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Human element: The human representation in the praxis of CJEU's copyright cases

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Tiivistelmä:

Tekijänoikeuden saralla on viime vuosina käyty mittavaa keskustelua siitä, voiko esimerkiksi tekoälysovellus olla tekijä ja millä tavalla koneellista kontribuutiota tulisi tekijänoikeudessa ylipäänsä arvioida. Keskustelu ei ole rajoittunut vain tekijänoikeuteen, vaan erityisesti nk. posthumanistisen teoriasuuntauksen piirissä on jo jonkin aikaa pohdittu ihmisen suhdetta ei-inhimilliseen. Eräs molempia keskusteluja tietyssä mielessä yhdistävä kysymys on ollut se, ovatko ihmisten ja koneiden rajat muuttuneet epäselvemmiksi tai ovatko ne aina olleet sitä?

Tässä tutkielmassa ei tarkastellakaan kysymystä siitä, kuka tai mikä voi olla tekijä vaan posthumanistisen teorian hengessä sitä, mikä on ihmisen merkitys tekijänoikeuden järjestelmässä ja erityisesti suhteessa teknologiaan. Kysymystä lähestytään Euroopan Unionin tuomioistuimen omaperäisyyden arviointia koskevan oikeuskäytännön kautta. Tutkielman menetelmällinen kehys koostuu Antti Hautamäen tulkinnan mukaisesta näkökulmarelativismista sekä Samuli Hurrin väitöskirjassaan esittelemästä oikeuskäytännön teoriasta. Tutkielmassa esitetään oikeustapausaineistolle posthumanistisen teorian innoittamana kolme kysymystä eri perspektiiveistä, ja näihin kysymyksiin etsitään vastauksia oikeustapausten lähiluvun keinoin.

Tutkielmasta ilmenee, ettei kysymys ihmisyyden ja teknologian välisistä rajoista ole tekijänoikeudenkaan saralla itsestään selvä. Rajojen muodostuminen ihmisyyden ja teknologian välillä ei ollut yhtä suoraviivaista, kuin tutkielman alussa esitetty hypoteesi rajojen liukumisesta oletti. Näiden rajanvetojen merkitys vaikutti olevan ennen kaikkea jonkin vieraan ulossulkeminen, joka tapauksissa näyttäytyi paitsi teknologiana, myös ihmiseen itseensä kuuluvana vierautena, alitajuisena aistimellisuutena. Nämä toiseuden elementit ulossulkemalla jäljelle jäi tekijänoikeusteorian perinteinen hahmo, luova ihmisyksilö. Tutkielman viimeiseksi kysymykseksi ja lopputulemaksi jääkin, ovatko nämä vieraana ulossuljetut elementit todella vieraita vai sittenkin olennainen osa meitä? Ja jos se mitä pidämme ihmisyydelle vieraana kuuluu siihen sittenkin, miten meidän pitäisi oma ihmisyytemme ymmärtää?

Avainsanat: immateriaalioikeudet, tekijänoikeus, omaperäisyys, oikeusteoria, oikeusfilosofia, posthumanismi

ABSTRACT

University of Lapland, Faculty of Law

The title of the pro gradu thesis: Human element - The human representation in the praxis of CJEU's copyright cases

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Summary:

In recent years, there has been extensive discussion in the field of copyright as to whether, for example, an artificial intelligence application can be an author and how machine contribution should be evaluated in the first place. The debate has not been limited to copyright, but especially in the context of the so-called posthumanist theory the relationship between human and non-human has been discussed for some time. One question that unites these two discussions has been whether the boundaries between humans and machines have become somehow fluid or whether they have always been that way.

Thesis does not address the question of who or what may be the author, but rather, drawing from posthumanist theory, what is the meaning of humanity in the copyright system and in relation to technology. The issue is approached through the case law of the Court of Justice of the European Union and its assessment of originality criterion in copyright cases. The methodological framework of the thesis consists of Antti Hautamäki's interpretation of perspective relativism and the theory of legal practice introduced by Samuli Hurri in his dissertation. Three questions inspired by posthumanist theory are posed to the case material, each from different perspective. Answers to these questions are looked via close reading of the cases.

Thesis shows that the question of the boundaries between humanity and technology is not self-evident even in the field of copyright. Firstly, the formation of boundaries between humanity and technology was not as straightforward as the hypothesis presented at the beginning implied. The significance of these boundaries seemed to be above all the exclusion of the 'otherness', which appeared not only as technology, but also as a human being's own, subconscious sensuality. By excluding these alien elements, the traditional figure of copyright theory, the creative individual, emerged. As the final question and conclusion of the thesis remains, are these alienated, excluded elements really alien or rather an essential part of us? And if what we consider to be foreign to humanity is after all included in it, how should we understand our own humanity?

Keywords: intellectual property rights, copyright, originality, legal theory, legal philosophy, posthumanism

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Abbreviations

AG	Advocate General
Berne Convention	Berne Convention for the Protection of Literary and Artistic Works
CJEU	the Court of Justice of the European Union
Conditional Access Directive	Directive 98/84/EC of the European Parliament and of the Council of 20 November 1998 on the legal protection of services based on, or consisting of, conditional access. Official Journal L 320, 28.11.1998, p. 54–57.
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Satellite Broadcasting Directive	Council Directive 93/83/EEC of 27 September 1993 on the coordination of certain rules concerning copyright and rights related to copyright applicable to satellite broadcasting and cable retransmission. OJ L 248, 6.10.1993, p. 15–21
Software Directive	Directive 2009/24/EC of the European Parliament and of the Council of 23 April 2009 on the legal protection of computer programs. OJ L 111, 5.5.2009, p. 16–22.
Term Directive	Council Directive 93/98/EEC of 29 October 1993 harmonizing the term of protection of copyright and certain related rights. OJ L 290, 24.11.1993, p. 9–13.
TRIPS Agreement	The Agreement on Trade-Related Aspects of Intellectual Property Rights, signed in Marrakesh, Morocco on 15 April 1994.
WIPO	World Intellectual Property Organization

WIPO Copyright Treaty	WIPO Copyright Treaty (adopted in Geneva on December 20, 1996).

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1 Introduction

1.1 Background

Copyright law has always been centred on the concept of human as only humans have been considered to possess features such as creativity. But what does it mean to be human in copyright today? Has this question become more difficult to answer? Certain events that have recently taken place might suggest so. In 2016 a project called ”Next Rembrandt” programmed an artificial intelligence (AI) application to create novel paintings in the style of the Dutch master, which were then 3D printed.[1] The outcome has been evaluated to have an uncanny resemblance to the actual work of Rembrandt. Previously in 2015 Japanese engineers taught a robot the art of a master swordsman. At the end of experiment, the robot was considered to perform better than the samurai.[2] Recently Helsingin Sanomat told about David Cope, who wanted to teach computer to compose music. First he decided to find out, *what does individual composing style consist of*.[3]

These events among many others have sparked discussion in the field of copyright law: how should the works carried out by non-humans be assessed? So far, courts have not needed to take much stand on this complex matter. One potential example emerged, though, in the United States when People for the Ethical Treatment of Animals (PETA) sued photographer Christian Slater, contesting his copyright to a photo taken by a monkey, the photo being the monkey’s selfie.[4] The case was finally brought to a conclusion in the spring 2018 when the Ninth Circuit Court of Appeals upheld the lower

[1] ‘Computer paints 'new Rembrandt' after old works analysis’. BBC 6.5.2016. Available at: https://www.bbc.com/news/technology-35977315. Last visited 27.8.2019.
[2] ‘Sword-wielding robot beats Japanese master samurai’. UPI 7.6.2015. Available at: https://www.upi.com/Science_News/2015/06/07/Sword-wielding-robot-beats-Japanese-master-samurai/2991433692865/. Last visited: 27.8.2019.
[3] ’Sibelius vai Homo Deus?’ Helsingin Sanomat 28.4.2019. Available at: https://www.hs.fi/kulttuuri/art-2000006082466.html. Last visited 27.8.2019.
[4] ’The monkey selfie lawsuit lives’. The Verge Apr 13 2018. Available at: https://www.theverge.com/2018/4/13/17235486/monkey-selfie-lawsuit-ninth-circuit-motion-to-dismiss-denied. Last visited: 27.8.2019.

court's decision, ruling that only humans can pursue copyright infringement claims.[5] In Europe, the outcome would have most likely been the same.[6]

When computer is 'better' than human in calculation, it usually does not cause an uproar or a media sensation. But if computers appear to be *more creative* than humans, it is a strange situation. Only humans can be creative. When we talk about these creative machines, we often end up talking about what is creativity and what is human, what creativity consists of.

Currently there remains a strong consensus on the level of European legislation as well as international treaties that natural person is the one who authors the work.[7] On the international level, especially relevant to European copyright law is the Berne Convention, at least in terms of authorship discussion. Although the term 'author' is often mentioned and used in the text of the Convention, it is not explicitly defined.[8] However, the author is strongly implied to be a natural human person. This interpretation is derived from for example the Berne provisions stating that the term of protection is to be counted from the death of author.[9] On the level of EU law, several provisions point to the same direction. For example, Article 2(1) of the Computer Program Directive[10] states that 'the author of a computer program shall be the natural person or group of natural persons who has created the program or […] the legal person designated as the right holder by that

[5]'Monkey does not own selfie copyright, appeals court rules' CNN 24.4.2018. Available at: https://edition.cnn.com/2018/04/24/us/monkey-selfie-peta-appeal/index.html. Last visited 27.8.2019.
[6] Andreas Guadamuz, 'Can the monkey selfie case teach us anything about copyright law?' WIPO Magazine 1/2018. Available at: https://www.wipo.int/wipo_magazine/en/2018/01/article_0007.html. Last visited 27.8.2019.
[7] The issue has been taken upon by many accounts during past couple of years, see e.g. Sam Ricketson, The need for human authorship - Australian developments: Telstra Corp Ltd v Phone Directories Co Pty Ltd. E.I.P.R. 34(1) 2012, p.54-60.; Paul Lambert, Computer-generated works and copyright: selfies, traps, robots, AI and machine learning. E.I.P.R. 39(1) 2017, p.12-20.; Julia Dickenson – Alex Morgan –Birgit Clark, Creative machines: ownership of copyright in content created by artificial intelligence applications. E.I.P.R. 39(8) 2017, p.457-460.; Jane C. Ginsburg, People not machines: authorship and what it means in the Berne Convention. IIC 49(2) 2018, p.131–135.
[8] Rosa Ballardini – Kan He – Teemu Roos, AI-Generated Content: Authorship and Inventorship in the Age of Artificial Intelligence in Taina Pihlajarinne - Juha Vesala - Olli Honkkila (ed.) Online Distribution of Content in the EU. Edward Elgar 2019, p.121.
[9] Article 7(1) Berne Convention for the Protection of Literary and Artistic Works (as amended on September 28, 1979).
[10] Directive 2009/24/EC of the European Parliament and of the Council of 23 April 2009 on the legal protection of computer programs. OJ L 111, 5.5.2009, p. 16–22.

legislation'. The clause seems to say that the author must be a human being.[11] Several other directives imply the same premise.[12]

The issue has been widely discussed in academic literature as well. As Dickenson, Morgan and Clark argue in EU law context: 'the EU test for subsistence of copyright as set out in the CJEU's Infopaq decision focuses on whether the work is the author's own intellectual creation. This test thus clearly envisages an author being a human person, and is generally interpreted as such.'[13] Also Jane C Ginsburg recently discussed the issue, recalling the article by Sam Ricketson already from 1992 titled 'People or Machines: The Berne Convention and the Changing Concept of Authorship'.[14] While Professor Ricketson acknowledged that the Berne Convention did not define authorship, it was likely because such specification in terms of whether author is *human* would have been unnecessary. According to Professor Ricketson, the idea of human authorship laid in the background of most of the articles of the Convention.[15]

If we accept that copyright system indeed is heavily based on humanity, we might want to ask, where does this assumption come from? While keeping in mind that inventions such as Artificial Intelligence only gained momentum fairly recently (and thus consideration of such issues was not necessary before) foundation for human based copyright can be found from the so-called justification theories and the central position *author* has in them. As Ginsburg notes, copyright system is built on two pillars: on the natural rights of the author and personal creativity, and on the other hand, on incentives to create for the general benefit of society.[16] These two branches form the justification theory of copyright. The former, known as the personality theory, is usually associated with Kant and Hegel, while the latter, the utilitarian theory, is linked to Locke.[17] In terms

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[11] Ballardini – He – Roos (2019), p.122.
[12] Ballardini – He – Roos (2019), p.123: Such as Article 4(1) Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases. OJ L 77, 27.3.1996, p. 20–28 (Database Directive), Article 2(2) of Directive 2006/115/EC of the European Parliament and of the Council of 12 December 2006 on rental right and lending right and on certain rights related to copyright in the field of intellectual property.
OJ L 376, 27.12.2006, p. 28–35 (Rental and Lending Rights Directive) and Article 1(5) of the Council Directive 93/83/EEC of 27 September 1993 on the coordination of certain rules concerning copyright and rights related to copyright applicable to satellite broadcasting and cable retransmission (the Satellite Broadcasting Directive).
[13] Dickenson - Morgan - Clark (2017), p.459.
[14] Ginsburg (2018).
[15] Ginsburg (2018), p.131.
[16] Ginsburg (2018), p.132.
[17] Ballardini – He – Roos (2019), p.119.

of intellectual property rights, Hegel and Locke have been viewed especially as theorists of property and providing justifications for ownership. According to Locke, the intellectual labour of the author mixed with other resources justifies the author's right over the fruit of his/her labours.[18] The personality theory by Hegel claims that a work belongs to or reflects the personality of creator.[19]

However, this study does not take up the matter of authorship. Instead of asking who the author is, the question is what kind of humans emerge from the copyright system. In terms of philosophy, this question is not a new one. Some could argue that indeed a significant part of Western philosophy is centred on question of 'who are we as humans?' In this study, the aim is to approach this question via philosophical framework inspired by posthumanist theories. This could be considered as certain kind of contraposition for Hegelian justification theory. While personality theory emphasizes the features associated with authorship such as creativity and originality as something fundamentally human, posthumanist theories have questioned the centric position of human altogether.

Despite its philosopical underpinnings, this work is not about the theory of some great writers (such as Hegel). Instead, it is about the 'theory of practice', that is, theory as the *problématique* that stands behind and generates the material reality of practice, that is, in the context of this work, in the reality of legal cases. Having said that, by reading the cases through posthumanist theories it might be possible to illuminate aspects of them that have been observed less. This way the study hopes to address the question of what are the features of human that are constructed in the praxis of the Court of Justice of the European Union (CJEU). This examination is carried out via case analysis of the CJEU's landmark cases regarding originality. The specific sense in which this work may be called deconstruction of the human figure in copyright is that it does not presume, or aim to establish, analytical clarity or normative coherence in the copyright system, but on the contrary reveals that the human of copyright is neither clear nor inevitable. Hopefully, this re-reading of these famous cases could contribute to future discussions in the field of copyright and technology and perhaps shed light to the place of humanity in the current system.

[18] John Locke - Richard H. Cox, Second Treatise of Government. Wiley 2014, p.18.
[19] Ballardini – He - Roos (2019), p.119.

1.2 Research questions

Human individual has been considered a central character in European copyright law. As discussed above, this is visible both in theoretical justification of copyright and in international treaties and legislation. However, it seemed that 'human' was not really discussed in the copyright cases of the CJEU. This observation formed into a problem that eventually became the research question of this study: what is human in copyright? However, before that the work underwent several preliminary phases.

The study draws inspiration from posthumanist theories, where one of the central questions has been what distinguishes humans from other forms of life. What kind of line exists between human and a robot for example, if any? This work was started with a working hypothesis: could it be that borders of human have become somehow more difficult to locate and are they being pushed forward so that elements of non-human are being included? In other words, have humans become closer to machines? To start answering this question I collected case material from the CJEU. On this first round, I looked for cases that related to interpretation of InfoSoc Directive[20] and which were delivered during years 2009-2019. The selection of this criteria was based on the hypothesis that the case C-5/08 *Infopaq International A/S* v *Danske Dagblades Forening,*[21] which brought along many new elements to the Court's interpretation of copyright law, might have served as a landmark for copyright posthumanism as well. Therefore, I limited the search to cases delivered after *Infopaq*. The search criteria produced a material of 35 cases that I started to go through.

However, I did not find what I was looking for. Instead, the material appeared to imply other issues. First, if we were to assume that the question of my working hypothesis would imply an onward movement, i.e. humans moving closer to machines, this movement rather seemed backwards. Whenever cases discussed humans, it did not seem that humans were becoming more of something. Rather, it seemed humans were becoming less. Whenever machines and humans appeared together, the dynamic appeared much more complex than I initially thought. So I changed the hypothesis: what kind of relationship there actually was between humans and machines?

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[20] 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. OJ L 167, 22.6.2001, p. 10–19.
[21] C-5/08 Infopaq International A/S v Danske Dagblades Forening, ECLI:EU:C:2009:465.

Eventually I chose 11 cases for further analysis that seemed to respond to these questions, addressing issues of technology and humanity. Closer look at these cases shed again more light to both praxis of the CJEU in formulation of human subject and the research question of this study. Although at first look it had seemed that 'human' was almost entirely missing from the case material, now it started to look like human was being discussed after all. This discussion was especially visible in cases that related to criterion of 'originality'. Originality is the so-called threshold for copyright protection to be granted.[22] Work must be original in a sense that it is its author's own intellectual creation, as affirmed in the *Infopaq* decision. It was precisely originality that seemed to be closely related to the idea that only humans can be authors, the most significant subjects of copyright system.[23] Originality seemed to be synonymic for creativity. If we assume that only humans can be creative, then the concept of originality appeared to provide a valuable insight into this fundamental feature of humanity.

Therefore, I eventually chose six originality cases for final examination, which are also landmark cases of the CJEU in terms of originality. This affected the final choice. As my hypothesis had again specified and I had started to think that it was precisely originality that might lead me to the fundamental question of 'what is human', I thought it reasonable to address the originality discourse in whole. Indeed, it has been considered that in this line of cases the CJEU *de facto* created European level criterion for originality.[24] Therefore, cases *Infopaq, FAPL*[25]*, Painer*[26]*, Football Dataco*[27] and *SAS*[28] not only present the CJEU's interpretation of originality but also the process through which it came into existence. By choosing these cases, I could observe not only the concept of humanity in the praxis the CJEU but also its development. One case is newer: *Levola Hengelo*[29], which serves as a sort of an epilogue to the originality saga. In fact, *Levola Hengelo* is the most recent copyright case from the CJEU by the time of writing

[22] Eleonora Rosati, Originality in EU Copyright – Full Harmonization through Case Law. Edward Elgar 2013, p.59.
[23] Ballardini – He – Roos (2019), p.119.
[24] Rosati (2013), p.99-100.
[25] C-403/08 Football Association Premier League Ltd and Others v QC Leisure and Others and C-429/08 Karen Murphy v Media Protection Services Ltd, ECLI:EU:C:2011:631..
[26] C-145/10 Eva-Maria Painer v Standard VerlagsGmbH and Others, ECLI:EU:C:2011:798..
[27] C-604/10 Football Dataco Ltd and Others v Yahoo! UK Ltd and Others, ECLI:EU:C:2012:115.
[28] C-406/10 SAS Institute Inc. v World Programming Ltd, ECLI:EU:C:2012:259.
[29] C-310/17 Levola Hengelo BV v Smilde Foods BV, ECLI:EU:C:2018:618..

this thesis. It was delivered 17 years after the last landmark case of originality. Yet, it still seems to express the same observations made from the previous originality cases.

The essential question of this study is how in practice the CJEU formulates representation of human in copyright cases. In other words, what is humanity in copyright system? This question is approached via three sub-questions, inspired by posthumanist theory and elements that emerged from case material. Firstly, the study asks, if the fundamental human feature is creativity, then what it means to act that way? And if creativity is central for humanity, could automation be regarded its counterpart? Furthermore, who is described as creative and who is described mechanic? Secondly, often discussed in posthumanist theory is the idea that borders between humans and machines are becoming increasingly fluid or that they merge. Therefore, the second part asks, whether these categories of human and machine are fluid or stable? Do categories of human and machine intertwine or are they separate? If such separation between them exists, how is that division mediated? Thirdly, the other central human feature alongside creativity is discussed: rationality. If counterpart for creativity is found from automation and counterpart for humanity in general is found from technology, this section contrasts against each other rationality and that which escapes rationalization: sensuous.

In this manner, three questions are asked from the research material. What is creativity in comparison to automation, what is the relationship between humanity and technology and what is the meaning of rationality when compared to sensuous. These three questions are operated via conceptual pairs of creativity/automation, humanity/technology and rationality/sensuous. These also represent three divisions. First division is explored within humanity. The second division takes place between realms of humanity and technology. Finally, the third division takes place within the subject. Via these questions and divisions, hopefully an image of 'human' starts to appear.

Finally a few words about limitations of the study. Two issues that would have been especially relevant are the economic factors of the cases as well as the issue of balancing interests[30], both strongly appearing in cases. Regarding the former, human creativity appeared in many cases to be negotiated in economic context. As for the latter, creativity, technology and economic aspects sometimes appeared as contradictory to each other. It

[30] See e.g. Jonas Christoffersen, Human rights and balancing: The principle of proportionality in Christopher Geiger (ed.), Research Handbook of Human Rights and Intellectual Property. Edward Elgar 2015, p.19-39.

seemed that the role law has in all this is exactly that: balancing those dynamics. Besides these, it is clear that legal system is very much centred on human subjects. Therefore, it would be possible to inspect the places of human in many other contexts as well. Some questions for further research might be for example the distinction between copyright and industrial rights systems. What kind of representation is produced for instance of inventor in patent law? Similarly, the question of human dignity would be most relevant in this sense. But as the pages are limited here, I have excluded these and many more issues.

1.3 Method

The method of this study is based on the theory of perspective relativism on the other hand and theory of legal practice on the other. The former draws inspiration especially from Antti Hautamäki's introduction to the topic.[31] The latter is based on dissertation of Samuli Hurri.[32] Perspective relativism refers to philosophical view where knowledge assertions are proportioned with perspectives.[33] Perspective is a way to examine reality from a certain viewpoint. According to relativist account, it is impossible to discuss anything without taking upon a certain perspective. However, this does not mean that all perspectives are equally good. Perspective relativism is also a critical account on perspectives.[34] Typical for perspective relativism is limitation of the perspective to observe only certain features. For example, as Hautamäki notes with a reference to Karl Popper, relativism can be compared to searchlight: what it reveals depends on its position, intensity of the light, its colour and so on.[35] Therefore, perspective relativism illuminates its target in a certain way. This leads to two outcomes. At first, perspective is always partial and constructed by the observer. This account emphasizes the active role of the one who views the target, instead of understanding looking as a passive practice.[36] Secondly, this enables the viewing of the target from different perspectives.[37]

In this study, such searchlight comprises of three questions posed to the case material. A few words on this framework. The intention of this study is not to interpret any individual philosopher nor is it to provide practical interpretations on copyright law.

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[31] Antti Hautamäki, Näkökulmarelativismi: Tiedon suhteellisuuden ongelma. SoPhi 2018.
[32] Samuli Hurri, Birth of the European Individual: Outline of a Theory of Legal Practice. Helsingin yliopisto 2011.
[33] Hautamäki (2018), p.5.
[34] Ibid.
[35] Hautamäki (2018), p.61.
[36] Hautamäki (2018), p.64.
[37] Hautamäki (2018), p.61.

Posthumanist framework is deployed as an instrument to illuminate certain features from the research material, i.e. the cases. As instruments of research tend to be, also these ones are constructed by the researcher. The choices of instruments affect the results produced. A critical notion might call this type of methodology cherry-picking. However, I consider this to be in correspondence with the account of perspective relativism. It is understood in that theory as well as in this study that no perspective can provide a wholesome picture of a phenomenon. This study does not aim to provide 'the truth' of copyright and most times not even answers to questions. The laboratory here is for generating more questions.

The second element of the method is theory of legal practice carried out by way of close reading of cases. While doctrinal approach is nearly impossible to avoid altogether, dogmatic reading[38] is not the aim. Instead, the method of study is based on close reading of individual cases of the CJEU. This type of method has been introduced by Samuli Hurri in his dissertation. This theory of legal practice Hurri explains to consist of two aspects. First, theory of legal practice is a theory of the ways in which the law is practiced. Secondly, this method enables making visible the theories that practitioners of law carry in their activities.[39] Instead of doctrinal issues, the attention is directed towards the more or less implicit ways the CJEU itself understands its actions. Yet, this does not mean that apparent self-explanations of the CJEU would be taken as given. The purpose of these methodical choices is to reveal something from the argumentation of the CJEU that is not communicated straightforward and finally perhaps to find a way beyond its self-awareness and control. The interest of this study is what Hurri states with a reference to Foucault to be 'what the cases do not explain but what nonetheless is present in the cases.'[40]

This combination forms the methodological basis for this study. The originality cases of the CJEU are examined through three questions inspired by framework of posthumanism. These alternative positions of searchlight are then hoped to reveal something from cases that is not made explicit in them or what is at least less discussed. In this regard, it could be asked, why are we concerned about samurai robots and monkey selfies in the first place? If we leave aside practical difficulties, is there something more

[38] Ari Hirvonen, Mitkä metodit? Yleisen oikeustieteen julkaisuja 2011, p.21-22: Legal dogmatics refers to clarification of generally valid legal principles and concepts.
[39] Hurri (2011), p.4.
[40] Hurri (2011), p.16.

to this issue? Why do we feel the need to centralize copyright system so strongly on humanity? Could it be that we fear the 'otherness' of machines and animals? Or could it rather be that in them we see ourselves and the otherness within us?

Finally, although the aim here is not to provide a thorough reading of any specific theorist, I will shortly address the theoretical framework deployed here although this issue will be further discussed in the next section. One feature that might strike the reader as odd is the way this work refers to several theorists without thoroughly introducing their thought. That is a choice made knowingly because of the instrumental nature of the theories used. While a study of this kind can certainly be conducted in a way where the thought of a philosopher is applied or contrasted to research material, this is not what has been done here. The three questions that serve as the perspectives in this study have been constructed in order to illuminate the area of the research question: what is it to be a human in copyright law. As discussed previously, what features eventually became visible were something quite other than what I initially anticipated. My theoretical framework aids to problematize and affords visibility to these features, but if any answers were to be provided, those would be provided in and by the material itself. Another reason is that my theoretical framework is not a unified philosophical account but indeed includes several different branches and outtakes. Therefore, the theory of this study should not be understood as interpretation of any individual philosopher, but consisting of concepts discussed within different philosophical frameworks.

1.4 Theory

A few words on posthumanist thought. Posthumanism is not a concise theory but rather an umbrella concept that includes several branches of thinking. Posthumanism can be divided into, for example, eco-critical accounts, human-animal studies and technological posthumanism. What binds these all together is the attempt to rethink the location of human in relation to non-human, whether it be technology, environment or animals. In this regard, posthumanism has been described as reactive thinking:[41] as response to the changing world we live in and where new technologies emerge, gene manipulation develops and we encounter more and more complex environmental issues. This phenomenon, among others, has sparked questions regarding our human-centric way to

[41] Karoliina Lummaa – Leea Rojola, Lukijalle in Karoliina Lummaa – Leea Rojola (ed.), Posthumanismi. Eetos 2014, p.8.

view the world. As Leea Rojola and Karoliina Lummaa note, posthumanist thinking searches for alternative, non-essentialist and non-hierarchical ways to understand features of different things as well as their relationships.[42]

Indeed, often in the focus of posthumanist accounts is deconstruction of dualistic divisions typical for Western thought. Examples of these pairs are nature/culture, female/male and inside/outside. Posthumanist accounts claim that these realms cannot be clearly separated[43] but they rather merge together or at least subjects and objects can move from one to other fluidly. Famous accounts of these kind of 'hybridizations' have been introduced by Donna Haraway[44] and Bruno Latour.[45] Both Haraway and Latour speak of the so-called naturecultures, which means the intertwining of things that have been previously thought as either natural or cultural.[46] Similar thinking is deployed by Karen Barad, who uses as an example ultrasonography examination of the fetus. In this examination, technology provides a seemingly objective view to fetus and yet we interpret the picture appearing before us on cultural basis, attaching meanings to the image.[47] Ultrasonography is therefore not a singular practice but 'a cluster of material configurations and discursive practices'.[48] Materiality, semantics and technology intertwine.

In addition to confusing the boundaries between, for example, nature/culture and human/machine, another central project of posthumanist thought is critique of the privileged position of human.[49] This critique is directed especially towards the type of humanism deriving from Enlightenment and the notion of human which is demarcated by rationality and autonomy. The implications of this kind of conceptualization of humanity have assumedly led to the exploitation of animals as well as overlooking the impact of structures that influence human choice. Understood this way, posthumanism has been greatly affected by the systems theory of Niklas Luhmann. Luhmann's theory radically

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[42] Ibid.
[43] Ibid.
[44] Donna Haraway, A Cyborg manifesto in Simians, Cyborgs, and Women: The Reinvention of Nature. Routledge 1990, p.6-10.
[45] Bruno Latour, Emme ole koskaan olleet moderneja. Vastapaino 2006.
[46] See e.g. Latour (2006), p.167-171; Donna Haraway, Modest−Witness@Second−Millennium.FemaleMan−Meets−OncoMouse: Feminism and Technoscience. Routledge 1997, p.60; Donna Haraway, When Species Meet. University of Minnesota Press 2008.
[47] Karen Barad, Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning. Duke University Press 2007, p.201.
[48] Barad (2007), p.204.
[49] See e.g. Haraway (2008), p.106.

questioned the autonomy and rationality of human subject, understanding it rather as subordinate to the functioning of systems of communication.[50] Similarly, structuralist and poststructuralist accounts have been important to posthumanist theory: human subject started to appear as a product of different kinds of structures and language.[51] For example, Michel Foucault has stated that 'human' is only a contemporary and passing concept.[52]

In that vein, it should be noted that posthumanist theory includes, in principle, two categories of accounts. Firstly, there are thinkers who identify as posthumanists and express their commitment to the posthumanist project. Such accounts include for example Donna Haraway, Cary Wolfe[53] and Katharine N.Hayles,[54] who have written some of the most important introductory pieces to posthumanist thought. However, not all theorists who have been regarded as posthumanist claim to be posthumanists themselves. For example, Foucault or Luhmann probably did not consider themselves as posthumanists, but their thinking nevertheless shares some of the central themes of what has later on come to be called posthumanism.

This study focuses on the technologically oriented posthumanism. These accounts often link to the confusion of borders between corporeal existence and, for example, cybernetic mechanisms and robot technology.[55] This type of understanding of posthumanism has been introduced by, e.g., N.Katherine Hayles' in 'How we became posthuman?' Central questions in this regard have been, whether humanity undergoes definite changes in the technological context, and how does human eventually differ from machine.[56] According to Franscesca Ferrando: 'Posthumanism addresses the question 'who am I?' in conjunction with other related questions, such as: 'what am I?' and 'where and when are we?'[57] These questions materialize in a number of situations. Firstly, posthumanist accounts have dealt with issues such as cyborgisation and technological

[50] Karoliina Lummaa – Leea Rojola, Johdanto in Karoliina Lummaa – Leea Rojola (ed.), Posthumanismi. Eetos 2014, p.25.
[51] Lummaa – Rojola (2014) Johdanto, p.15.; Posthumanism shares some traits with, for example, anithumanism, transhumanism and new materialism. According to Francesca Ferrando, the common nominator is the conception of human as non-fixed and mutable condition. See Francesca Ferrando, Posthumanism, Transhumanism, Antihumanism, Metahumanism, and New Materialisms: Differences and Relations. Existenz 8/2014, p.26-32, 26-27.
[52] Michel Foucault, Order of things: An archaeology of the human sciences. Routledge 1966, p.422.
[53] Cary Wolfe, What is posthumanism? University of Minnesota Press 2009.
[54] N. Katherine Hayles, How we became posthuman: Virtual bodies in cybernetics, literature and informatics. The University of Chicago Press 1999.
[55] Lummaa – Rojola (2014) Johdanto, p.17.
[56] Lummaa – Rojola (2014), Johdanto, p.19.
[57] Fransesca Ferrando, Posthumanism. Kilden Journal of Gender Research 2/2014, p. 168-172, 168.

enhancements of human. This way, borders between humans and machines become questionable in a quite concrete way. Secondly, as mentioned, posthumanist accounts can include more abstract approaches. Such is for example the idea that the human subject is not autonomous or rational but rather a product of different external practices.

This study approaches the issue of humans and machines from the point of view where 'human' and 'machine' are understood primarily as categories of thinking, rather than concrete objects and subjects. While actual humans and machines appear in the cases, the main interest here is in the way the CJEU conceptualizes these realms. What kind of images of humanity and technology are created in the reasoning of the court and how do these attach to practice? What are humanity and technology like, and what happens if these are detached from their designated fields? Can these categories move in a way that humans may be understood as machine-like and technology as human-like? Or would they perhaps merge together? In order to approach these questions, the study deploys oppositional pairs of creativity/automation, human/technology and rationality/sensuous. Via these distinctions, I hope to open a view to rethinking central position of human in copyright system. Now let us begin.

2 Humans and machines

2.1 Introduction

Adolf Eichmann was a Nazi criminal who was responsible for transfers to concentration camps in Nazi Germany.[58] Hannah Arendt described his behaviour almost mechanical, without intention or specific malevolence for that matter. According to Arendt: 'There was no sign in him of firm ideological conviction or of specific evil motives, and the only notable characteristic one could detect in his past behaviour as well as in his behaviour during the trial and throughout the pre-trial police examination was something entirely negative: it was not stupidity but thoughtlessness.'[59] According to Oxford dictionary Lexico, 'mechanical' is defined as 'an action done without thought or spontaneity; automatic.'[60] When it comes to copyright, the perception of an author has its background in the 18-century humanist thought: the concept of 'human' accompanying it is essentially

[58] Tuija Parvikko, Prology in Hannah Arendt, Eichmann Jerusalemissa: raportti pahuuden arkipäiväisyydestä. Docendo 2016, p.5.
[59] Hannah Arendt, Life of the mind. Harcourt Brace Jovanovich 1978, p.4.
[60] Lexico. Oxford University Press 2019. Available at: https://en.oxforddictionaries.com/definition/mechanical. Last visited 3.9.2019.

about individual freedom and natural self. The so-called 'romantic author' is a genius.[61] You cannot be a genius if you cannot think. Is thinking then something fundamentally human, something without which we lose our humanity? If we consider creativity as something that belongs to humanity and automated/mechanic something that belongs to machines, can that difference be found precisely from the mind? Let us take a further look at this issue.

Mind has certainly had an important role in justification theories for copyright. These theories are traditionally divided into two: utilitarian theories and personality theories.[62] Utilitarian theories are sometimes linked to Locke while personality theories are associated with Hegel's work.[63] Personality theory derived from Hegel's thought is illuminating more generally in terms of human-centric – and thought-centric – approach in copyright law. Personality theory sees copyright as something emanating from the author himself.[64] As Peter Drahos interprets Hegel, work reflects the author's personality[65] and only humans can have personality. As work is seen to originate from the author, it must bear elements from the author's personality in order to get copyright protection.[66] Martha Woodmansee explains this approach by noting that the 18-century thought began to emphasise inspiration instead of craftsmanship while the source of inspiration was internalized.[67] The inspiration was not drawn from the outside but from the person himself. To this day, similar understanding of author's personality as embedded in the work has an effect on the judicial evaluation.[68] In copyright theory, features such as intention, free will and creativity are usually associated exclusively with

[61] Martha Woodmansee, The Genius and the Copyright: Economic and Legal Conditions of the Emergence of the 'Author'. E'ighteenth-Century Studies 17(4) 1984, p.245-448, p.247.; Erlend Lavik, Romantic authorship in copyright law and use of aesthetics in Mirelle van Eechoud (ed.), Work of authorship. Amsterdam University Press 2014, p.46.
[62] Anette Kur – Thomas Dreier, European intellectual property law: Text, cases and materials. Edward Elgar 2013, p.241-242.
[63] Ballardini – He – Roos (2019), p.119. Some accounts have also systematised these differently, linking Locke, Kant and Hegel together under personality theory. This way the counterpart is utilitarian economic theory, see e.g. Caterina Sganga, Propertizing European Copyright: History, Challenges and Opportunities. Edward Elgar 2018, p.18-19.
[64] See eg. Woodmansee (1984), p.427.
[65] Peter Drahos, A Philosophy of Intellectual Property. Ashgate 1996, p.75-76.
[66] Andreas Rahmatian, Originality in UK copyright law: the old "skill and labour" doctrine under pressure. IIC 44(1) 2013 p.4-34, 5-6.
[67] Woodmansee (1984), p.427.
[68] Rahmatian (2013), p.6: Especially in the so-called *d'roit auteur* (author's rights) countries.

humanity.[69] Ability to create and therefore have personality become interconnected with the individual's inner world. Maybe we could think that according to this approach creativity indeed originates from the mind.

Is 'mind' truly a primary feature of humanity then? Primary feature of everything? N. Katharine Hayles presented an example of this kind of thinking in her research of the so-called Macy-conferences in 1946-1953.[70] Hayles concluded that the essential legacy of early cybernetics was exactly the setting of 'information over materiality'.[71] The researchers who participated in the conference thought that the behaviour of living creatures could be conceptualized in a similar way as computers, that is, as information processes. In the Macy-conferences, researchers presented mechanical animals that transformed these kinds of computational processes into concrete action that could be observed.[72] One of the mechanical animals was a robot rat that navigated autonomously in a maze.[73] This could be considered as a good example of something acting mechanically, or automatically: that is, acting to serve a pre-defined purpose without option to influence the process. In a way, the rat is utterly rational. If it cannot go left, it goes right. This type of action is at the same time instrumental and self-purposeful. Rat moves to clear the maze, but does not need incentive or vision of a bigger picture: the only reason for movement is the task, which is programmed to its system. The rat cannot suddenly give up or decide that it is happier staying still. It does not have any other option, but to move in the maze. An idea behind the mechanical animals was that if they could be observed and understood as 'pure information' maybe the same applied to humans as well.[74] Maybe functioning of a human mind could be understood similarly as functioning of a computer.

In the light of this example, prioritizing 'mind' did not lead to creativity as understood in Hegelian personality theory. Instead, attempts to thoroughly understand the functioning of the mind appeared to lead to the opposite: to automation. Therefore, the

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[69] See eg. Anette Àlen-Savikko – Rosa Ballardini –Taina Pihlajarinne, Tekoälyn tuotokset ja omaperäisyysvaatimus – kohti koneorientoitunutta tekijänoikeutta? Lakimies 7-8/2018, p.975–995, 989-990.
[70] N. Katherine Hayles, How we became posthuman. The University of Chicago Press 1999.
[71] Hayles (1999), p.50-51.
[72] Karoliina Lummaa – Leea Rojola, Johdanto: Mitä posthumanismi on in Karoliina Lummaa – Leea Rojola (ed.), Posthumanismi. Eetos 2014, p.15.
[73] Hayles (1999), p. 63-64.
[74] Hayles (1999), p. 56-57.

answer to the question ‘can we find difference between humanity and machine from the thinking’ is not that clear. Persons can act without thinking. Mechanical animals can be reduced to only thinking. What belongs to human and what belongs to machine appears to be not self-evident. Here, the difference between human and machine will be chased via three questions posed to the case material. First section addresses the question, what actions does the CJEU consider creative and what are considered mechanical. Does creativity belong to humanity and what is it like to be creative? Second section then asks if there is indeed a difference between humans and machines, how is that difference mediated? If we return to image of a mechanical rat, how are technological processes transformed into something that can be observed? Third section then returns to the human mind. Can mind be understood completely rationalized, like the rat in the maze? Or is there after all something that stubbornly escapes rationalization? Third question is therefore, what kind of difference can be found inside the mind.

2.2 Automation

2.2.1 Introduction

What is it to be creative? In this section, the notion is examined in contrast with the concept of automated/mechanic. Previously the connection between mind, thinking and creativity was addressed: the absence of these appeared to imply that actions were mechanical rather than creative. However, further examination revealed that this question was not self-explanatory. As was seen with the example of mechanical rat, the reduction of organisms to ‘only thinking’ did not lead to more creativity, at least in terms of personality theory, but to automation. In this study, automation is understood as acting without possibility or intent to have effect on the process. This way, the outcome is pre-defined. Could creativity then be the opposite? Having sufficiently options to choose from, devoid of external restrictions?

Certain idea has definitely been included in the famous line of cases from the CJEU[75]: *Infopaq, Football Association Premiere League and Murphy*, *Painer* and *Football Dataco*. These cases will be now discussed. From these cases, one concept emerges strongly: that is freedom to choose. ‘Free choices’ have been famously addressed

[75] Àlen-Savikko –Ballardini –Pihlajarinne (2018), p.982.; Christian Handig, The "sweat of the brow" is not enough! - more than a blueprint of the European copyright term "work" E.I.P.R. 35(6) 2013 p.334-340, 337.

in case *Painer*[76], however, it might turn out that in terms of freedom these cases have more in common that what meets the eye. In terms of this inquiry, 'free choices' appears to serve as a certain kind of distinction-making apparatus between concepts of automation and creativity. Now this interplay between automation, creativity and free choices is taken into examination.

This section asks, what kind of actions did the CJEU consider creative and what actions were deemed mechanical. If there indeed was a division between these, who were those that acted creatively and who did not? In other words, did creativity belong to humanity in the spirit of Hegelian personality theory? Finally, what part did free choices eventually play in this assumed distinction-making. If we return to our minds the examples presented previously (samurai robot, AI author, mechanical rat), perhaps we can find something that helps us to draw borders between these machines that act like humans and ourselves. Or maybe we will find that it is human who sometimes acts like a machine.

2.2.2 Infopaq: automated processes

Let us begin this analysis by first addressing the question of what constitutes an automated process. This issue is illuminated in the case C-5/08 *Infopaq International A/S* v *Danske Dagblades Forening*, delivered in 2009. Defendant in the proceedings was Infopaq, a business that operated media analysis and monitoring service. Infopaq produced short summaries of news articles published in Danish daily newspapers.[77] To do that, Infopaq used an 'automated process' ('data capture process'). The process included scanning of the articles and converting them into digital files. The files were then electronically processed.[78] As a final part the extract of 11 words was printed. The other pleader, Danske Dagblades Forening (DDF) was a professional association of Danish daily newspaper publishers, who assisted its members with copyright issues. In 2005, DDF had become aware of Infopaq's practices and concluded that Infopaq would need consent from relevant rightsholders to continue its business.[79] Infopaq disagreed and brought the case to court, where it was dismissed. Infopaq then brought an appeal before the referring court

[76] C-145/10 Painer, para 89-90.
[77] C-5/08 Infopaq, para 13.
[78] C-5/08 Infopaq, para 2.
[79] C-5/08 Infopaq, para 14-15.

in the case, the Danish Højesteret.[80] The Højesteret referred 13 questions to the CJEU of which two will be analyzed here. Firstly, the referring court asked the CJEU whether the storing and printing of extracts consisting of 11 words constituted 'reproduction in part' within the meaning of Article 2(a) InfoSoc Directive.[81] Secondly, the referring court asked whether Infopaq's data capture process satisfied the conditions of exemption in Article 5(1) InfoSoc Directive and could be therefore carried out without rightsholder's consent.[82]

Let us start with the question regarding Article 2(a), although the observations will be mainly focused to the application of Article 5(1). The referring court asked, whether an extract of 11 words from newspaper article constituted a 'reproduction in part'. First, what does "reproduction" mean and how did the Court interpret this concept? Right of reproduction is one of the basic elements of economic rights in the copyright system.[83] Article 2(a) states that:

> Member States shall provide for the exclusive right to authorise or prohibit direct or indirect, temporary or permanent reproduction by any means and in any form, in whole or in part:
>
> (a) for authors, of their works;

There we have two important pieces: *exclusive right for reproduction* which is afforded to *authors in respect to their works*. An exclusive right to reproduce, copy, a work could be regarded the core of copyright law.[84] It means that only a person who created the original work can produce copies of the original. 'Reproduction' could be simplified as giving a physical form to the work, i.e. materializing it.[85] However, also reproductions in digital form belong to scope of protection.[86] Right of reproduction was harmonized in InfoSoc Directive.[87] Yet, 'reproduction' is not defined, beyond being expressed to apply

[80] C-5/08 Infopaq, para 22.
[81] C-5/08 Infopaq, para 30.
[82] C-5/08 Infopaq, para 53.
[83] Christopher Geiger – Franciska Schönherr, The Information Society Directive in Irina Stamatoudi – Paul Torremans (ed.), EU Copyright Law: A Commentary. Edward Elgar 2014, p.401.
[84] Isabella Alexander, The concept of reproduction and the "temporary and transient" exception. C.L.J. 68(3) 2009, p. 520-523, 520.; Tuomas Mylly, Tekijänoikeuden ideologiat ja myytit. Lakimies 2/2004 p. 228–254, 229: According to Mylly copyright means possibility to limit the copying of the work, making the work available for public and exploitation of derivative works.
[85] Pirkko-Liisa Haarmann, Immateriaalioikeus. Alma Talent 2014, p.72.
[86] Geiger – Schönherr (2014), p.401.
[87] Kur – Dreier (2013), p.270.

to 'direct or indirect, temporary or permanent reproduction by any means and in any form, in whole or in part.'[88]

In *Infopaq,* the CJEU provided a teleological interpretation of the InfoSoc Directive to provide more specific definition for the concept of 'reproduction'.[89] First, the Court held that as Article 2(a) states that authors have the exclusive right to authorise or prohibit reproduction of their works, the scope of the reproduction right must be intended to cover 'work'.

Then how about the interpretation of the concept of 'work'? In its decision, the CJEU stated that Article 2(a) is applied to subject-matter, that is original in the sense that it is its author's own intellectual creation.[90] This was the most famous finding of the CJEU: the definition for 'originality'. Originality is one of the key concepts in copyright law: works that are not original will not receive copyright protection.[91] Furthermore, it plays an important role in infringement proceedings.[92] As was the case in *Infopaq*, if reproductions do not share the originality of the work, making them will not infringe the author's rights. Until *Infopaq*, only computer programs, databases and photographs were protected by copyright under the definition of 'author's own intellectual creation'.[93] In *Infopaq*, the CJEU developed a standard test for the scope of protection by giving the concept of originality an autonomous definition in EU copyright law.[94] In practice, this meant harmonization of the originality criterion in the EU Member States.[95] Regarding application of Article 2(a), the CJEU made two further findings. Firstly, parts of the work are also protected by copyright if they share the originality of the whole.[96] Secondly, an author can express his creativity in an original manner through the 'choice, sequence and

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[88] Alexander (2009), p.520.
[89] C-5/08 Infopaq, para 32: The CJEU held that such concepts must be defined 'having regard to the wording and context of Article 2 of the InfoSoc Directive, where the reference to them is to be found, as well as in the light of both the overall objectives of the Directive and international law.'; Eleonora Rosati, Originality in a work, or a work of originality: the effects of the Infopaq decision. E.I.P.R. 33(12) 2011, p.746-755, 755.
[90] C-5/08 Infopaq, para 37.
[91] Agustin Waisman, Revisiting originality. E.I.P.R. 31(7) 2009 p.370-376, 370.
[92] Ibid.
[93] Rosati (2013), p.98.
[94] C-5/08 Infopaq, para 27; Stephen Vousden, Infopaq and the Europeanisation of copyright law. W.I.P.O.J. 1(2) 2010 p.197-210, 200: It has also been noted that 'autonomous concept doctrine' is somewhat problematic as the EU only has shared competence in the field of IP law, unlike eg. in the field of customs and tariffs where the EU has exclusive competence and where the doctrine stems from.
[95] Rosati (2011), p.750.
[96] C-5/08 Infopaq, para 38.

combination' of words.[97] Therefore, even parts of sentences could convey the originality of a publication.

Whether extract of 11 words would indeed come within the concept of reproduction was left for the national court to decide.[98] Should the answer be yes, questions concerning the exceptions set out at Article 5(1) InfoSoc Directive would become relevant.[99] Article 5(1) lists the conditions based on which the exemption from the application of Article 2 might be granted:

> (1) Temporary acts of reproduction referred to in Article 2, which are transient or incidental [and] an integral and essential part of a technological process and whose sole purpose is to enable:
>
> (a) a transmission in a network between third parties by an intermediary, or
>
> (b) a lawful use
>
> of a work or other subject-matter to be made, and which have no independent economic significance, shall be exempted from the reproduction right provided for in Article 2.

While economic rights, such as right to reproduction, are reserved to authors, not all uses of work lead to infringement. Certain uses covered by 'exception or limitation' are outside the control of the author.[100] The limitations set in Article 5(1) InfoSoc Directive are mandatory, although the list is otherwise 'optional exhaustive'.[101] Infopaq claimed that the acts of reproduction fulfilled the conditions of Article 5(1) relating to transient nature of reproduction, since the reproductions were deleted at the end of the electronic process.[102] In its evaluation that followed the wording of Article 5(1), the Court stated that the act was temporary and transient when it was intended to enable the completion of a technological process of which it forms an integral and essential part.[103] Legal certainty for rightsholders further required that the storage and deletion of the reproductions is not dependent on human intervention.[104] From this, it followed that an act of reproduction could be held 'transient' within the meaning of Article 5(1) firstly if its duration was limited to what was necessary for the proper completion of the technological process.[105] Secondly, that process must be *automated* so that it deletes the

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[97] C-5/08 Infopaq, para 45.
[98] C-5/08 Infopaq, para 51.
[99] Alexander (2009), p.521.
[100] Geiger – Schönherr (2014), p.437.
[101] Geiger – Schönherr (2014), p.440-441: Besides mandatory exception of Article 5(1), Article 5 offers Member States a list of exceptions or limitations that they can choose to implement.
[102] C-5/08 Infopaq, para 60.
[103] C-5/08 Infopaq, para 61.
[104] C-5/08 Infopaq, para 62.
[105] C-5/08 Infopaq, para 64.

reproductions of newspaper articles *automatically* once the 11-word extracts have been produced.[106]

At this point an observation can be made. Often matter with reproductions is exactly that: producing something. In this case, the question was about producing copies to some extent as well, especially regarding storing and printing of the 11 word extracts. However, equally important is the question regarding deletion of the reproductions. While contemporary academic discussion has vastly included topics that relate to machines creating something, now the setting is opposite. In *Infopaq*, machines destroy and they do it automatically, unlike humans. This is the peculiar way in which the question of automation opens before us in *Infopaq*. The word 'automation' is not used in the Directive, but the Court used automation to refer to circumstances that create an exemption from the author's exclusive right for reproduction.

How did the CJEU perceive the concept of 'automated' then? Let us first take a look at the Advocate General's (AG) Opinion, which sheds light on this question. To define whether a process is automated, it was first necessary to define what kind of process was in question. First, the relevant publications were registered manually by Infopaq employees in an electronic registration database. Secondly, the spines were cut off from the newspapers so that they could be scanned. The section to be scanned was selected from the registration database before the publication was put into the scanner. Then the image file produced by scanning was converted into a text file that could be understood by a text processing program. The text file was processed to find a search word defined beforehand. Each time a match for a search word was found in the publication, the section and the page number on which the match appeared was given. This way the reader of the article could find the search word. To make this easier, the five words, which come before and after the search word, were captured. At the end of the process, the text file was deleted and a cover sheet was printed of all the pages where the relevant search word was found.[107]

Now, according to the AG, the technological process in this case covered *the entire process* of the production of extracts from newspaper articles. All of its phases, even those

[106] C-5/08 Infopaq, para 64.
[107] C-5/08 Infopaq International A/S v Danske Dagblades Forening, Opinion of AG Trstenjak, para 15; C-5/08 Infopaq, para 21.

carried out manually, were part of the technological process.[108] Therefore, each of the phases could also be regarded as an integral or essential part of a technological process in the meaning of Article 5(1). This implies that the operation of a machine may include also human performing, such as the scanning, and the cutting of the spine of publication.

According to the AG, the requirement that an act forms an integral and essential part of a technological process was fulfilled, even regarding the phases carried out by humans. But did that mean that all human actions were automatic? This seems to hold true for the actions before printing. However, as the criteria laid down in Article 5(1) are cumulative, the non-compliance with any of the conditions will lead to the act of reproduction not being exempted from the reproduction right provided for in Article 2.[109] Therefore, the AG considered whether the reproduction was of transient nature as well.

In the context of transient nature, the AG considered human contribution differently. Firstly, the AG explains that a number of reproductions can be identified in the process.[110] According to the AG, it was possible that creation and conversion of the image files constituted transient reproductions, as long as they were automatically deleted from the computer memory.[111] Regarding the storing of a text extract of 11 words, the AG considered the evidence insufficient, as the national court had not indicated for how long those words remain stored in the computer's memory.[112] At any event, the reproduction that certainly would not be automatically destroyed was the print of the extract. According to the AG, act of printing constitutes a lasting reproduction. This is not because it would last forever, but because the user alone decides when to destroy it.[113]

The CJEU agreed with the AG, emphasizing the element of human intervention involved in the storage and deletion of the reproduction. The creation and conversion of image files might constitute a transient reproduction as long as they were deleted automatically from the computer memory.[114] Also regarding the storing of 11-word extracts the Court agreed with the AG, stating that evidence was insufficient to evaluate whether the technological process was automated.[115] However, by printing the extract

[108] C-5/08 Infopaq, Opinion of AG Trstenjak, para 69.
[109] C-5/08 Infopaq, para 55.
[110] C-5/08 Infopaq, Opinion of AG Trstenjak, para 65-67.
[111] C-5/08 Infopaq, Opinion of AG Trstenjak, para 70.
[112] C-5/08 Infopaq, Opinion of AG Trstenjak, para 71.
[113] C-5/08 Infopaq, Opinion of AG Trstenjak, para 72.
[114] C-5/08 Infopaq, para 65.
[115] C-5/08 Infopaq, para 66.

Infopaq was 'making a reproduction outside the sphere of computer technology'.[116] According to the CJEU, it was not certain that the person concerned would want to delete the reproduction once its existence would no longer be needed for the completion of a technological process.[117] The CJEU explained that for example reproductions, which enable browsing and caching are created and deleted automatically, and therefore without human intervention.[118] Printing makes a difference, however. Once the reproduction has been affixed onto a medium such as paper, it disappears only when the paper itself is destroyed.[119] This kind of action can only be taken by a human:

> Moreover, since the data capture process is apparently not likely itself to destroy that medium, **the deletion of that reproduction is entirely dependent on the will of the user** of that process. It is not at all certain that he will want to dispose of the reproduction, which means that there is a risk that the reproduction will remain in existence for a longer period, according to the user's needs.[120]

The deletion is dependent on the will of the user, says the Court. This brings us back to the beginning, where role of free choices was discussed. In *Infopaq,* that concept receives quite an interesting content. When humans were not able to intervene, the process could be considered automated, as was possibly the case with the creation and conversion of image files and storing of 11-word extracts. When there was a possibility for intervention, the process ceased to be automated. Intervention on the other hand appears to be connected to the will: if the destroying of the reproductions was dependent on the choices of human, the process could not be considered automated. Does this back up the hypothesis that free will is indeed in at the center of creativity, when contrasted with automation? The implications are not that straightforward.

In terms of personality theory, the justification for the author's exclusive right for reproduction is that the author's personality is supposed to reside in the work. Therefore, also the reproductions of the original carry parts of that personality. Right to reproduction could be said to derive from the production of the original. However, in this case the question was not so much about producing, but to great extent about destroying. For work to be considered original, the personality should be involved. At this point, it is not entirely clear what personality is, but human contribution seems to be linked to free choices. Now, when something needs to be destroyed Article 5(1) InfoSoc Directive

[116] C-5/08 Infopaq, para 67.
[117] C-5/08 Infopaq, para 62.
[118] C-5/08 Infopaq, para 63.
[119] C-5/08 Infopaq, para 68.
[120] C-5/08 Infopaq, para 69. Emphasis added.

includes a mechanism that presupposes automation and therefore absence of human contribution. If humans are able to intervene the process, it ceases to be automated and exemption of Article 5(1) will not apply. Is this ability to choose whether to intervene or not somehow in the core of personality that is also a prerequisite for work to be considered original? In the decision, this kind of outline of personality was both present and absent. Firstly, the acts considered mechanical were not entirely carried out by technology but the CJEU considered it possible for humans to act that way as well. The humans could 'belong' to a machine, i.e. to an automated technological process. This was the case regarding the manual scanning of articles. In these terms, both the AG and the CJEU concluded that also these parts, in fact carried out by humans, were integral and essential part of the technological process, as they were necessary phases in completing it. This way, human actions could be considered automated. However, the destroying of reproductions was not automated as humans were able to exercise their freedom to choose whether to destroy the print or not. Freedom to choose would indeed appear to be the central concept but it was not linked to all humans that appeared in the case. As long as humans did not make choices, their actions were mechanical. With the next case, these implications of automation and human intervention will be further examined.

2.2.3 Football Association Premier League: on human intervention

In Joined Cases C-403/08 *Football Association Premier League Ltd and Others v QC Leisure and Others* (*FAPL)* and C-429/08 *Karen Murphy v Media Protection Services Ltd,* (*Murphy)* [121] the references concerned two cases. I will be concentrating this examination mainly on the former. The references in that case were made between 'Football Association Premier League Ltd and others ('FAPL and others')'[122], suppliers of satellite decoding devices[123] and operators of public houses.[124] Two of the actions were brought against suppliers of satellite decoding devices.[125] Third action was brought

[121] C-403/08 Football Association Premier League Ltd and Others v QC Leisure and Others and C-429/08 Karen Murphy v Media Protection Services Ltd, ECLI:EU:C:2011:631.
[122] Football Association Premier League Ltd (FAPL), NetMed Hellas SA (NetMed Hellas) and Multichoice Hellas SA (Multichoice Hellas) ('FAPL and others').
[123] QC Leisure, Mr Richardson, AV Station and Mr Chamberlain ('suppliers of satellite decoding devices').
[124] Mr Madden, SR Leisure Ltd, Mr Houghton and Mr Owen ('operators of public houses').
[125] C-403/08 and C-429/08 FAPL, para 44.

against operators of public houses relating to infringement of copyrights belonging to FAPL and others.[126]

FAPL ran the Premier League, the leading professional football league competition for football clubs in England. They also organized filming of Premier League matches and transmission of the signal to the broadcasters.[127] FAPL granted licences for live transmission on a territorial basis for three-year terms.[128] The signal was compressed and encrypted, and then transmitted by satellite to subscribers who received the signal using a satellite dish. The signal was decrypted and decompressed in a satellite decoder, which required a decoding device such as a decoder card for its operation.[129] In the United Kingdom certain pubs had begun to use foreign decoding devices to access Premier League matches. These allowed them to receive the broadcast in another Member State with fewer expenses. These kind of decoder cards had been manufactured and marketed with the authorisation of the service provider. However, the broadcasters had only authorised their use inside a specified national territory, not in the UK.[130] Therefore, the devices were used in an unauthorised manner.

FAPL and others brought actions against suppliers of satellite decoders and operators of pubs that used the devices.[131] FAPL and others claimed that this kind of use of the devices undermined the territorial exclusivity of the rights granted by licence and hence the value of rights belonging to them.[132] FAPL and others also claimed that pub owners who used the devices had infringed their copyrights to certain works by creating copies of works in the internal memory of the satellite decoder and by showing them on television screens as well as communicating them to the public.[133] The works in question included for example the Opening Sequence Film, Opening Sequence Graphics Film and Match Highlights Film.[134]

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[126] C-403/08 and C-429/08 FAPL, para 45.
[127] C-403/08 and C-429/08 FAPL, para 30-31.
[128] C-403/08 and C-429/08 FAPL, para 32.
[129] C-403/08 and C-429/08 FAPL, para 36-38.
[130] C-403/08 and C-429/08 FAPL, para 42.
[131] C-403/08 and C-429/08 FAPL, para 44-45.
[132] C-403/08 and C-429/08 FAPL, para 43.
[133] C-403/08 and C-429/08 FAPL, para 47; Stephen Smith and Andrew Maxwell, Premier League football cases: linguistic tactics, non-naked match feeds and the away goals rule. C.T.L.R. 18(2) 2012 p.33-36, 34.
[134] Rohan Massey, Referee! Illicit device and copyright issues in football broadcasting referred to the European Court of Justice. Ent. L.R. 19(8) 2008 p.174-177, 175.

Together, the High Court of Justice referred to the CJEU 18 questions. Some of them relate to Broadcasting Directives: Conditional Access Directive[135] and Satellite Broadcasting Directive.[136] These will not be discussed here: the examination will concentrate on third action, that is, on the CJEU's interpretation on the same points of the InfoSoc Directive as were discussed above in the context of the *Infopaq* case. Secondly, interpretation of Article 3(1) InfoSoc Directive governing 'communication to the public' will be addressed. The questions referred to the CJEU regarding InfoSoc Directive were, as reformulated by the Court, whether Article 2(a) meant that the reproduction right extends to the creation of transient sequential fragments of the works within the memory of a satellite decoder and on a television screen.[137] As to Article 5(1), the question was whether acts of reproduction performed within the memory of a satellite decoder and on a television screen fulfilled the conditions laid down in that Article.[138] That is, whether the acts were to be considered as temporary acts of reproduction which are transient or incidental and an integral and essential part of a technological process, and therefore exempt from the protection of copyright. Finally, there is one new Article. These questions concerned 'communication to the public' within the meaning of Article 3(1) InfoSoc Directive, which will be further introduced below.

Let us begin with the CJEU's interpretation of Article 2(a) InfoSoc Directive concerning right of reproduction. FAPL and others had claimed that pub owners had infringed their copyrights by creating copies of the works in the internal memory of the satellite decoder and by showing the works on television screen in public houses. The national court was uncertain whether the reproduction right extended to the creation of transient images within the memory of decoder box and on a television screen. The problem was especially the extent of reproduction, i.e. whether the work was reproduced in whole or in part. If the sequential fragments that created the images on television screen were considered together the work would have been produced as a whole. However, only a limited number of fragments existed at a certain point in time. Therefore, the referring court asked whether it should consider all of the fragments of each work as a whole or

[135] Directive 98/84/EC of the European Parliament and of the Council of 20 November 1998 on the legal protection of services based on, or consisting of, conditional access. OJ L 320, 28.11.1998, p. 54–57.
[136] Council Directive 93/83/EEC of 27 September 1993 on the coordination of certain rules concerning copyright and rights related to copyright applicable to satellite broadcasting and cable retransmission. OJ L 248, 6.10.1993, p. 15–21.
[137] C-403/08 and C-429/08 FAPL, para 153.
[138] C-403/08 and C-429/08 FAPL, para 160.

only the limited number of fragments existing at the moment.[139] The Court concluded that the unit composed of the fragments reproduced simultaneously – and therefore existing at a given moment – should be examined in order to determine whether it contains expression, which is the intellectual creation of the author of the work. If it did, it must be classified as partial reproduction for the purposes of Article 2(a).[140]

After that, the CJEU still had to consider whether acts of reproduction would fulfil the criteria of Article 5(1) InfoSoc Directive. The CJEU stated that it was undisputed that the acts of reproduction concerned satisfy the first three conditions laid down in Article 5(1). They were temporary, transient and formed an integral part of a technological process.[141] The CJEU did not elaborate this further but the AG's Opinion sheds light to the issue. The AG explains that an act can be held to be 'transient' if:

> […] its duration is limited to what is necessary for the proper completion of the technological process in question, it being understood that process must be automated so that it deletes the act automatically, without human intervention, once its function of enabling the completion of such a process has come to an end.[142]

We can see that the question of automation is back. Again, process was considered automated when the reproduction is deleted automatically and humans cannot interfere. The AG's reasoning appears to back up the hypothesis of the previous section as well: for an act to be considered 'automated' it must not involve human intervention. More clues can be found from the CJEU's decision. After concluding that first three conditions were fulfilled the CJEU moved to address the fourth and fifth conditions: whether acts were to be considered as lawful use and having independent economic significance.[143] The CJEU stated that acts of reproduction at issue satisfied also the fourth condition of Article 5(1) and were to be considered as lawful use.[144] Now, in terms of this inquiry, truly interesting is the CJEU's notion regarding the fifth condition, independent economic significance. Let us take a further look at this part of the CJEU's decision.

According to the CJEU, the acts of reproduction were carried out in order to provide access to the protected works. As the protected works had economic significance, access to them was bound to have economic value as well.[145] However, that significance must

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[139] C-403/08 and C-429/08 FAPL, para 54(4).
[140] C-403/08 and C-429/08 FAPL, para 157.; Smith – Maxwell (2012), p.36.
[141] C-403/08 and C-429/08 FAPL, para 165.
[142] C-403/08 and C-429/08 FAPL, Opinion of AG Kokott, para 88. Abbreviations added.
[143] C-403/08 and C-429/08 FAPL, para 166.
[144] C-403/08 and C-429/08 FAPL, para 173.
[145] C-403/08 and C-429/08 FAPL, para 174.

also be independent. Therefore, mere reception of the broadcasts would not generate additional economic value. In that regard, the CJEU stated that:

> […] the temporary acts of reproduction, carried out within the memory of the satellite decoder and on the television screen, form an inseparable and non-autonomous part of the process of reception of the broadcasts transmitted containing the works in question. Furthermore, they are performed without influence, or even awareness, on the part of the persons thereby having access to the protected works.[146]

As the reproductions were elemental part of the technological process that enabled the reception of broadcasts, those acts of reproduction were not capable of generating an additional economic advantage.[147] From the quotation, we can see that we are again heading towards the issues of automation and human intervention. The reproductions in question were considered as inseparable and non-autonomous part of the technological process, somewhat similarly as humans in case *Infopaq* regarding manual preparations of technological process. Back then, humans were included into technological process, as they could not have effect on its outcome. What appears to play important part also in this case is the fact that persons involved cannot influence the process and are not even aware of it. In *Infopaq*, when persons on the other hand could influence the technological process, the Article 5(1) did not apply. Now the CJEU considered the issue differently and all the requirements of Article 5(1) were fulfilled.[148]

The Court's interpretation of the concept of 'communication to the public' seems to support these conclusions. The referring court's inquiry related especially to Article 3(1) of the InfoSoc Directive, which governs 'communication to the public', stating that:

> 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.[149]

Regarding actions of pub operators, the referring court asked whether 'communication to the public' must be interpreted as covering transmission of the broadcast works, via a television screen and speakers, to the customers present in a public house.[150] The CJEU concluded that the screening of football matches in a pub constituted a 'communication

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[146] C-403/08 and C-429/08 FAPL, para 176. Abbreviations added.
[147] C-403/08 and C-429/08 FAPL, para 177.
[148] C-403/08 and C-429/08 FAPL, para 180.
[149] Geiger – Schönherr (2014), p.408: The 'communication to the public' encompasses non-tangible disseminations or transmissions of the work to the public by wire or wireless means. Characteristic to the concept is the distant element: Article 3 does not apply to cases where transmission originates from the same place and at the same time as where the public is present. Those would be considered as public performances, as a distinction from 'communication to the public'.
[150] C-403/08 and C-429/08 FAPL, para 183.

to the public' for which the authorization of the rightsholders was necessary.[151] Regarding this question, the CJEU referred to another case, *SGAE*[152], where it had held that a hotel proprietor carried out an act of communication when he gave his customers access to the broadcast works by distributing in the hotel rooms, with full knowledge, the signal carrying the protected works.[153] The Court pointed out that this type of intervention *was not just a technical means* to ensure or improve reception of the original broadcast in the catchment area, but an act without which customers could not enjoy the broadcast works.[154] Thus, the Court held that:

> […] the proprietor of a public house intentionally gives the customers present in that establishment access to a broadcast containing protected works via a television screen and speakers. Without his intervention the customers cannot enjoy the works broadcast, even though they are physically within the broadcast's catchment area. Thus, the circumstances of such an act prove comparable to those in SGAE.[155]

The significant element in the Court's evaluation was the proprietor's intentional behavior: his knowledge of the actions against the will and authorization of rightsholders and acting based on that knowledge. His intervention was also a prerequisite for the customers to have access to broadcast. As in *SGAE,* the intervention could not be regarded as mechanical.

Finally, one more aspect regarding matters of automation and free will. This point relates to the other case that the CJEU addressed, case *Murphy.* The CJEU's judgment in *Murphy* includes an interesting notion relating to scope of copyright protection: FAPL could have rights to the recordings, logos etc., but not to the football matches as such, as they could not be classified as works.[156] To be so classified, the subject-matter concerned would have to be original in the sense that it is its author's own intellectual creation.[157] As the CJEU explains:

> However, sporting events cannot be regarded as intellectual creations classifiable as works within the meaning of the [InfoSoc] Directive. That applies in particular to football matches, which are subject to rules of the game, leaving no room for creative freedom for the purposes of copyright.[158]

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[151] C-403/08 and C-429/08 FAPL, para 207.
[152] C-306/05 Sociedad General de Autores y Editores de España (SGAE) v Rafael Hoteles SA, ECLI:EU:C:2006:764.
[153] C-306/05 SGAE, para 42; C-403/08 and C-429/08 FAPL, para 194.
[154] C-403/08 and C-429/08 FAPL, para 194.
[155] C-403/08 and C-429/08 FAPL, para 195. Abbreviations added.
[156] C-403/08 and C-429/08 FAPL, para 96.
[157] C-403/08 and C-429/08 FAPL, para 97.
[158] C-403/08 and C-429/08 FAPL, para 98. Abbreviations added.

According to the CJEU, the interpretation applies in particular to football matches. This is because football matches are subject to rules of the game.[159] Those kind of events cannot be protected under copyright. The Court then raises the question of creative freedom, noting that following rules plays out this element. How should the meaning of rules be considered in relation to notions of automation, creativity and free will? Could we think that in the core of 'automation' resides a rule? At least that would explain some of the peculiar findings in case *Infopaq*. When humans were included into technological process it was asked, whether that was because humans had limited possibilities to have effect on the outcome of the process. Although the CJEU appeared to think that way, the accuracy of this conclusion can be questioned. In reality, there is likely nothing that would *make* humans to realize certain outcome in technological process. Unlike mechanical rat in the maze, humans in general have the ability to stop, make mistakes or act alternatively. However, if we would instead think that following rules is what constitutes mechanic actions, the outcome of the process does not need to be fully certain. It would be enough that rules exist to guide the operation.

Let us now draw some conclusions. Firstly, as the AG concluded in relation to transient nature of reproduction, it would indeed seem to be human intervention that deems the technological process non-automated. Furthermore, from the Court's elaboration on the issue of independent economic significance, we can see elements of what this intervention is like. This was an act that was performed without influence or even awareness of humans. While in *Infopaq* the exceptions of Article 5(1) did not apply as the humans could interfere, now the situation was different. The humans could not interfere, and were not even aware of the process, so Article 5(1) applied. From this, we got to the CJEU's interpretation of Article 3(1). Now the nature of human intervention was again elaborated. Regarding actions of pub owners, the Court stated that they were not to be considered as mere technical measures. This was because the pub owners *intentionally*, by their own choosing, gave the access to protected works. Freedom of choice appears to be linked to the human ability to intervene, thus turning the process non-automated. In other words, it seems to be the freedom of choice that constitutes non-mechanical action. But what then is mechanical action? This issue was illuminated in the final finding. The Court found that *rules of the game* made actions non-creative. When

[159] C-403/08 and C-429/08 FAPL, para 98.

rules apply, there is no room for creative freedom. From this concluding notion, we can move to discuss the creative freedom in a more detail with the next case.

2.2.4 Painer: creative freedom

We have now collected some materials for an idea of what it means to be mechanical. Next case, in turn, will discuss what it means to be creative. In Case C-145/10 *Eva-Maria Painer*[160] the reference was made in the proceedings between Ms Painer and five newspaper publishers concerning their use of Ms Painer's photographs of Natascha Kampusch,[161] a girl who later appeared in wider publicity because of her abduction. Kampusch was abducted in 1998 and held in captivity for over 8 years. Ms Painer had worked as a freelance photographer, photographing children in nurseries and kindergartens. She had also taken several photographs of Natascha Kampusch as a child, designing their background, deciding the position and facial expression, and producing and developing the photos.[162] After Natascha Kampusch was abducted, the security authorities launched a search appeal in which the contested photographs were used. In 2006, Kampusch managed to escape from her abductor. Following Kampusch's escape and prior to her first public appearance, the defendants in the main proceedings published Ms Painer's photographs from 1998 as well as the so-called 'photo-fit' based on Ms Painer's photographs, without indicating her name as the photographer.[163] Photo-fit refers to a portrait, created by computer from the contested photographs. Defendants had created the photo-fit because there was no recent photograph of Natascha Kampusch until her first public appearance. Photo-fit represented the supposed image of her during the time of her release.[164]

Ms Painer sought an order before the Handelsgericht Wien (Commercial Court, Vienna) that the defendants cease the reproduction and/or distribution of the contested photographs and the photo-fit without her consent and without indicating her as author.[165] She also sought an interlocutory injunction on which a ruling had been given by the highest court, the Austrian Oberster Gerichtshof (Supreme Court) before the main

[160] C-145/10 Eva-Maria Painer v Standard VerlagsGmbH and Others, ECLI:EU:C:2011:798.
[161] C-145/10 Painer, para 2.
[162] C-145/10 Painer, para 27.
[163] C-145/10 Painer, para 33-34.
[164] C-145/10 Painer, para 36.
[165] C-145/10 Painer, para 37

proceedings had ended.[166] In the proceedings for the interlocutory injunction, the Oberster Gerichtshof held that the contested photograph was a photographic work protected by copyright.[167] However, the production and publication of the contested photo-fit was considered as within the scope of free use, instead of being an adaptation, which did not require her consent.[168] The question of whether the photo-fit was to be considered as free use or adaptation depended on the creative effort in the template, i.e. the original photo. The greater the creative effort in the template, less likely a free use would come in question.[169] According to the approach taken by the Oberster Gerichtshof, in the case of a portrait photo the creator enjoys only a small degree of individual formative freedom, for which reason portrait photographs enjoy narrower copyright protection.[170] In those circumstances, the referring court was seeking to ascertain whether the legal opinion taken by the Oberster Gerichtshof was compatible with the EU law.[171] The referring court, the Handelsgericht Wien, referred four questions to the CJEU for a preliminary ruling.

For the sake of the argument about automatism and creativity, only the first part of the fourth question of the judgment will be discussed. The CJEU reformulated the referring court's question as whether Ms Painer's consent to publish the contested photo-fit was not needed because the scope of protection for portrait photographs was restricted or non-existent due to minor degree of formative freedom allowed by such photographs.[172] The question was firstly of whether Article 6 of Term Directive[173] should be interpreted in a way that portrait photographs are protected by copyright under that provision.[174] If yes, whether the protection was minor to that enjoyed by other works due to lack of formative freedom. This question was to be understood particularly in relation to Article 2(a) InfoSoc Directive governing right of reproduction.[175] However, the examination will be further concentrated on the CJEU's interpretation of Article 6 of the Term Directive.

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[166] C-145/10 Painer, para 39
[167] C-145/10 Painer, para 41.
[168] C-145/10 Painer, para 41.
[169] C-145/10 Painer, Opinion of AG Trstenjak, para 108.
[170] C-145/10 Painer, Opinion of AG Trstenjak, para 108.
[171] C-145/10 Painer, Opinion of AG Trstenjak, para 114.
[172] C-145/10 Painer, para 85.
[173] Council Directive 93/98/EEC of 29 October 1993, harmonizing the term of protection of copyright and certain related rights. OJ L 290, 24.11.1993, p. 9–13.
[174] C-145/10 Painer, para 86.
[175] C-145/10 Painer, para 86.

Let us briefly address the Article 6 of Term Directive. Article 6 states that:

> Photographs which are original in the sense that they are the author's own intellectual creation shall be protected in accordance with Article 1. No other criteria shall be applied to determine their eligibility for protection. Member States may provide for the protection of other photographs.

Article 1 regulates the duration of authors' rights. Photographs are mentioned individually due to the fact, that before harmonisation of Term Directive durations for protection in Member States varied significantly. For example, Berne Convention sets the minimum duration to 25 years for photographs. In Term Directive, photographs are considered copyrightable works and therefore granted the full harmonised term of protection, which is 70 years from the authors death.[176] A photograph that fills the originality criteria laid down in Article 6 must necessarily be protected by copyright. However, it is left to Member States' discretion to protect other photographs that do not cross the originality threshold by related rights.[177]

The CJEU started to answer the question concerning the creativity of portrait photographs by noting that it had already decided in *Infopaq* that copyright is liable to apply only in relation to a subject-matter, such as a photograph, which is original in the sense that it is its author's own intellectual creation.[178] Now the CJEU clarified this account further, with a reference to above mentioned Term Directive, saying that according to the recital 17 of Term Directive, 'an intellectual creation is an author's own if it reflects the author's personality'.[179] That is the case if:

> […] the author was able to express his creative abilities in the production of the work by making free and creative choices (see, a contrario, Joined Cases C-403/08 and C-429/08 Football Association Premier League and Others [2011] ECR I-0000, paragraph 98).[180]

According to the CJEU, author's intellectual creation reflects the personality of the author, in line with personality theories. The CJEU also included a reference *a contrario* to the reasoning in *Murphy* regarding copyright protection for sport matches.[181] Back

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[176] Gemma Minero, The Term Directive in Irina Stamatoudi – Paul Torremans, EU Copyright Law: A Commentary. Edward Elgar 2014, p.277.
[177] Minero (2014), p.277.
[178] C-145/10 Painer, para 87.
[179] C-145/10 Painer, para 88.
[180] C-145/10 Painer, para 89. Abbreviations added.
[181] Yin Harn Lee, Photographs and the standard of originality in Europe: Eva-Maria Painer v Standard Verlags GmbH, Axel Springer AG, Suddeutsche Zeitunung GmbH, Spiegel-Verlag Rudolf Augstein GmbH & Co KG, Verlag M. DuMont Schauberg Expedition der Kolnischen Zeitung GmbH & Co KG (C-145/10). E.I.P.R. 34(4) 2012, p.290-293, 293: In Infopaq the CJEU applied the concept of 'author's intellectual creation' to case that concerned interpretation of InfoSoc Directive. The concept is not mentioned in InfoSoc but only in Term Directive, Software Directive and Database Directive. Now the

then, conclusion was that no copyright protection could be given to sport matches as these *are subject to the rules of the game*.[182] The Court continued that the photographer, on the other hand, could make *free and creative choices* in several ways and at various points in production.[183] By making those choices, the author of a portrait photograph can stamp the work created with his 'personal touch'.[184] In *Painer*, the CJEU considered that a photographer has sufficient freedom for creative choices: the photographer can choose the background, the subject's pose and the lighting as well as the framing, the angle of view and the atmosphere created. When selecting the snapshot, the photographer can choose from a variety of developing techniques or use a computer software.[185] The relevant aspect is not whether the photo is a portrait or other kind of photograph but whether the photograph is original.[186]

On that point, the AG had taken the same stance. However, regarding author's own intellectual creation, which reflects his personality, the AG adds that:

> […] only human creations are therefore protected, which can also include those for which the person employs a technical aid, such as a camera.[187]

Only human creations are protected, even if technical aid is being used. The AG continues that besides being a human creation, the photograph must be original in order to get copyright protection.[188] That means that 'the photographer utilizes available formative freedom and thus gives it originality'.[189] This part of the AG's deliberations did not end up in the actual decision by the Court, but it illuminates our problem in its conceptualization of creativity as an exclusively human category. Only if the subject-matter lands inside that category, the question of originality will be addressed. In the case of a photo, this means that the photographer utilizes available formative freedom: freedom

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CJEU was interpreting Term Directive which does mention 'author's intellectual creation'. The judgment has been considered to express that definitions given for 'author's own intellectual creation' in InfoSoc (particularly in Infopaq) and Term, Software and Database Directives are synonymic. This is especially visible from the CJEU's decision to rely on its own earlier rulings as having established the standard for originality when it could easily have relied upon Art 6 of the Term Directive.; Eleonora Rosati, Towards an EU-wide copyright? (Judicial) pride and (legislative) prejudice. I.P.Q. 1/2013, p.47-68, 59: As far as the construction of EU copyright is concerned, the ruling in Painer represented another step in the clarification of what is now an EU-wide originality standard.

[182] C-403/08 and C-429/08 FAPL, para 98

[183] C-145/10 Painer, para 90.

[184] C-145/10 Painer, para 92.

[185] C-145/10 Painer, para 91.

[186] C-145/10 Painer, para 87 and 94.

[187] C-145/10 Painer, Opinion of AG Trstenjak, para 121. Abbreviations added.

[188] C-145/10 Painer, Opinion of AG Trstenjak, para 122.

[189] C-145/10 Painer, Opinion of AG Trstenjak, para 122.

to choose from different options.[190] If we apply the reasoning visible in *Infopaq* and *FAPL*, this would mean options that do not necessarily define what the outcome will be. Therefore, it would not matter whether the work is created using technology if there is a possibility for human intervention, i.e. the process is not completely automatic as was the case in *Infopaq*.

So far it has been observed that technological process is automated when humans cannot intervene, as was seen in *Infopaq*. However, humans can be part of technological processes. In *Painer*, a human in question deployed mechanical aid, a camera. Again, actions were not considered mechanical as photographers have substantial formative freedom in executing them. In addition to being able to intervene in technological process, the significant element appeared to be how much freedom the intervener has. When the photographers could make free choices, the actions expressed their personality and were thus original. With the next case, it is discussed what happens when technical aid is involved but possibility for free choices is narrow.

2.2.5 Football Dataco: mechanical considerations

In Case *Football Dataco Ltd*[191] the reference was made in proceedings between 'Football Dataco and Others'[192] and 'Yahoo and Others'[193]. The reference concerned intellectual property rights claimed by Football Dataco and Others over the English and Scottish football league fixture lists that are the lists of the games that a team is scheduled to play. The basic requirement of such lists is that a football league must play every other team once at the team's home ground and once at the opponent's home ground.[194] Compilation of the said lists were to great extent a task of one Mr Thompson, who in his work used also a computer program. The procedure consisted of several stages. The first stage was the preparation of the Premier League fixture schedule and an outline fixture list for other leagues. This was done by employees of the leagues.[195] The second stage was sending the clubs questionnaires prior to the fixing of the schedule. Then responses to these

[190] C-145/10 Painer, Opinion of AG Trstenjak, para 122.
[191] C-604/10 Football Dataco Ltd and Others v Yahoo! UK Ltd and Others, ECLI:EU:C:2012:115.
[192] Football Dataco Ltd, Football Association Premier League Ltd, Football League Ltd, Scottish Premier League Ltd, Scottish Football League et PA Sport UK Ltd.
[193] Yahoo! UK Ltd, Stan James (Abingdon) Ltd, Stan James plc and Enetpulse ApS.
[194] Mark Rodgers, Football fixture lists and the Database Directive: Football Dataco Ltd v Brittens Pools Ltd. E.I.P.R. 32(11) 2010 p.593-599, 593.
[195] C-604/10 Football Dataco, para 14.

questionnaires were analyzed.[196] The third stage was undertaken by Mr Thompson. It comprised of two tasks, 'sequencing' and 'pairing'. Sequencing aimed to achieve the perfect home-away sequence for every club, having regard to the so-called 'golden rules'[197], a series of organizational constraints and the requests made by the clubs.[198] The 'golden rules' for example included a rule that no club should have three consecutive home or away games or that in any sequence of five consecutive games, no club should have four home or four away games.[199] Mr Thompson then produced a pairing grid on the basis of the requests made by the teams. He gradually inserted the names of the teams into the grid and attempted to resolve a maximum amount of problem cases until a satisfactory draft fixture list was completed. For that purpose, he used a computer program, to which he transferred information from the sequencing sheet and the pairing grid to produce a readable version of the fixture list.[200] The final stage involved Mr Thompson working with employees of the professional leagues to review the content of the fixture lists. Review was carried out manually with the assistance of computer software to find solutions to outstanding problems.[201]

Football Dataco and Others claimed in the proceedings that they owned a 'sui generis' right and a copyright to the English and Scottish football league fixture lists. Yahoo and Others did not accept that such rights exist in law, arguing that they were entitled to use the lists in the conduct of their business without having to pay financial compensation.[202] The judge at first instance had held that fixture lists were eligible for copyright protection under Article 3 of Database Directive.[203] The referring court, Court of Appeal of England and Wales, had doubts about this. Firstly, the referring court raised the question of whether the fixture lists were protectable by copyright under Article 3 of the Database Directive. Secondly, the referring court was uncertain whether copyright

[196] C-604/10 Football Dataco, para 15.
[197] C-604/10 Football Dataco, para 13: Golden rules guided the construction of fixture list, the most important being: no club shall have three consecutive home or away matches; in any five consecutive matches no club shall have four home matches or four away matches; as far as possible, each club should have played an equal number of home and away matches at all times during the season, and all clubs should have as near as possible an equal number of home and away matches for mid-week matches.
[198] C-604/10 Football Dataco, para 16-17.
[199] Rodgers (2010), p.593.; C-604/10 Football Dataco, para 13.
[200] C-604/10 Football Dataco, para 17.
[201] C-604/10 Football Dataco, para 18.
[202] C-604/10 Football Dataco, para 20-21.
[203] C-604/10 Football Dataco, para 22.

protection could be granted under national conditions different from those set out in Article 3(1) of the Database Directive.[204]

Let us visit the referring court's question regarding interpretation of Article 3(1) of the Database Directive in more detail. Article 3(1) states that:

> In accordance with this Directive, databases which, by reason of the selection or arrangement of their contents, constitute the author's own intellectual creation shall be protected as such by copyright. No other criteria shall be applied to determine their eligibility for that protection.

Firstly, the question was whether the intellectual effort and skill of creating data should be excluded in connection with the application of that provision. Secondly, whether the 'selection or arrangement' of the contents, within the meaning of that provision, includes adding important significance to a pre-existing item of data. Thirdly, whether the notion of 'author's own intellectual creation' within the meaning of that provision requires more than significant labour and skill from the author and, if so, what that additional requirement is.[205]

A few words on the division between copyright and sui-generis protection. Copyright is not self-evident in the case of a database. At the end of the 20th century, the protection of data collections in the European Community was found to be very diverse and partially inadequate. Technological developments led to the need to change legislation, as it meant that databases could be copied quickly without deterioration and cost-efficiently.[206] Prior to the Database Directive, the protection of databases was realised in several EU Member States by copyright. Alongside this, the Database Directive created a new kind of right – a sui generis right – to provide protection also for databases that do not come under copyright protection because they were not original enough to achieve the level of work.[207] The sui generis right has been heavily criticized and soon after the directive was adopted, its effects on the economy and the possible monopolization of information were noticed in legal literature.[208] Sui generis right is applied when the threshold for copyright is too high; it protects the maker of a database

[204] C-604/10 Football Dataco, para 23.
[205] C-604/10 Football Dataco, para 24.
[206] Juho Ohisalo, Tietokannan sisältämän tiedon suojaaminen sui generis -oikeudella ja sopimusmenettelyillä in Rainer Oesch – Mikko Eloranta – Mari Heino – Mira Kokko (ed.), Immateriaalioikeudet ja yleinen etu. Alma Talent 2017, p.73.
[207] Kur – Dreier (2013), p.266.
[208] Ohisalo (2017), p.74.

against exploitation of their financial contribution, not the originality of the work.[209] In *Football Dataco Ltd*, the question was particularly about whether *copyright protection* would apply and for now we only need to know that copyright threshold was considered high for databases. To obtain copyright, database would have to express, by reason of the selection or arrangement of their contents, the author's own intellectual creation.

Then to the judgment. Again, the CJEU raised its own previous judgments rather than the Database Directive to discuss the originality of fixture lists. Referring to *Infopaq*, *FAPL* and *Painer,* the CJEU concluded that for databases, the criterion of originality is satisfied when its author expresses his creative ability in an original manner by making free and creative choices and thus stamps his 'personal touch' through the selection or arrangement of the data which the database contains.[210] However, the criterion is *not satisfied* when the setting up of a database is dictated by *technical considerations, rules or constraints* which leave no room for *creative freedom*.[211] The fact that the setting up of the database requires significant labour and skill on the part of its author cannot as such justify the protection of it by copyright, if that labour and skill do not express any originality in the selection or arrangement of that data.[212] The CJEU concluded that a database within the meaning of Database Directive is protected by the copyright when creative freedom of author is expressed.[213]

In his opinion, the AG had elaborated this a bit further, by noting that copyright protection requires creativity:

> […] copyright protection is conditional upon the database being characterised by a 'creative' aspect, and it is not sufficient that the creation of the database required labour and skill.[214]

Hard work is not enough for copyright protection to be granted. The AG also brought up differences in the scope of protection when it comes to common law countries and continental systems, emphasizing that continentally copyright is essentially about creativity and personality:

> […] in countries of the continental tradition, for a work to be protected by copyright it must generally possess a creative element, or in some way express its creator's personality,

[209] Ohisalo (2017), p.74-75.
[210] See also C-145/10 Painer, para 92.
[211] C-604/10 Football Dataco, para 39.
[212] C-604/10 Football Dataco , para 42.
[213] C-604/10 Football Dataco, para 45.
[214] C-604/10 Football Dataco, para 35. Abbreviations added.

> even though any assessment as to the quality or the 'artistic' nature of the work is always excluded.[215]

The AG continued that the Directive espouses a concept of originality which requires more than the mere *mechanical effort* that is needed to collect the data and to enter them in the database.[216] In that regard, the AG referred to the Court's established doctrine that a work is an intellectual creation if it reflects the personality of its author, which is the case if the author was able to make free and creative choices in the production of the work. This was not the case in *Football Dataco*. As the AG stated, the CJEU has further specified that the necessary originality will be absent if the features of a work are predetermined by its technical function.[217] However, mechanical efforts are relevant in application of sui generis right.[218]

I believe the term 'mechanical' can be given a broader meaning here: activity that follows rules or is otherwise constrained is mechanical whether actual machine is used or not. Both the CJEU and especially the AG held concepts such as 'personality' and 'creativity' in strong contrast with 'mechanical'. Personality was expressed when 'free and creative choices' could be made. In this sense, if the means determine the outcome the CJEU will regard actions unoriginal and copyright protection will not be granted. This way, also human actions are not necessarily original but furthermore, they can be mechanical.

2.2.6 Conclusion

The question here was to find out what kind of actions the CJEU considers mechanic, as a counterpart for creativeness. In the beginning, the mechanical rat moving inside a maze was discussed. The question was posed whether similar setting might be at hand in the CJEU's interpretations on automation. Now we have seen that something alike might be emerging from case material.

Let us first discuss cases *Infopaq* and *FAPL*. In *Infopaq*, the CJEU concluded that prints of 11 word extracts were not transient copies as their destruction was dependent on human will. Therefore, the process could not be considered automated: it was possible that prints would not be destroyed after all. In *FAPL*, the outcome was other way around.

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[215] C-604/10 Football Dataco, para 36. Abbreviations added.
[216] C-604/10 Football Dataco, Opinion of AG Mengozzi, para 37.
[217] C-604/10 Football Dataco, Opinion of AG Mengozzi, para 40.
[218] C-604/10 Football Dataco, Opinion of AG Mengozzi, para 43.

As the case concerned ephemeral signals inside satellite decoder box, of which humans were not even aware of, the question of automation was evaluated differently. In *FAPL*, the process was considered automated as humans could not intervene. However, an opposite interpretation was seen in the same case when the CJEU considered actions of pub owners and whether those were to be considered as communicating works to the public. In this regard, it was emphasized that pub owners knowingly decided to provide access to protected works. Therefore, their actions were not just of mechanical nature but a prerequisite for public to be able to enjoy the works. This way, if pub owners' actions were not just mechanical, maybe they were the opposite. Maybe those actions were precisely human. As a final notion the CJEU's understanding of the rules guiding the actions was discussed. The CJEU then concluded that football matches were not works in the meaning of copyright as they were subject to rules of the game. Therefore, it was not possible to exercise freedom of choice and thus be original.

In cases *Painer* and *Football Dataco* the question of free choice was again elaborated. In *Painer,* the CJEU concluded with a reference to *FAPL* that actions guided by rules are not creative. In *FAPL*, such constraints were rules of the game. However, in *Painer* similar effect was not brought up by use of a technical aid, a camera. Even though Ms Painer was using a camera to take certain type of photographs, she nevertheless had a chance to make several creative choices: freely choose between different options. This way, freedom of choice brought along personality. As Ms Painer was able to choose, also the work was seen to reflect her personality. In *Football Dataco* the situation was different. Again the question of rules was revisited. Although Mr Thompson's work with fixture lists required skill and labour it could not be considered creative similarly as Ms Painer's photographs. This was because fixture lists were made based on certain rules, which dictated to outcome. Therefore, Mr Thompson could not exercise creative freedom putting together the lists.

In *Football Dataco*, the AG and the CJEU appeared to throw against each other the concepts of 'artistic' and 'mechanical'. It was further concluded that originality reflecting the author's personality was tied to these kind of artistic, creative actions. Copyright is about creativity, not mechanical work, even though that work might be hard. Cases *Painer* and *Football Dataco* interestingly imply the traditional thinking of personality theory, linked to inspiration, creation and authorship. As it has been previously mentioned, creativity is usually considered to be exclusively human category. In this sense, it is

interesting that while *Football Dataco* strongly reflects these traditional modes of thinking, the conclusion was not that humans are always creative. Instead, in *Football Dataco*, the human was considered to act mechanically, similarly to a machine.

Let us finally return to the image of a mechanical rat in the maze. The rat navigated in the maze based on inputs produced by the environment: if it could not move left, it moved right. In this example the automation was seen in the way which all kind of creativity and element of surprise was removed from the equation. The rat operated like a computer, which it of course was. A question posed in the beginning was whether similar reasoning could be applied to humans in the context of copyright. The question was then approached via personality theory, asking if there is some fundamentally human element of creativity that could be made visible from the praxis of the CJEU. The answer is yes and no. The Court indeed appeared to reconstruct this kind of element: freedom of choice, which was produced through concepts of freedom from rules and personal stamp. This way, it could be said that it is precisely freedom of choice that lays in the heart of humanity in the Court's praxis. However, humans did not have exclusive right to this freedom after all. In *Infopaq*, the humans were parts of the machine and in *Football Dataco* humans acted like machines themselves. Freedom of choice belonged to humans but not all humans. If we now move from personality theory to posthumanist thought, the traditional questions have been borders between human and non-human as well as movements and fluidity of those borders. In the cases, these were not visible in a way that machines would resemble humans. Instead, machine and automation represented something precisely non-human if we consider humanity and creativity interconnected. Somewhat surprisingly, the movement of borders became visible among humans: in the way, some humans were creative and some were machine-like.

2.3 Medium

2.3.1 Introduction

Previously a question was posed: are borders of humans and machines becoming increasingly ambiguous? This is also a well-known starting point in the conversations concerning posthumanist thought. For example, Jannice Käll argues in her dissertation that several examples of development of digital technology could be understood also as development that makes it increasingly difficult to separate between persons and

things.[219] Interpreting Rosi Braidotti she adds that it is this 'condition of obfuscated boundaries between human and technology' that constitutes 'posthuman condition'.[220] Several other theorists have discussed the idea of intertwining machines and organisms as well. For example, Donna Haraway states in her Cyborg Manifesto that 'by the late twentieth century, our time, a mythic time, we are all chimeras, theorized and fabricated hybrids of machine and organism—in short, cyborgs.'[221] Haraway describes the way in which machines and organisms have been previously separated by strict borders. However, those borders can be, and are being, confused.[222] Could we consider that the examples presented in the beginning, the monkey-selfie, AI Rembrandt and robot-samurai, are these kind of cyborgs or chimeras? As peculiar creatures that do not appear to belong self-evidently either among humans or technology. Could something like that be seen from the case material of this study?

In the previous section, it was observed that certain fluidity appeared to exist between humanity and machinery. However, this did not mean human-like machines but rather understanding humans as machine-like. Sometimes the CJEU seemed to describe humans similar to machines: humans did not always act creatively but could act mechanically. Does this mean that the hypotheses presented now and in the beginning of this thesis, that it has become indeed more difficult to separate humans from machines, holds true? Again, the answer is not that clear. Assuming that a 'posthuman', 'cyborg' or 'hybrid' is indeed something that consists of both human and machine, and meanings attached to these categories, it appeared that the CJEU was doing exactly the opposite: not hybridizing the qualities, but analysing them apart. The distinction between human and technology seemed after all quite strict. Even though humans could sometimes form parts of technological processes, these occasions were singled out without indicating any fundamental problem with regard to the nature of humanity. At any event, it did not

[219] Jannice Käll, Converging Human and Digital Bodies: Posthumanism, Property, Law. Juridiska institutionens skriftserie 2017, p.21.
[220] Käll (2017), p.21.
[221] Donna Haraway, Simians, cyborgs, and women: the reinvention of nature. Free Association Books 1991, p.7.
[222] Haraway (1991), p.7. For Haraway, 'cyborg' is an important character precisely in this regard, questioning the old dichotomies between, for example, animals, races and men and women. See also, Juha Raipola, Inhimilliset ja postinhimilliset tulevaisuudet in Karoliina Lummaa – Leea Rojola (ed.), Posthumanismi, Eetos 2014, p.44.

appear difficult for the Court to determine where the boundaries between humans and machines go, at least when it comes to physical boundaries.

In this section, the way in which the Court maintains the difference between humanity and technology and its implications are further discussed. What is this seemingly clear separation of humans and machines like and if such separation does exist, is there a way to mediate it? The starting point is the conclusion of the previous section. There was a difference between humans and machines, but that difference was constructed among humans: humans could sometimes act like machines. This section then asks, what is that difference like when placed between humanity and technology? Instead of considering humans and technology intertwined, could we understand them as separate 'systems', nevertheless able to communicate with each other somehow? Returning to our example, the mechanical rat was supposed to transform information processes into action that could be observed. Could we think that something alike might be happening in these cases as well? If technology and humanity are clearly separate from each other, what needs to happen in order for certain technological subject-matter to cross that border and enter the system of humanity and law? In other words, how does the 'sphere of technology' become observable to humans?

2.3.2 Infopaq: 'sphere of computer world'

To begin with, let us return to the *Infopaq* case. In *Infopaq,* the CJEU concluded that copyright within the meaning of Article 2(a) of InfoSoc Directive was liable to apply in relation to a subject-matter that is original in the sense that it is 'its author's own intellectual creation'.[223] According to the CJEU, it could not be ruled out that such originality could be expressed by the extract of 11 words.[224] Having established that an extract of 11 words from a text could this way constitute the latter's 'reproduction in part', on the condition that the extract includes an element of the original author's own intellectual creation,[225] the CJEU then moved on to consider the exemptions from copyright given in Article 5(1) of InfoSoc Directive.

The first conditions that may constitute an exemption according to Article 5(1) are that the reproduction must be temporary, transient or incidental. The Court defined that

[223] C-5/08 Infopaq, para 37.
[224] C-5/08 Infopaq, para 47-48.
[225] C-5/08 Infopaq, para 48.

reproduction could be held 'transient' only if 'its duration is limited to what is necessary for the proper completion of the technological process.'[226] This meant that the process must be automated so that the reproduction was automatically destroyed once its function had come to an end, without human intervention.[227] This was not the case with the printing of 11 words, as destroying the printed paper was dependent on human intervention. However, regarding the first two acts of reproduction, the creation of image and text files, the CJEU could not rule out the possibility that those could be 'transient'. That would have been the case if the files were automatically deleted from the computer memory.[228] The reason why the first two acts might be exempted and the act of printing would not was according to the CJEU as follows:

> It is common ground, however, that, by the last act of reproduction in the data capture process**, Infopaq is making a reproduction outside the sphere of computer technology.** It is printing out files containing the extracts of 11 words and thus reproduces those extracts on a paper medium.[229]

What does is it mean that something is being done 'outside the sphere of computer technology'? Some clarification to that issue can be found from the preamble of InfoSoc Directive. At first, recital 5 notes that ways of creation, production and exploitation have multiplied and diversified due technological development.[230] While new legislation is not necessary, this progress creates a need for the copyright legislation to adapt. Recital 33 of the preamble then elaborates that, for example, certain acts of reproduction are necessary for the functioning of technology.[231] This is also why they should be exempt from the copyright protection:[232] mandatory authorisation from the rightsholder would hinder the development of technology. Earlier this type of exemption was not needed as all copies were permanent in a way that their destruction was dependent on human decision.[233] In other words, all copies belonged to the world governed by human will and choice.

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[226] C-5/08 Infopaq, para 64.
[227] C-5/08 Infopaq, para 64.
[228] C-5/08 Infopaq, para 65.
[229] C-5/08 Infopaq, para 67. Emphasis added.
[230] Recital 5 of the InfoSoc Directive.
[231] Recital 33 of the InfoSoc Directive.
[232] Recitals 31-40 of the InfoSoc Directive explain the functioning of Article 5. Although, it should be noted that there has been discussion on the actual legal effects of recitals, see e.g. Geiger – Schönherr (2014), p.449.
[233] On the origin of concept of reproduction and progressive dematerialisation of property, see eg.Taina Pihlajarinne, Should we bury the concept of reproduction - towards principle-based assessment in copyright law? IIC 48(8) 2017, p.953-976, 955.

Today however, this situation is different. Copies exist which are necessary for the functioning of technology. For humans these have the role of enabling something else to happen: often these kinds of reproductions, such as caching, are not something that humans could enjoy as such. In a way, they remain invisible for regular users. At the point where humans become able to enjoy the reproductions, to see or hear them, their copyright evaluation might be different. This kind of stance is visible in *Infopaq* where the CJEU considered that reproductions created, staying and deleted inside computer memory could potentially fulfil the exemption conditions of Article 5(1).[234] The same did not apply to the prints of 11 word extracts.[235] While the Court acknowledged that the facts provided by referring court were not sufficient to fully evaluate whether the erasure of files from computer memory was automated in all aspects,[236] there was no doubt that destruction of the prints of the extracts was not automated. They were produced outside 'computer sphere' and among humans.

As a final observation, let us revisit the AG's interpretation of Article 5(1). The AG explains the purpose of Article 5(1):

> […] the purpose of Article 5(1) is to exclude [from copyright protection] temporary acts of reproduction 'which technology dictates'.[237]

If an act of reproduction is dictated by technology, Article 5(1) can be applied. Let us consider what the AG says here together with what the Court set up as the 'common ground' in the above citation. Firstly, there is a 'sphere of computer technology' which has an outside. Then what stands as the outside of that sphere? Relying on the CJEU's definition of automation as consisting of acts independent of human intervention (i.e., acts are not automated or mechanical to the extent that they were chosen freely) it would be easy to conclude that what represents the 'outside' for technology is the world of humans. Previously, it was suggested that the CJEU's interpretation of automation was that it involves acts that are independent of human intervention. But could we also make a more detailed suggestion? Insofar as the 'outside', as explained by the Court in the first citation, is among humans where paper is printed and its destruction is dependent on human intervention, is the 'inside' of technology then something that 'technology dictates'? Insofar the Court means to say, not only that the technological environment

[234] C-5/08 Infopaq, para 65.
[235] C-5/08 Infopaq, para 67.
[236] C-5/08 Infopaq, para 65-66.
[237] C-5/08 Infopaq, Opinion of AG Trstenjak, para 94.

simply needs certain things to happen in order to facilitate its proper functioning, but also that technology so much as 'dictates' the way in which things will have to be, can we not find some hazy traces at least of the more critical understanding of technology, according to which technology is someplace where humans cannot exercise freedom of choice? Let us explore the implications of this division a bit further with the next case.

2.3.3 FAPL: transient fragments and ephemeral signals

The distinction between human and technology is further clarified in case *FAPL*. In *FAPL,* the questions referred to the Court concerned firstly the issue of whether the reception of Premier League football matches and the associated works constituted 'reproductions' within the memory of a satellite decoder and on a television screen.[238] As has been discussed previously, the referring court asked, whether reproduction right extends to transient sequential fragments of works, produced inside the memory of a satellite decoder and on a television screen and whether those fragments should be evaluated as one or independently when they appear.[239] In case transient sequential fragments constituted a reproduction, would those reproductions belong to the scope of Article 5(1) of InfoSoc Directive and be therefore exempted from copyright owner's authorisation. Secondly, the questions concerned the issue of whether pub operators who used such satellite decoders were 'communicating the works to the public' by showing them on a television screen in their public houses.[240]

Regarding the scope of copyright in the technological context of Article 2(a) of the InfoSoc Directive, the CJEU stated that the reproduction right extends to transient fragments of the works if they contain elements, which are the expression of the authors' own intellectual creation.[241] To determine whether such expression is contained, the fragments reproduced simultaneously were to be examined together.[242] Therefore, the CJEU did not consider it impossible that transient fragments within satellite decoder could carry the expression of author's intellectual creation. Final answer to this question was left for the national court to give.[243]

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[238] C-403/08 and C-429/08 FAPL, para 147.
[239] C-403/08 and C-429/08 FAPL, para 153.
[240] Ibid.
[241] C-403/08 and C-429/08 FAPL, para 159.
[242] C-403/08 and C-429/08 FAPL, para 159.
[243] C-403/08 and C-429/08 FAPL, 158.

Should the national court find that transient fragments of works come within the concept of reproduction, evaluating the conditions of exemption from copyright in Article 5(1) of InfoSoc Directive would become relevant. Regarding the application of Article 5(1), the CJEU concluded that it was undisputed that the first three conditions were fulfilled: reproductions in case *FAPL* could be considered as temporary, transient and being an integral part of technological process.[244] As has been discussed previously, also the fourth condition (lawful use) was fulfilled.[245] Let us again raise the CJEU's interesting notion regarding the fifth condition, independent economic significance. According to the CJEU:

> […], the temporary acts of reproduction, carried out within the memory of the satellite decoder and on the television screen, form an inseparable and non-autonomous part of the process of reception of the broadcasts transmitted containing the works in question. **Furthermore, they are performed without influence, or even awareness, on the part of the persons thereby having access to the protected works**.[246]

Therefore, the reproductions produced within the memory of a satellite decoder and on a television screen fulfilled all the conditions laid down in Article 5(1) InfoSoc. Such acts may be carried out without the authorisation of the rightsholders.[247] This much has been already observed. Previously it was concluded that the fact that users were not aware of the acts of reproduction lead to a situation where humans could not make free choices. But in relation to the issues of this section, we might ask, how come were the users not aware of these acts?

Let us take a short recap on what kind of actions were in question. Premier League organised the filming of football matches, which were usually filmed by the BBC or Sky. Films went through several phases. Logos and commentary were added, after which the films were compressed, encrypted and transmitted via satellite to subscribers. Subscribers could then decrypt and decompress the signal with a decoder device.[248] As a result, fragments of works (such as films, musical works and sound recordings) were sequentially stored in the decoder prior to their output.[249] Four frames existed in the memory buffer at one time, together with a short soundtrack corresponding to the

[244] C-403/08 and C-429/08 FAPL, para 165.
[245] C-403/08 and C-429/08 FAPL, para 172-173.
[246] C-403/08 and C-429/08 FAPL, para 176. Abbreviations and emphasis added.
[247] C-403/08 and C-429/08 FAPL, para 182.
[248] C-403/08 and C-429/08 FAPL, Opinion of AG Kokott, para 35.
[249] C-403/08 and C-429/08 FAPL, Opinion of AG Kokott, para 36.

frames.[250] Similarly, an image was displayed on the screen, although for an even shorter time, while the corresponding section of the soundtrack was played.[251]

The guests of a public house appear to be not aware of these acts as these take place 'inside' technology, but would they not be aware of the image displayed on television screen? Regarding the fifth condition of Article 5(1), independent economic significance, the AG indeed draws a distinction between acts that occur inside the decoder device and on the television screen. According to the AG, all conditions of Article 5(1) are meant to permit acts purporting to facilitate actual exploitation.[252] If an act of reproduction *with a view to transmission* does not occur, exploitation at the end of the transmission chain is not possible.[253] Therefore, reproductions produced inside the decoder device would have no independent economic significance.[254] However, the AG considered that reproductions on television screen would have that. According to the AG, 'the economic significance of a broadcast is, as a rule, based on its reception.'[255]

The CJEU eventually decided that neither the reproductions inside decoder's memory nor on television screen had independent economic significance, as fulfilment of that condition would require economic advantage beyond mere reception of the broadcasts.[256] In other words, as works broadcast have economic value, the access to them necessarily has value as well. However, this kind of value is not independent in a way that it would create additional value.[257] Still, the division drafted by the AG is illuminating in terms of the CJEU's statement regarding user's awareness. From this, we may infer that acts that a user is not aware of are also acts that take place within the satellite decoder device. However, on television screen there appears to be two things happening. On the other hand, there is the technological process of which the images on screen form part. This was considered non-autonomous: belonging to the 'sphere of technology'. Then again, the transient images as a whole formed a video of what humans understood to be a football match. How did this technological process produce something understandable to humans? Let us take a look at this issue next.

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[250] C-403/08 and C-429/08 FAPL, Opinion of AG Kokott, para 76.
[251] C-403/08 and C-429/08 FAPL, Opinion of AG Kokott, para 84.
[252] C-403/08 and C-429/08 FAPL, Opinion of AG Kokott, para 92.
[253] C-403/08 and C-429/08 FAPL, Opinion of AG Kokott, para 93.
[254] C-403/08 and C-429/08 FAPL, Opinion of AG Kokott, para 94.
[255] C-403/08 and C-429/08 FAPL, Opinion of AG Kokott, para 95.
[256] C-403/08 and C-429/08 FAPL, para 175.
[257] C-403/08 and C-429/08 FAPL, para 177.

This question relates to the Court's second inquiry. The referring court asked whether 'communication to the public' covers transmission of the broadcast works, via a television screen and speakers, to the customers present in a public house.[258] The CJEU started its evaluation by clarifying the concept of 'communication'. Referring to Related Rights Directive and TRIPS Agreement[259], the Court concluded that 'communication' should cover 'making the sounds or representations of sounds fixed in a phonogram audible to the public'.[260] The Court also raised Article 11bis(1)(iii) of the Berne Convention, stating that:

> [the] concept encompasses communication by loudspeaker or any other instrument transmitting, by signs, sounds or images, covering […] a means of communication such as display of the works on a screen.[261]

What appears to be listed here, are ways of communication that humans can not only understand but use to communicate with each other. As discussed in previous section, the actions of pub owners could not be considered just technical means merely to ensure or improve the reception of the original broadcast. Instead, those actions were the very requirement for the audience to be able to view the broadcast in the first place. In a way, broadcast works are around us all the time: we just cannot observe them without aid. We need something that transforms the signals into an understandable form. The CJEU explains this further:

> […] the proprietor of a public house intentionally gives the customers present in that establishment access to a broadcast containing protected works via a television screen and speakers. Without his intervention the customers cannot enjoy the works broadcast, even though they are physically within the broadcast's catchment area.[262]

Therefore, the CJEU concluded that when broadcast works are intentionally transmitted via a television screen and speakers, those acts constitute 'a communication to the public'.[263] In addition to the bar owners' intentions, a relevant aspect would appear to be the 'translation' of signals to a format the audience is able to perceive with their senses, by hearing and seeing in particular.[264] Without that intervention the customers cannot enjoy the works broadcast, even though they are physically within the broadcast's catchment area. The intervention of the owner is therefore not only manifestation of his

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[258] C-403/08 and C-429/08 FAPL, para 183.
[259] The Agreement on Trade-Related Aspects of Intellectual Property Rights, signed in Marrakesh, Morocco on 15 April 1994.
[260] C-403/08 and C-429/08 FAPL, para 191.
[261] C-403/08 and C-429/08 FAPL, para 192. Abbreviations added.
[262] C-403/08 and C-429/08 FAPL, para 195. Abbreviations added.
[263] C-403/08 and C-429/08 FAPL, para 196.
[264] C-403/08 and C-429/08 FAPL, para 195.

will. By intervening, he also provides the audience with a medium to the technological world of signals, by equipment that translates the signals and transient fragments produced inside the satellite decoder box to a format that the audience can understand.

Let us compare this case to the case of Infopaq. In *Infopaq*, what happens at the end of the process, i.e. whether prints were destroyed or not, was dependent on human will. Therefore, the process was not considered automated in all aspects. The CJEU also noted that print existed in material form, which was one of the reasons why it, according to the CJEU, could not be automatically destroyed. Automatically then meant without human intervention. On the other hand, that kind of automatic destroying was possible when it took place inside the technological process. In *FAPL,* the evaluation was in this respect different. Acts of reproduction took place inside the black box of technology, the satellite decoder. While the CJEU concluded that also parts of a work produced inside the decoder box constituted reproductions, authorisation of the rightsholder would not be necessary as all the conditions of exemption in Article 5(1) InfoSoc Directive were fulfilled. This was because humans could not interfere and were not even aware of the process.

However, when the ephemeral signals and transient fragments 'on the air' were transformed into a format that humans could understand by hearing or seeing, something happened. While the exemptions in Article 5(1) applied to the technological process of the FAPL case, its evaluation under Article 3(1) governing 'communication to the public' was different. If we consider that notion as it was presented in the previous case, where the CJEU appeared to draw a division between the 'sphere of computer technology' and the human world, could we think that in the present case that borderline was crossed somehow? And furthermore, that it was done by transforming the signals that belong to the technological world – and are therefore exempt from the application of Article 5(1) – into something that belongs to humanity? Could we think that by that act of transformation, the signals and fragments were given *a meaning* among humans? But what then is that meaning, more precisely? This will be discussed with the next case.

2.3.4 SAS Institute Inc.: acts of translation

Case *SAS* again brings to light some further distinctions between the human and the machine. The references for the CJEU were made by a British court in the proceedings

between SAS Institute Inc. (SAS Institute) and World Programming Ltd.[265] The case concerned analytical software developed by SAS Institute. Software known as SAS System was used particularly in statistical analysis. The SAS System included a core component that enabled users to write and run application programs to work with their data. Such applications were written in a language known as SAS Language.[266] When customers had acquired a license to SAS System, they were bound to use SAS components in order to run their existing application programs in SAS language.[267] The World Programming Ltd had then created an alternative computer program, the World Programming System, which enabled users to run programs written in SAS language.[268] World Programming Ltd had admitted that its intention was to produce the same kind of functionality as in SAS System, so that the programs of its customers would function similarly.[269] However, it had not been established that World Programming Ltd would have copied the text of the SAS System's source code or its structural design.[270]

The national courts handling the case on its previous stages had held that it was not an infringement of copyright to study how the program functions and, based on these observations, to write another program that emulates the functionality of the first program.[271] SAS Institute disagreed and brought the case before the referring court, The High Court of Justice of England and Wales.[272] For the sake of the argument, the analysis will be limited to the first question of the reference. This question, as reformulated by the EU Court, concerned the copyright protection for the functionality of a computer program, the programming language and the format of data files, i.e., whether those constitute 'a form of expression' of the program in terms of Article 1(2) of the Software Directive.[273]

Let us first revisit the Software Directive in a bit more detail. Article 1(1) states that:

> In accordance with the provisions of this Directive, Member States shall protect computer programs, by copyright, as literary works within the meaning of the Berne Convention for

[265] C-406/10 SAS, para 2.
[266] C-406/10 SAS, AG Bot's Opinion, para 27.
[267] C-406/10 SAS, AG Bot's Opinion, para 29.
[268] C-406/10 SAS, AG Bot's Opinion, para 30.
[269] C-406/10 SAS, AG Bot's Opinion, para 31.
[270] C-406/10 SAS, para 25.
[271] C-406/10 SAS, para 26.
[272] C-406/10 SAS, para 27.
[273] Directive 2009/24/EC of the European Parliament and of the Council of 23 April 2009 on the legal protection of computer programs. OJ L 111, 5.5.2009, p. 16–22.

> the Protection of Literary and Artistic Works. For the purposes of this Directive, the term 'computer programs' shall include their preparatory design material.

The wording clearly articulates that computer programs are protected within the copyright system, instead of other intellectual property regimes.[274] Secondly, computer programs are protected as 'literary works' within the meaning of Berne Convention. This means that computer programs are not to be categorized as, for example, applied art. Also the minimum requirements of Berne Convention apply similarly to computer programs as to other literary works.[275] Article 1(2) of the Software Directive then states that:

> Protection in accordance with this Directive shall apply to the expression in any form of a computer program. Ideas and principles which underlie any element of a computer program, including those which underlie its interfaces, are not protected by copyright under this Directive.

This Article expresses the well-established principle in the field of copyright law: copyright should protect expressions, not ideas.[276] Simplified, it could be said that protection is afforded to the form and not the content.[277] For example, it is possible for several persons to paint a picture of the same theme: it is the way in which that theme is expressed that is the subject of copyright protection and not the theme itself.[278] However, this approach has proven difficult in the context of computer programs due to the computer program's dualistic nature as both literary and functional.[279] While programming language resembles other language systems, difficulties emerge from its potential to create actual effects in the world of human experience. This functional element is not found from other literary works: if functionality is understood as analogous to an idea, it could be said that an idea is an essential part of a computer program.[280] This connection between every program's existence in the 'world of technology' and the 'world of humanity' requires that the courts distinguish the idea from its expression in order to evaluate whether a computer program can be given copyright protection.

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[274] Marie-Christine Janssens, The Software Directive in Irina Stamatoudi – Paul Torremans (ed.), The EU Copyright Law: A Commentary. Edward Elgar 2014, p.94.
[275] Janssens (2014), p.94-95.
[276] Rosa Maria Ballardini, Intellectual Property Protection for Computer Programs: Developments, Challenges and Pressure for Change. Hanken School of Economics 2012, p.34.
[277] F. Willem Grosheide, When ideas take the stage. E.I.P.R. 16(6) 1994, p.219-222, 220.
[278] Haarmann (2014), p.66.
[279] Ballardini (2012), p.34.
[280] Janssens (2014), p.95.

Then to the evaluation of the mentioned questions. Let us begin with the AG's Opinion. Regarding the referring court's question of copyright protection for computer language, the AG begins:

> […] a computer program is first compiled in the form of a source code. That code is written in a programming language which will act as a translator between the user and the computer. It enables the user to write instructions in a language that he himself understands.[281]

'Computer program' can be understood as set of instructions given to the computer: the programmer wants the computer to perform certain tasks. These instructions are given in the form of code.[282] The code that the programmer initially writes is the source code, which resembles natural language, usually English.[283] The source code is the only part of the code that can be understood by humans.[284] The object code, on the other hand, is a sequence of electrical charges which is not dependent on a written representation.[285] A so-called 'compiler' is needed to translate source code into machine-readable object code.[286] This marks the border between 'human world' and 'world of technology'. The language of computer needs to be translated into a form that humans can understand (and *vice versa*.) Similar observation was previously made in relation to transient images, which were translated into sounds and a picture on television screen.

Previously, a question was posed, whether the act of taking something from the 'world of technology' and carrying it over to humans meant that something was given a meaning among humans. Could we now think that perhaps this is what meaning stands for? That meaning is something the humans themselves understand? Natural language is no doubt this kind of construct. The foundation of language is a shared form of life, which again leads to shared meanings.[287] The acts discussed here (football match, its commentary and the writing of source code) are such that we humans can understand them but they would appear incomprehensible to animals or even to machines. This way, perhaps we could think that what defines the 'human world' alongside freedom is meaning. This is good as far as it goes, but what then defines the 'world of technology'?

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[281] C-406/10 SAS, AG Bot's Opinion, para 69.
[282] Manender Grewal, Copyright protection of computer software. E.I.P.R. 18(8) 1996, p.454-458, 454.
[283] Ballardini (2012), p.11.
[284] Ibid.
[285] Brendan Brown, Computer software - copyright protection for object code in New Zealand. E.I.P.R. 11(9) 1989, p.330-333, 331.
[286] Ballardini (2012), p.11.
[287] Susanna Lindroos-Hovinheimo, Justice and the Ethics of Legal Interpretation. Routledge 2013, p.26.

Let us still stay with the AG's Opinion and have a look at the way it answered to the question of whether the functionalities of a program could obtain copyright protection. The AG clarified the meaning of functionality in a computer program by defining it as the set of possibilities offered by a computer system: the functionality of a computer program is the *service which the user expects from it*.[288] Therefore, the AG considers that functionalities of a computer program cannot be the object of copyright protection.[289] The AG explains this with an example:

> Where a programmer decides to develop a computer program for airline ticket reservations, that software will contain a multitude of functionalities needed to make a booking. The computer program will have to be able, in turn, to find the flight requested by the user, check availability, book the seat, register the user's details, take online payment details and, finally, edit the user's electronic ticket. All of those functionalities, those actions, are dictated by a specific and limited purpose.[290]

Firstly, it is the programmer who decides to develop a computer program and thus defines its purposes. What the machine does is enable that purpose to be realized. Those kind of actions cannot be creative as they are dictated by 'a specific and limited' purpose. What the AG appears to say is that technology is instrumental. If we at this point take a look back to our paradigmatic image, the mechanical rat-in-a-labyrinth, perhaps we can realize what is crucial here: the purpose of the actions in the case of machines is pre-defined and it is because of this fact the they cannot belong to the scope of copyright protection. But it is not so that machines could never set the purpose. On the contrary, technology can dictate the way in which things have to be, as was implied by the AG in case *Infopaq*. Back then, the AG stated that 'the purpose of Article 5(1) is to exclude temporary acts of reproduction 'which technology dictates.'[291] If the purpose of the action is derived from machines instead of humans, those actions cannot be protected by copyright. Whereas copyright is about human freedom, machinery is about instrumental service.

2.3.5 Conclusion

The answer to the question whether technology and humanity intertwine in the praxis of the CJEU appears to be no. Both the CJEU and the AG appeared to place a strict division between what is human and what is machine. Previously, it was observed that freedom of choice served as this kind division between human and machine: freedom belonged to

[288] C-406/10 SAS, para 52.
[289] C-406/10 SAS, AG Bot's Opinion, para 53.
[290] C-406/10 SAS, AG Bot's Opinion, para 54.
[291] C-5/08 Infopaq, Opinion of AG Trstenjak, para 94.

humans and service belonged to machines. In this section this division was further examined. It further appeared that the CJEU and the AG were conceptualizing 'humanity' and 'machinery' as different 'worlds': when something happened among machines it could lead to the actualization of the exemptions of Article 5(1) of the InfoSoc Directive. Actions that took place among machines could therefore be exempt from copyright protection, which is for humans. This division was made via freedom of choice but also other elements.

In all cases objects appeared that seemed to belong to the 'world of technology': those were signals, file formats and object code. These were out of reach for humans as such. The reason why they appeared to belong to machine instead of human was that to all these an aspect of 'translation' was attached. Signals had to be translated into picture and sound, file formats needed to be translated into words on a paper and code needed to be in a form that humans could read. What happened in this act of translation was that these objects were given a meaning among humans: they were transformed into means that humans could use to communicate and interact with each other.

Could humans not communicate with technology then? In a way yes, but this kind of communication was not characterized by freedom, as with humans. The machines could be given different kind of instructions and orders, but it would be unthinkable that machine would suddenly question these. The machines in general do not stop and ask: what is the point? Whereas freedom was for humans, the instrumentality was for machines. The purpose of technology was to enable pre-defined purposes of humans. When the purpose was not set by humans, these actions were excluded from copyright protection. On this basis it seems we can conclude that copyright is indeed centred around human subject. But could there also be something more to that? In the previous section it was concluded that the division between human and machine could also be found within the humans themselves. Perhaps there lies some sort of fundamental fear regarding our own humanity: what if we are not creative and free, but unable to determine meaning and purpose for ourselves, and therefore not humans at all? Maybe this strict division between mechanical and creative is necessary precisely to safeguard our humanity and maybe we exclude machines to exclude the machine in us. With the next section we will take a look at this possible division within the human subject.

2.4 Rationality

2.4.1 Introduction

Where are we now? We have observed humanity in relation to automation as well as in relation to technology in more general. We noted that when humans were not able to exercise their freedom to make choices, they could be considered as parts of technological processes and their actions could be understood as mechanical rather than creative. But when there was a possibility for human intervention, the evaluation was different. However, this did not appear to imply that the so-called borders between humanity and technology would become increasingly fluid: rather the observations in the previous section pointed to the opposite direction. The CJEU seemed to draw a strict distinction between humanity and technology. When something happened among technology, it lead to the copyright protection, which is for humans, not applying. Then again, for something to cross the border required that this something received a meaning among humans via an act of translation. In addition, whereas free choice was associated with humanity, technology was given a role in instrumental service.

This way, two distinctions have been examined which appear to demarcate the world of human experience. The first one, which operated via the notion of freedom, was drawn within humanity. The second one, operated via the notion of meaning, was drawn between humanity and technology. At the end of the previous section a question was posed: is there something foreign in ourselves that does not comply with these categories constitutive of humanity (freedom and meaning) and which we therefore have to exclude to preserve our humanity? Reminding ourselves of the mechanical rat presented in the beginning, should we consider ourselves as the ones who set the purpose for the actions of the rat or are we the rat? Can we make free decisions? This final distinction will be approached via one more fundamental human feature: that of a rational thought.

The tradition of western philosophy has included a tendency to understand things in comparison to something that they are not. For example, social reality is not nature. Nature exists regardless of our social constructs. In a similar way, human is not an animal. Humans can make choices in a way animals cannot. Animals make choices too, but choices of animals are not rational in the same sense as human choices. Whereas humans

act out of reason, animals act out of instinct.[292] One element of these dichotomies is often their hierarchical order: reason is valued over instinct and human is valued over nature. For example, according to the interpretation by Max Horkheimer and Theodor Adorno, in European history the ideal of human presents itself in the distinction to animal and the irrationality of an animal is how humans prove their own value as rational beings.[293] In the tradition of thought deriving from Enlightenment, humanity is understood as an area of rational freedom, to which animal presents a border or counterforce.[294]

This order is also a foundation for Freud's theory of three traumas.[295] First trauma was the Copernican turn: Earth is not the centre of the universe. Second trauma ensued from the questioning of the hierarchy between humans and animals, implied in Darwin's work. Humans descended from monkeys. Third trauma was introduced by Freud himself. According to Freud, humans acted out of rationality only to a very small extent. Instead, humans were directed by the sub-conscious, something that would forever be out of reach for rationalization.[296] In the vein of posthumanist thought, Donna Haraway has then suggested adding the fourth trauma: that which infolds organic and technological flesh.[297]

While that kind of hybdridazitation was not visible in the cases *per se*, could we find the final division between human and machine from the third trauma? The one inside the subject, where it emerges between rational thought and something that escapes rationalization? If we are to assume that within humanity there is something 'other', something that represents non-human, and that this 'other' needs to be excluded, what is the 'other' more precisely? Previously that otherness has been found from animals, but what kind of otherness do machines represent? This is the last question of this thesis. Let us take a look at this issue next.

2.4.2 Levola Hengelo: on sufficiency and precision

In Case C-310/17 *Levola Hengelo*, the request was made in the proceedings between Levola Hengelo BV (Levola) and Smilde Foods BV (Smilde) concerning an alleged

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[292] The relationship of law and animals has been discussed more extensively by Visa Kurki, see e.g. Visa Kurki, Voiko eläin olla oikeussubjekti? Lakimies 3/2013, s. 436–458.
[293] Max Horkheimer – Theodor W. Adorno, Valistuksen dialektiikka. Vastapaino 2008, p.315.
[294] Jouni Teittinen, Mikä ihmiselle kuuluu: Humanismi, kysymys eläimestä ja kärsivien piiri in Karoliina Lummaa – Leea Rojola (ed.), Posthumanismi. Eetos 2014, p.155.
[295] Teittinen (2014), p.158-159.
[296] Ibid.
[297] Donna Haraway, When species meet. University of Minnesota Press 2008, p.11-12.

infringement by Smilde of Levola's intellectual property rights relating to the taste of a food product. 'Heksenkaas' or 'Heks'nkaas' ('Heksenkaas') was a spreadable dip, which was created by a Dutch retailer of vegetables and fresh produce in 2007. By an agreement concluded in 2011 and in return for remuneration, its creator transferred his intellectual property rights over to Levola. Since January 2014 Smilde had been manufacturing a product called 'Witte Wievenkaas' for a supermarket chain in the Netherlands.[298]

Levola took the view that the production and sale of Witte Wievenkaas infringed its copyright in the 'taste' of Heksenkaas and brought proceedings against Smilde before the Dutch Rechtbank Gelderland (Gelderland District Court).[299] The Rechtbank Gelderland held that it was not necessary to rule on whether the taste of Heksenkaas was protectable under copyright law. In any event, Levola's claims were to be rejected since it had not indicated which elements, or combination of elements, of the taste of Heksenkaas gave it its unique, original character and personal stamp.[300] Levola appealed against that judgment before the referring court, the Dutch Gerechtshof Arnhem-Leeuwarden (Regional Court of Appeal). The appellate court considered that the key issue in the case was whether the taste of a food product may be eligible for copyright protection.[301] The appellate court referred this question to the CJEU, asking it whether InfoSoc Directive precludes the taste of a food product from being protected by copyright and the national legislation from being interpreted in such a way that it grants copyright protection to a taste.[302]

Article 2(a) InfoSoc Directive states that the Member States are to provide for a set of exclusive rights for authors to their 'works'. In *Levola Hengelo* the CJEU recalled its doctrine, stating that the concept of 'work' is an autonomous concept of Community legislation.[303] In that regard, two cumulative conditions must be satisfied for a subject matter to be classified as a 'work' within the meaning of InfoSoc Directive. Firstly, as we have seen, the subject matter must be original in the sense that it is the author's own intellectual creation. Secondly, only something which is the expression of the author's own intellectual creation may be classified as a 'work'.[304] However, the Court leaved the

[298] Case C-310/17 Levola Hengelo, para 14-16.
[299] Case C-310/17 Levola Hengelo, para 16-17.
[300] Case C-310/17 Levola Hengelo, para 19.
[301] Case C-310/17 Levola Hengelo, para 20-21.
[302] Case C-310/17 Levola Hengelo, para 32.
[303] Case C-310/17 Levola Hengelo, para 33.
[304] Case C-310/17 Levola Hengelo, para 36-37.

concept of 'expression' open to great extent, which has led some commentators to guess, whether the implication of this division will lead to *de facto* fixation-requirement in EU copyright law.[305] Interpretative support for determining the EU law meaning of the concept of work along these lines was looked for from international treaties. Under Article 2(1) of the Berne Convention, 'literary and artistic works include every production in the literary, scientific and artistic domain, whatever the mode or form of its expression may be.' According to Article 2 of the WIPO Copyright Treaty[306] and Article 9(2) of TRIPS Agreement, copyright protection may be granted to expressions, but not to ideas, procedures, methods of operation or mathematical concepts as such.[307]

This issue relates to the question of 'subject-matter categories', which has every now and then been discussed in the field of copyright. The adopted type of regulatory approach means that the subject-matter of copyright is defined by exclusive categorization.[308] However, in principle European Union law does not recognize these kind of categories[309]: the wording 'literary and artistic works' in Berne Convention is to be interpreted broadly and the categories listed in it are more of examples.[310] The Berne list makes no reference to tastes, or to works which are similar to tastes, such as scents or perfumes, but it does not exclude them expressly. Also, case *Infopaq* had indicated that all works regardless of their subject-matter can obtain copyright protection if they fulfil the originality criterion laid down in the decision.[311] However, as Caterina Sganga points out, in case *Painer* the CJEU appeared to imply that the preliminary identification of the subject matter determines the subsequent protection.[312]

If we now move to the CJEU's evaluation in *Levola Hengelo,* we can first make the observation that the emphasis of the CJEU's reasoning was on the notion of expression. According to the CJEU, the subject matter protected by copyright must be expressed in a

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[305] Caterina Sganga, The Notion of 'Work' in EU Copyright Law After Levola Hengelo: One Answer Given, Three Question Marks Ahead. E.I.P.R. 41(7) 2019, p.415-424, 421.
[306] WIPO Copyright Treaty (adopted in Geneva on December 20, 1996).
[307] Case C-310/17 Levola Hengelo, para 39.
[308] Pamela Samuelson, Evolving conceptions of copyright subject matter. University of Pittsburgh Law Review 78/2016 p.17-93, 21-22.: Some countries have taken the approach in the Berne Convention with an open-ended list of 'literary and artistic works' as the subject matter of copyright. Other countries use specific types of subject matters eligible for copyright protection.
[309] See eg. Sganga (2019), p.421-422.
[310] Sganga (2019), p.415.
[311] C-5/08 Infopaq, para 37: 'In those circumstances, copyright within the meaning of Article 2(a) of Directive 2001/29 is liable to apply only in relation to a subject-matter which is original in the sense that it is its author's own intellectual creation.'
[312] Sganga (2019), p.417.

manner which makes it identifiable with sufficient precision and objectivity, even though that expression does not necessarily have to take lasting form.[313] The CJEU concluded that the taste of a food product could not be pinned down with precision and objectivity. Literary, pictorial, cinematographic or musical works are examples of a precise and objective form of expression.[314] The taste of a food product, however, is identified essentially:

> […] on the basis of taste sensations and experiences, which are subjective and variable since they depend, inter alia, on factors particular to the person tasting the product concerned, such as age, food preferences and consumption habits, as well as on the environment or context in which the product is consumed."[315]

Taste sensations were considered subjective, and therefore not adapt to contribute to formation of copyrightable subject-matter. In the proceedings, Smilde claimed that the protection of tastes is not consistent with the copyright system because it only consists of visual and aural creations.[316] This indeed seems to be so. As observed in the previous section, if something happens in the 'sphere of technology' its contents need to be translated into understandable form, to be made visible or audible for humans. In *SAS*, this medium for translation was programming language and in *FAPL*, it was television screen and speakers. Especially the latter seems to point out that only certain of the senses are to be regarded responsive in this regard, those being vision and hearing. Turning to the AG, we can see him taking the same stance as the judges, noting in his opinion that the provision of Berne Convention regarding different categories of works refers only to works, which are perceived visually or aurally, such as books and musical compositions.[317] Although the list is not exclusive as such, says the AG, it does exclude productions that may be perceived only by senses such as taste, smell or touch.[318]

What does this mean then? At first, it no doubt follows already from the functioning of the legal system that legal concepts need to have a certain limited scope.[319] Would not this in itself mean that concepts such as taste could not be legal and, consequently, that tastes could not constitute subject-matter of copyright law? This seems to be the

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[313] Case C-310/17 Levola Hengelo, para 40.
[314] Case C-310/17 Levola Hengelo, para 42.
[315] Case C-310/17 Levola Hengelo, para 42. Abbreviations added.
[316] Case C-310/17 Levola Hengelo, para 23.
[317] Case C-310/17 Levola Hengelo, Opinion of AG Wathelet, para 51.
[318] Case C-310/17 Levola Hengelo, Opinion of AG Wathelet, para 51.
[319] Ari Hirvonen, Oikeuden ja lainkäytön teoria. Helsingin yliopiston oikeustieteellisen tiedekunnan julkaisuja 2012, p.68. Although it should be noted that legal norms can include also so-called flexible norms as well as principles which are less strictly limited.

undertone in both the CJEU's and the AG's reasoning. Yet this question urges me to bring up something that has been remotely present in all of these cases. Law is not necessarily meant to correspond to what is 'true' in some unequivocal sense. There are plenty of objects and actions (or rather candidates for such) that can be introduced into legal system, although law cannot loyally replicate those elements of the 'real world'.[320] In terms of procedural law, what will be the decision of the court is initially based on the claims and evidence submitted by the parties, which mould the judgement. The judgement becomes a judicial truth although it is not necessarily the 'truth itself'.[321] Therefore, to allow copyright protection for taste is not 'impossible'. Indeed, such actions regarding sensuous copyright have been taken nationally.[322]

How about the recipe of the food product, could it not be enough to fulfil the condition of sufficient identification? As for example Andrew Christie writes: 'Over time, the content of copyright works has evolved away from the symbolic and towards the sensual.'[323] The CJEU and the AG would appear to prove against this kind of claim. Referring to the dichotomy between idea and expression, the AG stated that although the form in which a recipe is expressed may be protected by copyright where the expression is original, copyright does not protect the recipe as such as it relates to idea.[324] Also the CJEU links the recipe to ideas, procedures, methods of operation or mathematical concepts.[325] Copyright protection cannot be granted on that basis. Interestingly, both the AG and the CJEU see an option that the conceptual vagueness of such evasive things as tastes can be done away with someday: with the aid of technology. This is elaborated in the AG's opinion:

> It would seem that, based on today's technology, the precise and objective identification of a taste or scent is currently impossible. […] An objective characterisation of such experiences does not yet exist. I do not rule out the possibility that techniques may be developed in the future to enable the precise and objective identification of a taste or a scent, which could lead to the legislature taking action to protect them using copyright, or other means.[326]

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[320] Legal norms are usually considered to mean the way something *should* be instead of how something *is*, see eg. Hirvonen (2012), p.53; Kaarlo Tuori, Kriittinen oikeuspositivismi. Werner Söderström Lakitieto Oy 2000, p.7.
[321] Dan Frände et.al., Prosessioikeus. Alma Talent 2017, p.120.
[322] Sganga (2019), p.417-418: In 2006, the Dutch Hoge Raad and the French Cour de Cassation took opposite positions on the copyright protectability of scents.
[323] Andrew Christie, Reconceptualising copyright in the digital era. European Intellectual Property Review 17(11) 1995, p.522-530, 523.
[324] Case C-310/17 Levola Hengelo, Opinion of AG Wathelet, para 55.
[325] Case C-310/17 Levola Hengelo, para 39.
[326] Case C-310/17 Levola Hengelo, Opinion of AG Wathelet, para 57. Abbreviations added.

The CJEU agreed to this, noting that 'it is not possible in the current state of scientific development to achieve by technical means a precise and objective identification of the taste of a food product which enables it to be distinguished from the taste of other products of the same kind.'[327] Vague concepts such as taste cannot be defined precisely enough: they are too subjective. Technology, on the other hand, just might have this property. It might understand something about humans that humans cannot understand about themselves.

Let us now return to Freud's three traumas for a while and especially to the second one: the division between human and animal. As Jouni Teittinen notes, humans have throughout history reflected their essence in relation to animals, to the point, where categories of human and animal have become metaphysical categories instead of practical conceptualizations or taxonomical divisions.[328] If we consider this separation analogous to the separation between machine and human, it appears that similar practice is visible in *Levola Hengelo*. Separation of human and non-human elements, the latter of which humans to some extent share with other beings, requires striking a division inside the mind of a human. Sub-conscious element of the human mind, the one that escapes rationalization, must according to these divisions belong to something 'other' than human. Humans act out of reason, animals act out of instinct. For something purely sensuous to enter the legal system is unthinkable, as it would mean recognizing the animal side of human. Similar point has been made by Christopher Buccafusco, who argues that the so-called sensory dichotomy in IP (between patents and copyright) reflects the sensory hierarchy in traditional Western aesthetic theory: according to this tradition, sight and hearing are 'high' senses capable of unconstrained aesthetic and cultural experiences. Touch, taste, and smell, by contrast, are 'low' senses because their connection to natural bodily needs constrains their aesthetic capacities.[329] The 'lower quality' must be excluded to preserve the higher quality. Interestingly, as seen in the previous citation, technology does not bear this off-putting implication. On the contrary, in the future technology might just finally provide humans with a more precise and clear view of the otherness inside themselves.

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[327] Case C-310/17 Levola Hengelo, para 43.
[328] Teittinen (2014), p.156.
[329] Christopher Buccafusco, Making sense of intellectual property law. Cornell Law Review 97/2012, p. 501-548, 501.

If we continue for a moment with this analogy of animals, we can observe that animal represents instinct, something that relates to the sub-conscious rather than to clear reason. If this non-human element is purified, something fundamentally human emerges: a human of rational and free choices. It was also one of the products of Enlightenment that human cannot take his humanity as given, but instead must take responsibility for it by making use of his reason.[330] If all else is excluded but reason remains, does it mean that we will this way finally find the core of humanity? Let us return to mechanical rat. If animal represents something non-rational, something that belongs to the world of senses and instinct, then how about the mechanical animal? It cannot really be said that the rat would have operated on instinct. In a way, the rat was utterly rational. It chose the best option based on the feedback it got from the system and this way navigated in the maze. If this type of rationalization is indeed at the core of humanity, it would seem that exactly that core we share with machines.

2.4.3 Conclusion

In this case, two things seem to happen. Firstly, while the decision of the CJEU has in general been accepted well[331], it has sparked criticism as well. Sganga criticizes the Court's decision for leaving an open-ended reference to 'future technology' to the judgment: 'Last, but not the least problematic, the fact that the court links the potential future admissibility of sensory copyright to the evolution of technology depicts a notion of protected works that is flexible and always open to judicial adaptations, with no guideline — either contextual or teleological — which could decrease the uncertainty surrounding the definition and its potential future development.'[332] Indeed, insofar as the aim of the Court with respect to the senses was to set the standard of perfect objectivity for their evaluation, the judgment left quite many questions ambiguous and open for great discretion in national courts. What appears as the most authoritative source of objectivity is technology. The translation and transformation of irrational experience requires only just some improvement of technique: the analysis and transformation of this experience pass through science, and so it becomes the essential instrument of the relationship

[330] Teittinen (2014), p.157.
[331] See e.g., Ruth Hoy – Ella Castle, CJEU puts a stop to the spread of copyright works: the taste of a food product cannot be classified as a work, Entertainment Law Review 30(2) 2019 p.69-71.
[332] Sganga (2019), p.420.

between rationality and sub-conscious.[333] Technology appears to provide an objective and transparent look into the part of experience that escapes rationalization. By this act, the sub-conscious can enter into the field of rationalization. Previously the instrumental nature of technology was brought up. However, now it would appear that technology stops being an instrument and instead becomes an aim: sole provider of rationalized view into sub-conscious. This way human experience becomes mediated by technology.

Secondly, if we, in accordance with the personality theories, view the copyright as the project of individual freedom and creativity, we can point out that rational choice appears to confirm the central position in humanity, but at the same time it also poses the greatest threat to it. It is exactly rational logic that machines are very good at too: it is what we have hoped to teach them. Whereas senses were seen as something to be excluded, the rationality of technology was welcomed. And yet, in the light of the cases discussed here, it would seem that 'otherness' of machines (automation/instrumentality) is something contrary to 'creativity', which is fundamentally associated with humans. Should *Levola Hengelo* be understood in a way that maybe these elements of 'otherness' are not that alien to us after all? That all along, in all these cases, this is what has been developing: there is no 'otherness' in machines but with machines we share the common ground. The 'otherness' discussed in these cases is not so much the animal side of the human that we fear but the 'otherness' of machine which we find within ourselves, as the cases discussed here would seem to imply. Perhaps we need to reconstruct the image of an author-genius over and over again to hide the fact that we are closer to machines than that image of humanity.

3 Final conclusions

In this study, the differences and similarities between humans and machines have been chased in three sections. We started with a question of 'what is human in the praxis of the CJEU's copyright cases'. Immediately from the beginning, this question seemed to wrap inside of it meanings and mysteries that made it less and less clear while we advanced. As discussed in the beginning, in the core of humanity seemed to reside creative freedom and rationality: humans were able to not only choose from different options but to set the aim, which technology could not do. It was further questioned, whether these traditional

[333] German A. Duarte, "La chose maudite". The concept of reification in George Bataille's The Accursed Share. HSS IV.1 4(1) 2015, p.91-110, 94.

categories belonging to humanity had become somehow confused with the emergence of new technologies. In other words, had it become more difficult to separate humans from machines?

This question was then approached via three distinctions that supposedly separated humans and machines. With the aid of these hypothetical distinctions, oppositional pairs were drafted. This way, we could assume that if, for example, creativity belongs to humanity then it must have a counterpart that belongs to machine. In the first section, this oppositional pair consisted of creativity and automation. If creativity is in the core of copyright system, then certainly automation was outside of it. In a way, this was so. In the first section, the CJEU did appear to separate actions it considered creative from those it considered mechanic. Mechanic actions could not gain copyright protection. Interestingly, this division appeared to be grounded on the notion of freedom of choice. When humans could exercise their freedom to choose from different options, they were considered creative. When the actions of humans were bound by rules or external constraints, they were mechanic. This way, the boundaries between human and machine did become confused. It turned out that while creativity was in some sense reserved for humans, automation was something that humans and machines could share. Humans could act mechanically as well.

Although this kind of fluidity appeared to exist between categories of humanity and technology, these findings were not entirely satisfying. Addressing posthumanist thought, it seemed difficult to argue that boundaries of humanity and technology had become less clear, as the CJEU nevertheless seemed to draw a strict division between humans and machines. This was the starting point for the second section. While in the first section the division between humans and machines appeared to take place within humanity, now the division between humanity and technology was further examined. What kind of division existed there, if any? And if such division was to be found, could it be crossed? The conclusion was that the CJEU indeed seemed to conceptualize humanity and technology as separate areas, speaking of the ‘sphere of computer world’. If something was to be carried over from that sphere to humanity, it required an act of translation. For example, television signals had to be transformed into picture and sounds, into a format that humans could understand. This raised the question, why were those formats understandable to humans while others were not? The answer was then looked from the point of view of

meaning: for something to cross the border between human world and world of technology required that it could be given a meaning among humans.

What then was the oppositional pair in this case? First, both the first section and the second implied the same outcome: freedom was for humans. What belonged to machines was enabling of something else to happen, instrumental service. This way, when the world of human experience was defined by freedom and meaning, the world of technology appeared to be defined by meaningless functionality. Like a mechanical rat in the maze, the machines could act to fulfil a pre-defined purpose, but setting the purpose belonged to humanity. However, the findings from the first section still seemed somewhat troubling. In some cases, humans could not set the purpose. This raised a question, is this seemingly strict division between humanity and machines merely an illusion, smoke and mirrors to safeguard the core of humanity when we know that within us there are also elements that do not appear human in traditional sense?

This element of 'otherness' was then discussed in the third section. In a way, it had been developing all along but was now faced up front. The findings from previous sections, freedom to make choices and set the purpose for actions, seemed to lead to one more traditional human feature: rationality. According to Merriam-Webster dictionary, rational means having reason or understanding.[334] It seemed this final human feature, emphasized in the tradition of Enlightenment, was bringing us back to the beginning. Is mind the primary feature of humanity? Can mind be understood like a computer? Or is there something that escapes this kind of rationalization after all? This time the division was looked from within human subject via oppositional pair of rational and sensuous. In this regard, the typical division has been drawn between humans and animals and this division was discussed here as well. Whereas animals act out of instinct, humans act out of rationality.

In the final case *Levola Hengelo*, it seemed that the CJEU had to separate these features, rational and purely sensuous, in order to exclude the irrational. This appeared as the final border demarcating human representation in the copyright system: humans must be able to make free choices, set the purpose instead of just following orders and these actions must take place in rationalized environment. But if the irrational represents the

[334] Merriam Webster Dictionary. Available at: https://www.merriam-webster.com/dictionary/rational. Last visited 3.9.2019.

otherness of an animal, what would then be the otherness of technology? In this regard, it seemed that otherness of machine was not seen as something that should be excluded at all: rather, technology was seen as an instrument to provide final, utterly rationalized look inside human subject. While taste sensations could not be defined with sufficient precision and objectivity with human abilities that kind of objective look into that which escapes rationalization could in the future be found precisely from technology.

Whereas animals have been considered irrational, and therefore non-human, technology appeared as completely rational, even more so than humans. This was visible in the example of the beginning as well: the mechanical rat was, in its own way, utterly rational. Would this mean that technology does not after all represent an otherness for us but rather something that we welcome to be part of ourselves? Which has always been part of ourselves?

Contemporary visions of dystopia include androids and technologically enhanced humans, robot overlords and ethical issues arising from ambiguous lines between human and non-human. Yet what I have observed here appears to point to the opposite direction. In the CJEU's reasoning, humans and machines can act likewise, share common features. If we would remove all words referring to human and non-human, refuse to take these categories as given, it would be very difficult to say which actions belong to each. Humans and machines have a common ground, in humanity itself. Technology has never really been 'outside' humans. Insofar as humans and technology share all these common features, the final question that remains is whether this means that machines are more humans than we might have realized? Or would it rather mean that we are less humans than we would like to think? Perhaps we need these strict divisions to ease our fear that we are not rational, that we cannot set the purpose and that our choices are not our own. If humanity is indeed defined by these features, have we ever been humans to begin with?