the whole arrangements of law’s principles apply. It is from the position of this irreversible interrelation that their dissonance should be discussed. In other words, if we are acknowledging the coalescence of copyright and technology, I suggest it is from the middle that any principles should arise. For that reason, deploying the notion of parasite/noise enables new ways to study and investigate the actual relation between copyright and technology. The notion of noise provides a perfect tool for mapping the state of affairs. It endows a fresh apprehension and basis for developing an argument that refutes a position that copyright is in conflict with technology, as the latter both engenders and offers the potential to actualise copyright’s specified objectives. Among other reasons, since technology is viewed as an attack and obstruction to copyright and its channels of communication, the notion of noise most aptly describes the uncertainty of the constructive and destructive processes of technology, but also recognises copyright law’s striving for certainty as a foundationally injudicious conduct in dealing with the issue.

4.2. Medium in the middle

If copyright is located in the middle, or the channel of communication, and technology is identified existing in that same realm, this requires clarification of what a medium is. Drawing on the available meanings of a medium, it encompasses almost contradictory notions but I want to argue that, paradoxically, this is where its


he argues that legal change in context of legislation is at least a result of the ‘political mediation’, situated in particular social conditions. In the context of different reactions to telegraphy in different countries, Bently indicates that they should remain as a reminder ‘that history of copyright, while deeply embroiled with technology, is not a mere reflection of technology.’ See Bently, L. ‘The Electric Telegraph and the Struggle over Copyright in News in Australia, Great Britain and India’ in Sherman, B. and Wiseman, L. (eds.) (2012) Copyright and the Challenge of the New Alphen aan den Rijn: Kluwer Law International; pp.76-7.
potential lies.\textsuperscript{42} As argued in the two previous chapters (see Figure 2), copyright law actualises its supremacy by attaching on the medium, and through its categories and criteria attains the role of a transmitter and receiver in the communication.\textsuperscript{43} In that sense, the medium receives a meaning of an instrument corresponding to the common view – copyright being a mechanism that holds the function and responsibility of cultural transmission. Furthermore, by this function copyright (law) also comprises the other meaning of a medium, which is thus also comprehended as a milieu where recognition and transmission of copyrighted material is achievable.

Copyright’s instrumentalism, nevertheless, is not devoid of understanding the medium as a condition or milieu where agency takes place. Since copyright is an outcome of communication, its origination is actualised in mediation. As the French philosopher Debray states: ‘[a]s a general rule, usage is more archaic than the tool. The explanation is self-evident: if the medium is “new”, the milieu is “old”, by definition.’\textsuperscript{44} In that respect, it can be argued that copyright, as a medium through which works are communicated, is only an outcome of a milieu, that is, a technological surrounding that sustains its actualisation. However, technology is not reduced to only a milieu where communication takes place, but is the means through which copyright works are both (re)produced and distributed, that is, communicated.\textsuperscript{45} The digital surrounding and devices through which copyright material is communicated directly affect the system of copyright law.\textsuperscript{46} This is due to the digital ‘intangibility’ of the medium by which the work is expressed, but also because of the ‘intangible process’ of making multiple copies and dissemination of

\textsuperscript{42} There are three different meanings of this noun: 1. Means, instrument, mechanism, method, agency, channel; 2. Conditions, milieu, surrounding, environment, setting; 3. Middle way, middle, midpoint, compromise.


\textsuperscript{45} Information Society Directive Art. 3 (1) ‘Member States shall provide authors with the exclusive right to authorise or prohibit any communication to the public of their works, by wire or wireless means, 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 time individually chosen by them.’

copyrighted materials. Hence, facing this *intangibility*, copyright must re-constitute its comprehension of technology so that it can move away from the current view of adapting its old copyright principles to a new technological condition. After all ‘[a]s the content becomes less dependent on the medium in which it is made available to the public, a system of law conceptually linked to the medium, such as copyright, must inevitably undergo some dramatic rethinking.’

This ‘dramatic’ act is thus possible only by inclining to understand the medium, in discerning the middle when tackling the issue of copyright and technology. Copyright is both a medium and a product of communicative relations, thus it is the channel where its operating system is constructed. In consequence, this is a significant position from which to appraise the intermediary. As Serres’s parasite demonstrates, it is ‘the intermediary in any given relation who has the most power’, thus the intermediary characteristic of copyright law is relevant to be recognised especially when tackling its political authority of regulation and transmission of cultural works. However, Debray, who draws on Serres, argues that it is the intermediary ‘who makes the law’, but that is only a result of ‘mediation’ as a place where simultaneously the social, technological and cultural formations, institutions and dynamic processes interrelate. As such, ‘[t]he logic of transmission and the logic of organisation cannot be separated.’ In other words, the technical and the social are not separate entities but a ‘realm in which subjects and object, humans and non-humans intermingle and co-determine each other.’ Therefore, it is a question of

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51 Ibid, p.28.
the medium, or what Agamben terms as ‘pure mediality’, on which the political should be focused, and not on its distinction between legitimate or illegitimate ends. As Crocker comments, ‘[i]f politics must get beyond the dialectic of legitimate and illegitimate ends, that is because the political is not so much about the definition of goals, so much as the way that the medium in which our actions take place affects what we can be and do.’ The medium is, therefore, not a fixed entity but rather a site where mediations occur and dynamic combinations of intermediary processes and practices take place. Copyright law must acknowledge the action corresponding to and emerging from the medium where it takes place. In order to understand the mediality there is a necessity to acknowledge and identify the presence of the ‘third man’, the parasite, or the noise in the medium.

4.3. Technology as noise

As we have seen earlier, information theory is based on successful transference of a message from sender to receiver through a noisy channel. The signal is successful if in the course of transferral it was not distorted by noise. The more noise there is in the channel, the less possibility for the message to be transmitted. What science of thermodynamics, sound engineering and informatics thus seek are ways to distinguish noise from the signal and correct any corruption of messages. The ensuing information disciplines analysing communication are mainly concerned with the problem of noise and contact, and with the relation between signal and noise with an explicit intent of generating ‘media effect’. On the account that information theory is concerned with noise that interrupts a channel of communication between sender and receiver it is here foregrounded to investigate and discern an

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52 Agamben argues that ‘politics is the sphere neither of an end in itself nor of means subordinated to an end; rather, it is the sphere of a pure mediality without end intended as the field of human action and of human thought.’ Agamben, G. (2000) Means Without Ends: Notes on Politics Minneapolis and London: University of Minnesota Press; p.117.
interrelation of seemingly disparate categories and disciplines such as copyright and technology.  

As demonstrated before, the parasite – that is noise – is the third element, which enables and informs the medium through which two end points connect. In that manner, the system according to Serres is always a ternary model. For the communication between two ends to occur there is a necessity of a medium through which a signal passes, which is always accompanied by background noise. The noise is an intrinsic feature of the medium, which, despite its interfering qualities, is ineradicable element that constitutes communication. In that sense, while the noise invades the communication its presence is nevertheless permanent. Serres explicates the ternary model as a system of a particular kind:

Systems work because they do not work. Nonfunctioning remains essential to functioning. And that can be formalized. Given, two stations and a channel. They exchange messages. If the relation succeeds, if it is perfect, optimum, and immediate; it disappears as a relation. If it is there, if it exists, that means that it failed. It is only mediation. Relation is nonrelation. And that is what the parasite is. The channel carries the flow, but it cannot disappear as a channel, and it brakes (breaks) the flow, more or less. But perfect, successful, optimum communication no longer includes any mediation. And the canal disappears into immediacy.

Drawing on different meanings that the notion of parasite entails, it is the third element always present in the communication that must be recognised. In this paradoxical arrangement, and according to the logic of the parasite, communication is never perfect and immediate. If that would be the case, it would immediately disappear as a relation, thus noise (parasite) is the ‘essence of relation.’

Accordingly, if copyright law is comprehended as a system that facilitates and regulates such communication between endpoints, it seems that it suppresses the interfering factor of the medium and pursues a realisation of communication

57 Ibid.
between subjects that is intended to be normatively successful and appear immediate. In other words, for the established copyright apparatus it seems that the third element – technology – is only mediation by which the actual copyright communication of objects between the subjects occurs, and is therefore subjugated as a means to an end. For that reason, as Brown’s reading of Serres’s parasite suggests, copyright manifests the paradox of mediation in that ‘we “forget” the medium in order to focus on the message’, on the content that copyright is entrusted with to protect.58 However, it is the medium that gives possibility for the messages to be transmitted in the first place, and in that regard, that is what sustains copyright law. Therefore, it could be said that the conundrum lies in the fact that immediate relations are not subject matter of copyright law, but they actualise on a non-relation, in the presence of noise which is not fully recognised in its paradigm. The noise is an essential element for a relation to occur, it is the condition upon which systems emerge and transform, and therefore it is an immanent disordering quality which law continuously tries to conceal and give an impression that order and balance are in place.

Noise is the relation which simultaneously connects and separates, creates and obstructs communication. This paradox of the noise is in fact the essence of relation and impulse of possible transformation within a model that appears to be steady, such as the institution of copyright. In this regard, situating the investigation and the subject matter in the middle, nuanced to apprehend copyright’s mechanism, technology thus acquires a position of noise. By recognising the presence of a third element in the communication that copyright is set to regulate, the attribute of technology attains different role that moves away from the manner it is being tackled in the copyright discourse. This recognition of noise in the middle, as noted above, not only implies moving away from the habit of discussing copyright from the ends, but also redirects the discussion on the actual communication, and as such, allows discerning another quality of technology in the context of copyright. In such a manner, the proprietary principles, revolving around the endpoints in which

copyright manifests itself, become only a corollary to an already established communication enabled by technology. While noise gives an impression that is external, it is nonetheless always already part of any kind of communication. A system, such as copyright law, is primarily conditioned on the presence of noise/parasite as an essential part of communication. Technology, both as condition and a means, is grounded on the relation that contextualises and actualises social gatherings and experiences of cultural forms, onto which relation copyright law as a ‘parasite’ attaches and sets principles of exchange and regulation. Copyright is an outcome of the technological condition that reifies its subject matter of operation – that is, communication. However, the noise that appears between two different positions and interrupts their exchange of information often carries a negative role – thus it is viewed as an error, disruption, or malfunction. As Serres writes:

Such communication [dialogue] is a sort of a game played by two interlocutors considered as united against the phenomena of interference and confusion, or against individuals with some stake in interrupting communication. These interlocutors are in no way opposed, as in the traditional conception of the dialectic game; on the contrary they are on the same side, tied together by a mutual interest: they battle together against noise.... They exchange roles sufficiently often for us to view them as struggling together against a common enemy. To hold a dialogue is to suppose a third man and to seek to exclude him; a successful communication is the exclusion of the third man. The most profound dialectical problem is not the Other, who is only a variety – or a variation – of the Same, it is the problem of the third man.59

An established communication (dialogue) is a crux of copyright as it regulates and must ensure that copyright works are subject of exchange between copyright owners and the public. Since copyright manifests itself holistically, that is, operates on behalf of the two ends, it grants itself a position to identify the noise and exclude it. Even though emerges from the relation, copyright manifests itself to be installed on the far ends – its authority emerges from the middle but instantaneously covers the whole milieu. As such any interference is considered as a subject matter that falls within the normativity of copyright law and its regulation. The medium, however, is

always followed by distortion since ‘[t]here are channels and thus there must be a noise’.

This is where the system of copyright, like a body cell being attacked by a virus, tries to expel and terminate the interference and exclude it from the system. For that reason, it appears that technology attacks the channels where copyright ‘facilitates’ communication of objects between subjects, it receives the function of noise that is positioned between the endpoints – it becomes a technosite (technology + parasite). Even in acknowledging technology’s positive potentials, such as possibility to disseminate creations and knowledge, it remains to be seen as interference, since it poses challenges to the seemingly ‘harmonious’ resonance of copyright. With regard to the ‘noisiness’ caused by technology, this is exactly its paradoxical position in a copyright context, where it simultaneously enables accomplishing copyright’s objectives, but also destroys its mechanism of previously established principles. The communication is contingent upon two opposite conditions: on the one hand, it requires the presence of noise, and on the other hand, ‘it requires the total exclusion of precisely what it needs to include, namely, background noise.’

Therefore, there is a necessity to recognise the noise in the channels where copyright law resides. In this paradoxical state of affairs, investigating the relation between copyright and technology requires not dividing copyright and technology, but discerning their multi-layered relation.

Bearing in mind the previous points, the recognition of noise allows overcoming the shortcomings that Bracha identifies in the discourse – the view of copyright being reactive to technology and technology being extraneous to copyright – and instead view their continuous intertwinement. However, it must be stressed that by contending that copyright has emerged as an outcome of technology, this does not side with the reactive approach that veils a technological determinist position, but instead, acknowledges technology as a medium, means and milieu in which copyright

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61 In the same manner as Serres at one point divides parasite into para (beyond, alongside) and site (location), I refer to additional meanings of techne (art, skill, technology) and site (location) such as location of the art, location where technology emerges, that of the communication.
continuously unfolds and occurs. Moreover, such an approach clearly avoids the linearity in which copyright often manifests itself – that technological changes demand copyright to constantly amend and change. On the contrary, even though the print press was an ‘agent of change’, it indisputably appeared on, or attached onto already established communication existing in particular social, cultural, economic and political conditions, out of which copyright resulted. As such, print can certainly be regarded as (technological) noise that interfered and therefore engendered a new set of relations. However, this middle, the noise, always between, simultaneously subject of exclusion and inclusion, leads Serres to question whether we have created a model of relations from basic means (tools), or if in the practice of relations ‘we have discovered the origins of technology, of tools, of means.’ Given his understanding that there is always an intermediary, a means, milieu, Serres suggests, the origin of technology results from an intersubjective relation. Technology is the ‘objectification of our intersubjective relations.’ But here understood not as an ordinary object, but attains a quality of a quasi-object, it is a relation which allows movements and connects, allows crossing spaces, and passing information – the quasi-object is noise. As such, it becomes a subject matter of copyright law.

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63 For instance, Debray reminds us, that mediation does not encompass only the technological medium through which culture is constituted, but also, the sociality that underlie such constitutions. See, generally, Papoulias, C. (2004) ‘Of Tools and Angels: Régis Debray’s Mediology’ Theory, Culture & Society, Vol.21(3), 165-170; p.166.
64 See, generally, the seminal works by Eisenstein that investigates and demonstrates different effects that printing press had on society at large – hence an ‘agent of change’. She also holds that the ‘authorship was closely linked to the new technology’ thus the technical aspect of copying influenced the emergence of authorship. Eisenstein, L.E. (1979) The Printing Press as an Agent of Change Cambridge: Cambridge University Press; pp.153-54.
66 Ibid, pp.61-5.
4.4. Noise and copyright

The processes and practices of creation, production, distribution and use – understood generally as communication – introduced by digitisation are features of the emanating ‘noise’ copyright law faces today. Accordingly, the ‘noisy’ quality of technology is also manifested in the abundance of information that digitisation and the Internet have irreversibly enabled. The possibilities of endless creation, reproduction and distribution characterise an information overload of digital works ready to be accessed and used, thus indeed, ‘[t]he buzz of information is the white noise of today’s culture.’\textsuperscript{68} The information society is characterised by information abundance, what Lévy appropriately calls a ‘second deluge’, which in contrast to the biblical deluge, is not diminishing but rather explosive, chaotic and multiplying – a new condition where ‘[t]here is no solid foundation beneath the ocean of information.’\textsuperscript{69} In such circumstances, the noise is manifesting not only as a background against which communication is possible, but also as effect of that very same communication, which generates cacophony of voices, excess of information, abundance, and intellectual confusion.\textsuperscript{70} In consequence, noise is generated from the multiple copies that digital technology endlessly proliferates. It seems as if this overabundance of copies has finally attained its true meaning – the Latin word \textit{copia} meaning ‘abundance, plenty, multitude’.\textsuperscript{71}

The information communication technologies propagate endless content, immersing the society into noise, requiring regulative techniques and policy changes that would address this threatening entropy. In that regard, Pasquale analogised the information overload in the cultural environment with that of negative externality or pollution of the physical environment.\textsuperscript{72} It thus appears that copyright’s objectives of promoting...


\textsuperscript{69} Lévy, P. (2001) \textit{Cyberculture} Minneapolis: University of Minnesota Press; p.xii [Emphasis added].

\textsuperscript{70} Ibid.

\textsuperscript{71} Boon adds that although copying nowadays is associated with theft or deterioration of an original, the phenomena and activities we associate with copy(ing) manifest abundance. Boon, M. (2010) \textit{In Praise of Copying} Cambridge: Harvard University Press; p.41 and pp.44-53.

\textsuperscript{72} Pasquale, F. (2007) ‘Copyright in an Era of Information Overload: Toward the Privileging of Categorizers’ \textit{Vanderbilt Law Review}, Vol.60, 135-194; p.140; Serres terms this a ‘soft pollution’ where ‘noise technologies’ propagate images, texts, and sound polluting our space. In the context of
creativity and knowledge have echoed back with a raucous overload of information. And while this is an outcome of the overall creative process, the act of maximising copyright works is not the right reference for measuring our welfare. The concern often raised is that the information overload becomes a noise filling the space in which it is difficult to identify and establish what is it that recipients desire. Under such terms, if noise is everywhere, it also attains a quality of something that becomes useless, deteriorates the message and has no value. Particularly from an economic perspective, the noise threatens the messages by making them useless commodities, transforming their heterogeneity into a homogenous mass. In such circumstances, copyright, which depends on heterogeneity and distinctions, would unavoidably lose its sense of direction. It is the asymmetrical conditions of a system that creates the value, thus if everything is accessible to everyone loses its value.

Therefore, the issue of digital abundance challenged the conditions of analogue scarcity, thus what becomes a scarce commodity is not the information but the attention. For these reasons, Pasquale argues that all the intermediaries (or as he calls them ‘categorisers’) such as indexers, search engines and samplers, must be privileged and favoured with a fair use defence as they are treating, managing, and


Pasquale argues that information overload ‘is an unintended but serious consequence of copyright law’s success in creating incentives for the production and distribution of expression.’ I accept this statement with reservation. Ibid, pp.140-42 and pp.165-70.

‘[I]n Babel of signals, we must listen to a great deal of chatter to hear one bit of information we really want. We discover that information can become noiselike when it is irrelevant or interferes with desired signals, so tending to defeat meaning – making it harder to extract meaning form information...’ A quote from Klapp, O. (1986) _Overload and Boredom_ Greenwood Press; p.2, in Ibid, p.169.


dealing with the negative externality of copyrighted works.\textsuperscript{79} In that sense, a tactic to fight this noise, he proposes, is the need for incentivising production of metadata through various systems for indexing and categorisation, making easier navigation in the noisy sea of information, and decreasing their potential for copyright infringement.\textsuperscript{80} In the light of the possibilities of mass-digitisation, indexing and categorising digital data, the legal barriers between authorised and fair use has been obliterated, challenging the legal position in which the categorisers undertake and filter the content for its use.\textsuperscript{81} In that regard, it has been argued that any regulation of the information society should advance policy not only in the context of use and access, but also in terms of how to navigate and filter such information.

Along these lines, Lundblad has indicated that information society is ‘characterized by noise rather than information.'\textsuperscript{82} Therefore, he has advanced and recognised a model of ‘noise society’ in which information is produced for the most part by individuals through formations that are temporary and in which distribution is uncontrolled.\textsuperscript{83} By arguing that the noise society is open and hardly subject to control, and that it leads to an information overload, he has also proposed filters (and utilities of search) to become organising tools that extract information from noise – that is, ‘refine information into actionable knowledge’, provide social interaction and, as such, respond to the accelerating information overload that communication technologies enable.\textsuperscript{84} In that sense, he rightly argues that information society polices fail as they assume ability to control and contextualise the creative processes, communication and transference of content.\textsuperscript{85} In challenging

\textsuperscript{79} Ibid, pp.140-42.
\textsuperscript{80} Ibid, p.177.
\textsuperscript{81} For instance, search engines and news aggregators displaying snippets from a third party’s newspaper articles. Germany passed a legislation \textit{Leistungsschutzrecht} in 2013 that requires news aggregators to pay a licensing fee for the content they use. As a response Google has introduced opt-in mechanism for indexing news only for the publishers that would explicitly choose to do so. On mass-digitisation and the position of the intermediaries, see, generally, Borghi, M. and Karapapa, S. (2013) \textit{Copyright and Mass Digitization} Oxford: Oxford University Press.
\textsuperscript{83} He continues: ‘It is also a society where the value function does not hold. It is a society where more information is better, but only to a point, when it becomes a cost. Information overload leads to a collapse in value, to noise externalities and costs.’ Ibid.
\textsuperscript{84} Ibid, pp.255-56.
\textsuperscript{85} Ibid, pp.129-32.
the existing information policies, therefore, he advances recognition of noise and its interfering features as necessary for any information policy, as they cannot be eliminated, and even threatening if not handled with care. He is not advocating for noise society, but argues for different policies that would be able to face the growing noise that evades society.\textsuperscript{86} Interestingly, both Pasquale’s and Lundblad’s approaches recognise the parasitic formations of the middle as an intrinsic element for the system to function, for the life to be sustained. However, in their understanding, the presence of noise is approached as a content that overloads the communication channels. While this provides and destabilises many of the concerns related to information policy creation, as it has been argued before, information cannot be separated from noise as it complements information; thus information should not be understood only as a finite product but rather as a process, however comprehended in that way, their separation is difficult to be determined.\textsuperscript{87}

Noise, thus, remains on the channel while simultaneously and paradoxically enabling and disturbing the processes of interaction that sustain copyright. The parasite always situates itself ‘at the intersection of relations’.\textsuperscript{88} Digital technology has not only disturbed the established routes of distribution and reproduction, but has also brought into questions the possibility for such regulation. Although the strategies fighting against this pandemic of parasites are not solely a legal subject matter, the technological advancements require intermittent interventions in the normativity of copyright law.\textsuperscript{89} Either copyright law is subject to alteration and adaptation that should respond to the changes that technological advancement introduces, or it extends its legal instrumentality by integrating technology into its normative mechanism to regulate that very same technology. The former recognises a necessary change of copyright law in maintaining a balancing system that will satisfy

\textsuperscript{86}Ibid, p.255.
the needs and the interest of all involved stakeholders. The latter recognises a
necessary change of the legal instruments used for controlling of technology and by
this employing information architecture as a mechanism, as an extension of the
legislative strategies to control and regulate content transmission. The strategies
employed prove to be different in kind but similar in tendency, that is, to save
copyright from noise.

For the reasons of excluding the interfering noise – which affects circulation,
distribution, and reproduction of content – a legal intervention within the digital
medium took place by introducing technological protection measures and (digital)
rights management. Such normative validation of ‘technological fixes’ provided an
additional control for copyright holders in respect to preventing and restricting
access and copying of copyright digital material, while also outlawing any
circumvention actions that would surpass such protections. Deployed in particular
by the content industries, these digital locks and encrypted files have become a ‘legal
instrument’ taking a technological disguise. Better said, they have become parasitic
features, by situating in the middle, to affect and impede any of the infringing
relations and activities that technology enables. Accordingly, they have manifested a
peculiar regime as distinct legal measures closely related to but remaining beyond
copyright – hence it is not surprising they have been dubbed as paracopyright.
Paracopyright is not about the scope of copyright, but about securing legal
protections for the technologies that are used by copyright holders. As such, the

and 12; Implementation of the Treaty in the EU with the Directive 2001/29/EC on the harmonisation
of certain aspects of copyright and related rights in the information society Articles 6 and 7; In the US
with the Digital Millennium Copyright Act (DMCA) Pub. L. No. 105-304, Section 1201, 112 Stat. 2860
91 Technological protection measures are technological devices, components or a technology when
‘the use of a protected work or other subject-matter is controlled by the rightholders through
application of an access control or protection process, such as encryption, scrambling or other
transformation of the work or other subject-matter or a copy control mechanism, which achieves the
protection objectives.’ Article 6 (3) from the Directive 2001/29/EC on the harmonisation of certain
aspects of copyright and related rights in the information society [Emphasis added].
92 Paracopyright is ‘a term that refers to an umbrella of legal protections above and beyond traditional
paracopyright as anti-circumvention measures thus expanded the control not only of uses, which copyright principles traditionally entail, but also of access and copy control of rightholders’ content.\textsuperscript{94} Although one could argue these are fair utilisation of technology, they have often been subject to criticism as the control they entail go beyond the property protection and, moreover, affect the actual access to materials that are outside copyright’s regulation (such as works in public domain) or legal exceptions for use (works that can lawfully be used without any previous authorisation from the author/owner). The technological protection measures integrated in the medium to control the message (the copyright content), however, have raised concerns about their effectiveness. Not only because they have a potential to run in conflict with the principles of uses and access which copyright prescribes, but also they have proven to be technologically vulnerable (as they can often easily be bypassed, either because they become obsolete, or because there are other technological means for such circumvention).\textsuperscript{95} In that sense, the measures that these technologies enable not only block access and use, but also impede many potential creative reuses and appropriation that copyright in principle promotes, thus restricting communication.\textsuperscript{96} As Netanel notes, this translation of copyright principles into new technologies and conditions, to a certain extent would have not been an issue if only narrowly made for the means of distribution; however they go beyond as they are applied in circumstances when users circumvent technological protection measures for their permitted use, but also in blocking access to works that are in public domain, often because of design or chance such material is combined together with copyright works.\textsuperscript{97}

The concerns about these measures is beyond the scope of this study, however, they


\textsuperscript{97} ibid, pp.69-70.
provide an insight into how these ‘technological fixes’ have become a tool, using the same technological conditions to ‘fight’ against the technological possibilities that directly affect copyright law. In this sense, instrumentalising technology as a legal tool is actually an act of silencing the noisy potentials of technology.98 It numbs the technological possibility by serving the purposes of the right owners, not by preventing copyright infringement but by interfering the access and use of the content.99 As Gillespie comments, a ‘technological artefact’ becomes a legal instrumentation that is set up to achieve the normativity of copyright, but by this act it also interrupts communication and culture.100 The paracopyright performs the role of the parasite as ‘[w]hat passes might be a message but parasites (static) prevent it from being heard, and sometimes, from being sent.’101 Accordingly, the paracopyrights resonate the abusive tactics of the parasite, by altering or even destroying the balance which copyright essentially aims for.102 The reasons for referring to the technological measures is to identify how copyright law, by identifying the noise, becomes noise itself, thus introducing paracopyright measures that aim to intercept the communication it claims to achieve. Copyright law functions in the middle, while holding the ends and infusing regulation that is less visible, as it hides in the very design or architecture of technology.103 It is in this paradox that copyright establishes itself as a force that is not visible and can only be heard. The

98 This act of silencing has political dimensions as it is becomes ‘both a political intervention into human activity and a means to intervene in a social dispute through technology — that is, the battle over ownership and culture waged around the Internet, peer-to-peer technology, and popular entertainment, and more broadly around the production of knowledge and the circulation of information.’ Gillespie, T. (2007) Wired Shut: Copyright and the Shape of Digital Culture Cambridge: The MIT Press; p.74.


more noise the parasite makes, the less visible it is.\textsuperscript{104}

Assuming that the regulation of copies as a primary focus of copyright became out of reach and impossible to control, the actual content transference between end points for both the content industries and subsequently copyright law has shifted from the content (of what was copied) ‘to the machines or materials that facilitated the copying.’\textsuperscript{105} The shift took place from focusing on the user, the person who makes (illegal) copy, to the technology that supplies the end user. The noise has been identified. Consequently, as soon as the digital technological interference/noise became overpowering, this required refocusing on the medium in order to protect the object (the message) and direct attention ‘from the message itself toward the medium in which it occurs’.\textsuperscript{106} In view of the interference that digital technology has performed, this has indisputably interrupted content industry’s intermediary position that facilitates the process of communication. If content industries have been associated with the parasite, and the parasite has only one threat – not to be replaced by another parasite – then the potentials of the digital technology is indeed becoming noise, disrupting the channels in which they have installed themselves. The noisy technosite has affected the third and took its place, and as such it gave rise to panoply of infringing practices, actions and processes – communication – beyond their control. It enabled circumventing their middle position that they held firmly in the analogue world. Thus this has lead, as Ganley indicates, the content industries ‘[f]aced with the prospect of redundancy at the dawn of the digital era’ to cautiously tread ‘a path between embracing the future and avoiding it. Their ultimate aim is to


ensure that their stake in it is as profitable as possible.\textsuperscript{107} In response, as argued before, from regulating only uses of copyright material the copyright owners shifted their attention to regulate technologies and access to their works.\textsuperscript{108}

Bearing in mind the previous points, apart from the various litigations and legislative strategies aiming to exert control over copyright material on the Internet, the content industries complemented their fight by resorting to ‘noise’ as an instrument that would directly affect, for example, the file-sharing networks. Lundblad has termed them ‘noise tactics’, designating technologies that are pervaded into the file-sharing network with an intent to pollute the system by introducing distorted, low quality copies of copyright works, with an aim to deter users from infringing activities that these platforms enable.\textsuperscript{109} While this resonates Lessig’s ‘code as law’ and the regulatory effects of technologies being employed, in this connotation the technological features are being deployed as noisy particles that destroy and interfere any possibility of communication to take place.\textsuperscript{110} According to their purpose, there are two different attacks identified: poisoning, which attempts to reduce the availability of a certain item; and pollution, which attempts to fill the network space with noise – in other words, it attacks the content or the communication capacities of the network.\textsuperscript{111} Recognising different types of noise tactics, and questioning their efficiency, Lundblad argues that these forms of intervention would become less effective with technological advancements.\textsuperscript{112} Moreover, he has indicated that such tactics are not only legally ambiguous, but also demonstrate disrespect for legal rules on the part of the copyright holders, which not

\textsuperscript{108} ‘Previously, the copyright laws were technology neutral: They did not regulate technologies, but rather they regulated uses of copyrighted material, regardless of the technology employed. Use of copyrighted works was the essence of copyright, not technology.’ Patry, W. (2011) How to Fix Copyright Oxford: Oxford University Press; p.43.
\textsuperscript{109} Decoys are files that present themselves as a copyrighted work but are something else, corrupted files. They could be passive or active depending on the viruses and the harm they might do on the computer. Lundblad, N. (2006) ‘Noise Tactics in the Copyright Wars’ International Review of Law Computers & Technology, Vol.20(3), 311-321; p.313.
\textsuperscript{110} Ibid, p.312.
\textsuperscript{112} Ibid, pp.314-15.
only deepen the war with the ‘pirates’ but also erode ‘the respect for the very body that they depend on.’

The Internet is overpopulated with parasitic formations which manifest a continuous noisy disturbance of the channels where transference occurs. ‘Concerns about ownership’, as Halbert notes, ‘reach an almost hysterical pitch when the Internet is brought into the picture.’ Because such formations are ineradicable, the latest development of employing legal tactics has yet again taken noise quality directed towards the medium enabling such a relation. More precisely, instead of fighting against the file-sharing networks, the medium that enables such a formation has become an object of attack. In that regard, content industries have taken a resort in the legal choice of obstructing the infringing activities enabled by the file-sharing networks through directly obstructing the Internet service providers that provide the resources for such actions. The basis for such legal actions is prescribed in the provisions that provide copyright holders ‘to apply for an injunction against intermediaries whose services are used by a third party to infringe a copyright’ under conditions that they have had ‘actual knowledge’ of a general infringement taking place through their services. This is apparent in the wave of recent decisions that block access to file-sharing networks which activity is supported by the Internet

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113 Ibid, p.320. Lundblad also addresses some of the copyright issues such tactics give rise to. For instance, the issuer of such noise files also has to have copyright clearance; also, if dissemination of such corrupted file is authorised by the copyright holder, it complicates the position of the user in knowing whether a download is permissible or not; all the distortions and noise integrated into the file may also infringe certain moral rights.


115 The proposed bill H.R. 3261: Stop Online Piracy Act (Introduced October 26, 2011) in the US Congress would have allowed copyright holders to take direct actions, through the ISPs, against websites that contain any copyrighted material, without any prior notification of the websites to remove such content. The proposed Act was subject of great criticism as it gave power to copyright holders to block a web domain worldwide, it required an active monitoring of the content on the part of the websites, and being a threat to freedom of expression. Interestingly, the bill was also known as the ‘E-PARASITE Act, an acronym of the title ‘Enforcing and Protecting American Rights Against Sites Intent on Theft and Exploitation Act of 2011’.


117 Article 8 (3) from the Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society. [Emphasis added]. In the UK, The Copyright and Related Rights Regulations 2003 (S.I. 3003/2498) implemented the Directive and inserted the previous article into Section 97A of the CDPA. In addition, on (non) liability of Internet service providers see Articles 12-15 from Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on electronic commerce).
service providers. In this way, the legal order imposed on the Internet service providers is an interfering noise *par excellence*, as it blocks transference of messages from both being received and sent. While such actions are applicable in the fight against piracy, their effectiveness has been questioned, since such blocking in the digital realm can not only be circumvented but also gives rise to other file-sharing platforms. Moreover, taking into consideration that such noise interrupts ‘communication’ altogether, this has in turn initiated concerns over the free flow of information, blocking off transmission of content that is not subject of copyright protection, as well as the specific situation in which Internet service providers are integrated as active players in the fight against piracy.

In general, this indicates that all these directions towards the medium have resulted in two distinct but concurrent responses concerning such interferences. On the one hand, there is an attempt to exclude the noise emanated by technological possibilities in order to reassert copyright’s praxis of regulating communication. On the other hand, it uses the very same medium to extend its normativity of regulation. However, both the approaches respond to technology as an external entity that should be subjugated to copyright law regulation and normativity, either as an external entity according to which changes are to be made, or as an interfering entity that must be kept outside from already established relations. The paradox of this so-called ‘exclusion’ is that it uses the very same technology to obstruct its potentials. The common standpoint is that normative borders must not be crossed and that technology as an entity is to be subsumed within copyright’s normativity. Changing

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118 See, for instance, *Twentieth Century Fox Film Corp v BT* [2011] EWHC 1981. This is the first judgment by the High Court deciding to grant an injunction, ordering BT to block access to Newzbin2 website; *Dramatico Entertainment Ltd and others v British Sky Broadcasting Ltd and others* [2012] EWHC 268 (Ch) (Blocking Pirate Bay web-site. Such blocking actions had already taken place in other countries.); *EMI Records Ltd v British Sky Broadcasting Ltd* [2013] EWHC 379 (Ch); *Football Association Premier League Ltd v British Sky Broadcasting Ltd* [2013] EWHC 2058 (Ch) (Web-site blocking order in respect to streaming rather than file-sharing).

119 Dutch Court of Appeal overturned a court order forcing Internet service providers to block Pirate Bay on the basis it was ‘ineffective’ and had an opposite effect. Moreover, it was held that such blocking is disproportionate and impeding the free flow of information. Gibs, S. (2014) ‘Pirate Bay ban lifted in Netherlands as blocking torrent sites ruled ‘ineffective’’ The Guardian [online] http://www.theguardian.com/technology/2014/jan/29/pirate-bay-ban.lifted-in-netherlands-as-blocking-torrent-sites.ruled-ineffective (Accessed 23 February 2014).

120 See, for example, the arguments raised by the counsel for BT and Mr Justice Arnold’s reasoning in that regard, *Twentieth Century Fox Film Corp v BT* [2011] EWHC 1981 at 120-203.
and adapting copyright law is directed at excluding technology and dealing with it as an ‘interruption’ that must be kept at a distance from copyright’s field of operation, that is, its enclosed model of rules and obligations. The ongoing tactics to meet the challenges of the technological advancement/interference are persistent attempts to reconstitute the ‘balanced’ condition of copyright upon the ruptures that technology creates. These ruptures within the system of copyright emanate the dissonance between copyright and technology.

This leads to another relevant aspect of the argument where notion of the parasite becomes even more effective. The issue of interference stretches on the borderline between the inside and outside, and law thus performs the role of securing the equilibrium of its own system. Resistance to the outside factors is an act of immunisation strategy. And while the risk of an attack on copyright’s immune system becomes extensive, the actual response becomes intensive.121 The current copyright’s landscape, overpopulated with parasites, actually propagates exigencies of copyright protection measures and responses to fight against copyright infringement that becomes intensive both in means and aims. While the actual disturbance that technology performs requires copyright law to exclude it in its entirety, it nevertheless integrates the technosite as it becomes a subject of law’s immunisation technique. On that account, the noise tactics, paracopyrights and abuses of communication channels, performed by content industries and the law itself, resort in deploying what it needs to defend from. The body of copyright must defend itself from the ‘little troublemaker’, the organisms that infect and continuously multiply.122

In that regard, the Italian philosopher Esposito argues from a biopolitical standpoint that immunity is not a form of action but of reaction, which is a force to counterforce another force. This attempt to restrict contagion by not allowing interference

122 The organism reacts, ‘[t]he flows accelerate; the ganglia swell; the defensive system is mobilized; the fever goes up...It happens, in particular, that an infectious disease is provoked by the arrival of a parasite, a virus, a protozoan, a metazoan, or a fungus. Introduced either permanently or temporarily in the organism of its host that is henceforth its environment, it intercepts flows, sometimes accelerating them, turning them in its favor at every level.’ Serres, M. (2007 [1980]) The Parasite Minneapolis and London: University of Minnesota Press; pp.196-98.
requires integrating the same qualities of the external entity.\textsuperscript{123} Viewing the role of law as a function of immunisation that secures and defends community, and in this context ©, is exactly what Esposito’s immunity and Serres’s parasite counteract.\textsuperscript{124} For Esposito, the immunitary mechanism is ready for a counterattack as it presupposes the existence of what it needs to defend from, not only because of the disease in question, but also because ‘the immune mechanism functions precisely through the use of what it opposes.’\textsuperscript{125} The parasite uses the same tools in order to fight the parasite, that is, use noise to fight back noise, or in this context, use technology to fight technology. More precisely, the law, the parasite, ‘produces in a controlled form exactly what it is meant to protect us from.’\textsuperscript{126} As the parasite (noise) demonstrates, this condition of being and nonbeing, and the binary oppositions of inside and outside are grasped by the fuzziness and its effects – of ‘acting at once as potion and poison’,\textsuperscript{127} a \textit{pharmakon}. The parasite is not only an interceptor in a negative sense, but comes close to Esposito’s process of immunisation, as it requires internalising the parasite in order to be safe from the parasite. Serres explains:

The parasite gives the host the means to be safe from the parasite. The organism reinforces its resistance and increases its adaptability. It is moved a bit away from its equilibrium and it is then even more strongly at equilibrium. The generous hosts are therefore stronger than the bodies without visits; generation increases resistance right in the middle of endemic diseases.\textsuperscript{128}

This is exactly the mechanism by which copyright, in using technology as its main instrument, maintains its ‘balancing order’ of the system. It ‘technologises’ the manner in which to protect from the possibilities of technology. Copyright law uses the parasite to make itself safe from a parasite. As such, the copyright system might allow the parasite as long it can protect itself, or better its enclosure, but still it has not developed a tolerance for the ‘parasitism’ to remain. Deployments of such noisy

\textsuperscript{124} Esposito argues that ‘immunity constitutes or reconstitutes community precisely by negating it’ and it advances the role or function of law in securing and protecting community. For a more detailed discussion see Ibid, pp.21-51.
\textsuperscript{125} Ibid, pp.7-8.
\textsuperscript{126} Ibid, p.8.
techniques by copyright law are attempts to silence and paralyse technology. Accordingly, for the law, on the one hand, technology’s negative aspect is prevalent since it disturbs the communication between the two ends of which copyright is in control. On the other, technology’s positive aspect is only declared in the rhetorics of the (cultural and economic) progress it provides, but once it achieves the objective, it is instantaneously neutralised by law, making it a mere instrument by which copyright’s principles should be regulated. Technology is only positively considered when it serves the interests of the middle, of the intermediary. However, the noise is a multi-player, it constantly multiplies, ‘it occupies space with its imperceptibility.’\textsuperscript{129} It is both the excluded and included, constantly affecting and providing new spaces of transformation.\textsuperscript{130}

Technology, in this sense, interrupts various instances across the constructed copyright model. Similar to the parasite’s behaviour, it ‘paralyzes, analyzes, catalyzes’.\textsuperscript{131} While it primarily might paralyse the system in question, it soon after catalyses and brings new qualities to its subsistence. In parallel with its advancement it has always had an impact on different aspects by which copyright law actualises itself – it has always introduced possibilities and conditions for new creations, being a means by which distribution, reproduction and use are achieved. The technosite is an integral entity without which host’s body (copyright) cannot function. Namely, the history of mechanisation and digitisation proves inclusion of ‘new copyright expressions’ (photography, computer programs) but also of establishing new rights (neighbouring rights) along with the technological developments. Especially taking into account the potentiality of information age, the rampant digital and communication technologies become a condition, an essential element that the content industries both depend upon and struggle with.\textsuperscript{132}

\textsuperscript{129} Ibid, p.194.
\textsuperscript{130} As Serres writes ‘[t]he parasite is the location and the subject of transformation.’; Ibid, p.211.
\textsuperscript{131} Ibid, p.209.
\textsuperscript{132} The technosite enables not only proliferation of content, but emergence of middlemen, either as service providers that facilitate transference of content, or as online platforms that build their financial power based on user generated content (YouTube); Along the same lines of controlling access and use, Borghi and Karapapa indicate how processes of mass-digitisation, in contrast to peer-to-peer sharing platforms where the intermediaries are circumvented, reintroduce the centrality of the intermediaries through which works are accessed (digital libraries, online repositories or
Accordingly, technology is not a mere accident, an external entity, a materiality subjugated to the copyright apparatus. Rather, it is an intrinsic and active feature of communication. In ascertaining parasite’s immanent and thus inevitable presence, the copyright discourse seems to superficially or misleadingly account for the quality of technology. Moreover, different narratives surrounding copyright and its policing repress the potentials of technology and pursue taming it, according to its tenacious principles and teleological normativity. ‘We repress what bothers us. What is repressed, but remains anyway, still parasites communication.’

The parasite is thus not only an ineluctable part of the relation that holds the third position, but always returns when excluded. With each return there is a new interference that transforms the established communication. The parasite, or that which is excluded, attempts to ‘become included, to gain entry into a given system, eventually overwhelming it by becoming him/itself the system and renewing and enriching it creatively, or attacking it in case of systematic resistance to the intruder.’ The digital technology enables a multiple production, creation, communication, information abundance, in which it is not possible to differentiate original from a copy. In the world where noise is predominant with abundance of information, where everyone is actively taking part in simultaneously creating and communicating, the effectiveness of law must, as Patry argues, ‘be based on the world of digital abundance.’

_The artificial scarcity, which has been the central premise of copyright’s edifice (and market interests), has been fundamentally..._
disturbed. Patry is correct when he observes that the classic response to such disturbances is to ‘fight the new and when you can’t defeat it, remake it so that is tame, safe version of the old – [but] that tactic won’t work anymore’\(^{138}\) Noise is constant it never ceases ‘even under the dominion of those who claim to eliminate them’, or more precisely, as Serres indicates and what strategies for copyright enforcements confirm, they ‘have simply monopolized the noise’ thus become interference themselves in achieving the objectives copyright is aiming for.\(^{139}\)

In contrast to the ongoing argument according to which copyright law should acknowledge the effect technology has for the new practices of production and reproduction appearing on the ends – that is, authors and users – this thesis suggests that the conundrum of copyright is not between its subjects claiming new practices or rights over objects, but it is its continuous fight to expel the parasite, to exclude noise, or in this context, the technosite that intrudes the communication regulated by copyright law. Moreover, and crucially, the logic of the parasite informs new comprehension of noise as an integral part of the system, which by its continuous perturbation, the noise (the parasite) constitutes ‘the condition of possibility of the system’ – hence, ‘it attests from within order the primacy of disorder’, that is, ‘it produces by way of disorder a more complex order.’\(^{140}\)


From its very inception copyright law has been in crisis.\(^{141}\) The crisis is the ‘condition of possibility’ for copyright. Noise, parasites, and continuous interference are the realm in which copyright resides. Copyright law is crisis.

Instead of attuning and recognising the noise, copyright instinctively reacts by turning up loud its noisiness in order to attract attention, alarm the body, the system, of the parasites existing or ‘attacking’ the interconnection which is regarded to be always in equilibrium. Accordingly, the middle where relations occur, and the concept of balance – the homeostasis – is viewed as a higher goal and/or a condition to be maintained, is in constant crisis. While law’s normative solution tries to respond to the new circumstances by pursuing never reachable balance, it remains noise itself, not fully capable to understand the domain in which it operates.\(^{142}\) For Serres the noise ‘is the beginning and the transformation’ and with its presence is how systems change their order.\(^{143}\) The noise is the instance that gives possibility for a system to change and readjust. That said, the notion of noise (parasite) does not have an intention to promote any ‘inherent political connotations’ but to understand it as a technical or neutral concept.\(^{144}\)

The dynamic processes and disturbances that technology performs challenge the static mode in which copyright functions. As argued before, it attains the role of a parasite, noise that with its rules and principles simultaneously enables and disrupts the communication it aims to maintain. As such copyright becomes static in the communication channels in which it operates.\(^{145}\) In other words it might seem static, but it is static (noise) itself. However, this claim does not lead to a negative

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\(^{142}\) ‘Harmony is not a law; it is not regularity. Harmony is rarity itself. It is, quite precisely, a miracle.’ Serres, M. (2007 [1980]) The Parasite Minneapolis and London: University of Minnesota Press; p.122.

\(^{143}\) Ibid, p. 41.


\(^{145}\) The technical meaning of the word static is a hissing noise or any other effect that disturbs signals of any telecommunication system, such as telephone, radio or television.
understanding of copyright law. As the notion of parasite/noise demonstrates the interference is also beneficial, or at least a condition that entails continuous re-adaptation, shifting and innovative actions on the part of the interlocutors that attempt to maintain a communication in the presence of noise. This understanding of copyright law, nevertheless, has already been demonstrated by Coombe who argues that although copyright law ‘is constructed through a rhetoric of rights’ it is ‘always simultaneously prohibitive and productive: it creates realities and constitutes possibilities.’ Therefore, even though copyright imposes and extends its regulation onto the technological means, and seems to constrain the free flow of information that technology enables, it can be argued that it is noise that keeps and induces the system in constant perturbation. The legal normativity, understood as a legal constrain, is at the very same time a ‘condition of possibility of (inter)action’, because while it inhibits a particular behaviour it also gives rise and induces new type of behaviour. The interfering presence of the legal regime invites a continuous circumvention, enabling practices and forms of communication that essentially are productive, regardless of whether they fall within the legal understanding of creativity and knowledge. For that reasons, especially underpinned by the digital surrounding, there is communication that is always out of reach for the law, or to put it differently, communication (actions and practices) to which law tacitly consents, or silently applies. Serres is right when he suggests that law is indeed ‘a refined technology of our relations.’


III. MILIEU
The questions revolving around copyright’s subsistence, essence and propriety in the last two decades have certainly induced a search for new recourses of investigation that can offer fresh perspectival stances for understanding the processes and practices occurring on copyright’s landscape. The landscape, nevertheless, is not a fixed background upon which subjects and objects interact, but a ‘dynamic medium’ that has an active part in social arrangements, formation of identities, simultaneously being both construction and representation of the sight/site. Copyright’s landscape is of changeable nature, a sight holding attention of multiple eyes, a site of discourses. Concerns do change depending on the position one takes in the copyright’s landscape, and thus for the authors and users copyright becomes an attribute in the process of subjectification, whereas for the owners and entertainment industries a strategy of objectification, familiarly known as commodification. The law in general, and therefore copyright law in particular, absolutely depends on the subject and the object as essential elements to its subsistence. It is in ascertaining their interrelation by which law actualises itself and performs its role. Ultimately, this is confirmed by the fact that the orienting principle of property does not regulate owning of an object, but regulates the relation between subjects in regards to an object. The landscape, as such, can be understood as a background against which subjects and objects are perceived, but also as a realm where all the agents and processes can be legally represented, evaluated, questioned, and investigated. The landscape of copyright in that sense becomes not only territory for taking positions, but also scenery against which perspectival

1 While the term practices alludes to communicative acts as a subject matter of copyright regulation (production, reproduction and dissemination), the term processes implies the social, cultural, economic, political, technological activities, by which copyright, among many other instances, becomes an issue of consideration. In the former the acts are subjectified (authors, copyright owners, users), whereas for the latter they are desubjectified, more precisely, objectified.


3 Here ‘discourse’ is understood as a debate, but also as a movement across the landscape, which comes from its etymological basis in Latin – discursus, meaning ‘running to and fro’, or ‘running about’.
methodologies conceptualise and reconceptualise the very topography of primarily copyright, and then its interrelation with technology.\(^4\)

The territorial understanding of property both conceptually and pragmatically remains in the discourse and entrenched policies of copyright. Additionally to being a visual category, as I argue in the next chapter, this territorial comprehension still holds the ‘intellectual lands’ as a matter of regulation, which, as explained below, limits our comprehension of what copyright ought to be, especially in the context of its current technological surrounding. By means of displacement from landscape to soundscape, as discussed in the previous chapter, here the argument integrates or unfolds yet another spatial displacement – from land to sea – that in a parallel manner upholds some of the thesis’s accounts and efforts to apprehend the ‘double intangibility’, and the relation of copyright and technology. The chapter begins by addressing the embedded spatial organisation of copyright and its discourse, and further, identifies the pirates as yet additional reason for such displacement. In the second part, the notion of parasite provides yet another quality to address the pirates, but also helps to divorce from the meanings it has in a copyright context. In the end, by bringing copyright at open sea, this provides new encounter with the noise, that is, background noise of the sea, by which the relationship between copyright (order) and technology (disorder) is considered.

### 5.1. Spatiality of copyright

Sherman and Strowel have appropriately stressed that in the last decades of the twentieth century the increasing interest in copyright has come largely from the 'outside' of the legal sphere, as historians and philologists, cultural and critical

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Theorists manifested their interest in copyright.\(^5\) In chorus with this revival from the ‘outside’, the interfering noise made by technological advent has additionally required defocusing from the seemingly stable copyright landscape, revealing its interwoven topology constituted by legal, social, political, cultural and economic positions. In that sense the singular focus on copyright’s landscape has been blurred, and it has become a subject matter viewed from different ‘angle[s] of vision’, which in turn are ‘perspectival constructs’ that both challenge and sustain copyright.\(^6\) Copyright’s focal presence has been disturbed. And while the interdisciplinary approaches to copyright law originated mainly in Europe and particularly in French theory, they have ironically germinated greatly on the Anglo-Saxon soil, significantly allowing to firstly ‘rethink the way we conceptualize copyright law’ and secondly ‘to [also] challenge some of the assumptions on which such conceptualizations were based’.\(^7\)

The copyright’s landscape is nothing more than a conceptualisation, a setting or a prospect in which copyright regulates the interaction between subjects and objects. A conceptualisation, however, should be understood broadly, both as a legal arrangement and as a methodological tool that informs comprehension of the practices and processes that copyright law has set to protect and promote. In that regard, primarily, copyright’s conceptualisation has a historical background against which it continuously justifies itself and informs any subsequent changes ought to be made.\(^8\) Furthermore, conceptualised as a property right, this notion of property

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\(^6\) Along these lines, for instance, Appadurai therefore introduces different -scapes (ethnoscapes, technoscapes, financescapes and ideoscapes) to indicate and render the fluidity of our current social and political processes, which are hardly graspable from one point of observation. Appadurai, A. (1996) *Modernity at Large: Cultural Dimensions of Globalization* Minneapolis: University of Minnesota; p.33.

\(^7\) Sherman, B. and Strowel, A. ‘Introduction’ in Sherman, B. and Strowel, A. (eds.) (1994) *Of, Authors and Origins: Essays on Copyright Law* Oxford: Clarendon Press; p.2 (Foucault’s ‘What is an Author’ and Barthes’s ‘The Death of the Author’ are two specific texts that have significantly resonated within the copyright discourse).

\(^8\) Durrante, for example, argues that law as a legal science ‘has always played a paramount role in the epistemological perspective, namely, in the representation of reality. Legal science has constructed the possibility to mediate between the real (what is) and the virtual reality (what ought to be) within the physical domain.’ Durrante, M. (2010) ‘Re-designing the Role of Law in the Information Society: Mediating between the Real and the Virtual’ *European Journal of Legal Studies*, Vol.2, Issue 3 [online] http://www.ejls.eu/6/76UK.htm#_ftnref2 (Accessed 26 February 2014).
persistently remains to be a background upon which any re-thinking of copyright is to be made. Whilst the former meaning of a background carries a temporal quality that extends to the present, the latter bears a spatial quality as a site where law performs its normativity. It seems that both of these meanings are enmeshed in what constitutes copyright’s landscape, not allowing in turn a comprehension of technology beyond this contentious background. In other words, as digitisation has introduced another layer on the landscape that avoids to be seen, and which enables processes that are hardly graspable, it has interrupted copyright’s visual comprehension of its surrounding by disturbing its seemingly stable landscape.9

The technological disruptions of copyright’s landscape has indeed initiated various concerns aiming to conceptualise, visualise and inform a better place, setting or milieu from which and through which copyright’s intrinsic features (of making copies, production, distribution, subjects and objects) could be better comprehended and then ameliorated. Copyright’s landscape has become a (battle)field that is teeming with new approaches or gateways/getaways that yield articulation and evaluation of what and how copyright becomes in this tide of technological advancement. As discussed above, divergent camps have built their arguments in consolidating a copyright discourse revolving around ownership. However, while they were always pertinent but quiet, now they have become noisy as digitisation penetrated the arena of copyright – indeed, recalling Feenberg’s statement, technology is a ‘social battlefield’. The general public is entertained by the noise that echoes from the battlefield where current copyright wars are being fought. The meaning of entertainment being employed here is surely not one of amusement or enjoyment, or one closely associated with the entertaining copyright works, but rather it comes from its etymological roots – enter and tenere – which means ‘to hold attention of’. The battlefield holds attention not only for those directly affected by it, but also for the general public that in recent years actively participates and scrutinises intellectual property policies that pose a threat to creativity, knowledge and freedom

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9 Copyright’s dependency on the visual is considered in the next chapter.
of expression.\textsuperscript{10}

However, copyright’s landscape should not be understood as merely a representation that can be observed from afar. In recalling the Schmittian construction – ‘[e]very basic order is spatial order’\textsuperscript{11} – it can be argued that spatiality is an enduring essence of copyright, a conceptualisation that both conceives its pertinence and develops its discourse. Copyright is intrinsically a dividing operation as the boundary of property divides two different spaces that interrelate according to the rules and principles installed on the boundaries. These spatial conceptualisations are asserted through the existent divisions of private and public that remain to be orienting principles according to which copyright deals with any disturbance that threatens such spatial arrangement.

In context of the technological challenges, the spatiality of copyright can be roughly trifurcated along the following three trajectories. The first, discussed in the first chapter, centres on the essential normative construction of property in which law asserts the right to the ‘intellectual lands’, which has become even more questionable with the digitisation.\textsuperscript{12} The foreclosed © circumference marks a spatial boundary, delimiting the possession of one’s right to control the manner in which, by whom and under what conditions owners can reap and distribute what they have sown.\textsuperscript{13}

\begin{footnotesize}
\textsuperscript{10} For example, this was the case against the controversial Anti-Counterfeiting Trade Agreements ACTA in the EU and Stop Online Piracy Act (SOPA) in the US. In the EU there were number of petitions, demonstrations and email communication to the MEPs of the European Parliament. In US on the 18\textsuperscript{th} of January 2012 Wikipedia closed its system for one day as an act of protest against the draconian SOPA introduced by the US Senate. On copyright wars, see, Patry, W. (2009) Moral Panics and the Copyright Wars Oxford: University Press.


\end{footnotesize}
Copyright controls circulation of works that gravitate around copyright holders and regulates the conditions of their use by the public. This circulation of works, subject to copyright regulation, is not infinite, as the proprietary exclusivity is limited by the duration of copyright. Once duration of copyright expires the work becomes free to be exploited, and thus enters the microgravity of the public domain. I employ the term microgravity to associate public domain with that what surrounds copyright’s circumference, where works orbit freely around but are still under the forces of copyright’s gravity. The public domain is not only actualised by copyright’s circumference, but this externality is where reserves are orbiting until they are not reused and fall back into copyright’s gravitational force.¹⁴

In contrast to the ‘internal aspect’ of the previous trajectory, the second transverses beyond the foreclosed © circumference and moves into the externality, into the commons, the public domain as a recourse wherefrom challenges and limitations to copyright’s expansion become possible.¹⁵ Without any legal provision that sustains its definition, the public domain is viewed as ‘a space without form or clearly defined boundaries’¹⁶, a negative space that becomes a reservoir of copyright works whose duration of protection has expired.¹⁷ And while the public domain was born together

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¹⁴ ‘...representations, no longer protected by laws of trademark and copyright, are now part of the...public domain, while elements of the public domain are constantly appropriated in the proprietary expressions of those whom the law recognizes as authors.’ Coombe, R.J. (1998) ‘Critical Cultural Legal Studies’ Yale Journal of Law & the Humanities, Vol.10, Issue 2, 463-486; p.468.


¹⁷ Different copyright works have a different duration of copyright. See CDPA 1998 Sections 12-15.
with copyright, or more precisely, copyright is ‘forged from pieces of land taken from the public domain’, its spatiality is marked by the copyright’s circumference. In light of the possibilities that digitisation enables both in production and dissemination of ideas, expressions and inventions, the social and cultural aspects of the undervalued domain ‘outside’ property have necessitated its affirmative recognition. In this understanding, it is argued that public domain should not only protect works that fall outside protection, but also comprise works that are subject of copyright exceptions, that is, fair dealing, which sustain cultural and creative practices. In other words, as Cohen puts it, should become part of a ‘cultural landscape’. Because our culture depends on this public domain, as much as on the intellectual property right, Boyle appealed for a movement similar to that of the ‘environmental movement’ that will ‘preserve the public domain’ and make us aware of the information environment. He argued that this movement would make ‘visible the invisible contributions of the public domain, the “ecosystem services” performed by the underappreciated but nevertheless vital reservoir of freedom in culture and science.’ Discussions about copyright law and its surrounding came about to be represented through environmental (ecological) conceptions, claiming that the public domain is not external part to it, but integral to constituting the very same copyright landscape. Recently, in line with Boyle's environmental project of recognising the public domain, Tysse has extended the ecosystems found in the natural environment onto copyright system as a part of a broader ‘information ecosystem’. More specifically, by adopting such analogy she has argued that

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copyright systems are ‘complex adaptive systems’ that are 'non linear, dynamical systems, capable of evolving over time in response to changes in their environment.' That way, if copyright law is to sustain its objectives, it necessitates recognising its surrounding, and provide legal rules that will 'sustain the information ecosystem in a healthy, self-critical state, balancing stability against the elements of chaos that are essential to creativity.' Such investigation not only provides a way to go beyond the ‘bipolar conflict between private property and the commons that does not accurately reflect the complexity of copyright systems,' but also challenges the rigid copyright inclination towards order by requiring its recognition of a dynamic, complex, or chaotic surrounding that is essential to its sustenance. Integrating complexity within copyright discourse is of great importance, as it shifts the focus in recognising the unbalanced chaotic concurrence between copyright and technology, and the flexibility to its environment that is required on the part of copyright for it to sustain itself, however they remain to be studied at 'landscape scale' for capturing copyright’s coevolutionary properties with its surrounding.

With the first impulses of digitisation, the factor of spatiality instantaneously occurred marking an ambiguous distinction between the cyberspace and real space as a third trajectory, which was discussed in the previous chapter. Comprehending the ‘cyberspace as place’ cyberlibertarians claimed it is a separate place in which legal rules of the physical world and its territorial disposition are not applicable, and thus demanding that law should change accordingly. Hunter has rightly argued that such a metaphorical usage of the word ‘place’ not only had a great influence on the regulatory legal (and judicial) regime of cyberspace, but that it also led ‘to a view of cyberspace as land that may be fenced off and privatized,’ which is detrimental to

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26 Tussey argues that law should recognise this complexity and become ‘flexible enough to accommodate chaotic elements that are essential to the creative process.’ Ibid, pp.9-10.
27 Such inflexibility of copyright law vis-à-vis its surrounding, she argues, should be challenged as it can ‘inadvertently create disorder where it is poorly formulated or where it is repeatedly amended without attention to its overarching purpose or framework.’ Ibid, p.104.
understanding the commons, which Internet and digitisation has ‘re-introduced’. 29
The spatial distinctions within copyright are only a reflection of already underlying
schisms underlining copyright’s landscape.

©

In light of the technological and software developments, a copyleft movement
(licensing) has emerged in copyright’s landscape. In opposition to copyright’s
principles, it is considered to be a ‘general method for making a program (or other
work) free, and requiring all modified and extended versions of the program to be
free as well.’ 30 Accordingly, all the works that are originally created become
instantaneously part of the public domain and subsequently a subject to free
modification, distribution and use by the public. The inclusion of the word ‘left’, as a
play on the word copyright indicates a direction towards a spatial orientation in the
copyright’s landscape.

©

The technological intangibility and its elusive force of mediation are often hardly
recognisable in the landscape. If copyright’s conceptualisation firmly holds onto its
landscape, this part suggests a necessity for spatial displacement. Such a
reconfiguration, nonetheless, does not imply a change of the position from which the
landscape can be observed, but suggests a departure from the land to the sea. This
attempt of a displacement, however, is not a conceptual recourse, which runs a risk
to fall within the binaries of land and sea, neither to associate sea with that of the
common. 31 Instead, it holds the sea as a milieu from where copyright emerges, and
in which it also moves afloat. I argue that this movement, in turn, provides better

Review, Vol.91, 439-520; p.475; For a nuanced view on the same metaphor see Lamley, M. A. (2003)
‘Place and Cyberspace’ California Law Review, Vol. 91, 521-542; In an act to move beyond the views
and discussion of cyberspace as space, separated from the ‘real space’, Cohen has argued for an
approach to cyberspace that is embedded in the everyday practice, constituted by real experience and
As/And Space’ Columbia Law Review, Vol.107, 210-256; p.213.

31 For Locke the ocean was ‘great and still remaining common of mankind.’ Locke, J., Macpherson, C.B.
position to apprehending technology. Moreover, taking into consideration the great proliferation of pirates that technological advancement brings, copyright is bound to set sail at open sea in search for the pirates. After all, the ever-present pirates that encroach on the ‘intellectual lands’ are creatures from the sea.

5.2. Piracy and copyright

With the rise of the technological tide, piracy is a notion that denominates a practice of unauthorised use and reproduction of another’s work, proliferating across different platforms and networks. Piracy thus signifies outlawed practices and groups stretched on the circumference of copyright. However, history shows that the pirates have been a significant feature continually present from the very pre-conditions of what would later be established as copyright up until the current technological surrounding. The pirate is both a representation and denomination of all illegal and deviant practices emanating from the digital realm. This looming presence of practices interfering property principles, and their noisy disturbances of copyright regime have nevertheless resulted in proclaiming copyright wars against the pirates that are being fought on many fronts. While piracy has been a significant accompanying feature of copyright, what becomes evident now is that the discordant technology cannot be fully separated from the noisy pirates, thus copyright fleets are in a constant mode of mobilisation to fight against and depower their ships.

Taking technology as a medium where various communicative actions take place, it could be held that the pirates are intrinsic noise in the medium which copyright law persistently attempts to expel. And as it has been indicated before, copyright cannot entirely harm its objective habitat that sustains its presence, it requires subjects


33 One of the biggest peer-to-peer networks ‘The Pirate Bay’ has a logo of a sailing pirate ship.
(scapegoats) in order to vindicate its form of operation and sustain its normativity. However, as I argue below, the pirates are integral part to technology, thus elusive as the technology they are attached to. As such, their subjectivity is of a specific formation not reducible to the existent and recognised categories of agents that copyright law prescribes. For this reason, I approach the pirates not as a denomination infused with moral and legal connotations out of which any pros and cons arguments can be developed. Instead they are considered here as hosts of both copyright law and its discourse, inviting them to displace themselves, at least temporarily, from land to sea. In that way, the encounter with the pirates allows new spatial understanding beyond copyright’s property principles. It provides a possibility to destabilise the base upon which copyright law’s conceptual structure and orienting navigating mechanism function. Taking into consideration that their presence had informed copyright, and their current augmentation and reappearance become subject of policy, they are a significant manifestation of the dissonance between copyright and technology. Copyright is one of the few laws that is privileged to have its own representation.

Copyright is one of the few branches of law that hold the privilege to have their own representation. The representation indicates the actual spatiality which is inherent in the copyright apparatus. The symbol ascertains the presence of law and asserts one’s right over a particular work of expression. However, its authority does not emerge from the representation, but from its imminent absence, since copyright subsists in the moment when an idea is originally expressed. I speculate that the symbol denotes a protection of O (original work) with all the prospective C (copies) emanating from it, securing that those copies remain inside the circumference of legal regulation. The enclosing line marks one’s property and signifies the exclusive

34 Heller-Roazen identifies the characteristic of piracy as an agent that cannot be reduced to an individual or to an association, thus ‘it is often represented as “universal”’. Heller-Roazen, D. (2009) The Enemy of All: Piracy and the Law of Nations New York: Zone Books; p.11.

35 It must be noted, however, as Johns argues, piracy is not a transgressive practice that stemmed from the digital technology, nor it is a mere by-product or corollary to actual intellectual property law. Johns, A. (2010) Piracy: The Intellectual Property Wars from Gutenberg to Gates Chicago and London: The University of Chicago Press; p.6.
right to control the manner how that copyright work is to be used and distributed. This action is further justified with copyright law’s highest goal, but also privilege, to deal with the subject matter of creativity and knowledge, to promote their production and diffusion for the public interest.

The ever-growing technological advancement seen across different platforms and networks enabled possibilities that have disturbed copyright. In response, this has intensified copyright’s importance asserting its presence across different fields of our everyday life. As such, this gave rise to social, cultural and economic waves of concern about copyright in this high tide of technological possibilities. The potential for copy making, accessing, reproducing and disseminating did not only challenge copyright’s edificial formation, but also its conceptual justification. In that sense, it can be said that the proliferation of different access, use and distribution of copyrightable content are circumstances that provide constant possibility to circumvent copyright’s circumference, making law continuously alert to redraw the line and ensure the balance is kept afloat.

©

The border or the ‘dividing line’, Serres argues, regardless of whether abstract or linear, consists of three layers. The first layer is on the inside and it protects the interiority with its softness, whereas the exterior is hard as it protects from invaders. In the middle is the porous layer which through its passages and pores enables flow of exchanges, communication, and nourishment. If Serres is correct when he says that every border functions in this threefold way, then it can be argued that technology constitutes the middle layer that provides passages and obliterates the boundaries drawn by copyright. However, this in turn triggers stronger demarcations of space, manifested in copyright’s circumferential normativity. Subsequently, this initiates more rigid laws and policies that sharpen the conceptual and practical

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understandings of copy, reproduction and distribution, while underpinning the inherently present divisions of the public and private, owners and users, real space and cyberspace. It is along these lines of conceptualisation and space shifting where piracy takes place in the copyright discourse. The paradoxical demarcations and obliterations, appearances and disappearances of boundaries are actually where copyright law confronts with the existing possibilities advanced by technology. It is along these lines of marking different spaces where the discord between copyright law and technology lies, but it is also in this liminality where the emergence of various groups, practices and motions take place. This *space in between* is where I argue piracy prevails.

The notion of pirate has a long history which pervades in different forms and actions. Its features have pertained the human civilisation intermittently. The historical account of piracy predates copyright law as such as it is associated with the sixteenth century mechanism of controlling copies of printed books, the very reasons copyright emerged in the first place. As Johns demonstrates, it is not an outcome or ‘a mere accessory to the development of legal doctrine’, but instead, it is copyright that emerged as a response to piracy. Even though it may seem that the processes associated with piracy, such as appropriation and reproduction, have continuously disturbed copyright’s enclosing line, they were nonetheless intrinsic features existing prior to its foreclosure. Additionally, if copyright is an outcome of the Enlightenment project, the so-called ‘distribution of light’, as Johns argues, was only possible through the veiled piracy within that project. Knowledge was spreading not only through authorised pathways of distribution, but also through the actual re-

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40. It was the making of copies, reusing and re-appropriating as acts and practices upon which copyright’s regulatory edifice was built upon.
appropriation, informing equally the public sphere – ‘No piracy, we might say, no Enlightenment.’\footnote{41}

Johns has correctly put piracy in historical perspective and has shown that localising piracy in time and space is not that straightforward as it requires a ‘historical vision’ and a different approach to the matter of piracy.\footnote{42} Indeed, piracy is not an outcome of the law, but it precedes the mechanism of law. However, in the historical perspective that Johns undertakes, it seems that piracy remains in the semantic and rhetorical usage employed by the politics of regulating prints, objects, or knowledge in general – showing how the apparatus of copyright is a result of piratical practices and denominated groups that were undertaking acts that impeded the monopolies of the print. Piracy had been defined from the localised understandings of borders and thresholds,\footnote{43} thus piracy has different meanings in different social and political contexts. Such argument is expected if we have accepted that copyright as a legal instrument of international relevance functions on several different justifications variously integrated within different legal systems. In that sense piracy is not only a matter of historicity but also ‘a matter of place – territory and geopolitics – as well as time.’\footnote{44} The piratical activities represent different comprehension not only for those directly and indirectly taking part in them, but also for the political arrangements that are ‘allowing’ them.\footnote{45} The historical view on piracy in the localised discipline of law, is yet another aspect that requires a cautious approach. For the legal discourse, the meaning of a pirate is often reduced and localised in the problematic notion of the historiography of intellectual property – by maintaining a normative character,

\footnote{42}{Ibid, p.15.}
\footnote{43}{Ibid, p.14.}
\footnote{44}{Ibid, p.13.}
\footnote{45}{For instance, China has a specific amalgam of socialism and capitalism that allows and further endorses the rife copying, employing or working in favour or in tune with capitalistic overproduction. Caraway argues that the term falls in two camps of designating criminality or missing markets. In Europe piracy is ‘whatever the knowledge industry needs protection from’ whereas in the US it is understood as blunt stealing, thus the famous sentence ‘Piracy is theft.’ He approaches piracy through avoiding this distinction and argues that commoning (reproducing the commons) the resources is actually what lies in the heart of capital, as a paradoxical tendency to provide an access to the common, which is not exterior to capitalism. Caraway, B.R. (2012) ‘Survey of File-Sharing Culture’ *International Journal of Communication*, Vol.6, 564-584; p.581 and p.566.}
‘legal essentialism’ and not taking into account the cultural history.\textsuperscript{46} The interdependency between these \textit{histories} must be acknowledged, as any meaning or metaphor the pirate entails changes with the shift of its practices and uses, thus not limiting it to its legal contextualisation.\textsuperscript{47} Accordingly, as Heller-Roazen indicates that ‘[a]n examination of piracy might, moreover, with equal justice provide a history not of pirates but of their changing representations.’\textsuperscript{48}

For the copyright, the notion of piracy relates to the very act that infringes the right to own, possess, and therefore exclusively control and manage content’s reproduction and distribution. Defining piracy is relatively a difficult question, even more when tracing its origination in the context of copyright.\textsuperscript{49} As it has designated different practices and violent acts, and thereof different meanings, it cannot be reduced to the current meanings built in the discourse. Since it pertains intensively in the policy debates, changes, or ongoing copyright wars – the notion of piracy initiates interests from across disciplines in comprehending the impulses and attributes of piracy today.\textsuperscript{50} With the high rise of the technological tide, different positions emerge in respect to its quality,\textsuperscript{51} thus many \textit{cons} and \textit{pros} arguments have fully been subsumed within copyright discourse. On the one hand, it denominates a


\textsuperscript{47} ‘The continuities and discontinuities of copyright history will therefore not always be evident from explicit changes in terminology.’ Ibid.


\textsuperscript{49} The question where does piracy come from, how it developed over time together with all its consequences, for Johns, is something that ‘have never been properly asked, let alone answered.’ Johns, A. (2010) \textit{Piracy: The Intellectual Property Wars from Gutenberg to Gates} Chicago and London: The University of Chicago Press; p.5.


\textsuperscript{51} It designates various enunciations occurring through the widespread sea of information, and therefore in a rather uncritical manner extends further to cover often divergent and opposing stances regarding its morality.
practice of unauthorised use and reproduction of another’s work. The frequent understandings hold piracy, together with counterfeiting, as the most dangerous issues for the content industries, effectuating various (pan)governmental bodies to actively devise strategies and support enforcement against this rife phenomenon. It has become a rhetorical means, a metaphor, against which copyright policy orients and justifies itself. The issue of piracy thus encapsulates the practices, actions and undertakings that occur and interrupt the interactions that copyright has set to protect and control. The manner in which copyright cons, that is, directs the steering of its ship against piracy has even become a conspiracy projects themselves led by the content industries and their strong lobby groups while supported by governmental policy changes. Taking into consideration the already elusive boundaries that digitisation entails, the digital pirates maintain their historical image

52 It is understandable that a ‘pirate’ signifies a whole spectrum of copyright infringements, from those who use non-infringing material to those who are engaged in lucrative piracy. In this discussion I will address it generally, since it is not discussed from a view focused on the end means but rather as a feature that takes place in the middle.


54 The enforcement of intellectual property right is of great significance for the European Commission. For instance, in 2008 it adopted a Resolution on a comprehensive European anti-counterfeiting and anti-piracy plan, which in turn initiated the creation of The European Observatory of Counterfeiting and Piracy that ‘serves as a platform to join forces, to exchange experiences and information and to share best practices on enforcement.’ [online] http://ec.europa.eu/internal_market/iprenforcement/observatory/index_en.htm#maincontentSec8 (Accessed 20 December 2013).


56 I refer here to the secret negotiations of the Anti-Counterfeiting Trade Agreement which intended to establish a global intellectual property enforcement against counterfeiting and piracy. In the EU, for instance, apart of the controversies regarding its provisions (restricting citizen’s liberties, procedures of enforcement), the European Commission was criticised for its lack of transparency and secretive participation in the negotiations. For that reason not only European Parliament requested by the Commission ‘to grant public and parliamentary access to ACTA negotiation texts and summaries’, but also initiated great active involvement on the part of the public to raise the awareness about the controversies related to the Act. The European Parliament rejected ACTA in July 2012. See, European Parliament resolution of 10 March 2010 on the transparency and state of play of the ACTA negotiations P7_TA(2010)0058.
of being outside the boundaries of jurisdictions – they are the enemy of all, as they cannot be ‘represented as lawful enemies’ or subjects with whom any direct negotiation is possible.\(^{57}\)

On the other hand, while pirates constantly intrude and find passages into the ‘intellectual lands’ that copyright has set to protect and promote, these tactics are viewed as practices that resist enclosures, challenge law’s normativity, and are always engaged with allowing or providing a free flow of information. The piracy in that sense becomes a paradigm of resistance and hacker culture, claiming the commons and withstanding the capitalistic pervasion of the creative industries. Piracy’s extension on the political scene is reversing the negative connotation and acknowledges its presence against corporations, shifting the discourse from a legal to a cultural perspective, primarily engaged with social and cultural enrichment,\(^{58}\) that is, the value of free culture and access to knowledge. Paradoxically, these practices often operate and are further justified because they work in favour of copyright law’s goal to promote creativity and knowledge.\(^{59}\) However, once applied on copyright’s landscape such ideals are in instantaneous conflict with law’s principles. Piracy, with its inherent features of appropriation, reuse, and unauthorised distribution, designates a creative expression that can scarcely be endorsed within the confines of ©. The term ‘piracy’ extends far beyond its legal label that stigmatises the activities over the Internet platforms such as peer-to-peer networks. As Castells and Cardoso argue, these ‘piracy cultures’, are characterised with ‘diversity’ and ‘commonplaceness’ that continuously emerge as alternative networks and


\(^{59}\) I stress the need to be careful when construing the high goal of the human kind, especially in copyright’s context, being rhetoric of post hoc legal construction. In addition, as Hall rightly argues that digital piracy is not ‘inherently emancipatory, oppositional, leftist or even politically and cultural progressive’ but it depends and it is contingent on the contexts and the decisions in which it is dealt with. Hall, G. (2009) ‘Introduction: Pirate Philosophy’ Culture Machine Vol. 10, 1-5; p.2 [online] http://www.culturemachine.net/index.php/cm/article/viewFile/367/374 (Accessed 28 February 2014).
communities that create and distribute content. As such, they propose considering the ‘piracy cultures’ not through the lenses of legal and illegal practices that counter the institutionalised and legal paths, but as instances of mediation that both inform cultural and market practices.

The unceasing appearance of the pirates resonates the dissonance between copyright and technology. Although it may seem that piracy manifests itself as the main cause and outcome of this dissonance, its actualisation and continuous recurrence is what endures beyond the prevalent historicity of copyright. Therefore, I argue that piracy entails a condition of para-historicity. Taking into consideration copyright’s origination and existence that is always historically embedded, deploying such term is undoubtedly dubious and uneasy. By rendering piracy beyond its ‘past and present tenses’, and their different historical accounts, it attempts to reduce the tensed relationship manifested between copyright and technology, or rather caused by the presence of pirates. Regardless of the positive and negative denominations ascribed to it in a copyright context, the pirates are always around. Not only copyright and pirates are on the same waving sea, but also the pirates remain to be an intrinsic feature of copyright despite their various meanings and practices they bring about. In this context, I address the characteristic of piracy not as an external practice but as a concomitant to copyright.

In search for pirates the radar of © always rotates.

5.3. Pirates and parasites

In this part, I aim to set free the discussion from a range of previously described different positions concerning piracy. This entails avoiding the historicity of copyright and piracy, but also the notion of property as an orienting principle according to which they are often debated. The reason for such an approach is to articulate different understanding of the pirates as a feature that is internal to copyright.

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system. In order to do so, I will return to the notion of parasite.\textsuperscript{61} The para-
historical\textsuperscript{62} tracing of the pirate through the notion of parasite is not simply an
analogical exercise; it is rather a deliberate disqualification, at least temporarily, of
what piracy means and represents. Such recourse becomes necessary in an attempt
to divorce the pirate from its different meanings and practices associated within the
histories of copyright discussed above.

Having previously addressed the multifaceted notion of the parasite, it is again
important to take into account its simultaneous different meanings – the parasite of
social relations, the biological parasite of the organism, and noise/static of
communication (human relation, living animal, physical noise). In brief, although the
parasite or noise carries features of interruption and interference, they are
ontological and intrinsic to any relation. Serres intriguingly identifies the third, the
parasite (noise) always present in the middle, as an integral part, a background
against which communication between two points takes place.\textsuperscript{63} For him, what
makes a system formation does not rest on the points upon which that apparatus
functions but on the medium where ‘flow of messages [are] passing through’.\textsuperscript{64}
Accordingly, this notion allows avoiding the differentiation of the copyright system
on author/owner and user and focuses on the actual relation between these points
on which law establishes itself, that is, in the middle where interceptions occur.

The ‘intellectual lands’ regulated by © are hosting lands. Encircled with the common,
they are a place where the host invites the guest to feed from his or her creative
expression (creativity and/or knowledge) and pay in return. The pirate, however,
encroaches and impinges those lands. The pirate, same as the parasite, is an

\textsuperscript{61} For a discussion on parasitism as a form of an intense and generalised form of piracy that invades
Génétique’ Critique, No.733-734: Pirates!, 496-509; Paris: Les Éditions de Minuit [online]

\textsuperscript{62} Employing the notion of parasite, as an unwanted noise of communication, an uninvited guest, or a
life form that lives off another enables this ‘para-historical’ condition to discuss piracy under different
terms.

Ithaca: Cornell University Press; pp.67-8 (‘[w]e include whatever noise is actually present in the channel and
thus inseparable from its function as a channel.’).

uninvited guest. The pirate, an *invisible* force that always takes on a material presence, finds a hosting environment in which it is capable to exist. As a guest, it is always situated beside the place (*para site*) where it can feed itself. The parasite is the uninvited guest that takes without giving. The parasite attaches to the host, and does not exhaust production, but settles on the reproduction where energy occurs, thus it abuses relation (a site) not an actual thing.\(^{65}\) It parasites the reproduction, that is, ‘the propagation of production rather than production per se’ and ‘steers it in a new direction favourable to it.’\(^{66}\) Such abuse from the parasite as a practice of intervention within an organised and delimited space resonates with the piratical mode of operation. Moreover, it has a particular association with the ‘play of everyday practice’ of using and re-using, particularly prevalent in the current digital conditions, as well as in the articulation of how popular culture continuously resists and generates itself.\(^{67}\) The everyday is the domain where copyright and technology endlessly intermingle, not only in context of the creative practices it entails, but also in context of the technological milieu/medium where they take place.\(^{68}\) Indeed, as copyright’s landscape becomes populated with pirates, the everyday becomes a battlefield for fighting against them.\(^{69}\) The copyright wars are manifested in the constant struggles of interests that took momentum with the digital technological

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\(^{65}\) Ibid, p.82 and p.99.


\(^{68}\) But also the everyday is the domain where law is constantly ‘re-enacted and remade’. Sarat and Kearns observe: ‘Law seeks to colonize everyday life and give it substance, to capture it and hold it in its grasp, to attach itself to the solidity of the everyday and, in so doing, to solidify it further. But because everyday life is a force in motion and a clash of forces that never fully reveal themselves, law can never fully capture or organize the everyday.’ Sarat, A. and Kearns, T.R. ‘Editorial Introduction’ in Sarat, A. and Kearns, T.R. (eds.) (1995) *Law in Everyday Life* Ann Arbor: The University of Michigan Press; p.7

means of reproduction, which in turn, generate ‘energy’ and enable new relations on which parasites attach and feed off.

In that regard, the consumption in form of re-appropriation and pouching deployed by the pirates resonates de Certeau’s investigation of these practices as an essential trait constituting the everyday life.\(^70\) De Certeau employs the division of strategies and tactics, as military notions, to explicate the territorial arrangement of such practices. Strategy is always associated with an institution or a discourse as a place, which instructs the relations with an external environment. That is a place that can be ‘circumscribed as proper (propre)’, ‘delimited as its own’ that becomes a basis from which any relations with an exteriority, ‘composed of targets and threats can be managed.’\(^71\) As such, de Certeau argues that all the political, economic and scientific rationality is based on this ‘strategic model’,\(^72\) and so is copyright law. In contrast, the tactic does not have a place where it can settle its positions and secure independence. The tactic ‘is a calculated action determined by the absence of a proper locus’, thus the space where tactic takes place ‘is the space of the other.’\(^73\)

Akin to that of the parasite, the tactic of the pirate is creating a space for itself within the ‘constraining order of the place’, and since ‘it does not obey to the laws of the place’ it finds ways to adjust this place to its own needs by (ab)using, manipulating and diverting them – thus it employs ‘an art of being in between.’\(^74\)

Its mode of operation, its movements, that is ‘making do’, do not rest on space but on time – ‘[i]t must constantly manipulate events in order to turn them into “opportunities.”’\(^75\) This tactic does not have a general view, its operation is consisted of ‘isolated actions’ and therefore whatever it can win it cannot protect, cannot


\(^72\) Certeau, also, argues that such strategies are not only asserting their power and will by distinguishing their own place, but also in such division of spaces they are utilising a ‘panoptic practice’ wherefrom it is capable to use the sight in order to control the forces from the outside. Ibid, p.xix and p.36.

\(^73\) ‘A tactic insinuates itself into the other’s place, fragmentarily, without taking it over in its entirety, without being able to keep it at a distance.’ Ibid, p.37 and p.xix.

\(^74\) Ibid, pp.29-30.

\(^75\) Ibid, p.xix.
'keep to itself.' The tactic is indeed the way in which the parasite attempts to situate right beside the place where ‘opportunities’ emerge, where reproduction is flowing with energy. Since it cannot produce by itself, it needs a reproduction to feed on. However, as argued before, with an act of consumption it produces something new, thus ‘[t]he parasite is the location and the subject of transformation.’

Translated into copyright’s landscape, in this sense, the prescribed space of production as asserted by copyright’s law strategy, is continuously disturbed by irregular, often unpredictable tactics, which by their consumption, or rather piratical abuse, recreate and inform new forms of production, as they are not conforming with the parameters set by the strategies. In search for recognising the users beyond merely passive consumers, but active operators, de Certeau observes:

In reality, a rationalized, expansionist, centralized, spectacular and clamorous production is confronted by an entirely different kind of production, called ‘consumption’ and characterized by its ruses, its fragmentation (the result of the circumstances), its poaching, its clandestine nature, its tireless but quiet activity, in short by its quasi-invisibility, since it shows itself not in its own products (where would it place them?) but in an art of using those imposed on it.

The tactical consumption of the pirate is sort of parasitical sustenance, dispersed and decentralised, which is invisible, trying to blend with the environment and camouflage itself so as to avoid any attention. The parasite is good in mimicry as it becomes part of the host, of the body and organism hardly identifiable by the host, or as Serres specifies ‘[i]t does not play at being another; it plays at being the same.’ However, once a parasite is discovered, what seemed to be a hospitable environment turns into hostility. Cicero’s famous Communis hostis omnium – the

76 Ibid, p.37.
78 However, as Mason shows, the so-called resistance of the youth cultures, not only drives cultural innovation, but also informs new business models based on a creative resistance. The book traces examples from across different cultural practices. Mason, M. (2008) The Pirate’s Dilemma: How Youth Culture is Reinventing Capitalism New York: Free Press.
enemy of all – is still traceable in today’s discourse as an entity that is unjust. The enemies of the mankind were always considered unsocial, however, the piratical file-sharers are far from being anti-social. Moreover, in the context of copyright, it is not clear whether it is an enemy of the owners/content industries (those in charge of protecting the intellectual lands) or an enemy of the creativity and knowledge as copyright’s highest aims of all. *Hostis* and ‘host’ share the same etymological root, where it signifies both the guest and the host.\(^82\) Accordingly, the hostile enemy represented by the pirate easily attains a role of a guest, and thus the pirate is not an enemy but turns into a guest – thus from the enemy of all it becomes ‘the guest of all’.\(^83\) The system is in equilibrium until the parasite has not been interrupted and that is when the positions change. The pirate constantly shifts positions, is the joker that interrupts but also leads/transforms the system into another state.\(^84\) The state of piracy is not a para-state as it does not seek to acknowledge independency and delimit its position (or state of affairs), but as discussed above, it only engages in finding new ways within the imposed system, finding ways to settle beside the place that supports its existence. For these reasons de Certeau calls the tactic as ‘art of the weak’ as it is determined by absence of power in contrast to the strategy in which organisation is postulated on power.\(^85\)

I argue that this absence of power constitutes the strength of the pirates. Moreover, the parasite (the pirate) gains power by not wanting to establish a boundary as this would not only bring more parasites but also cause it to lose its comfort zone. The parasite has only one enemy ‘the one who can replace him in his position of parasite.’\(^86\) Therefore, the interest of the pirate is not to attach on a thing, but on the actual relation that connects different ends. The pirate never engages with


\(^{83}\) This runs parallel with the thesis’ s account that copyright from being an ‘uninvited’ guest attained a role of a host, thus assigned itself a role to mark and regulate the use and any subsequent distribution of the ‘intellectual lands’.

\(^{84}\) ‘The noise is a joker. It has at least two values, like the third man: a value of destruction and a value of construction. It must be included and excluded.’ Serres, M. (2007 [1980]) *The Parasite* Minneapolis and London: University of Minnesota Press; p.67.


appropriating a particular object (or use as such), it just disrupts the communication route and takes it into another realm of interaction.\textsuperscript{87} The pirate does not and cannot steal the non-scarcity of ‘intangible property’; it just remains in the medium and continues to feed on the interaction. Therefore, it does not exhaust production, but takes the position where reproduction occurs, where the actual transference and distribution of copyright works takes place.\textsuperscript{88} In that mode of operating it informs a new form of disordering order. It disrupts and interferes, and is always engaged in transforming the system; therefore, it is not of a surprise to find the pirate in the means of access and simultaneous reproduction and distribution of copyright works today (peer-to-peer networks). However, the piratical tactics have a potential that should not be overlooked – the more they become permanent and visible the more they gain the quality of a strategy. In that sense, as Andersson argues, as the peer-to-peer networks are increasingly setting norms of the manner in which reproduction and distribution of content is taking place, in de Certeau’s terms, they not only get strategic but lead the content industry to become more tactical in its approaches to finding new modes of operation within their space of ordering.\textsuperscript{89} It is in this ‘spatial shifting’ where the noisy tactics deployed by the middlemen, as discussed in the previous chapter, manifest their impulses for survival, and thus attain a parasitic quality.

If reproducing and sharing, in this digital arrangement, are intrinsic features, then piracy is just an outcome of communication. But where pirate does affect is not the message (content of copyright protection) but the medium, as it is always in the third

\textsuperscript{87} Heller-Roazen observes that in ancient times '[b]y definition, such individuals, therefore, could not claim to be and to remain masters. They could certainly be transmitters, rightfully relaying property, according to established legal rules, from persons to persons through the medium of the moving waters. They might also be thieves, taking goods from the land into a region in which they could no longer clearly be assigned their owners, in order to insert them later, at a price, into new chains of legal commerce. Such individuals – one might call the "pirates" – were in any case always agents of the threshold, who crossed the moving border at which things pass from belonging to someone to belonging, alternately, to no one and to everyone. Hence their indispensability to so many...' Heller-Roazen, D. (2009) The Enemy of All: Piracy and the Law of Nations New York: Zone Books; pp.67-8.


position where communication occurs, and that is where the pirates remain. In that regard, this line of reasoning contrasts the question that Hall rightly addresses – of how copyright has shifted from the subject (death of the author, decentring of the subject) to the object as a commodity – ‘shifting of the emphasis even further away from safeguarding the rights of the individual author as original creator, and onto safeguarding the rights to a commodity which can be bought and sold regardless of who created it.’\textsuperscript{90} It rather argues that since it has become almost impossible to control the actual content transference to the end user, today copyright law refocused and its operation has shifted from the user or actual infringer to the channel, to the technological medium that provides this communication – the fight against the pirates is displaced from the content (of what is copied) on the medium, using technology as a regulatory instrument in that respect.\textsuperscript{91} It is a shift from the user – the person who makes the copy – to the technology, which supplies the end user. On this very ground, the Pirate Bay was depowered in the UK as High court ordered service providers to block access to its hosting site.\textsuperscript{92} Regardless of the block, the excluded always returns. Various Pirate Bay proxy sites become available on daily basis, and are used as an intermediary to circumvent the block by the Internet service providers. Once they are blocked new ones appear instantaneously. There is a new quality that pirate/parasite reveals – it occupies both the medium, the space, the environment the milieu (mid+lieu),\textsuperscript{93} it fills the space with its noise, and interferes the central position of copyright’s edifice.

\[\copyright\]

Returning back to the symbol of \(\copyright\). Copyright law oscillates around its own axis. The C signifies the centrality of copyright. Its power emanates and depends on the centre. For Serres the manner how the institutions, our culture and sciences function

\textsuperscript{92} Dramatico Entertainment Ltd and others v British Sky Broadcasting Ltd and others [2012] EWHC 268 (Ch).
\textsuperscript{93} ‘The parasite gets power less because he occupies the center than because he fills the environment.’ Serres, M. (2007 [1980]) \textit{The Parasite} Minneapolis and London: University of Minnesota Press; p.95.
is summarised in: ‘Cut, Center, Purify’.\textsuperscript{94} The property right is established on this premise. The power functions by purifying its centre and marginalising noise, the filth on its margins. The centre organises and expands and this is how the western thought understands growth and production – as a ‘progressive conquest of space’.\textsuperscript{95} In order for the power to function and be effective, although centralised (and in the middle), it needs to be ‘carried to the periphery’. Its condition is to eliminate any obstacle, it needs a space of silence, through which it will be heard and obeyed, ‘the space must be deparasited’ as ‘the message of order must pass through silence.’\textsuperscript{96}

Copyright law, akin to the parasite, it is in the middle and simultaneously occupies the milieu. ‘Who has the power? The one who has the sound, the noise, and who makes others be quiet.’\textsuperscript{97} But here is the paradox, the noise is imperceptible, the parasite is miniscule, always present by its ‘absence’, enveloping the whole space and everything it contains. Such manifestation of the law is exactly what Philippopoulos-Mihalopoulos calls a ‘lawscape’ understood as a ‘fusion of space and normativity’, in/by which law operates and exerts its power.\textsuperscript{98} More specifically, even when law is not directly invoked, its regulations and principles are constantly present, thus law’s ubiquity is what makes its ‘very imperceptibility’, it being a ‘white noise’.\textsuperscript{99} Constantly diffused and ready to intervene when needed, law is both invisible and visible in its functioning, a parasite, static, that enables and intercepts relations.\textsuperscript{100} Copyright law circumscribes by its simultaneous silent application and noisy protection.

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\textsuperscript{94} Ibid.
\textsuperscript{95} Ibid, p.96.
\textsuperscript{96} Ibid, p.95.
\textsuperscript{97} Ibid, p.142.
\textsuperscript{99} Ibid.
\textsuperscript{100} For Philippopoulos-Mihalopoulos the lawscape term is both material and conceptual, aiming to discern the atmosphere, in which bodies, objects as well as sensations and emotions congregate, which in turn is where law both hides and manifests itself. Accordingly he takes intellectual property law as an example to demonstrate how law inscribes itself not only in the objects of everyday usage, but in its potential to extend its control on the sensorial. Ibid, p.36 and pp.42-3.
While one parasite (power) chases out another, as soon the parasites are chased out they immediately return. The power does not come from the centre but from its decentralised omnipresence by filling the space.\textsuperscript{101} The pirates, hardly to be located, occupy the ‘space, the media, the environment, the milieu’, they are everywhere and that is their tactic.\textsuperscript{102} The parasite knows how to multiply with its smallness and ‘it occupies space with its imperceptibility.’\textsuperscript{103} It becomes invisible by making, on the contrary, a lot of noise. ‘One can hide by being too visible or too perceptible. The parasite hides behind the noise’.\textsuperscript{104} Here the strongest feature of the parasite, the pirate, the technosite is perceived: it becomes invisible and incomprehensible since it makes a lot of noise; it is its intangible presence that disturbs and where copyright loses its orientation. The parasite is always invisible, which does not mean immaterial, ‘only parasites have this genius for being invisible.’\textsuperscript{105} This invisibility is what copyright deals with in essence, from its ‘intangible’ object of protection, the intangible processes that digitisation entails, to the ungraspable pirates in its surrounding, it continuously attempts to represent the non-representational, the intangible.

The radar is still turning, but pirates are nowhere to be seen. Their fleet is flouting the rules.\textsuperscript{106} They are obstreperous – noisy and difficult to control. They are invisible, and that is their power. Not centralised but spread. The parasite, and therefore the pirate, invades the spaces with its noise, the ‘parasite is everywhere’; same as the background noise, ‘[i]ts voice expands, filling the space, wherever he is and wherever he goes. Voice, wind, sound and noise.’\textsuperscript{107} We are surrounded by noise, and this noise is inextinguishable.

\textsuperscript{102} Ibid.
\textsuperscript{103} Ibid, p.194.
\textsuperscript{104} Ibid, p.218.
\textsuperscript{105} The parasite, on the other hand, must keep silent for it not to be expelled. Serres writes: ‘Thus the parasite is the most silent of beings, and that is the paradox, since parasite also means noise. Small, protozoan, insect, it is invisible; it cannot be felt; it copies so as to disappear’. Ibid, p.237.
\textsuperscript{106} In addition to its meaning of defying, openly disregard a rule or law, flout etymologically derives from \textit{fluten} that in Middle English carried a meaning of ‘to play the flute’.
\textsuperscript{107} Ibid, p.96.
Copyright law, guided by its internal propensity to order and balance, fails to
immunise itself from the continuous piratical attacks, thus it is always in the process
of transformation. As the etymology of the word pirate indicates, it not only signifies
an attempt, but also trial and proof; continuously contributing to the changes in
dealing with the arrangements of how digital culture is lived. As Hall notes, the
activities of the pirates are ‘attempts’ that ‘trial’ the conditions and the possibilities
of the networked digital culture. Therefore, they are ‘in fact involved in the creation
of the very new laws, policies, clauses, settlements, licensing agreements and acts of
Congress and Parliament by which they could be judged.’ In this arrangement,
piracy attains a political dimension by challenging and questioning the installed
positions within the copyright landscape. They represent the noise that channels
interference, thus disturbing the fundamental rules and prevailing forms of
communication under copyright’s regime. This impulse of continuous
transformation is what Johns traces in the act of the pirates who

...strained relations between creativity and commercial life, and at critical
moments caused them to be reconstituted. The history of piracy is the history
of those transformations. Every time we ourselves buy a book, download a
file, or listen to a radio show, our actions rest on it.

The pirates go in parallel with technological advancement and constantly change
their tactics. They epitomise the transformation and the complexity of the system
they contribute to. The transformations are result of the destabilising presence, an
internal link according to which law attempts to create a realm of order and control.
The spectrality of the pirate has always loomed copyright’s arrangements, but
reappears in intensity with the transition phase of the ongoing digitisation that
copyright is concerned with. The pirates are the irritants of the order, and therefore

their very existence amounts to a test of that order.112 Recalling Schmitt’s ‘basic order being a spatial order’, pirates are the phantoms, but also messengers of the spatial disorder in which copyright has irreversibly been entangled.

Copyright cons its ship. The radars are still turning. It cannot see but just hears the pirates, the noise, the sea. Is that the sea or the pirates? Nausea. The unknown prophecy of copyright, what is its future, is it going to survive, is it going to succeed in finding and depowering the pirates’ ships? Perhaps Proteus, the minor god of the sea, knows that. He has the power of prophecy that is revealed only when he is caught. Yet he likes to take up different forms only to avoid answering such questions. A matter of metamorphosis, it takes different shapes, ever-changing, flexible and capable for adaptation. Proteus is the ‘old man of the sea’ representing the constant fluidity and mutability of the sea.113 Pirates are Proteus’s sons and daughters, inheriting the metamorphosis, always pluralised, multiple, not capable to be reduced to an individual, at least when it comes to copyright law. Because of this reason, pirates cannot fall in the legal categories of subjects, nor are they reducible to a legal representation, thus again not capable of constituting a collectivity with which agreement is possible – they are protean.114 Akin to the parasite’s paradox, it is necessary for the relation but ‘ineluctable by the overturning of the force that tries to exclude it’, in constant metamorphoses, thus difficult in defining it.115 Not

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113 Homer ‘The Odussey’ Book IV The Internet Classics Archive [online] http://classics.mit.edu/Homer/odyssey.4.iv.html (Accessed 26 February 2014). Menalus beclaimed on the island Pharos learns from Proteus’s daughter Idothea about her father who can tell him how to return home. ‘“Stranger,’ replied she, ‘I will make it all quite clear to you. There is an old immortal who lives under the sea hereabouts and whose name is Proteus….knows every inch of ground all over the bottom of the sea. If you can snare him and hold him tight, he will tell you about your voyage, what courses you are to take, and how you are to sail the sea so as to reach your home. He will also tell you, if you so will, all that has been going on at your house both good and bad, while you have been away on your long and dangerous journey.’ She continues ‘The moment you see that he is asleep seize him; put forth all your strength and hold him fast, for he will do his very utmost to get away from you. He will turn himself into every kind of creature that goes upon the earth, and will become also both fire and water; but you must hold him fast and grip him tighter and tighter, till he begins to talk to you and comes back to what he was when you saw him go to sleep; then you may slacken your hold and let him go; and you can ask him which of the gods it is that is angry with you, and what you must do to reach your home over the seas.’
114 Protean has a meaning of ‘tending or able to change frequently and easy’, ‘able to do many things’, versatile.
apprehensible for the legal representation, and thus not capable of constituting a collectivity with which any silent agreement is possible, but only noisy wars. They are not an individual or a group, but universal, always general, multiple, as Johns indicates, ‘[t]he pirates, in all too many cases, are not alienated proles. Nor do they represent some comfortingly distinct outsider. They are us.’\textsuperscript{116} As such, they remain a problematic issue for both denomination and elimination since they are not external but integral to copyright’s system of functioning. A proteus designates a bacterium found in the soil or in the intestines of animals, a feature always part of the internal functioning – from the parasites of the land to the noise of the sea, the pirates are always around.\textsuperscript{117}

5.4. © and the sea

The sea is inevitable for ©. Even if such conceptual displacement from land to sea is not possible for copyright, drawing on Lévy’s observation that today’s information abundance brings about the ‘second deluge’, then it is the sea of information that actually covers the territory of copyright’s landscape. The abundance of information never stops, thus this second deluge is a condition that must be accepted.\textsuperscript{118} Copyright is in urgency for displacement. The inappropriateness of its navigation and technological instruments is not because it lags behind the digital advancement, neither because it has not fully embraced the cultural productivity.\textsuperscript{119} Its inappositeness lies in being constructed on a territorial comprehension of the world. Schmitt argued that there are three reasons for this ‘decisive position of territory in

\textsuperscript{117} Of course, pirates are of all times and in all the seas.’ Schmitt, C. (1997 [1954]) Land and Sea Washington DC: Plutarch Press; p.20.
\textsuperscript{118} Lévy argues that: ‘for better or worse, this flood will never subside. We will have to learn to accommodate its profusion and disorder...no sense of order, no central authority will be able no sense of order, no central authority will be able to lead us back to terra firma or the stable and well-delienated landscapes that existed before the flood.’ Lévy, P. (2001) Cybertulture Minneapolis: University of Minnesota Press; p.xii and p.141.
\textsuperscript{119} Is there any positive quality in not reiterating that copyright law lags behind the technology, but rather to take technology as a condition that precedes copyright law?
the legal tradition.\footnote{120} It is the land that can be cultivated and becomes an object of ownership; the terrain, which is full of demarcations and cracks thus capable of fragmentation; and the firm ground for constructions of various kinds. By contrast, the liquidity of the sea does not allow such fragmentation or demarcation and can never become a foundation for stable architectural constructions.\footnote{121} Sea in contrast to the law, as a ‘unity of order and orientation’ that is bound to the land, is not such space. On such account since demarcations and leaving traces on the sea are not possible, it was therefore designating space where boundaries and therefore law and property were not attainable.\footnote{122} Taking further Grotius’s view that the sea is fluid and ever-changing and therefore not an object of possession, the resources of the sea do not supply an object of work as found on the copyright’s landscape, but require acknowledging the process and the flux of the very essence of creativity and knowledge that copyright claims to deal with.\footnote{123} The fluidity of the sea is what manifests the intertwinement of copyright and technology.

In view of the changes that digital revolution brings forth, it affects the established principles upon which copyright operates but also demands in return a shift in the perceptions of what this ‘new’ condition entails. As Schmitt observes:

> Each time the forces of history cause a new breach, the surge of new energies brings new lands and new seas into the visual field of human awareness, the spaces of historical existence undergo a corresponding change. Hence, new criteria appear, alongside of new dimensions of political and historical activity, new sciences, new social systems; nations are born or reborn.\footnote{124}

Therefore, if ‘all important changes in history more often than not imply a new perception of space’, then it is in these shifts where space revolution occurs.\footnote{125} The space revolution, nevertheless, does not entail that revolutions are happening only when new unknown territories are discovered, but when the notion of space


\footnotesize{121} Ibid.


\footnotesize{125} Ibid.
transforms different levels and aspects of human existence.\footnote{Ibid, p. 37.} In such understanding, technology introduces new space that requires a conceptual rethinking of copyright’s territorial belonging, and moreover, challenges the rigidity of copyright’s legal structure of copyright. However, such reasoning, does not intend to further create or add another binary division, greatly prevalent on many layers in the copyright discourse, but it is a manner to recognise and urge for a new spatial configuration that the current discord between copyright and technology necessitates.

One should be aware, however, as Schmitt indicates, that human, even though a terrestrial creature, ‘is not a creature wholly conditioned by his medium’, thus not only it has an ability to transcend conceptual realms, but also environmental, and is capable to change, readjust and recognise himself ‘into a new form of his historical existence’.\footnote{Schmitt notes in the end of his book how electric power, the airplane, radio introduced confusion in the existing notions of space. Ibid, p.5.} That is to say, that law as such also exerts its potential to appropriate, cover and extend further, to constantly adjust and recognise its validity in newly formed contexts and spatial reconfigurations. As Grosheide reminds us, commenting on the desirability and possibility to regulate the cyberspace, legal concept of territory has historically extended to the ‘no man’s land’ and the seas ‘that were at first seen as belonging to nobody casu quo to everybody and beyond anybody’s control’.\footnote{Grosheide, F.W. (2012) ‘Being Unexceptionalist or Exceptionalist – That is the Question’ SCRIPTed, Vol. 9, Issue 3, 340-353; p.347.} Moreover, in view of Philippopoulos-Mihalopoulos’s notion of ‘lawscape’ there is no space which law has not already enveloped, in which law is not capable to extend and manifest its presence.\footnote{Philippopoulos-Mihalopoulos, A. (2013) ‘Atmospheres of Law: Senses, Affects, Lawscapes’ Emotion, Space and Society, Vol.7, 35-44.} In that sense, the deployment of the sea in this discussion is not understood as new space analogised with the cyberspace, or as a space in which law has not manifested its presence. It is rather an attempt to identify a contingent, constantly fluid and dynamic mobility of the ‘technological’ sea in which copyright has been always afloat. Furthermore, the sea is not only an object of interest because it is space that symbolises movement, what in fact the current technological \textit{currents} facilitate, but rather because it is conditioned and constitutive
of such movement.\footnote{Steinberg, for instance, argues that sea ‘is not a metaphor’, but space of experiences, a movable space whose fluidity is central to discussing the flows of modern society. Steinberg, P.E. (2013) ‘Of Other Seas: Metaphors and Materialities in Maritime Regions’ Atlantic Studies, Vol.10, No.2, 156-169; p.165.} Displacing copyright into the sea is actually a move aimed to demonstrate its immersion in the sea of noise. More specifically, what seems is that copyright has always floated on the disordering turbulence of the ever-changing sea. In search for the pirates and their nautical formations, it seems that copyright law fails to comprehend the fluctuating state of the sea as a milieu in which the actual noise and the pirates are filling the space. The noise from the sea is unlocalisable and copyright is fully immersed in it.

5.5 Order and disorder

The notion of noise has enabled covering seemingly disparate aspects of copyright and its relation to technology. The capacity to do so lies in the potential of the notion, as uniquely developed by Serres, to appear in many different disguises, and thus to acquire different meanings. This potential has offered a possibility to construct an alternative theoretical basis for contextualising and discussing copyright and technology. Moreover, by identifying the third as an essential feature of any relation, model or a system that simultaneously manifests itself in the means, medium and milieu, the notion of noise has led the investigation onto the sea. As such, it challenges the conceptual base upon which copyright performs – deep-rooted in property and as such embedded in agrarian activity of dividing a land.\footnote{The ‘reaping what you sown’ as one of the most common metaphors associated with creations and copyright. Patry, W. (2009) Moral Panics and the Copyright Wars Oxford: Oxford University Press; p.78; See, also, Loughlan, P. (2006) ‘Pirates, Parasites, Reapers, Sowers, Fruits, Foxes...The Metaphors of Intellectual Property’ Sydney Law Review, Vol.28, No.2, 211-226.} To put it differently, it dissociates from copyright’s earthy ground and displaces it into a more fluctuating, turbulent realm. However, such a conceptual and methodological approach reveals that the sea, after all, is not a foreign surrounding but is the realm in which copyright has always been afloat. It can be argued that it is only with the emergence of digital technology that copyright can finally acknowledge its ever-
changing noisy milieu, and as such question the static ‘territorial’ principles it upholds.

Etymologically, noise has its origin from the Greek word *nausia*, or in Latin *nausea*, which means seasickness. Indeed, the reverberation of technology disorients copyright, infusing noise into the discourse and the current state of affairs. Following the understanding of technology as a means and a medium, here technology becomes a milieu, background noise that is always there, infinite, roaming and rumouring, difficult to define and grasp. Technology as such can be considered as constant noise that breaks the redundancy and order, bringing constant change and fluctuation. However, the notion is not reducible only to that of technology but has a greater significance in the context of copyright law.

In his work *Genesis*, Serres draws on the analogy of the sea to expand and explicate the disordering nature of the third out of which orders emerge. Akin to the sea, it might look silent and smooth but that is only its appearance. It is the background noise which is always there, a ‘pure multiplicity’ which is the founding of all disorder and order, something that is not graspable, without any form. As such, it is not external as ‘outside, is not existent, but is internal and differential, is insistent and consistent.’ Noise is the formless matter that gives rise to the forms, without any meaning, its power is assaulting, its presence is omnipresent, immanent.

For Serres, the ongoing negotiation with noise is what constitutes society, prompting it to its continuous variations and transformations. In the copyright context, it is

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132 In Greek *nausia*, from *naus* (ship), or *nautia* (seasickness).
136 ‘Society makes a colossal noise...noise is what defines the social.’ Serres, M. (2008 [1985]) *The Five Senses: A Philosophy of Mingled Bodies* London and New York: Continuum; p.107; See, also, the seminal work from Attali who demonstrates how noise was organised by sonic organisation in the form of music, and as such was/is heralding the social, political and economic organisation of the society. Attali traces four different stages of music organisation: *sacrifice, representation, repetition* (mass-production) *and composition*. He traces and argues that music ‘makes audible the new world that will gradually become visible, that will impose itself and regulate the order of things.’ Attali, J.
precisely the ‘very operation of order(ing) which produces a noise of its own’, never capable to reach and establish the order it aims to achieve.\textsuperscript{137} It is in this negotiation with noise that copyright both constitutes and transforms itself. While such a statement is a truism in the context of copyright law’s historic ever-adaptation to technology, copyright must recognise the dynamic unpredictability that technology induces in view of the communication copyright is deemed to regulate. It is the characteristic of technological noise that needs to be recognised and encouraged as it prevents any ordering system from becoming too rigid, and as such not capable to adapt to changing circumstances.\textsuperscript{138} The noise is preventing the systems from becoming redundant, it is disordering order, and as such every order is an exception. Serres refers to this disordering nature as ‘a turbulence, it is order and disorder at the same time, order revolving on itself through repetition and redundancy, disorder through chance occurrences, through the drawing of lots at the crossroads, and through global meandering, unpredictable and crazy.’\textsuperscript{139}

While the rational thought of classifying and coding tends to view the external as negative, an outlaw, Serres approaches it as a positive chaos, and as such it provides a model of thinking that escapes categories and unities.\textsuperscript{140} Noise, however, is not something that is foreign to the system of law, as it continuously negotiates and recognises its potential to effectuate processes from which both copyright law and its agents subsist. Law is indeed a contractual modality, and is thus certainly ‘our rather stable existence.’\textsuperscript{141} However, in this stability there is no harmony and thus any pursuit to establish a balancing system is impossible, therefore there is a


\textsuperscript{140} ‘Chaos is nebulous. It does not flow out with a point or a direction, or following some rule, or abiding by some law. Look how much trouble we have thinking it or seeing it. The whole of reason protests – I mean logically. Our whole classified rationality, all the coding, habits and methods, lead us to speak in externals or negations: outlaw and nonsense. But I say positive chaos.’ Ibid, p.98 [Emphasis added].

necessity to acknowledge the contingent balance of these disorderly modalities. There is a necessity to recognise the ‘aleatory quality’ as a disordering feature and for it to be integrated or assimilated, or else the ‘system is in danger of dissolving’, since noise can also be fatal.\footnote{Talor, M.C. (2001) *The Moment of Complexity: Emerging Network Culture* Chicago and London: The University of Chicago Press; p.137.} In the manner in which this chaotic turbulence is both deterministic and unpredictable, it stands in contrast with the logic and classical sciences that view them as antithetical.\footnote{Assad, M.L. (2000) ‘Language, Nonlinearity, and the Problem of Evil’ *Configurations*, Vol.8, No.2, p.271-283; p.280.}

As such, noise is not a phenomenon in itself but ‘every phenomenon is separated from it’.\footnote{Serres, M. (2009 [1982]) *Genesis* Ann Arbor: The University of Michigan Press; p.13; On noise, see also, Goddard, M. et al. (eds.) (2012) *Reverberations: The Philosophy, Aesthetics and Politics of Noise* London and New York: Continuum; Schwartz, H. (2011) *Making Noise: From Babel to the Big Bang & Beyond* New York: Zone Books.} Noise is the very condition out of which things emerge; it is the ‘background of information, the material of that form.’\footnote{Ibid, p.7.} Accordingly, copyright deals with forms (works) that emanate from this noise, which is the background of all the creativity and knowledge. However, they attain such denomination only after they have taken a form and have been objectified in the context of copyright. Regardless of the form they take, noise is still immanent, it informs the work but its non-phenomenological quality still fluctuates. Everything comes from the sea, the primordial soup, and background noise. It is the sea in the end that reflects knowledge and creativity, murmur, fluctuation, genesis; the noise is a non-phenomenological matter, preceding all forms and formations. A communication manifests itself in different forms and practices, the value of which is often non graspable, especially when viewed through the lenses of commodity-oriented copyright. Noise in itself is understood as a chaotic multiple, ‘not only as the most common of all dynamic processes but also, and more significantly, as the most ideal of conditions for human creative expression.’\footnote{Assad, M.L. (2000) ‘Language, Nonlinearity, and the Problem of Evil’ *Configurations*, Vol.8, No.2, p.271-283; p.278; See, also, Clayton, K. ‘Time Folded and Crumpled: Time, History, Self-organisation and the Methodology of Michel Serres’ in Herzogenrath, B. (ed.) (2012) *Time and History in Deleuze and Serres* London: Continuum; p.41.} In such understanding, it is crucial to
recognise the chaotic multiple, so to avoid the seemingly abstract order and identify the disordering manner in which creation, or communication takes place.

The continuous turbulence between order and disorder, the unpredictable nature of noise, must be recognised. The presence of that which is always beside (para-) the order, and continuously induces changes. Any creation does not come from order, but from disorder. If copyright is an entity, always in the middle, attached onto relations, and has an objective to promote communication, it must allow such disruptive instances to take place. Otherwise, it makes the realm redundant, immersed in its homogeneity. For that reason, Cohen argues and suggests that ‘legal and technical rules governing interconnection should seek to foster a heterogeneous, imperfect technical landscape that allows scope for the play of everyday material practice.’ However, she continues, copyright law and the policies of regulation have a difficulty to acknowledge the processes of communication that often disrupt and go beyond the ‘logical reasoning that derive from the tradition of Enlightenment rationalism.’ While making of the law serves the political and economic interest of the actors that benefit from this continuous flows of cultural information, there is a lack of recognition of the noise, which induces ‘illogical’ patterns by which culture or communication in general emerge. Since creativity (intangibility), or as Cohen refers to ‘human flourishing’, depends on the conditions of partial unpredictability, she argues that there is a necessity for copyright policies to recognise the continuous discontinuity in which everyday practices emerge. This unpredictability is what noise is.

Having discussed the ‘parasitic’ nature of copyright (law), its principles are indeed capable of metamorphosis, continuously readapting and extending by attaching on relations in order to sustain their existence. However, although changeable they hold still on the positions they have, since any great change would dislodge them. As Cohen accordingly observes ’[c]opyright rights have a protean quality, expanding into

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148 Ibid, p.239.
every avenue of potential profit. With one significant exception, copyright limitations generally have not demonstrated a parallel capacity to evolve as technologies change. It is exactly this recognition of the change that noise enables us to comprehend, at least theoretically. Therefore, noise should be employed in studying the dynamics of communication that technology brings forth, and moreover, it allows moving away from the fixed ends that copyright entails.

The multiplicity, or disordering turbulence, is hard to be seen and difficult to think, for which reason Serres suggests hearing it. In order to understand the dissonance, the never ceasing sound enclosing copyright and technology, the following chapter articulates the soundscape of copyright.

\[150\] ibid, p.242 [Emphasis added].

\[151\] Harrari and Bell explain Serres’s disorder: ‘This concept of disorder does not mean to understand the condition of the dialogue between symmetrical ontologies but to view the relation between the order and disorder; consequently, it is necessary to rethink the world not in terms of its laws and its regularities, but rather in terms of perturbations and turbulence, in order to bring out its multiple forms, uneven structures, and fluctuating organizations.’ Harari, J.V. and Bell, D.F. ‘Introduction: Journal à plusieurs voies’ in Serres, M. (1982) Harari, J.V. and Bell, D.F. (eds.) Hermes: Literature, Science, Philosophy Baltimore and London: The John Hopkins University Press; p.xxvii.

6. Soundscape of ©

In this part, the noise attains a meaning of sound quality and leads the investigation into sonority. It is argued that this enables a possibility to ‘hear’ the dissonance between copyright and technology, but also to stimulate the sensory field in which copyright and its discourse find themselves. In order to achieve this aim, the chapter begins by identifying the visual disposition of copyright and its legal arrangement, which emerged in parallel with the advent of printing press and the historical periods of Renaissance and Enlightenment, privileging the ocularcentric understanding of the world. Furthermore its visual dependency is also traceable in having property as its orienting principle, a fundamentally visual category that frames and arranges ownership. Such a sensory investigation, in this chapter, is supported by the media scholarship that argues how technologies of communication performed a significant role in the sensorial shifts of the human perception. Contending that copyright is irreversibly tied to technology this induces an exploration of copyright law's response to these shifts. By arguing that digital technology reveals its sonic qualities, I therefore challenge copyright apparatus’s privilege of the visual, and propose that copyright ought to open its auditory sense in order to better apprehend the elusiveness, or as stressed before, the intangibility of technology. In the end, by associating intangibility with the qualities of sound, this chapter shows how such ‘sonic’ extrapolation provides a methodological passage to reach and introduce the soundscape as a contextualisation and conceptualisation where the dissonance, but also the coalescence between copyright and technology can be closely ‘heard’.

6.1. Visuality of copyright

The discovery of the printing press that enabled book reproductions could be considered as a historic point in time in which the origination of copyright can be located, but also as a fact of a continuous historical relevance in the copyright discourse. Among the legal scholars, it is commonly held that this discovery in the
fifteenth century, followed by the period of the privileges as a prelude, led to the emergence of copyright, having the text and its copies as primary object of regulation. However, this period, which historically coincides with the Renaissance and socio-cultural perturbations taking place at that time, provides intriguing insights into the visual inception of copyright. Scott has brought into focus the feature of vision that played a significant role in claims to privilege. More precisely, by identifying the Renaissance perspective as a tool for observation and an epistemic means of objectification, she argues ‘that vision and visual art in fact made a telling contribution to the formulation of the legal forerunner [privilege] of modern copyright’ in France. Perspective as ‘a property-making machine’ became the ‘visual articulation of ownership’ that was manifested in mapping out the boundaries of tangible objects. Although Scott’s argument does not aim to achieve so directly, this insight can be read as an indication that copyright has inherited the visual articulation of ownership and as such became a visually dependent instrument itself.

Copyright’s visual orientation, in particular having property as its focal notion, is not an unexplored subject matter. The debates over identification of literary property in the eighteenth century, as Sherman and Bently show, have been concerned with the lack of distinguishable property marks and visual representations as prerequisites that would enable the law to determine and ascertain this particular form of intangible property. And while the reification of an author’s intangible mental labour was subject to different techniques employed by the proponents of the

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3 Ibid, p.288.
5 ‘There are no indicia, or marks of appropriation to ascertain the owner of this species of property. What are the marks? It is not in manual occupation, it is not in visible possession, which Lord Kaym’s History of Property lays down as an essential condition of property. How is an author to be distinguished?’ Yates in Tonson v. Collins (1762) 1 Black W. 321, at 334. Tonson v. Collins, London (1762), in Bently, L. and Kretschmer, M. (eds.) Primary Sources on Copyright (1450-1900), www.copyrighthistory.org; If property functioned by demarcation, there was a necessity for it being ‘visibly and distinctly enjoyed’ and having ‘boundaries to define it, and some marks to distinguish it.’ Sherman, B. and Bently, L. (1999) The Making of Modern Intellectual Property Law Cambridge: University Press; p.25, citing Millar v Taylor (1769) 98 ER 232-3.
literary property, the visual, both literally and conceptually, remained a measure for comprehending and recognising the intangible as a form of property.\textsuperscript{6}

The fact that it is a property-based category provides another insight into the visuality of copyright. Rose has made a remarkable contribution by arguing how vision – not only literal but also metaphorical – has an enormous influence on the comprehension of what property is, showing how visual metaphors function as rhetorical modes of power that determine a certain understanding of property.\textsuperscript{7} The tangible, physical and visible traces or gestures were always the orienting principles for understanding of property, manifestations of claiming entitlement and dominion over things.\textsuperscript{8} Visibility is present in property law like in no other area of law,\textsuperscript{9} regardless of the fact that property right is an abstract legal instrument, subject of relation between people regarding an object.\textsuperscript{10} And while such a relation, as Rose argues, is difficult to envision, a particular representation is hence drawn for substitution.\textsuperscript{11} Abstractions need representation, at least for the law. In the case of copyright, the notion (metaphor) of property asserts its abstractness, as it is employed to substitute for the intangibilities that copyright is set to protect.


\textsuperscript{10} Property law, with its reliance on real and metaphoric sight, its urge to look at things and to label those things properties, seems to be in a serious state of denial. That is, property law seems implicitly to deny that property is about relations among people, whose institutions necessarily reflect the way those people think, argue, persuade, change their own and one another’s minds over time. What is possibly even worse, vision-based property might infect the notions of other rights as well and make other fields of law lose touch with the evolving and persuasive aspects of “rights” altogether.’ Ibid, p.272 [Emphasis in original].

\textsuperscript{11} For instance, the well-known ‘bundle of sticks’ is translated into copyright as ‘bundle of rights’, which does not relate to a particular thing, but rather to a group of rights that the copyright owner can exercise. Ibid, p.278.
However, for this to take place it needs a trace of representation, which attributes to the visual when copyright deals with intangibilities.¹²

This is particularly manifested by the idea/expression dichotomy, according to which only the expressed, fixed and represented idea is subject of property. The visual trace is the actual requirement for copyright to subsist, where the expression of an idea becomes the only condition upon which it can be protected. Therefore ‘in order to position an intangible entity as an object of property’, as Barron observes, ‘the law must be able to see it as an identifiable and self-sufficient “thing”, attributable to some determinate author and perceptible to the senses through the physical medium in which it is recorded or embodied.’¹³ However, the perennial paradox remains, as the intangible and not the object is the matter that is protected.¹⁴ After all, for copyright it is not the object that is protected, but the ‘visual’ perception and representation of that what is intangible.¹⁵ Such visual perception not only imparts the (modernist) formalistic distinctions and recognitions of copyright works, but also aligns with the processes of reproduction and distribution in that regard.¹⁶ As Sherman and Bently argue, in dealing with disputes over intangible property, the law primarily deals with the ‘representation or the sequel of the physical object’, and the


¹³ Barron argues that because of ‘copyright’s “ways of seeing” the work’ many contemporary practices in the visual arts are not recognised by copyright, which is not an effect of any aesthetic prejudice but only because that it is a ‘by-product of copyright law’s pursuit of certainty, objectivity, and closure.’ Barron, A. ‘Copyright, Art, and Objecthood’ in McClean, D. and Schubert, K. (eds.) (2002) Dear Images: Art, Copyright and Culture London: ICA and Ridinghouse; p.292 [Emphasis added].


¹⁵ As Rose notes, the modern law provides a possibility to acquire an intangible right that goes beyond the physicality of the object. However, in order for this right to take place there is a necessity of an agreement or contract, which also leaves a visible trace. Such visible traces for a copyright could be identified, for instance, with the U.S. law that prior joining the Berne Convention in 1989 required registration in order for a copyright to subsist. While today registration is predominantly superseded, it is still active on voluntarily basis as an evidence of ownership in infringement cases, or as a requirement to bring a lawsuit for an infringement of a copyright work. See 17 U.S.C. §§ 408-412.

image of the intangible is always secondary. Indeed, copyright law requires a material or thing to both apply and refer to. However, as the elusiveness of intangibility escapes the visual representation and law’s eye, thus idea/expression dichotomy remains copyright’s continual slippery ground. In that sense, the expression required for copyright to subsist, it is more of a visual category than an expression associated with the communication through speech. However, in order for the law to be capable to protect the intangible property beyond the immediate form in which it was expressed’, it had to become abstract and ‘take on a transcendental quality’ – grasping the intangible which is simultaneously identifiable and compliant enough to move from work to work.

In light of the digitisation processes, the already elusive quality of the ‘intangible’ has been dissolved. Its physical and visible markers removed, or better substituted with digital bits informing a ‘materiality’ that is hardly graspable or visible to the law. If vision is dependant on distances by which it objectifies the thing seen, it could be said that digitisation, especially with the Internet, has interfered ‘copyright’s vision’ by minimising the distance of communication not only through myriad of possibilities to interact with copyright works, but also by disturbing the objectifying techniques of copyright law. The works are hardly caught by the eye of law, both for their ubiquity and instantaneous multiplication. While communication at a distance, effectuated by

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19 Kant in his essay On the Unlawfulness of Book Reprinting understands the book as a ‘speech to the public’. More precisely, for Kant, a book is ‘a writing which represents a speech that someone, through visible signs of language, holds before the public.’* Kant views the author as the person who delivers the speech and the publisher as the person who speaks in the name of the author. More interestingly, Kant notes that the publisher provides the ‘mute instrument’ (the book) for delivering the author’s speech. This speaking to the public through the publisher, as Borghi argues, entitles the publisher as an intermediary of the communication, to whom the speech is not transferred as property but ‘entrusted’ as a ‘duty (and a faculty) to retell.’ I speculate that the acoustic explication of a speech carried by a mute object can be understood and identified as a residue of the sonority at this stage of copyright’s history. Kant, I. (1785) On the Unlawfulness of Reprinting Berlinische Monatsschrift 5 (1785) 403-417; p.407 in Bently, L. and Kretschmer, M. (eds.) Primary Sources on Copyright (1450-1900), www.copyrighthistory.org; Borghi, M. (2011) ‘Copyright and Truth’ Theoretical Inquiries in Law Vol.12, Number 1, 1-27; pp.6-7. (*Quoted in the same article, p.4, from Kant, I. Die Metaphysik der Sitten. Rechtslehre [The Metaphysics of Morals. Doctrine of Right], in 8 Werkausgabe Immanuel Kant 404 (Wilhelm Weischedel ed., 1968).
the print, was originally the condition upon which copyright emerged, today, a tone of discord could be heard as digitisation affords us a distance from the ‘visual distance’ and directs us into the very emergence of the processes, which law falls short to apprehend.

The acts of closure and demarcation, as essential features of property, have been subject of ongoing tension for copyright in its protection and promotion of intangibility, which has further been inflated with the interference of digital technology. This interference obliterated the demarcations between the private and commons, changed the dynamics, leaving traces for challenging the mythic representation of property within the copyright discourse.21 Taking into consideration the invisible traces of technological processes that affect copyright (held here as a visually dependent apparatus), the following discussion returns to the notion of communication, set as a premise for discussing the relationship between copyright and technology, and, moreover, as a position from which perceiving and challenging copyright’s sensorium becomes conceivable.

6.2. Copyright and modes of communication

Investigating the relation between copyright and technology demands addressing the modes of communication subjected to technological advancement. Such an approach not only acknowledges copyright’s ineradicable attachment to the technological mode of communication, but also offers another significant insight into its visual disposition. Moreover, it enables challenging copyright’s dominant ‘sense of sight’ and allows better apprehension of its dissonance with technology.

Before addressing the issue further, a note on communication is required, which I draw from the communication theorist Carey who has aptly identified two contrasting definitions in the history of Western thought. The first is a transmission

21 I draw this observation from Rose who indicates that physical demarcations often fade, fences fall, and lose their visual boundaries as the wildness, or the interference from the environment, lurks in. Rose, C. (1994) Property and Persuasion: Essays on History, Theory and Rhetoric of Ownership Colorado: Westview Press; p.273.
view of communication understood as a process through which messages are ‘transmitted and distributed in space for the control of distance and people.’

In this view, the insistence is on spreading and disseminating the knowledge and ideas, whereby the control over space and people could be/is maintained. Carey identifies the origination of this view in religion, which is still maintained in our contemporary understanding of communication, transformed and incorporated within science, politics, and society at large. The second definition offers a ritual view of communication, deriving from a pre-religious setting. In this view, communication attains the role of ‘representation of shared beliefs’, it being communicated for maintaining the society – thus the terms sharing and participation are closely linked to it. In this understanding, it is the ‘common’, or the ‘communion’ that defines what communication is. Accordingly, the communication is not focused on ‘the extension of messages in space but toward the maintenance of society in time.’

The reason for alluding to these different notions of communication is to stress that copyright was informed by and still maintains the ‘transmission view of communication’, whereas the ‘ritual view of communication’, although rhetorically recognised, is hardly graspable to its apparatus.

The history of the modes of communication recognises a three-step evolution of communicating information, which can be divided in: the period before the invention of the printing press, the era of hierarchical mass communications, and the Internet age. In the first period, characterised by the oral cultures, communication created cultural, intellectuals or information commons, in which property, as we know it today, would have undermined the communication and the evolution of culture. These communities have largely functioned on a decentralised communicative

structure where every member of the community was simultaneously a sender and receiver. The pre-printing press covers also the scribal stage, the period that had little reference to any ‘informational property’ largely due to the low level of literacy and slow process of copying manuscripts.25 For instance, during the Middle Ages in Europe, the literary creativity has been organised by the Roman Catholic Church, which ‘centralized the production, preservation, and dissemination of artistic and intellectual knowledge within a monastic system.’26 Eisenstein argued that scribal culture of medieval Europe ‘’worked against the concept of intellectual property rights” because the mode of communication lacked the power necessary for preserving individual contributions to art, literature, and inventions,’ stressing how occurrence of print was a key feature in understanding the emergence of literary property and its diffusion of knowledge.27

In the second period, as technological mechanisation was introduced, the ability to copy and disseminate copies provided a possibility for an emergence of a hierarchical communication system.28 Copyright’s origination, as repetitively said before and argued by many, is located with the occurrence of the printing press as a particular mode of communication, which had a great impact across society in general.29 This hierarchy changed the distribution of the information from sender to the recipient (public), informing their division and centring the origination on an individual.

Moreover, it is this arrangement of communication that framed the current understanding of control and dissemination of information. In that sense, ‘[c]ulture, and information in general, once an organic part of social life, became a product to be purchased and consumed’. The potential of technological reproduction and dissemination thus had an influence on both social and artistic production, but also contributed to the processes of commodification, a significant aspect that would mark copyright’s development and organisation ever since.

The third period of the Internet age, Cahir argues, provides a ‘logic of open access’ common for the oral cultures where production and dissemination of information becomes non-linear and decentralised, hence it provides a condition in which all of us are becoming simultaneously senders and receivers in the act of communication. For this, it could be argued that technology is taking us back in time; it faces us with the embedded natural and social codes of communion. However, while these codes are recognised by copyright and its apparatus in promoting creativity and knowledge, it seems they often fall out from its operation for reasons being grounded in the ever-growing propertisation and the divisions it entails, reinforcing its transmission view of communication, as noted above.

In extending the modes of communication onto the digitisation processes, Lévy, for example, associates cyberculture by connecting it with the features of the oral cultures. While the texts and writings are always detached from the context in which they were created, the digital retains the oral culture contextualisation or, as Lévy hypothesises, cyberculture ‘reinstates the copresence of messages and their contexts, which had been current in oral societies, but on a different scale and on a different plane.’ He argues that all cultural forms, such as religion, science or classical philosophy, which derive from writing, tend toward universality and totality,

32 Lévy defines cyberculture as ‘the set of technologies (material and intellectual), practices, attitudes, modes of thought, and values that developed along with the growth of cyberspace.’ Lévy, P. (2001) Cyberculture Minneapolis: University of Minnesota Press; p.xvi.
33 Ibid.
while cyberculture is dissolving the ‘pragmatics of communication’ based on those faculties.\textsuperscript{34} While the propensity of information does create a type of universality, it is significantly different from the static writing. More specifically, he continues, ‘[i]n this case the universal is no longer articulated around a semantic closure brought about by de-contextualisation. Quite the contrary, the universal does not totalize through meaning; it unites us through contact and general interaction.’\textsuperscript{35} What can be argued, therefore, is that copyright was built on the basis of de-contextualised writings and texts, and it is thus unequipped to respond to the context that the instantaneous enunciation and interconnectedness digital technology facilitates. Holding a position that copyright was shaped to respond to the technology of print – which underpins the transmission view of communication – it is not surprising to understand the difficulties it finds with the novel digitisation mode, which fundamentally transformed the conditions and obliterated the distances and separations upon which copyright has built its edifice but also inherently maintained them ever since.

Contending that a use of the modes of communication is a sound basis for comprehending the interrelation between copyright and technology, it is worth turning the focus now on the media scholarship that initiated the visual/aural distinction caused by the technologies of communication. Innis, McLuhan and Ong argue that the modes of communication played a major role in the sensory shifts underpinning and affecting the manner in which societies organised themselves, but also characterised the different stages of human cognition and comprehension of the world.\textsuperscript{36} The sensorial capacity that the modes of communication informed are

\textsuperscript{34} Their universality with totality, he argues, originates in the writing as a mode of communication where the (semantic) meaning is what empowers them, thus the meaning must be kept alive, universal, and remained unchanged through the processes of translation, interpretation, diffusion and conversation. While the mass media, at least in their classical configuration, ‘continue the cultural extension of the totalizing universal initiated by writing’, he holds, that is not the case with cyberculture. Ibid, pp.95-9.

\textsuperscript{35} He argues that cyberculture ‘brings us back to a preliterate situation’ where the ‘real-time interconnection’ and the dynamics of communication create a shared context. Lévy, P. (2001) \textit{Cyberculture} Minneapolis: University of Minnesota Press; pp. 98-9.

similarly following three stages: orality, where the culture is based on the auditory capacity, which marked their collectiveness and maintained itself on memorisation. The literate stage as visual culture which divided the subject and the object, enabling externalisation of the 'memory and institutional form through the power of writing and eventually print.'37 Finally, the electronic culture that, although dependant on the power of externalisation developed in the literature culture, shares qualities and thus returns us in the state of aural/oral cultures typifying 'an expansive present and universal interconnectedness.'38 It should be noted, nevertheless, that every new mode of communication is not eliminating the previous, but reinforces and transforms their qualities by incorporating them within their mode,39 thus the convergence of 'historically separated modes of communication lies in the hability of digital electronics.'40 These modes of communication, they argued, had an enormous sensory effect on the humans, which corresponded to their perception, comprehension and organisation of culture and society at large.

Ong argues that the visual component of the print as a technique of communication had an enormous influence on the understanding of the world, intensively numbing society's aural condition. He argues that the sonority of the oral cultures informed their concrete, participative and localised nature, directly experiencing and engaging with the world by the very act of communication through sound. In contrast, the literate cultures characterised with writing fostered abstractions, implied a separation and enabled distancing 'the knower from the known', creating a division between a writer and a reader.41 By comparison, printing even further provided such
a division by allowing objects to be separated from their origin.\textsuperscript{42} Accordingly, Ong argues that the shift from oral to written speech, especially with the emergence of the print, made a shift from aural to visual space, establishing the sight as a predominant sense characterising the Western culture, and the separation of the individual from the collective.\textsuperscript{43} For the third mode of communication, manifested with that of the electronic communication (radio, sound tape, television), he further introduces the notion of ‘secondary orality’ that shared a great resemblance with that of the primary orality, still dependent on the writing or the medium through which we express ourselves.\textsuperscript{44} The secondary orality, he argues, not only ‘generated a strong group sense, for listening to spoken words forms hearers into a group, a true audience’ but ‘generates a sense for groups immeasurably larger than those of primary oral culture’, thus referring to McLuhan’s famous concept of a ‘global village’.\textsuperscript{45} Holding the stance that modes of communication are fundamentally transforming societies, Ong suggests that the electronic media gave possibility to re-instil the forms of participative sociality, marking the pre-modern cultures but also reasserting the emergence of the aural feature that the new technology entails.\textsuperscript{46}

The electronic age marked a departure from the visually based typographic and mechanical era, in which shaping and structuring of human interdependence were based.\textsuperscript{47} In his study of media and communication, McLuhan argues that the intensified audio-visual features introduced with the electronic means of communication, and the possibility of electronic interconnectedness ‘recreated the

\textsuperscript{42} Ong notes: ‘Manuscript culture had taken intertextuality for granted. Still tied to the commonplace tradition of the old oral world, it deliberately created texts out of other texts, borrowing, adapting, sharing the common, originally oral, formulas and themes, even though it worked them up into fresh literary forms impossible without writing. Print culture of itself has a different mindset. It tends to feel a work as “closed”, set off from other works, a unit in itself. Print culture gave birth to the romantic notions of “originality” and “creativity”, which set apart an individual work from other works even more, seeing its origins and meaning as independent of outside influence, at least ideally.’ Ibid, p.131.

\textsuperscript{43} Ibid, p.115.

\textsuperscript{44} Ibid, p.133.

\textsuperscript{45} Ibid.


world in the image of the global village'. Such metaphorical construction pursued a representation of the conditions in which instantaneous and continuous spread of information is rendered possible, in which ‘time has ceased’ and ‘space has vanished’ connecting the people in a ‘simultaneous happening’. More specifically, such rearrangement articulated a re-emergence of the acoustic space associated with the tribal and oral cultures, in contrast to the visual space, informed by the typography and represented by the western civilisation. McLuhan explains that:

Acoustic space is a complete contrast to visual space in all of its properties, which explains the wide refusal to adopt the new form. Visual space, created by intensifying and separating that sense from the interplay with the others, is an infinite container, linear and continuous, homogenous and uniform. Acoustic space, always penetrated by tactility and other senses, is spherical, discontinuous, non-homogenous, resonant, and dynamic. Visual space is structured as static, abstract figure minus a ground; acoustic space is a flux in which figure and ground rub against and transform each other.

Extending to the current digitisation processes, it could be argued that digital technology as a means and condition, made possible the processes of communication, (re)production and distribution to reinitiate the practice of oral tradition where the act of communication is instantaneous (re)production, thus agents modify their envisioned role as set by copyright law. Moreover, as Ong notes “[o]ral cultures encourage fluency, fulsomeness, volubility. Rhetoricians were to call this copia.” In that sense, this analogy resonates not only with the increasing communicative output, but also with the digital abundance of instantaneous multiplication and dissemination of copies, emphasising their quality more as a

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48 Ibid, p.31.
51 Marshall, M. and McLuhan, E (2007) Laws of New Media: The New Science Toronto: University of Toronto Press; p.33. McLuhan drawing on Gestalt technique introduced the figure/ground approach, arguing the visuals are focused on the figure thus overlooking the ground and the context, in contrast to the aurality, which encompasses both of them. Although this distinction leads McLuhan into a strong dualism, it nonetheless supports the investigation into the hearing the dissonance of copyright and technology.
process of communication than a thing of production. Contending with the idea that digital technology is returning to some of the facets of the oral culture, I argue that digitisation introduces sensory shifts that require ‘aural’ capacities for it to be apprehended. Digitisation as an existing historic category, both literally and metaphorically challenges the copyright’s sensorium, its dependence on the visual.

The modes of communication affect society at large, and law as ‘an institution built on the creation, storage, processing, and communication of information’ depends on the medium that informs its functioning. As McLuhan has put it, ‘[o]nce a new technology comes into a social milieu it cannot cease to permeate that milieu until every institution is saturated.’ In that sense, ‘[l]aw itself is inherently technological’, inscribed on the medium that carries its normativity and by which it communicates its messages. Relating to the sensorial shifts that modes of communication entail, the ocularcentric character of law comes from it being instilled in the visual medium of the writing, which ‘encouraged law’s conformity to visual values’. Moreover, as law ‘is already embedded in a specific technology’, that is writing and printed script, and thus, according to Hildebrandt, the legal normativity

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57 Hibbitts discusses law’s preference on the visual, which is also manifested in the (American) legal discourse of favouring visual metaphors. Hibbitts, B.J. (1994) ‘Making Sense of Metaphors: Visibility, Aurality, and the Reconfiguration of American Legal Discourse’ Cardozo Law Review, Vol. 16, 229-356; p.299, in particular pp.258-64; In another study, Hibbitts, demonstrated that in contrast to the modern age, where the written word is dominating the legal communication, in the ‘performance cultures’ they were combining different medium, thus law was not only read or spoken, but simultaneously heard, seen and even felt, and legal meanings were often not reduced to a single medium but ‘holistically performed.’ Hibbitts appeals for a recognition of other sensorial capacities through which law and its meanings are performed, hence ‘coming to our senses.’ Hibbitts, B.J. (1992) “Coming to Our Senses”: Communication and Legal Expression in Performance Culture Emory Law Journal, Vol.41, No.4, 874-960; pp.943-60; Katsh, M.E. (1989) The Electronic Media and the Transformation of Law New York and Oxford: Oxford University Press; pp.84-5.
is always imbued in the technological normativity by which is articulated.\textsuperscript{58} Accordingly, it could be argued, copyright apparatus urges extensions of regulatory technique over the digital technology, which are hardly applicable as they are still instilled in the form of the previous mode of communication – the print – out of which copyright derived from.\textsuperscript{59}

Still bearing an ‘ocularcentric’ normativity, copyright requires a shift of its sensory capacity to better apprehend the processes that digitisation entails. Only from that position, by recognising its dynamics and potentials, I contend that it is possible for copyright to encapsulate and articulate a legal mechanism that would sustain its potentials. Viewing the emergence of copyright law on the second mode of communication, as a consequence of print, and additionally asserting that technology entails the features of auditory culture, it is sound to challenge its visually based normativity with auraility. This approach to communication and its materiality of interconnection provide a novel dimension, for it presents an elucidation of the dissonance between copyright and technology. In the context of copyright, where in the most general sense communication is its goal and functionality, this assists in conceptualising a soundscape in which copyright is immersed. In this manner, although relying on the reductive and criticised visual/aural binary, the articulation supports the stimulation of copyright's atrophied ears.\textsuperscript{60} The epistemological resources are to be challenged, by introducing, if not re-discovering, new


\textsuperscript{59} This resonates with the ongoing attempts of copyright, as discussed before, to extend the legal principles and integrate control within the digital technology (DRM, web-site blocking). Katsh, for example, argues that ‘[i]n an era in which new means of communication are emerging, it would be an error to ignore the potential effect of the new media on how we organize and conceptualize the law.’ Katsh, M.E. (1989) The Electronic Media and the Transformation of Law New York and Oxford: Oxford University Press; p.248.

epistemological passages for dealing with copyright and its visually based origin. Contending that the notion of property as an orienting principle of copyright is problematic for its apprehension in the digital environment, copyright’s vision based functioning must be challenged, thus ‘hearing’ the processes that eventuate in the soundscape where copyright operates. Moreover, such immersion to sonority is what technology induces. This is to be understood not only in McLuhanesque sense of how electronic (digital) media introduce ‘acoustic spaces’, but also in associating technology with sound qualities, with background noise, and its resonating processes of reproduction and distribution that could not be caught by the eye of copyright law. Could this 'opening of copyright law's ears' enable hearing (understanding) of the noise that technology emanates?[^61]

### 6.3. Copyright in the network

The act of immersing copyright's law apparatus into a soundscape requires a further challenge of distinctions, representations and positions spread on the vast landscape of copyright. Specifically, the notion of network has become a critical thread wherefrom diametrically different positions concerning copyright are loudly argued. While the potentials that network as a tool, condition, process is effective to challenge, critique and represent, it seems that it is restrictive when debating the conundrum of copyright and technology. The notion of network restrains, as it is deployed in support of the two different positions that this thesis sets to avoid. More specifically, on the one hand, it is considered as a realm that attracts and further develops conditions and prospects for grasping, regulating and justifying commodities requiring rigid legal interpretations and actions represented in the current copyright policies and debates. On the other hand, although for opposite reasons, it becomes a plane of resistance, through decentralising the agency

[^61]: ‘Hearing is a model of understanding. It is still active and deep when our gaze has gone hazy...It is continuous while the other senses are intermittent. I hear and I understand, blindly, when evidence has vanished and intuition has faded out: they’re the exceptions.’ Serres, M. (2009 [1982]) *Genesis* Ann Arbor: The University of Michigan Press; p.7.

The notion of the network, representing both the information communication technologies and the society itself, has become a predominant concept and method for discussing social structures, processes and digital communication. This conceptualisation has achieved a possibility to trace the dispersion of nodes and links, thus becoming a ‘new social morphology of our societies’ encompassing their functions and processes.\footnote{Eriksson, K. (2005) ‘On the Ontology of Networks’ \textit{Communication and Critical/Cultural Studies}, Vol.2, No.4, 305-323; p.307 [Emphasis in original]. Eriksson argues that the notion of network emerged because of the weakening of the hierarchy principle, the fading of the nervous system metaphor for communication, rapid development of information technology, but also with emergence of the system theories, cybernetics, complexity theory coming with the development of the communication and information technology.} Network has surely become a dominant visualisation of the society in general, which Eriksson traces it back to several simultaneous processes, out of which the information communication technology plays the biggest part.\footnote{Gudamuz, A. ‘The Copyright Web: Networks, Law and the Internet’ [online]} Eriksson’s view that network ‘has become constitutive to our way of thinking about society and communication as one meaningful whole’ can certainly be traced within the copyright discourse.

The notion of network has become a prevalent concept for contextualising the realm where copyright and technology meet, representing the processes and the agents subjected to copyright law’s apparatus. In that sense, the network, particularly manifested as the Internet, has become a field that enables development of different positions, especially regarding the relation between copyright and technology, as well as an instrument to situate copyright’s agents and comprehend the processes it enables.\footnote{Castells, M. (1996) \textit{The Rise of the Network Society}\nOxford: Blackwell; pp.469-70.} In that sense, addressing the subject matter of copyright and technology,
and claiming that copyright is being technologised, it seems that this conceptualisation provides an adequate basis to understand, or more precisely locate, the conflict between copyright and technology. Especially, the digital network of communication has made it possible to identify what Castells terms as ‘self-communication’ or the rising autonomy of the communicating subjects that become both senders and receivers of messages. According to Castells, this has initiated a call for recognising the position of the user as an active partaker in the cultural practices of the networked everyday within the copyright normativity; but also recognising of the potential of the commons and the network as condition for emergence of novel forms of peer-to-peer cultural production suitable for the network information economy.

On the one hand, the network information society is viewed as a condition that articulates and ascertains the alternative processes of production, interaction and communication, eluding copyright law’s normativity. On the other hand, it becomes a plane where its distribution potential becomes a tool for capitalistic interventions of commodification. However, as Cohen aptly notes, the legal scholars conceptualise the network and the activities therein as taking place in an ‘abstract, disembodied plane, detached from material and geographic contexts.’ This distinction could be traced with the emergence of the Internet and the debate on cyberspace, as a separate realm where information flows freely, not subjected to the real-world processes of regulation and control. This separateness and ‘freedom’ have been overturned, as argued before, once it was shown that information technology is still a subject of technological normativity that controls and regulates the digital space by


mechanisms embedded in its architecture. This nonetheless ascertained the network as a plane of ongoing distinctions – those who argue for 'network neutrality' that should enable an open and unconstrained access to information and those who view information technology as an instrument for policing and regulating content. However, as Cohen has argued, the network is not a space out there, subject of legal interventions and articulations, but it comprises the real world, which is ‘increasingly networked.’ The emergence of a digitised realm against a physical, both considered as social playgrounds, created a space in-between or channels where all the processes of communication, production and distribution act and react. The network comprises the actors as nodes interrelated through copyright’s mechanism – authors (creators), owners, and users (public).

Network culture is the contemporary global culture that should be thought of, Terranova writes, as simultaneously encompassing ‘the singular and the multiple’. As such, there is a necessity for resisting such a differentiation, and in Lyotard’s terms, view the togetherness or the interdependence between the singular and plural, as already plural. Situating the multiplicity in the context of copyright law, it can be argued that it emerges in three instances. Firstly, it is found in the modes of production or, more precisely, social production of knowledge and works of copyright. The notion of immaterial labour indicates the production and consumption of content that emerges from within the processes of communication, but not necessarily falls within the confines of copyright. In addition, it is the overabundance of copyright works, a proliferation, infinity of things. Secondly, it is

73 Lazzarato comments that such ‘immaterial labour constitutes itself in forms that are immediately collective’ and allows challenging the notions of ‘creativity as an expression of “individuality”’ and therefore understands creativity as a ‘social process.’ Lazzarato, M. ‘Immaterial Labour’ in Virno, P. and Hardt, M. (eds.) Radical Thought in Italy: A Potential Politics Minneapolis and London: University of Minnesota; pp.133-47.
found in the multiplicity of subjects that emerge in the copyright discourse. In other words, as previously argued, the inclusion of user’s or access rights as legitimate rights against the right-holders (authors and/or owners). Thirdly, the multiplicity emerges as an animating act of technological existence that copyright law is both dependent on and endangered by. The latter springs out from the modes of reproduction and distribution, the technological possibilities that directly affect copyright’s regulation of intangibilities. It is in this pluralisation where the challenges of the notions of property, needs, interests, values, balances, and their protection rest, often metaphorically utilised to the point of abstraction in debating about promotion of creativity and knowledge.

The multiplicity of cultural formations is based on the interconnectedness of communication systems where informational dynamics annihilate distances, becoming a creative destruction, a ‘productive movement that releases (rather than simply inhibits) social potential for transformations’. More accurately, it is in the informational milieu instigated by technology where the interconnectedness or communication takes place. One of the difficulties of copyright law it is to recognise this interconnectedness beyond the confines of its mechanism and fully acknowledge the contingency and the potentials that such an interaction allows.

That is to say, copyright, it seems, is still focused on the nodes and lines that constitute the networks, through which copyright content is communicated, still incapable to apprehend the quality of that communication and the relation occurring in the middle. In other words, while the network contextualises the potential of multiple interlinking relations, strengthens the argument of de-linearity in production and distribution of creative content, and asserts the decentralised communication model, the nodes, although decentralised, are still centres of the network that send and receive. As such, they are recognisable by copyright’s

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normativity, which reduces their relations in terms of property principles by which it controls and regulates copyright material.

In view of the digital advancement of cultures, the network has become a concept that contextualises and strengthens the argument of de-linearity in production and distribution of creative content, asserting the decentralised communication relations between the agents of the network. However, as Mackenzie notes, although networks are urging us to focus on the relations, their theorisation ‘can deanimate relations in favor of a purified form of networked stasis’. In other words, the network is visualised and theorised to have ‘well-defined links’ that ‘afford unmitigated flow between distinct nodes’, but the flows are often ‘difficult to manage and to theorize.’ For that reason, Mackenzie introduces the concept of wirelessness in comprehending the network cultures, as it provides a distance and proximity not through strings but through mediation in its totality. In parallel with these attempts to liberate the network from its stagnation and recognise its fluidity, the copyright’s realm also requires recognition of the processes of interaction and communication, moving beyond the static representations that network’s nodes and lines imply.

The ‘concept of network’ is employed for visualisation, mapping and thinking of the network society, the social interrelations, the power of communication, and understanding the nodes and their interlinking. It has become a metaphor that delineates the space, while the act of networking encapsulates the processes of

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79 Ibid, pp. 8-11.
80 Lévy argues that the virtual world ‘arranges information in a continuous space – not in a network – based on the position of the user or his or her representative in this world (known as immersion).’ Lévy, P. (2001) Cyberculture Minneapolis and London: University of Minnesota Press; p.43.
81 In context of the author-network theory, Latour indicates that the ‘[n]etwork is a concept, not a thing out there. It is a tool to help describe something, not what is being described.’ Latour, B. (2005) Reassembling the Social Oxford: University Press; p.131.
interaction that copyright is set to regulate and control. However, as Serres suggests, the space we are in now necessitates a move away from the network thinking. Connor comments by drawing on Serres, that the networks which maintain distinctions of nodes and lines, here and there, are hardly capable to encapsulate the ‘real explosion of relations that characterises contemporary communications’ where there are no discrete points and fixity.  

Serres explains:

There is nothing any more that distinguishes where I am, where I have come from, where I am going and whatever the space is through which I am displaced. At the very moment when the whole world speaks only of networks, they are melting in a general short-circuit. We will live henceforth in a space without measurable distance.

While the network still depends on the points ‘where goods, meaning, information, can be concentrated’, Connor writes that Serres advances a thinking of space where ‘there are no nodes, but rather relations, passages, intersections.’ Accordingly, if Serres is correct, copyright’s apparatus is fundamentally challenged. Not only in being divested by its end-points, but also in being required to acknowledge a new quality emerging in the middle. For reaching the objective to identify a conceptual framework in which manifold legal, cultural, technological processes are taking place, I propound here the notion of a soundscape. If the network is difficult to be visualised, there is a need to expose the law to new sensory experiences and immerse it into a soundscape; or, more correctly, discern its soundscape. For these reasons, the network is superseded by a soundscape where the intangibility as a process, and copyright and technology could be heard together, though not in harmony but in a cacophony. In the soundscape, the noise, both as a technical and conceptual feature, here attains an acoustic quality. I argue that in order to comprehend the interfering noise, copyright must ‘open its ears’. It is the state of disorder and noise that copyright fails to listen. The dissonance between copyright and technology should be assessed through its resonating, sounding effect.

84 Ibid.
6.4. Sounding double intangibility

The soundscape as a resonating ambit is not a figment. In recent years, the sound and the space in which it resonates have become a new methodological tool making way into scholarship to provide a new realm for understanding the contemporary processes, changes and dynamics that society at large undergoes, particularly underpinned with the new media and communication technologies.\(^5\) The interactivity introduced by new media make the agency active, embodied and immersed, and thus, as Dyson comments, they ‘reconstitute experiences characteristic of the aural, for sound is the immersive medium par excellence.’\(^6\) Sound and digital media, LaBelle suggests, resemble each other because of the qualities of mobility, relationality and immateriality – thus sound ‘can lend itself to recognizing the operations of digital media’ and ‘the contemporary condition of the digital age.’\(^7\) Sound as a medium, model or a metaphoric device, which is invisible, elusive and intangible reveals the attributes of communication technologies.\(^8\)

The term soundscape, however, requires some clarification. The term itself, originally introduced by Schafer, designates any acoustic environment that is constituted by

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\(^6\) Dyson, F. (2009) *Sounding New Media: Immersion and Embodiment in the Arts and Culture* Berkeley: University of California Press; Coyne argues that the pervasive digital media tune places by their constant noise and interference. Coyne, R. (2010) *The Tuning of Place: Sociable Spaces and Pervasive Digital Media* Cambridge and London: The MIT Press; p.239; ‘The trend in communication is now immersion rather than detachment, towards the interactive and the participatory rather than detachment, towards the interactive and the participatory rather than towards solitary enjoyments, toward ever-changing dynamic experiences rather than toward the fixing of meaning as objects to be collected...there is every chance that it [sound] will have a much increased role to play in the very future.’ Leeuwen, T. van (1999) *Speech, Music, Sound* London: Macmillan; p.197.


sounds of any type, and ‘consists of events heard not objects seen.’\textsuperscript{89} Thompson, further, defined the soundscape as an ‘auditory or aural landscape’, understanding it as a realm made not only out of sounds but also the ‘material objects that create, and sometimes destroy, those sounds.’\textsuperscript{90} In both of these approaches, the soundscape, either understood as physical environment and/or cultural realm, is considered to be a subject of change depending on historical, cultural and technological configurations, which greatly affect human behaviour and experience, but also the manner in which they listen and make sense of the world around them.\textsuperscript{91} Accordingly, the soundscape of copyright is a constructive notion to encapsulate the environment of law’s normativity and the materiality in and upon which it resides.\textsuperscript{92} In this context, however, I primarily use it as a conceptualisation, which is informed by the sound qualities and effects that both its subject matter and technology, as I argue, entail.\textsuperscript{93} Such conceptualisation not only enables copyright to become aware of its sounding milieu and its ever-changing dynamics, relations and events, but also allows hearing the dissonance between copyright and technology. The soundscape designates a realm that envelops both copyright and technology and, as such, is not stable. It is a space that is in constant (trans)formation constituted by the relations which copyright and technology inherently ‘parasite’, or in Serres’s terms, it is a ‘space of interference’.\textsuperscript{94} The soundscape is filled with background noise, and as such, it does not entail a division between an outer and


inner space, but it is a space that unfolds in its own making, thus disturbs the divisions and walls erected by copyright. The soundscape, then, is to be understood as an acoustic space that ‘has no point of favoured focus. It’s a sphere without fixed boundaries, space made by the thing itself, not space containing the thing...dynamic, always in flux, creating its own dimensions moment by moment. It has no fixed boundaries; it is indifferent to background.’

In Chapter 1 this thesis hypothetically set the claim that the conundrum between copyright and technology lies in what I term a double intangibility. This notion aims to address and encompass the intangibility understood firstly, as an essential subject matter of copyright protection and promotion; and secondly, as a technological intangibility manifested in the ungraspable processes and practices it entails, which copyright law struggles to apprehend both practically and conceptually. More specifically, it suggests that the elusiveness of intangibility as a principal concern of copyright is further disturbed by the intangible features of technological processes of reproduction and distribution; hence copyright’s complexity in dealing with the noisy interference that digital technology has introduced. However, as previously discussed, the noise must be recognised as both a negative and positive feature. By associating technology with that of noise, apart from manifesting itself merely as a ‘negative’ interference, it also bears a positive quality – by bringing transformation to the system and introducing a possibility for copyright to comprehend the quality of the intangible as its very essence of communication. I suggest that digitisation provides such apprehension, as it ‘materialises’ the intangible and actualises the potential of the intangible far beyond copyright’s reductive rhetorical notions of creativity and knowledge – by manifesting its potentials, fluidity and dynamism and understanding the intangible more as a process, action or communication, rather than a mere object.

For apprehending their intangibility, which is different in kind but similar in quality, I indicate here that an investigation of sound and its qualities is a worthwhile approach. This not only allows us to avoid the already dominating visual

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epistemology, but also to apprehend and hear the invisible, the intangible, in all its materiality and presence. Therefore, building an argument based on sound and a soundscape allows explanation of two things. First, if for copyright the elusiveness of intangibility is the lack of trace, then sound is the closest intangible materiality that should be employed in that regard. Second, if digital technology’s conditioning features are closely related to that of oral culture dominated by aurality, its operations are compared to that of sound, and it is associated with noise (technosite), then technology is a matter that copyright must apprehend not through seeing, but with an engagement of a different sense – that of ‘hearing’. Finally, taking the claim that ‘the digital age is markedly acoustical and immediate, rather than literate or representational’, and that sound is non-representational, lacking the structure of reference such as words and images, I argue that this offers a more fitting apprehension of intangibility, but also an articulation of its relation to digital technology. In that sense, relating to the ‘sonoric qualities’ of both technology and intangibility, it is argued that copyright should reconceptualise its sensory apparatus. As a consequence, I propose that copyright might better comprehend and recognise a model that could support the current dynamics and processes of digitisation.

Hearing the dissonance between copyright and technology requires a theoretical model that captures the sound, perceives the noise, and hears the echoes of communication. Sound is unpredictable, coming from all sides, and thus, as Attali observes, ‘the world is not for beholding. It is for hearing. It is not legible, but audible.’

The nature of sound as a phenomenon of particular intangibility, invisibility and elusiveness is a subject matter of different understandings. O’Callaghan identifies

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three theories which question the faculty of sound, its materiality and affection, which paradoxically or not resonate the manner in which intangibility, as copyright’s subject matter, and that of technology could be conceived. The first theory of sound considers sounds as an attribute of an object, as a quality emanating from the object. This understanding, similar to Locke’s view that ‘sounds are properties of bodies’, holds that objects ‘possess’ sound, thus they are physical properties of objects. Since sound cannot be transmitted in vacuum, the second theory considers sound not to be a quality of an object but of a surrounding medium. More specifically, according to Aristotle, it is ‘a particular movement of air’ indicating that sound is a vibration, a disturbance that moves through the medium, not necessarily tied to a property of a particular object. The third view considers sound as an event ‘in which a moving object disturbs a surrounding medium and sets it moving.’ In this understanding sound is neither a faculty of the object, nor a vibrating wave, but is the ‘interaction’ between the object and the medium, which bears ‘a particular pitch, timbre, loudness and location.’ Translated in a copyright context, it seems that the first understanding of sound indicates the manner by which the intangible becomes regulated and protected by copyright, under a condition that there is an object that can carry and resonate sound (creative ideas, knowledge) – as such, the intangibility attains a property quality of an object. The second understanding, which identifies sound in the movements and vibrations, suggests that sound is a ‘disturbance that moves through a medium’ understood as vibrating waves or air. In this sense, sound encapsulates the medium of technology, but also its salient qualities of reproduction and distribution, merging the intangible with the medium. With digitisation, the subject matter of copyright’s protection is merging with the medium that enables its communication. The third


102 Ibid.

103 Ibid, p.28.

104 Ibid, p.36.

105 Ibid, p.27.
understanding indicates that sound is actually a result neither of an object nor the medium, but their clash, an event as a spark that we perceive, which manifests itself in a particular location with particular quality to it. It is in this third understanding, where the double intangibility becomes a sounding event, attaining a quality, which I suggest that copyright should both recognise and protect.

The elusiveness of sound remains a difficulty for copyright law to apprehend. As Barron has pointed out, in light of the ‘specificity and relative autonomy of law’s doctrinal categories’, copyright is uncomfortable with the sound of music as it is ‘amorphous to be an object of property’.106 The immateriality of sound, Gaines indicates, ‘has historically presented a problem for aesthetic theory as well as for legal theory’ since, in contrast to representation, sound cannot be grasped because of its materiality being an occurrence, a vibration which ‘gradually ceases to exist just as we have apprehended it.’107 Since sound is difficult to be seen, there is, as Gaines argues, a ‘built-in incompatibility between “sound” and property rights’, but also a difficulty for the law to define and delineate the sound.108 Here, I move beyond a discussion about how and in what capacity the ineffable and intangible sound is reified into an ‘object’ of copyright protection. Instead, I deploy sound as a quality associated with the ‘intangible’ as the main subject matter of copyright protection.

The division of matter and form that comprises a copyright work, the matter of intangibility is deep and fluid and the form is superficial and static. Since law adheres to materiality, then it is the invisibility of the ‘intangible materiality’ that copyright law finds difficult to grasp.109 Copyright deals with intangibles that ‘cannot be seen or measured’,110 thus for copyright, as Edelman argues, ‘[i]t is a matter of giving the

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109 Moreover, as Ihde from a phenomenological viewpoint suggests, that if for the visualist tradition of thought it is the invisible that finds difficult to grasp – ‘It is to the invisible that listening may attend.’ Ihde, D. (2007) Listening and Voice: Phenomenologies of Sound 2nd Ed. Albany: State University of New York Press; pp.13-4 [Emphasis in original].
invisibl...the thought of man....the character of the visible - private property'.

Accordingly, the intangible as a matter of protection, here understood as invisible, becomes visible only because of the established formalistic legal system, and its abstraction as property. It is in this capacity that copyright law is mostly affected by technology, as the intangible once reified within the confines of ©, now coalesces with the technological medium. Because it becomes integral part of the dynamics and ungraspable potentials of digitisation, this in turn propels and catalyses the intangible. As such, while the ‘noisy’ technology directly affects the protection of intangible, it also provides a possibility to rearticulate it into a sonic quality and better understand its fluctuating nature. The quality of the intangible (creativity and knowledge) can indeed never be confined into a property, and even when it is, as copyright demonstrates, it persists in being ungraspable. For this reason, I suggest that if copyright were to acknowledge such a quality, it would provide a better apprehension of the processes that technology entails.

Furthermore, I have discussed that copyright is static and superficial, incapable of fully acknowledging the changes and fluctuations that digitisation introduces. In this disruption by technology, copyright is affected, not only because its ‘intangible property’ is subject of immense reproduction and dissemination, but also because digitisation imparts a quality to the intangible as an active process going beyond the boundaries and fixity established by copyright. Reitering Sherman and Bently, ‘[t]o our modern eyes, which are used to seeing the intangible as an object, the idea of the intangible as a form of action may be difficult for us to comprehend’, I propose here that the quality of sound is capable of grasping such an action of the intangible, both conceptually and metaphorically, and understand it more as a process than a thing. As such, importantly, the fluidity of sound not only captures the work as a ‘communicative act’ between the author and the public, as Drassinower aptly indicates, but also provides a possibility to apprehend the ‘communicative value’

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If copyright works under the digitisation processes become less of an object, manifesting precisely their intangible nature, it is sound that encapsulates such a quality. The digitisation of the intangible makes it possible to understand the intangible as something that goes beyond a possibility to be contained, akin to sounds, which do not have shapes and sizes, and could not be grasped. Sound resonates with the intangible because it is elusive and is not reducible to an object, ‘it is not, and can never be, an object which can be grasped and possessed.’ It is essentially a matter that dissipates and modulates, and thus it resembles the intangibility of copyright. The fluidity and elusiveness of creativity and knowledge, especially underpinned with the digital potential of reproducing and distributing, assert their ‘sonoric’ quality, which should be recognised by copyright.

Always in motion, sound is something that produces and generates. It does not describe neither a place nor an object, it is the invisible act, a dynamic of production that is not interested to linger and hear its outcome. For this, the intangible, akin to sound, is never a finite object, never an object that can be represented, it is more of a process than a thing, manifesting a ‘mode of being in a constant state of flux’. With this understanding, the intangible is indeed similar to the elusive quality of creativity and knowledge, hardly reducible to a property, but...
multiple and heterogeneous, neither visible nor tangible, always ‘ontologically vague and semantically imprecise’.\textsuperscript{119}

However, while sound is invisible and often understood as immaterial, it is inherently attached to a medium. Sound always emerges through a material medium '[t]hough it cannot be expressed outside its embodiment in such a medium, it is in itself entirely immaterial and insubstantial.'\textsuperscript{120} In that sense, Henriquez rightly states that 'the idea of sounding serves to draw attention to a rather different object of enquiry than the conventional ones of text or image.'\textsuperscript{121} More to the point, if the identified subject matter of copyright is the intangible, which remains non-visual but intrinsically elusive, it is not a matter of seeing but of hearing it. In this way, the dynamic, the flow of creation and production, that is communication, are opening up and simultaneously incorporating the corporeal subject matter of copyright.\textsuperscript{122} But with that difference the non-corporeality here loses its transcendental quality and materialises as sound.

Technology introduces a ‘codification as a new reification’ hardly grasparable by the law.\textsuperscript{123} If the intangible has always been embodied in a physical entity, the digitisation affected the work, that is the creation, by separating the ‘intellectual object from its physical embodiment.’\textsuperscript{124} Accordingly, Borghi and Karapapa indicate the shift in the copyright discourse of considering the works more as a ‘content’,

\begin{itemize}
\item \textsuperscript{119} Ibid.
\item \textsuperscript{120} Henriquez, J. (2011) Sonic Bodies: Reggae Sound Systems, Performance Technique, and Ways of Knowing New York and London: Continuum; p.xvii.
\item \textsuperscript{121} Ibid.
\item \textsuperscript{123} ‘Newer technologies...transpose and create quantized data through time stretching, morphing, detailed surface rendering, and motion capture, all with a level of resolution beyond the capacity of the human eye (a good argument for optical upgrades)’. Galloway, A. and Thacker, E. (2007) The Exploit: A Theory of Networks Minneapolis and London: University of Minnesota Press; p.134 and p.137.
\item \textsuperscript{124} In the context of the Google Book mass digitisation project, Borghi and Karapapa investigate in detail the legitimacy of such uses, by also aptly indicate that, as digitisation ‘de-materializes’ the works, the mass digitisation introduces a ‘de-intellectualization’ by turning them into mere data – they are detached from the very condition of their being, namely their intelligibility to humans.’ Borghi, M. and Karapapa, S. (2011) ‘Non-display Uses of Copyright Works: Google Books and Beyond’ Queen Mary Journal of Intellectual Property, Vol.1, No.1, pp.21-52; p.22 and p.44.
\end{itemize}
capable to reflect the digital dematerialisation of their form. It is in this understanding that McLuhan’s ‘medium is the message’ resonates the amalgamation of the content and the medium – the digital format of the work/content is inseparable from the digital medium that supports it. Moreover, as technology carries auditory qualities, pushes the debate further and provides a novel conceptualisation of the materiality of the intangible through the sound that it possesses. Sound delivers the ‘immediate presence of the real, in all its concrete materiality’. In this context, the ‘acoustic space’ brought in by the technological advancement connotes the realm in which copyright and technology reside, presenting itself as a new theoretical composition enabling to grasp the current contingency and fluctuation.

### 6.5. Sounding relations

Contemporaneous with the Enlightenment, copyright is a manifestation of the light that has spread and created a division of subject and object, making visible the distinction between an author and the public sphere, and privileging the ocularcentric regime of attaining knowledge. The knowledge has been developed on this separation of material/immaterial, real/unreal, tangible/intangible, closely related to the eye, which has been given the highest primacy of sensual occupancy in understanding and constructing the world around us – the rationalistic principle of dualism and bifurcation dominating the science, and pragmatism of the social interaction in its most general sense.

The critical explorations of copyright, it can be argued, predominantly reside in the theoretical model developed out of text and vision. As noted before, the tendency of

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125 Ibid, p.44.
128 Erllmann’s historical and philosophical exploration of the relationship between reason and resonance commences by drawing on Diderot’s disagreement with Descartes and Locke, since for Diderot the thinking process is not a reflection, but its complete opposition – ‘[w]hile reason implies the disjunction of subject and object, resonance involves their conjunction.’ Erllmann, V. (2010) *Reason and Resonance: A History of Modern Aurality* New York: Zone Books; pp.9 -10.
comprehending and analysing entities by their visuality and representation could be discerned in the socio-philosophical background of the Renaissance and printing press.\textsuperscript{129} There are two separate accounts surfacing out of this statement that correlate to copyright and its discourse. The first is related to the technology of printing press as the main condition upon which, primarily as censorship, and then as a copyright mode emerged to control copies of books. The text is not only the reason for copyright’s emergence, but it is the basis upon which copyright apparatus was built, imparting both the subject matter of copyright protection and the distinction between the author and the public. The second, as argued before, is that copyright is an outcome of visually oriented Western thought. Although the natural and utilitarian theories of copyright have different origination they meet at particular points in which fencing, divisions and justification through exclusion become a basis upon which copyright paradigm has lingered ever since.\textsuperscript{130} For those reasons, it seems, copyright is epistemologically studied as an almost pre-given category articulated through its normative constructions on divisions and perspectives. For the eye to be able to see, it requires a distance from the object. This act of seeing, hence, simultaneously creates a distinction between a subject and the object of observation.\textsuperscript{131} Consequentially, it is the points of divisions, such as subject/object, author/user, private/common, where a discussion on copyright both instigates and ceases, the same points being altogether disturbed by digital technology. Copyright is static and fixed on the end points, constantly striving to extrapolate additional

\textsuperscript{129} Schafer indicates that ‘[i]n the West the ear gave way to the eye as the most important gatherer of information about the time of the Renaissance, with the development of the printing press and perspective painting.’ Schafer, R.M. ‘Soundscapes and Earwitnesses’ in Smith, M.M. (ed.) (2004) \textit{Hearing History: A Reader} Athens: University of Georgia Press; p.8; ‘Renaissance perspective thus serves as an analogy for a much more general phenomenon: the power to create a distinct, single point of view that organizes thought and perception along linear lines.’ Lethem, J. ‘The Ecstasy of Influence’ in Miller, P.D. (ed.) (2008) \textit{Sound Unbound: Sampling Digital Music and Culture} Cambridge and London: The MIT Press; p.54.

\textsuperscript{130} Rahmatian, for instance, makes a distinction between an internal (positive) aspect of property, related to the rights and duties that right entails (civil legal systems), and external (negative) aspect of property, related to the exclusion of others (common legal systems). The former exercises power to the fence, whereas the latter deals with actions and encroachment to the property from the outside. He notes that the ‘“internal” powers of use and “external” rights to fend off an encroachment of any kind meet on the fence.’ Rahmatian, A. (2011) \textit{Copyright and Creativity: The Making of Property Rights in Creative Works} Cheltenham: Edward Elgar; pp.7-9.

\textsuperscript{131} Leeuwen writes that in this process, the object of vision becomes an ‘inert object’, where the subject of vision becomes an observer ‘who possesses and controls’ the object from a distance.’ Leeuwen, T. van (1999) \textit{Speech, Music, Sound} London: Macmillan; p.195.
meaning that will support its justifications and normativity. Therefore, as argued earlier, we need a new localisation, or re-localisation of the problem, avoiding the ends and positioning in the middle. Situating law in a soundscape enables, or at least opens a possibility for, copyright to ‘hear’ the sounds of its surrounding, and enable understanding of the dynamics and ever-changing processes, which are fully immersive and relational similarly to sound.\textsuperscript{132}

Accordingly, contending that ‘texts and images require the distance of vision that separates subject from object’, in contrast, sound is ‘immersive and proximal.’\textsuperscript{133} Unlike vision, the quality of sound is assumed to be concrete, regardless of its intangibility, whereas unlike writing that is considered abstract, sound is immediate, affecting with its own physicality, immersing and enveloping all the subject and objects in its concrete occurrence.\textsuperscript{134} Therefore, it pervades the surrounding by evading distinctions and distances that vision intrinsically demands. Sound, as Voegelin suggests, ‘is never about relationship between things, but is the relationship heard.’\textsuperscript{135} As such, the notion of sound avoids distinctions and actualises the processes of interaction, it allows avoiding the current copyright’s focus on subject and object and situates in-between, attaining the meaning of a medium, means and milieu and informing the soundscape in which copyright is immersed.

An immersion into soundscape not only allows us to avoid the distinctions and the distance imparted by the vision, embedded in ocularcentric disposition of copyright law, but also addresses the subjectivity that has often been invoked throughout the copyright discourse.\textsuperscript{136} Recalling again the modes of communication, with the shift from oral to script cultures, later extended with the print, the first effects of

\begin{footnotesize}
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\item\textsuperscript{132} ‘Sound is intrinsically and unignorably relational: it emanates, propagates, communicates, vibrates, and agitates; it leaves a body and enters others; it binds and unhinges, harmonizes and traumatizes it sends the body moving; the mind dreaming, the air oscillating. It seemingly eludes definition, while having profound effect.’ LaBelle, B. (2006) \textit{Background Noise: Perspectives on Sound Art} New York: Continuum; p.ix.
\item\textsuperscript{135} Voegelin, S. (2010) \textit{Listening to Noise and Silence} London: Continuum; p.49.
\end{enumerate}
\end{footnotesize}
subjectivity and objectivity could be traced.\(^{137}\) As Poster identifies, in the oral stage 'the self is constituted as a position of enunciation through its embeddedness in a totality of face-to-face relations', while in the print stage 'the self is constructed as an agent centred in rational/imaginary autonomy.'\(^{138}\) Here the sound/voice, previously a sole oral property, becomes fixated as an externalised and objectified materiality. This very fact made the first distanciation or hierarchy between the speaker and the audience, and set the possibilities for communication on a distance. In the electronic stage, 'the self is decentred, dispersed, and multiplied in continuous instability.'\(^{139}\) The communication between subjects in the digital age not only becomes discursive, but also decentralised, only to be heard but not to be seen. The understanding that in the oral cultures the self was already part of the community could be traced back to the fact that the self is predominantly dependent on the sound. Sound and the act of listening always carry the notion of 'diffused subjectivity' since through this act, as LaBelle writes, ‘an individual is extended beyond the boundaries of singularity and toward a broader space necessarily multiple.’\(^{140}\) This resonates with the recuperation of the user in the copyright scheme for ascertaining its inter-subjectivity with the author, where the author becomes dependent on the action of the user.\(^{141}\) The aurality of the oral cultures grasps the obliteration of the hierarchy, or the well-known authority of the author, as all the subjects are made equal in their right and need to produce, access, use, and communicate intangible objects that copyright protects and promotes. In McLuhan’s terms, the acoustic space, that is soundscape, is built on holism, without any cardinal centre, but centres, and thus the ‘acoustic mode rejects hierarchy; but, should hierarchy exist, knows intuitively that hierarchy is exceedingly transitory.’\(^{142}\)

\(^{137}\) Poster notes, however, that these stages ‘are not “real.” Not “found” in the documents of each epoch, but imposed by the theory as a necessary step in the process of attaining knowledge.’ Poster, M. (1990) The Mode of Information: Poststructuralism and Social Context Cambridge: The University of Chicago Press; p.6.

\(^{138}\) Ibid.

\(^{139}\) Ibid.


Extending the notion of communication to the oral culture goes beyond the distinctions and characterises the indivisibility of the commons, often associated with the communication (access, use, distribution of copyrighted works) facilitated by the current communication technologies. It should be noted however, as Ong’s argues, there is a difference between human communication and communication though a medium. The former does not consist only of a sender and receiver, but the position of sending is simultaneously a receiving one, thus intrinsically intersubjective.\textsuperscript{143} The latter, in contrast, gives an impression that communication is a ‘pipeline transfer of units of material called ‘information’ from one place to another’.\textsuperscript{144} Therefore, while the general understanding positions copyright in the realm of human communication, its legal framework proves the opposite – it is situated in a communication through a medium – viewing communication only through a linear pattern between end points, continuously justifying the act of communication with the higher goals of creativity, knowledge exchange, that is, communication. On that account, if we adopt Ong’s consideration that human communication is intersubjective while media model is not, it seems that copyright can hardly ever be treated as a locus where intersubjectivity is experienced. For this, in contrast to Shannon’s communication model viewed as linear and sequential, the soundscape upholds the de-linearity of communication, which finds its articulation in that of the oral history, and at least conceptually grasps the intersubjective communication that technology imparts.\textsuperscript{145} Therefore, the communication here goes beyond the nodes associated with the notion of network, and is immersed into the soundscape of enunciations and soundings.

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It is the hearing that ‘incorporates and creates communion.’\textsuperscript{146} Copyright law has an intrinsic goal to bind and join together, therefore, in contrast to the distinctions it

\textsuperscript{144} Ibid, p.171.
entails, the soundscape as a realm in which it emerges and reverberates presents a potential to articulate copyright as inherently an instrument that creates community. Copyright’s symbol signifies community.

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If hearing is related to the ‘pre-individualistic collectivity’, Gaines suggests that sound ‘eludes the organizational structure of commodity culture.’\textsuperscript{147} With its quality to disperse, disseminate and envelope, sound both subverts and resists the separations and distinctions informed by copyright. This tendency of the sound to spread out and present itself as belonging to everyone ‘makes it potentially oppositional – not its source in personhood.’\textsuperscript{148} Copyright law, as an outcome of the visual, is static and superficial, unlike the aural, which is dynamic and deep. It thus cannot keep pace with the changes and cultural fluctuation that society is experiencing, the processes of multiplication, changing modes of production and distribution, as well as the melting definitions and notions of what author/creator, user or public is. Hearing the action as process is a shift from the debates surrounding the object, redirecting them towards perceiving the acoustic space as a ‘sphere of simultaneous relations.’\textsuperscript{149}

Sound provides a possibility to reach the aspect of community, which copyright has as its own objective to maintain. Ong notes that ‘sound always tends to socialize.’\textsuperscript{150} The socialising aspect is in the proximity, which hearing the sound requires. It is both a spatial and a temporal quality that draws people together. Moreover, the distance introduced with printing (and vision) has been diminished as digital technologies have re-introduced ‘face-to-face communication’, but with that difference, making physical proximity redundant.\textsuperscript{151} In this paradoxical manner, as the Internet attests,

\textsuperscript{148} Ibid.
\textsuperscript{151} In recent years, streaming websites have emerged as a new technology that enables use and access (viewing and listening) of digital works in real time, thus challenging copyright’s application and
technology is indeed the means, medium and milieu, it is the noise that enables and disturbs, capable to cross and disperse great distances, almost immediate but ubiquitous, simultaneously affecting and giving rise to new forms of relations, experience, entertainment and enjoyment, introducing a resonating realm in which copyright and technology are interrelated and immersed. 

In addition to the visually determined comprehensions, Kaplan has put forward a proposition that aural metaphors provide yet another possibility to capture the quality of Internet and reconceptualise the spatial metaphor in auditory terms. Such an understanding not only relates to the potentials of the ‘fluid, multidirectional, and participatory’ communication that Internet enables, but it also allows moving beyond the visual conceptions of cyberspace, present in the legal discourse, that suggest ‘boundaries, zones, and divided spaces.’ If sharing and instantaneous reproduction and distribution are associated with communication then, he argues, hearing and its quality are ‘more isomorphic with how

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152 In 1928, the French poet Valéry heralded the ubiquity of creative works that technological developments will enable. In his essay ‘Conquest of Ubiquity’ he writes that the reproduction and transmission of works of art will be affected, as technology will enable sending and re-creating ‘a system of sensations, or more precisely a system of stimuli’ acquiring a ubiquitous quality. He continues, ‘[j]ust as water, gas, and electricity are brought into our houses from far off to satisfy our needs in response to a minimal effort, so we shall be supplied with visual or auditory images, which will appear and disappear at a simple movement of the hand...we shall find it perfectly natural to receive the ultrarapid variations or oscillations that our sense organs gather in and integrate to form all we know. I do not know whether a philosopher has ever dreamed of a company engaged in the home delivery of Sensory Reality.’ Valéry, P. (1964 [1928]) Aesthetics New York: Pantheon Books; pp.225-26.

153 For an exploration and commentary of the evolution of metaphors (information superhighway, cyberspace, and “real” space) applied to the Internet in the legal discourse, see Blavin, J.H. and Cohen, I.G. (2002) ‘Gore, Gibson, and Goldsmith: The Evolution of Internet Metaphors in Law and Commentary’ Harvard Journal of Law & Technology, Vol.16, No.1, 265-285; In addition, Lévy has argued that the expression ‘information highway’ reinforces the socio-technical infrastructure of the economic interests, assimilating it to a physical space of the industrialisation era, in which consumption and transmission of information are taking place. Because the new modes of communication and access are defined by the new features such as reciprocity, social participation, non hierarchical and hypertextual navigation, he argues, this does not correspond to the metaphor of the highway ‘which evokes only the transport of information or narrowly channelled mass communication, rather than interactive relationships and the creation of community.’ Lévy, P. (2001) Cybertculture Minneapolis: University of Minnesota Press; pp.173-75.


communication actually occurs on the Internet than are visual metaphors of space and place.156 Kaplan employs the auditory to better comprehend the manner in which communication over Internet is experienced by users, and thus proposes that the space of the Internet should avoid its fixed borders and regions, and think of itself in aural terms, which in turn enables an apposite understanding of the ‘malleable environment where interactions are as fluid as conversations.’157 While Kaplan aptly argues for such a metaphorical shift in order to untangle the space of the Internet, the manner in which I employ the aural/sonic features is not intended to reduce them only to a metaphorical quality, neither to advance the soundscape as yet another metaphor for the Internet. In that regard, the quality of sound is not only reduced to the voices that express and share, but also emanates from the noise that informs the medium, means, and milieu, and enables apprehending the processes of communication that copyright tends to ‘parasitically’ regulate.

Importantly, the obliteration of boundaries that technology presents, akin to that of sound, must not be romanticised or idealised. The network society, underpinned with information communication technologies in parallel to its possibilities of bringing communities together and diminishing distances and locations, also fragments the society, either through the well-known digital divide, or through the very process of supporting an even greater individualism, reflecting the capitalistic processes and information politics.158 Copyright as a legal instrument partakes in making of such divisions, whereas the soundscape, at least conceptually, provides a possibility to bridge them.

6.6. Spatiality and temporality

LaBelle considers sound to be a spatial event that has a social element to it. He claims that ‘in multiplying and expanding space, sound necessarily generates

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156 Ibid, pp.312.
157 Ibid, p.313.
listeners and a multiplicity of acoustical “viewpoints,” adding to the acoustical event the operations of sociality.\footnote{LaBelle, B. (2006) \textit{Background Noise: Perspectives on Sound Art} New York: Continuum; p.x.} Also, ‘sound is never a private affair’,\footnote{Ibid.} as it is always directed towards the space where other subjects receive it as a vibration. In this sense, ‘sound is always already a public event, in that it moves from a single source and immediately arrives at multiple destinations.’\footnote{‘Sound thus \textit{performs} with and through space: it navigates geographically, reverberates acoustically, and structures socially, for sound amplifies and silences, contorts, distorts, and pushes against architecture; it escapes rooms, vibrates walls, disrupts conversation...inhabiting more that one place; it misplaces and displaces...It is boundless on the one hand, and site-specific on the other.’ Ibid, p.xi.} Sound is thus an intangible wave that materialises in the immediate space and in such an actualisation. As Serres notes, the ‘sound event does not take place, but occupies space. Even if the source often remains vague, its reception is wide and general.’\footnote{Serres, M. (2008 [1985]) \textit{The Five Senses: A Philosophy of Mingled Bodies} London and New York: Continuum; p.47.} In that sense, the spatiality that sound creates provides yet another reasoning for introducing the soundscape of copyright and its interrelation with technology. Sounds as such, although intangible, are located in space, designating an area in which they occur, disperse and dissipate.\footnote{Ackerman, D. (1990) \textit{A Natural History of the Senses} New York: Vintage Books; p.178.} The localisation of the communication that digitisation entails, similar to that of oral cultures is always contextually realised, escaping copyright’s pre-given normative understanding of how and in what manner communication is allowed. In other words, the multitude of interrelations and the creative potentials that digital communication provide are not fully capable to be prescribed by copyright, as they often extend beyond the proprietary definitions of creativity and knowledge. Similarly to sound, the effect and value of established communication can be recognised only in the moment in which it reverberates. Therefore, I anticipate, if digitisation generates an abundance of information, making noise out of creative, communicational content, it goes beyond the reach of copyright capability to recognise and regulate the principles of communication. Digitisation is returning the quality of the oral cultures and their contextual occurrence. As such, copyright’s capacity to apply in a ‘de-contextualised’ setting, is challenged requiring ‘contextual’
modification of its normativity.\textsuperscript{164} Similar to how hearing occurs at the same time as the ‘sonorous event’, it can be argued that law’s hearing (understanding) will have to respond on the context of communication between agents, and only then apply the principles it upholds.

This brings us back to Serres and his insistence on the importance of locality. As the notion of the parasite/noise demonstrates, every relation has its own specificity and depending on the conditions, materials and circumstances, builds a model which describes the locality of the event.\textsuperscript{165} However, extending the specificity of the local onto the global, as Serres warns, have a tendency to become ‘monstrously inflated’, as the domination of an ‘empire is never more than some inflated local, a part that took the place of the whole.’\textsuperscript{166} Such an inflation of the global does not necessarily support or reflect the instances of the local. The local is an island of order in the sea of noise.\textsuperscript{167} Copyright, after all, is a localised practice. However, being emplaced in the national and international frameworks and grids, it applies global rules to localised events, incapable to fully recognise the particularity of the context, in which interactions, relations, creative play, sharing of knowledge takes place.

\textsuperscript{164} Such ‘contextual application’ of copyright principles, for instance, could be already identified with the Creative Commons licenses that provide a possibility for creators and users, under specific conditions, to engage in sharing and using digital works. The aim of such licences is to modify the traditional ‘all rights reserved’ into ‘some rights reserved’ thus adjusting the rigidity of copyright and, as its name suggest, create a possibility for the commons. Furthermore, with the emergence of Internet, such contextual applications are manifested in the contracts that regulate the rights and uses of digital works. For the relationship between copyright and contract law and the concerns of such contractual regulation of copyright see, for example, Kretschmer, M. \textit{et al.} (2010) \textit{The Relationship Between Copyright and Contract Law} Strategic Advisory Board for Intellectual Property Office, London, UK [online] \url{http://www.ipo.gov.uk/ipresearchrelation-201007.pdf} (Accessed 10 March 2014); Also, Griffin, J.G.H. (2011) ‘The Interface Between Copyright and Contracts: Suggestions for the Future’ \textit{European Journal of Law and Technology}, Vol.2, Issue 1; 1-13 [online] \url{http://ejlt.org/article/view/23/118} (Accessed 10 March 2014). It is outside of this study to fully identify or propose forms of such ‘contextual’ regulation that digitisation has apparently advanced, or to comment on the potentials and/or concerns that they entail.


\textsuperscript{167} Ibid, p.112; Commenting on the expansion of the copyright regime, Elkin-Koren’s observation is extremely appropriate in this context: ‘If copyright law had once created islands of information, which are subject to the sovereign control of copyright owners, these islands are now turning into a continent leaving little available space in between. Copyright law thus becomes a very powerful means for accumulating control.’ Elkin-Koren, N. ‘It’s All About Control: Rethinking Copyright in the New Information Landscape’ in Elkin-Koren, N. and Netanel, N. (eds.) (2002) \textit{The Commodification of Information} Alphen aan den Rijn: Kluwer Law International; p.84 [Emphasis in original].
From another point of view, media theorist Meyrowitz indicates that the ‘introduction and widespread use of new mediums of communication may restructure a broad range of [social] situations and require new sets of social performances’, without any prior modifications on the part of ‘customs and laws concerning access to places.’\textsuperscript{168} The technological noise has re-modified, or catalysed, both the quality and the value of interaction, which in turn attracts law to reappear and assert its principles. However, the attempt of copyright regulation to tame the technological noise by imposing restrictions of access and interaction seem to be hardly achievable. What is at stake is that copyright must recognise the continuous emergence of various ‘social performances’ or communicative acts that digitisation entails. Since these social performances, but also their subject of interaction, as I argued so far, resembles the qualities of sound, then copyright indeed needs to ‘open its ears’ in order to ‘hear’ its reverberating subject matter of intangibility, more as a process than a thing.

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The circle designates spatial dispersion of sound, which is non linear but is spread, constituting the spatial and temporal field in which it reverberates. The soundscape thus designates simultaneously the two fundamental principles of copyright – the spatiality of its property, and temporality of its copyright duration. In the very act of unfolding and reaching distances, sound is intrinsically related to time. As such, the notion of sound captures the protection of ‘intangible property’ both as a subject matter of copyright protection and its duration – it marks the spatial territory only until it dissipates in the background.

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The view of soundscape’s spatial and temporal characteristics encompasses the two principles of orientation that are intrinsic to copyright and its subsistence. Copyright is a property right, which circumvents and encloses a property, by delimiting its ‘spatiality’. Copyright provides such an enclosure only for a particular duration, after

which the boundaries vanish and the work falls or finds itself in the public domain. In being a property right, it seems that copyright is discussed only in its spatial terms subjecting the time duration of protection only in the pragmatics of its functioning. Accordingly, time supports copyright’s intrinsic division to mediate the interests between the private and the public, and to regulate the duration in which copyright works are subject of control, after which they fall into public domain to be freely used and reused. The subject of it being continuously extended has been widely discussed and challenged, especially in context of the digitisation and its appropriateness in the digital age.

Furthermore, the attention on the temporal feature of sound provides yet another characteristic of copyright. While technology challenges the distance of communication through a myriad of possibilities to interact with copyright works, it also challenges copyright’s own understanding of temporality as such. Rose argues that the vision eradicates the sense of time, and as such property as a visual category considers past and future as parts of the same time, as something given and naturalised. Moreover, as vision is ‘thought timeless because it is not dependent upon the dynamic unfolding of events’ and it is only capable to extracts information ‘from a static, literally timeless scene’, it seems that in the present dynamic

\[169\] The temporal characteristic has been integral if not essential feature of copyright’s apparatus integrated within the first copyright Act, that of Statute of Anne, prescribing a copyright term of fourteen years. The Act prescribed additional fourteen years in cases if the author was still alive. For books already in print when the Act was passed, the authors were conferred with a single twenty-one year term of protection. The Statute of Anne 1709, 8 Anne, c. 19.


processes that technology enables, the visually oriented copyright is destabilised. As Hibbitts indicates in context of law:

Largely because we have regarded sight as timeless, we have regarded it as the principal systematizing sense. It is supposed to be the sense most capable of appreciating or identifying the constant relations between different elements that make up the idea of “system” (as opposed to, say, the more dynamic idea of “process”).

The present changes are both conceptually and literally moving away from copyright’s static comprehension and imply dynamic processes, which are introducing constant change and thus imply a time bound quality. Copyright, it can be argued, is embedded in the Newtonian understanding of reversibility and extended time, and resonates with the manner in which it conceives of itself and regulates. Being a visual category, it is not surprising that it manifests itself as a timeless category. Copyright, and law in general, is situated in the comprehension of itself as being constantly reversible and ever-present, hence the presence of all-inclusive justifications, and its holistic visualisation. As Serres rightly observes, for law to maintain its image as a guarantor of stability, it must stop time. Technology, in that sense, is indeed the parasite/noise that confronts the aim of rationalism for order and harmonious modes of functioning, where time is reversible, where the chances of interruption are viewed as outside of the system, or as something to fight against. Moreover, if vision requires constancy, any changes in the environment

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175 Serres explains the notion of systems through the history of sciences, and identifies a logico-mathematical system (independent of time variable), Newton’s mechanical view (where time is reversible) in which truths and the objectivity were given as timeless, or more precisely as in every-time, recognising reversibility as a condition in which things and laws emerge. With the industrialisation and the introduction of the thermodynamics in the nineteenth century, the impossibility of perpetual motion and the increase of entropy (irreversible time) were recognised. In addition, in contrast to these systems considered as closed, the complex theory introduced an understanding of the system as being open and in constant disequilibrium. See Serres, M. ‘The Origin of Language: Biology, Information Theory & Thermodynamics’ in Serres, M. (1982) Harari, J.V. and Bell, D.F. (eds.) Hermes: Literature, Science, Philosophy Baltimore and London: The John Hopkins University Press; pp.71-4.
makes it difficult for it to extract information,\textsuperscript{178} the technosite, noise disturbs and provokes copyright to hear and comprehend the processes, the dynamics in its surrounding, and its relation to technology. Noise is ‘always produced locally, in a single direction and soon it fills the space, the whole space.’\textsuperscript{179}

Immersing into the resonance of copyright enables us to avoid the rigidity of law and as such understand the dynamics of creation, that is, production, reproduction and distribution. The dissonance between copyright (the mute instrument) and technology (the loud instrument), together with all the discourses, as well as processes and regulations that create the noise, could be conceptualised through the soundscape that they both constitute and are constituted of. As sound negates stability, the resonance, noises, hums and even silences provide a new methodological conception for grasping the dynamics of the field that copyright suppose to regulate. Moreover, having intangibility as an essential matter to regulate, promote and protect, especially in the digital conditions, the ‘materiality’ of sound proves promising to explore and understand intangibility, but also the effect that such a digital technology excites. What copyright protects cannot be seen, but only heard. If that is the case, then there is a necessity to immerse into the soundscape, to study the dissonance between copyright and technology by extrapolating a sonic methodology. Surely, this process is not an easy task, as it requires ‘opening the senses’, exposing, or more precisely, stimulating the sensory faculty of copyright law.

6.7. Senses of Law

The senses have become subject of great interest across different academic disciplines. The ‘sensual turn’ in the scholarship has primarily taken place in challenging the dominance of the vision that is associated with the ocularcentric

scientific rationalism, initiated with the Enlightenment project, thus challenging the hierarchical position of vision or the sense of sight as conditioning the Western comprehension and arrangement of the world.\textsuperscript{180} In such recognition of the senses, even though society’s sensory order seems natural, Classen has argued and demonstrated that they are culturally contingent and structured, not pre-given static faculties but entities that change over time.\textsuperscript{181} Senses are not only physiological responses and experiences of the subject, but they are ‘the medium though which all the values and practices of society are enacted.’\textsuperscript{182} Recalling Marx’s understanding of the senses as socio-historical formations, Benjamin took this argument further by suggesting that the ‘mode of human sense perception changes with humanity’s entire mode of existence. The manner in which human sense perception is organized, the medium in which it is accomplished, is determined not only by nature but by historical circumstances as well.’\textsuperscript{183} In that sense, Ong’s articulation of the sensorium is apposite, being ‘the entire sensory apparatus as an operational complex,’ partly determined by culture but also making culture.\textsuperscript{184}

Taking into consideration that we are socially and culturally immersed in the organisation of the sensorium, law is certainly an instrument that both emerges from and organises that very sensorium. As Bently notes, law has integrated within its own operation a division between the mind and the body and their two corresponding faculties of reason and sensation. In this arrangement and acceptance of the Cartesian dualism, law has seldom ‘questioned its own senses, i.e. its own sources of

\textsuperscript{181} Moreover, she has demonstrated that the Western visualism and orality/aurality have different and contrasting qualities to that of other cultures. Classen, C. (1993) Worlds of Sense: Exploring the Senses in History and Across Culture London and New York: Routledge; p.7.
knowledge’ as it ‘associates itself purely with reason.’\(^\text{185}\) However, law’s interrelation with the senses has surfaced recently within the legal discourse, investigating the way in which the ‘ordering of the senses informs law’ but also the way and the extent to which such ordering is ‘constructed by, reflected in or reinforced by law.’\(^\text{186}\) The senses are not static qualities but ‘they are shifting and elusive qualities, constantly reshuffled by socio-cultural and technological changes, always dislocating law’s normativity towards new potentialities.’\(^\text{187}\) As such senses not only become a subject matter by which law manipulates, channels and controls the sensible, but they also construct law’s meaning, its sense and direction.\(^\text{188}\) Law’s sensory disposition characterises the manner in which it perceives and comprehends the milieu in which it resides and constructs simultaneously.\(^\text{189}\)

The intellectual property rights in general, and copyright in particular, are category of rights that most closely deal with our sensory stimulations and perceptions. The copyright regime promotes and protects those creations of works ‘that are not only produced, but also perceived, by senses that stimulate human intellection.’\(^\text{190}\) For copyright ascertains, regulates, operates and provide us with various modes of expression, or in other words, it regulates ‘things’ that stimulate and provoke our senses. Emerging from the regulation of printed books, that is text, copyright

\(^{188}\) Ibid.
adopted the vision as its inherent quality in recognising and providing protection of works. The works that were essentially a visual media, those works that appealed the human sense of sight were slowly incorporated within the body of copyright, from maps and engravings to the photographs and moving images.¹⁹¹ Having the text as its primary object of protection, copyright is indeed literal and ‘starts with the written word as its model, then tries to fit everything else into the literary mode.’¹⁹² The dominance of the vision is particularly evident also in the works appealing to the human sense of hearing, thus musical compositions were primarily considered as writings to be read,¹⁹³ thus analogised with that of literary property.¹⁹⁴ Although the right in sound recording encapsulates a protection of the sound, the musical works are still recognised and protected in their expression as written scores or notation.¹⁹⁵

In parallel with the technological and social developments, copyright’s scope has expanded to protect and promote works that were appealing to the human senses of sight and hearing.¹⁹⁶ Being a property right, it is not surprising that copyright’s development has continuously extended on, incorporated and regulated different sensory properties – thus from text being its main subject matter of protection, it has

¹⁹³ The visual requirement for copyright’s recognition of a musical work is evident in the famous case of player pianos, as a new technology at that time for recording (mechanically reproducing) and distributing compositions. Deciding whether the manufacturers of player pianos infringe the rights of publishers, Justice Day stated that the perforated mechanical copies are not copies of sheet music as they ‘are not made to be addressed to the eye as sheet music, but they form part of a machine...to play an instrument from a sheet of music which appears to the eye is one thing; to play an instrument with a perforated sheet which itself forms part of the mechanism which produces the music is quite another thing...These musical tones are not a copy which appeals to the eye. In no sense can musical sounds which reach us through the sense of hearing be said to be copies, as that term is generally understood, and as we believe it was intended to be understood in the statutes under consideration.’ White-Smith Music Publishing Company v. Apollo Company [1908] 209 U.S. 1, at 12, 14 and 17; ‘Music appeals to the ear, but a sheet of music appeals to the eye . . .’ Boosey v. Whight, [1900] 1 Ch. 122, at 124.
¹⁹⁵ Barron, also, discusses the manner in which copyright law treats popular music, which remarkably draws from the treatment how musicology determines musical works. She notes that copyright law’s notation-centric understanding of music as a score privileges musical works that seem ‘deaf.’ Barron, A. (2006) ‘Introduction: Harmony or Dissonance? Copyright Concepts and Musical Practice’ Social & Legal Studies, Vol.15 (1), 25-51; p.30 and p.32.
integrated protection of images, moving images, sounds/music, performances, dance, colours, smell.\textsuperscript{197} In that sense, intellectual property law constantly extends and ‘allows the proliferation of the sensorial’ as it promotes and ‘protects sensorial intangibility from becoming unattached from its original creative source.’\textsuperscript{198}

Although an investigation of how copyright law encapsulates and treats different sensory stimulations into its own normativity are constructive, here I have enquired into copyright’s sensory disposition. Accordingly, I have avoided questions of how copyright law controls or regulates our senses, and have investigated the manner in which law senses, with an aim to discern what senses copyright law requires in order to apprehend technology.\textsuperscript{199} Therefore, this investigation does not rest on a simple discussion of the origins and conditions upon which copyright emerged and informed its visual disposition but in articulating aurality, as opposed to visibility, as an additional approach to the study of copyright. In view of the noisy surrounding underpinned by technology, I suggest that there is a necessity to stimulate copyright law’s sense of hearing, the aural capacity of law to hear.

The interest in sound, acoustics and aural in the legal scholarship is partly related to its simultaneously increasing dependence on the aural technologies, but also to the attempts to move away from the writing based comprehension or execution of law.\textsuperscript{200} Hibbitts has identified shifts form visual to aural metaphors within the legal

\textsuperscript{197} Cronin argues that copyright should protect only the works that stimulate our senses of vision and hearing, as they are intrinsically related and stimulate the ‘rational human intellection’, for which protection copyright was originally conceived. For more on the issue and cases of perfumes and their eligibility for copyright protection (as original works or imprints of personal creation), see Ibid; In contrast, Buccafusco, proposes that particular ideas and emotions that are communicated through other senses should also be subject of copyright protection. Buccafusco, C. (2012) ‘Making Sense of Intellectual Property Law’ Cornell Law Review, Vol.97, 501-548; Also, see, Seville, C. (2007) ‘Copyright in Perfumes: Smelling a Rat’ The Cambridge Law Journal, Vol.66, Issue 1, 49-52.


\textsuperscript{200} See, for instance, Parker’s ‘acoustic jurisprudence’, which investigates the sound and the acoustics, the audio technologies as conditions of administering justice. Parker, J. (2011) ‘The Soundscape of Justice’ Griffith Law Review, Vol.20 (4), 962-993; For a discussion on oral evidence, see Haldar, P.
discourse, which are not only founded in the changing cultural, sociological and technological conditions, but are located within the shift of the values of objectivity and abstraction, into understanding law as ‘concrete, relational, subjective, dynamic and process oriented.’\textsuperscript{201} Acknowledging the presence of metaphors not only reflects an emergence but also presents new conditions and values that must be recognised. Therefore, Hibbitts suggests that any shift in metaphor in context of the law, ‘may indicate or promote a new doctrine or even a new jurisprudential theory that cannot easily be brought into the fold of existing figures of speech.’\textsuperscript{202} While such an observation is certainly promising, in this study the use of sound is not only a matter of replacing tropes but provides a possibility to grasp the spatial and the temporal, the processes of communication and the ongoing changes which copyright essentially deals with.\textsuperscript{203} Importantly, this proposed shift towards aurality, both in the discourse and apprehension of copyright’s subject matter and its relation to technology, does not mean that such a shift must eradicate the visuality, or emphasise one sense over the other.\textsuperscript{204} It is intended to discern sound as a ‘corrective addition’\textsuperscript{205} to vision oriented copyright apparatus (discourse) in dealing with technology.

\textsuperscript{202} Ibid, p.237.
Conclusion

A research project in social sciences predominantly begins with a clear outline of a methodology that establishes and directs the path of the investigation. With a final aim to provide an answer to a given research question, it determines methods and techniques through which such an analysis and studying can be achieved. This research project has apparently reversed this approach, as the methodology and methods employed have been constituted and, therefore, continuously altered by the very course of investigating the relation between copyright and technology. For the reason that the object of investigation is interwoven with the method, the conclusion is inseparable from a reflection on its method.¹

At the outset of the thesis, I have indicated that this investigation locates itself in medias res. In addition to acknowledging law as an instrument that binds two opposites together, such an approach – I have hypothesised – has a particular reason for investigating copyright and its relation to technology. In view of the fact that copyright is a property category, divisions are inherent in its mode of functioning, which spill naturally and constitute the discourses that surround it. As such, the dichotomous nature of copyright is reflected in the approaches to technology and understandings of the effects it has on it. For that reason, I have contended that in order to understand the relation between copyright (law) and technology there is a necessity to detach from the ongoing divisions, (op)positions, and instead immerse in the middle, in the process, in the very action where they meet, where communication takes place. It is there in the middle where different aspects, notions, practices and structures were identified, and that is where noise revealed itself.² The dissonance of copyright and technology is noise.

² Philippopoulos-Mihalopoulos eloquently explains the middle: ‘To begin in the middle is to denounce the possibility of a centre. The middle does not allow for a perspective that calls itself an origin and
While the dissonance between copyright (law) and technology has been intrinsic from the very emergence of copyright, the current digitisation has induced by far the most raucous disturbance of its foundation. This is evident not only in the processes of production, reproduction and distribution of copyright works, but also in challenging the principles, mechanisms and rationales upon which copyright operates. Given the changed technological scenery, which provides great potentials for innovation and creation both in cultural and economic terms, copyright laws are scrutinised for whether their ‘traditional principles’ are appropriate for this digital age. More specifically, if copyright is to achieve the purposes it claims to have, it requires adapting and re-modifying in order to respond to the technological conditions, and this has become the most pressing issue at stake. It is this issue that was of the main concern for this thesis.

The thesis provides a new theoretical understanding of the relation between copyright and technology, by introducing novel concepts and methodological tools to address their dissonance. It situates in the middle and from there explicates a different relationship between those two. However, it must be noted that the middle is not understood here neither as an instance between oppositions, a middle position between ‘good’ or ‘bad’, nor as an articulation of a middle way by which a balance is achievable or should be maintained. With an aim to avoid the conflicting nature that copyright paradigm entails, the thesis avoids any mode of negating. Descriptive in its nature, it argues that there is a necessity to find new approaches, new narratives through which to investigate the intricate relation between copyright

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4 Lessig, for instance, argues that the debate about copyright is between far extremes – those for maximal copyright and those who reject it, thus the ‘mistake here is the error of the excluded third’. He continues, ‘[w]hat’s needed is a way to say something in the middle—neither “all rights reserved” nor “no rights reserved” but “some rights reserved.”’ Lessig, L. (2004) Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity New York: The Penguin Press; pp.276-77.
and technology and articulate their intertwinenment. Taking the position of the middle, and the interdisciplinary approach that both the subject matter of investigation and methodology have led to, this thesis provides a narrative that does not fall into the established discourse. More precisely, attaining a quality of its object of study – parasite (noise) – it is situated right beside the discourse. Even though this might seem as an impulse of an academic radicalism, it is more of an attempt to rearticulate and outline (map out) the positions already existing within the copyright discourse, enclosed by its paradigm. That said, since copyright paradigm sustains a model, but also informs the discourses within (around) it, this study is thus not external to it.

Copyright encircles its theory, practice and discourse. Constituted on the rhetorical paradigm of property it creates (conflicting) divisions that are difficult to overcome. For that reason there is a growing tendency in the copyright scholarship, as Borghi has appropriately put it, to ‘overcome the binary language of the dominating paradigm and draw attention to a third and higher instance which is at stake in copyright.’ Accordingly, instead of focusing on the scope of copyright, it is its subject matter that is questioned and emphasised. This thesis joins that scholarship which attempts to dissociate itself from this embedded division persisting in the copyright system, but in its case, the focus is neither on the subject, nor on the object through the principle of property. Rather, it chooses the relation, interaction or interdependence – in one word, communication. With that difference, the thesis includes and recognises technology as an intrinsic element to this communication,

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and from there investigates its relation to copyright. It argues that the far end positions, underpinned by the property paradigm, undervalue the middle that actualises and enables copyright subsistence. Accordingly, by drawing on information theory and especially the work of Michel Serres, it identifies noise, both in technical and conceptual terms, as a third instance through which different aspects of copyright and its relation with technology are demonstrated. In that manner, while the investigation is addressing the noise, it is noise itself that is interrupting the discourse. The pre-given positions of the discourse must be challenged, not for the sake of breaking them down, or disvaluing their significance, but in order to prevent them from falling in a mere redundant repetition. The impasse of the copyright dichotomy sets the whole debate in a sort of a deadlock.

The approach adopted here, drawing on Serres, avoids the method of analysing, which dissects, and adopts synthesis in order to integrate, providing a possibility to bridge and as such connect different realms. Accordingly, the investigation comprises distinct positions of endeavour, not by remaining on the end-points but on the lines that connect them. In that context, the object of investigation and the method meet in the middle. Engaging with the work of Serres, such intertwinement of the object and the method are inevitable. However, the method should not be understood as a pre-given model applicable for general use, but is constructed in parallel with the model, with the subject matter of investigation. For that reason, Serres’ method does not seek but finds passages that would connect and interrelate different realms and disciplines. Following such an unsteady trajectory, Serres’s thought continuously attempts to bridge the ‘separation of knowledge into regions, 

8 Lyotard, for instance, argued that in contrast to the legitimisation of scientific knowledge based on performativity, paralogy is a new form of legitimisation of knowledge. Paralogy in its etymology means beside or beyond reason, a method that goes beyond the constructed traditional scientific frameworks. As such Lyotard claims that the postmodern ‘produces not the known, but the unknown’. Lyotard, J.-F. (1984) The Postmodern Condition: A Report on Knowledge Manchester: Manchester University Press; pp.60-1.


formations, or disciplines’, where the idea of communication with all its operations such as interference, distribution and translation is what is required for us to look at.\textsuperscript{11} In that manner, as Harari and Bell indicate, for Serres the ‘medium is the “method.”’\textsuperscript{12} Such an approach has been reflected in this study since the object of observation – noise – and its potency to change roles, forms and qualities have led the investigation into seemingly disparate realms, providing different aspect to studying the relation between copyright and technology.\textsuperscript{13}

The investigation has begun by identifying intangibility as the main dissonance between copyright and technology. The elusiveness of the intangibility remains an ongoing issue for copyright law. It has been particularly disturbed by technology, which disembodied the form, or more precisely, the copyright work into a digital medium. Moreover, because of the instantaneous possibilities of reproduction and distribution enabled by the digital technology, technology shares very similar characterises to that of intangibility. I have thus proposed the notion of ‘double intangibility’ as the most pressing issue that copyright is confronted with. The intangibilities that are protected, that of the creativity and knowledge, have in their roots the relations upon which they are built and upon which people communicate. I have argued that despite of the fact that digitisation affects copyright it also provides a possibility for copyright to comprehend the intangible, not as a thing but as a process, communication, action, performance. Therefore, in order to grasp these dynamics, the argument took methodological recourse to communication and information theory, which offered illustration of the place where copyright (law) and technology meet, and, most importantly, it recognised noise as an integral part of any communication. Following this recognition, the notion of parasite and noise, as developed by Serres, provided a possibility to demonstrate, but also to discern the presence of the third in different instances. In that way, the notion of noise or


\textsuperscript{12} Ibid [Emphasis in original].

\textsuperscript{13} As Serres writes, noise ‘settles in subjects as well as in objects, in hearing as well as in space, in the observers as well as in the observed, it moves through the means and the tools of observation, whether material or logical, hardware or software, constructed channels or languages.’ Serres, M. (2009 [1982]) Genesis Ann Arbor: The University of Michigan Press; p.13.
parasite, taking different positioning and meanings – means, medium and milieu – provides primarily new articulation of technology, but is also applicable to viewing copyright – its history, as well as different legislative, juridical and policy strategies – as a legal apparatus.

This allows not only to question the normative structure of copyright law, but also to assert a different relation between copyright and technology. Particularly by refocusing on the lines, the channels where they coalesce, it demonstrates where their clash of normativity could be heard, and their relationship rearticulated within the copyright discourse. The notion of noise enables penetration in the spaces-in-between, situated on the relation where copyright and technology meet. Technology is the means, medium, and milieu by which copyright emerges and in which it resides. Such understanding, however, should not be regarded as technologically determined, since copyright law, and those who use it as an instrument to regulate communication in their interest also hold that very same position. The introduction of noise provided an explication and joined the scholarship that insists in recognising technology as an internal entity, in contrast to the common approaches that view it as an external quality. Technology is not a separated, externalised form independent of copyright, but as the notion of noise indicates, is an integral part of the system. This could be discerned through the features of technology as such, actualised by its mode and potential for multiplicity, instantaneous dissemination, and emergence of new forms of (re)production and distribution, hence attaining a character of ‘noise’ that directly disturbs and interferes the principles on which copyright system is based upon. While such interference has negative impact on copyright law, it also catalyses its constant shift. If copyright is set to achieve the purpose of protecting and promoting communication in its most general sense, it must provide a mechanism that would acknowledge the significance of the processes occurring in the channels it is given the authority to regulate and order. Copyright as it stands fails to communicate a possibility, a prospect for comprising novel applications in the relevant technological context. Therefore, it is argued in this thesis that copyright must free itself from its static arrangement, as any kind of change is hardly achievable by the rigid divisions it entails. However, as this thesis argues, the changes
never come from the outside but always from within and that is what technology does.

One of the main arguments of this thesis is that digital technology, even though it has greatly affected copyright and challenged its principles, similar to noise, infuses transformation in the system by its interference. The transformation is that it makes copyright to face itself, to question its principles and provide a possibility for not only to apprehend the intangible, but in essence to encapsulate and hear the elusiveness and murmur of the intangible. The object of observation and the method, as such, thus attained ‘acoustic’ quality that enables ‘sensory’ investigation of the ever-growing dissonance between copyright and technology.

In this regard, this study contributes to the growing interest in sound across disciplines, and most importantly introduces sound in a copyright discourse, both as a concept and a method to apprehend the subject matter of copyright protection and promotion – intangibility. More specifically, it proposes a sonic method to understand intangibility in the digital context. One appropriate observation here is that ‘the call for a sonic method is not simply promoting the case for an alternative – one mediated via exposure to the forces of negation to produce a concrete new implacable method – but rather is intended to set method free in digital sense of multiple possibilities for connection across space and time.’\(^{14}\) Therefore, it is this thesis’s endeavour to trace and propose a new theoretical resonance beside the one of the networks in addressing the current digitisation practices in the copyright realm of production and dissemination, or more precisely, communication. By introducing the soundscape of copyright as a conceptualisation, the thesis provides a unique standpoint from where it becomes possible to articulate anew not only the dissonance of copyright and technology, but also the intangible. Moreover, this study is not without its practical potential. In midst of the growing expansion of rigid copyright laws and polices conducted in the interest of the content industries, it has been debated it recent years that any changes and adaptations that inform policies must be based on an objective evidence, according to which any amendments to the

laws should be made. In response to this need, in recent years sonification has become a growing field of interest across different disciplines. As a technique for data display and analysis it uses sound to convey information, and has rarely been applied as such in the legal field.\textsuperscript{15} Having recognised the soundscape of copyright and its noisy technological surrounding, such model of data analysis invites this research project for further application of its theoretical character.

As this thesis demonstrates, a sonic examination provides a possibility to untangle and ‘make sense’ of the complexities in presence of the contemporary technological environments, where the mere looking may not be sufficient.\textsuperscript{16} In grasping the intangibility of the objects and the processes behind their creations, the sonic methodology offers integration of thesis’s object and its seemingly disparate points of reasoning.\textsuperscript{17} Once again, Serres interrupts, as he cares to say – ‘I think I pick up noises from them [objects] more than I see them, touch them, or conceive them. I hear without clear frontiers, without divining an isolated source, hearing is better at integrating than analyzing, the ear knows how to lose track.’\textsuperscript{18}

Copyright is a visually dependent category for the reasons related to its origin in the historical period of Enlightenment, the technological mode of communication – printing press – that gave rise to its edifice, and also for it being a property right. In such a manner both the object of observation and the method led the study to perceive that the dissonance between copyright and technology can be identified in the fact of law’s dependence on the visual. Thus technology, with its intangible sonic features, is yet inviting copyright to set free from its constraints, or better, acknowledge other sensory qualities. Technology is opening the senses of law.

Finally, it seems that copyright and the discourse that it encircles is self-reflexive, not capable to avoid its own image, arrangements upon which it has instilled. What I


\textsuperscript{17} To ‘think sonically’ enables thinking across disciplines and not only the immediate sonic world but also the conceptualisation of sonic world.’ Sterne, J. ‘Sonic Imaginations’ in Sterne, J. (ed.) (2012) \textit{The Sound Studies Reader} London and New York: Routledge; p.2.

argue is that the digital technology, although introduces great challenges, provides a possibility for copyright to question and re-consider its own principles. Moreover, as it was stressed in the beginning, it is not only that copyright’s history needs more narratives, but also its very presence demands investigations that draw on different disciplines and fields of knowledge.


Birrell, A. (1898) *Seven Lectures on the Law and History of Copyright in Books*.


Joint Academic Statement ‘The Proposed Directive for a Copyright Term Extension – A Backward-looking Package’ Centre for Intellectual Property Policy & Management (CIPPM, Bournemouth University), the Centre for Intellectual Property & Information Law (CIPIL, Cambridge University), the Institute the Institute for Information Law (IViR, University of Amsterdam), and the Max Planck Competition and Tax Law (Munich), 27 October, 2008.


Kant, I. (1785) *On the Unlawfulness of Reprinting* Berlinische Monatsschrift 5 (1785) 403-417 in Bently, L. and Kretschmer, M. (eds.) Primary Sources on Copyright (1450-1900), www.copyrighthistory.org;


Patterson, L.R. (1968) Copyright in Historical Perspective Nashville: Vanderbilt University Press.


Rand, B. (ed.) (1927) *The Correspondence of John Locke and Edward Clarke*.


Slater, J. (1884) The Law Relating to Copyright and Trade Marks Treated more Particularly with Reference to Infringement London: Stevens and Sons.


(The Statute of Anne) An Act for the Encouragement of Learning by Vesting the Copies of Printed Books in the Authors or Purchasers of such Copies, during the Times therein mentioned 1709, 8 Anne, c. 19. Statute of Anne, London (1710), Primary Sources on Copyright (1450-1900), Bently, L. and Kretschmer, M. (eds.) www.copyrighthistory.org (Accessed 02 May 2014)

Anti-Counterfeiting Trade Agreement (ACTA)

Copyright Designs and Patents Act 1988, c. 48

The Copyright and Related Rights Regulations 2003 (S.I. 3003/2498)


Protect IP Act (PIPA)

Stop Online Piracy Act, proposed bill H.R. 3261, October 26, 2011, also known as ‘E-PARASITE Act, an acronym of the title ‘Enforcing and Protecting American Rights Against Sites Intent on Theft and Exploitation Act of 2011’.

U.S Constitution

Universal Copyright Convention 1952

WIPO Copyright Treaty 1996

TABLE OF CASES


Boosey v. Whight, [1900] 1 Ch. 122, at 124.

Cariou v Prince, 714 F.3d 694 (2d Cir. 2013).
ITV, Channel 4 and Channel 5 v TVCatchup Limited Case C-607/11, 7 March, 2013

Nils Svensson, Sten Sjögren, Madelaine Sahlman, Pia Gadd v Retriever Sverige AB Case C-466/12, 18 October 2012


Donaldson v Beckett (1774) 4 Burr. 2408.

Dramatico Entertainment Ltd and others v British Sky Broadcasting Ltd and others [2012] EWHC 268 (Ch).
EMI Records Ltd v British Sky Broadcasting Ltd [2013] EWHC 379 (Ch).

Erle J Jefferys v Boosey 1854 10 ER 702.

Ex parte Island Records Ltd [1978] 3 All ER 824
Football Association Premier League Ltd v British Sky Broadcasting Ltd [2013] EWHC 2058 (Ch).


Roger v Koons 960 F.2d 301.

Twentieth Century Fox Film Corp v BT [2011] EWHC 1981.


White-Smith Music Publishing Company v. Apollo Company [1908] 209 U.S. 1,


INTERNET SOURCES


Debray, R. ‘What is Mediology’ *Le Monde Diplomatique*, August 1999, Translation by Martin Irvine [online]  

Gibs, S. (2014) ‘Pirate Bay ban lifted in Netherlands as blocking torrent sites ruled ‘ineffective’’ *The Guardian* [online]  


Homer ‘The Odyssey’ Book IV *The Internet Classics Archive* [online]  

(Accessed 21 May 2014).

Sherman, B (2010) ‘Hybrid Property: Defining the Limits of Copyright Law’, Abstract for the International Conference “Copyright Culture, Copyright History” at Tel Aviv University, The Buchmann Faculty of Law, January 4-6, 2010. [online]  

The European Observatory of Counterfeiting and Piracy that ‘serves as a platform to join forces, to exchange experiences and information and to share best practices on enforcement.’ [online]  