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AVOIDING PLAGIARISM IN HIGHER EDUCATION: LEGAL INTERPRETATION AND CONTROVERSIES

EVITAREA PLAGIATULUI ÎN ÎNVĂȚĂMÂNTUL SUPERIOR: INTERPRETAREA LEGALĂ ȘI CONTROVERSELE

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Abstract: Plagiarism and copyright infringement are intrinsically connected. The paper examines EU law in this area, depicts different types of plagiarism and copyright offences as well as different types of penalties. The focus is on higher education plagiarism and the use of several types of anti-plagiarism software to tackle that problem. Several controversies have been examined and recommendations offered on avoiding some of the common problems.

Key-words: *plagiarism, copyright, legislation, anti-plagiarism software.*
Cuvinte cheie: *plagiat, drepturi de autor, legislație, software anti-plagiat.*

1. INTRODUCTION

The focus of the paper is academic plagiarism divided in two types: plagiarism of text and plagiarism of ideas (Roig, 2006 quoted by Vrbanec & Mestrovic, 2021, p. 286). Further distinction along those lines is the distinction between literal and intelligent plagiarism (Alzahrani et al., 2012 quoted by Vrbanec & Mestrovic, 2021, p. 287). Referral to the original source is more difficult in the second type and thus a sanction is more difficult to be imposed in that case.

The paper focuses mostly on the weaknesses of plagiarism's detection and interpretation. It offers some forms of correction of these weaknesses and suggests a shift in the comprehension of authorship as a combination between its information and innovation aspects (methodology section).

2. DATA AND METHODS

2.1. Literature Review

The literature review will focus on the effect of anti-plagiarism tools on legislation, mostly emphasizing the negative sides. The latter include a lack of precision in the definition, a lack of unified reaction to the legal problem of plagiarism, weaknesses of the anti-plagiarism software, including the focus on detection as opposed to prevention.

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The legal prosecution of plagiarism has problems because of the lack of relevant legislation in some of the countries, such as Bulgaria (Kostov, 2014, p. 76). First, there is no legal precision among the academic circles in terms of what we call 'plagiarism'. The definition itself is not clear and is composed of blurring concepts. Thus, the interpretation of the definition may vary in different legislations. Second, an answer is missing to the very important question about the organ or institution that makes the decision referring to what is plagiarism and what sanction it should impose (Kostov, 2014, p. 78). So, there is no working mechanism of control and sanction of plagiarism.

Another weakness of the process of searching for plagiarism is a weakness of the programmes for plagiarism prevention: they can 'catch' only the so-called literal plagiarism with its subdivisions of 'exact', 'near' and 'modified' copy (Alzahrani et al., 2012 quoted by Vrbanec & Mestrovic, 2021, p. 287). Thus, anti-plagiarism software cannot trace 'intelligent' plagiarism in its three forms: text manipulation (paraphrasing, summarising), translation, and idea adoption (Vrbanec & Mestrovic, 2021, p. 287). A slight excuse could be the vision that all ideas are information and they are acquired by the general information exchange where modifications of ideas are difficult to be precisely specified. In this line of thought, a further discussion could arise from the decision referring to what kind of sanction should be imposed to the three different types of academic plagiarism: 'heavy' (copy, substitute, and translation), 'mild' (self-plagiarism, repetition) and 'real' (hybrid) (Vrbanec & Mestrovic, 2021, p. 290).

Anti-plagiarism software applies the detection method. However, it should be supplemented by prevention methods that have long-term effects. The two types of methods are described by Lukashenko, 2007 (quoted by Vrbanec & Mestrovic, 2021, p. 293). The prevention methods seem to have more educational effect as they may include acknowledgement of code of honesty and integrity. The detection methods are more related to the imposition of sanction and penalties with a short-term and rapid effect. Detection methods could produce results only if open access scientific databases are created. A weakness of anti-plagiarism software is, once, that the program does not detect complex types of plagiarism and second, that it either does not guarantee the confidentiality of the author or has restrictions on 'the number of documents submitted or the number of words in the document' (Vrbanec & Mestrovic, 2021, p. 295). The lifting of the mentioned restrictions is connected with certain costs of the otherwise free service. A further complication when it comes to building the open access scientific databases is that they are or should primarily be composed of already originally published works, which makes the status of works 'in process' or 'under review' unclear and subject to violation of copyrights.

In terms of cost, it is without doubt that free anti-plagiarism detection tools/softwares have to be provided by the government to all academic institutions as part of the educational policy (Chowdhury, 2020, p. 20). The main problem with these tools is their reliability and the validity of the produced results (Jiffriya et al., 2021, p. 49). The detection process is not accurate in itself as it is an automated process. Out of the two types of plagiarism, detection tools (source code and

natural language), the natural language tools are more developed (Jiffriya et al., 2021, p. 51), the latter being divide into intrinsic (analysis of the differences in style within the text itself) and extrinsic approach (analysis of logical similarity of content among many documents) (Jiffriya et al., 2021, pp. 53-54).

Among the challenges to plagiarism detection tools, there can be mentioned: incapability of detection of 'plagiarized images, tables, figures, formulas and scanned documents' (Jiffriya et al., 2021, p. 58), the malpractice of collecting students' assignments in the databases, the generation of false-positive results, the poor detection of paraphrased text, cross-language documents, and citations (Jiffriya et al., 2021, pp. 58-59). A limitation is the interpretation of the 'similarity checks', which are considered measurement for plagiarism based on matching of phrases of certain length (Kavulya et al., 2022, p. 6). These similarity checks cannot be performed on non-digitalized text and also not all of the available online material can be searchable.

In terms of preventative methods, first the rules on academic and scientific dishonesty that universities should implement have to comply with cultural peculiarities (Pupovac et al., 2008, p. 14), although plagiarism as academic malpractice has to be regulated according to harmonized international standards of education. Growing problems among certain European countries (Spain, United Kingdom, Bulgaria, and Croatia) is cyberplagiarism or plagiarism from digital sources (admitted by 77% of the students) (Pupovac et al., 2008, p. 15), as well as translated plagiarism or plagiarism between different languages (Sowden, 2005 quoted by Pupovac et al., 2008, p. 16).

2.2. Methodology

Methodology stems from the different views of the subject of intellectual property: information or invention (Boyle, 1996, p. 156), although both views can supplement each other. The different starting points have different visions of the productive process and it is either a development of existing work (information) or a matter of creativity and innovation (invention). Problems could arise from the barriers to the free flow of information in the first case and from the lack of incentives to innovation in the second case.

On the one hand, it is the assumption of the uniqueness of authorship and this leads to the issue of copyright, which further leads to the conception of property rights (Boyle, 1996, p. 56). On the other hand, it is the assumption of a creative work as a collection of information (use of existing resources). Neither of the assumptions is completely accurate.

The focus will be on the conception of problems and the normative starting point. In the case of information, the transaction cost problem is in the circular effect of: barriers to the free flow of information lead to the inhibition of innovation/ inadequate circulation of information. In the case of innovation, the public goods problem stems from the causal chain: inadequate incentives for future production lead to the inhibition of innovation/ inadequate circulation of information. The normative starting point, i.e. property rights is the creator's 'natural' right, the reward for past creation, and the incentive to produce again.

It seems that the appropriate treatment of plagiarism should include a view combining both the information and invention sides/interpretation of authorship (Table 1). So far, anti-plagiarism software with its detection function, has more positive effects with the treatment of plagiarism as a problem with information. The other view, namely treating authorship as originality and property right could increase the reliance on legal sanctions as barriers to the infringement of authorship rights.

Table 1. Authorship as Information and Innovation

Subject Matter	**Information**	**Innovation**
Economic Perspective	Efficiency	Incentives
Paradigmatic Conception of Problems	Transaction cost problems	Public goods problems
Reward for	Effort/investment/risk	Originality/transformation
View of the public domain	Finite resources for future creators	Infinite resources for future creators
Vision of the productive process	Development based on existing material	Creation ex Nihilo (creativity, craft)
Normative starting point	Free speech/free circulation of ideas and information	Property rights

(Source: Boyle, 1996, p. 156)

3. RESULTS AND DISCUSSIONS

The practical discussion on plagiarism detection in various countries include an explanation why the protection of property rights still has a way to go in order to reach a general understanding and a unified regulation. This is explained by the fragmentation of approaches, legal pluralism and uncertainty, as well as by the weaknesses of anti-plagiarism reports.

3.1. EU Law Concerning Plagiarism and Copyright

Besides the international contracts like World Intellectual Property Organization (WIPO) and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) under the World Trade Organization (WTO), regional (European) legal framework has been shaped by EU Directives.

As a rule, directives in their legal nature have binding legal force. However, they lay down certain results that must be achieved and each member state is free to decide how to transpose directives into national laws. Transposition includes the passing of appropriate implementation measures.

The following directives give an outline of the general EU framework in the area of plagiarism, each focusing on specific issues, namely Directive 2001/29/EC of the European Parliament and the Council of 22 May 2001, Directive 2006/116/EC of the European Parliament and of the Council of 12 December 2006 and Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019. All these so-called directives are specifically created in different years, thus showing the specific needs of the legal shortcomings. However, the general

framework lies in the European Code of Conduct for Research Integrity. Important of course is the WIPO (World Intellectual Property Organisation) Copyright Treaty created in December 1996.

A mutual flaw regarding the general 'acquis communautaire' is the fragmentation of approaches due to the application of 'mutatis mutandis' or, in other words, when comparing two or more cases or situations and simultaneously making the necessary alterations while not affecting the main point at issue. In the area of copyright in relation to the protection of 'critical and scientific publications' as described in the Directive 2006/116/EC of the European Parliament and of the Council of 12 December 2006, only in this case the member states 'remain free to maintain or introduce other rights related to copyright in particular in relation to the protection of such publications'. However, as mentioned, due to the application of 'mutatis mutandis', these so-called 'rights' are specific for each country and they should reflect the customs and traditions of the country and the region because each country has different interpretation of morality and ethics. This of course does not prevent the need for the creation of a worldwide intellectual property code with a single definition of morality in the area and a single penalty code worldwide.

Despite the joint efforts worldwide to create such a code, however, the so-called 'legal uncertainty remains for both rightholders and users, as regards certain uses, including cross-border uses' in the area of digital environment, especially in the area of intellectual property rights.

3.2. Controversial Issues

First, there is no common definition of plagiarism. Generally, the definition includes lack of academic integrity and the use of intellectual work of other people with the respective consequences. It may be different for different universities. It may focus only on the intentional versus the unintentional use of such work, although the consequences may be the same (Neville, 2007, p. 27). Three main forms of plagiarism are usually mentioned, namely copying, representing arguments without citation of the source, and paraphrasing without quotations (Neville, 2007, p. 27).

Second, the issue is rather broadly related to copyright and intellectual property rights. According to the directives, copyright is an element of the internal market. However, as such, different local legislations may apply, based on different cultures, which means legal pluralism and application of the law using the so-called 'mutatis mutandis' after the process of harmonization. In other words, 'mutatis mutandis' is the practical side of harmonization.

Third, legal uncertainty could be found in two main areas: prevention of extraction from a database (public-private partnerships) and in-text-and-data mining. Both the issues of 'lawful access' and cultural differences lead to different interpretation and legal freedom.

The reason is that the focus is so far on the legal definition of copyright infringement/intellectual property rights. This is due to the flexibility of the framework and it leads to fragmentation and legislative inconsistency, but it also allows state adaptation and 'mutatis mutandis' (each case adds to the softening of

the law by introducing its experience). The latter allows for the creation of precedents in law that could be used as case law examples. It is used when comparing two or more cases/situations, making necessary alterations while not affecting the main point at issue. However, legal uncertainty remains in cross-border uses of works in the digital environment, as well as text and data mining.

Different legislations are results of different cultures and country styles. In other words, legal harmonization, leading to consensus is a must, but still individual application is a creativity approach. This approach could also be the essence of anti-plagiarism software. First, along those lines the following concepts or collaboration of concepts have to be defined: 'right of reproduction', 'right to prevent extraction from a database', 'public-private partnerships', 'lawful access to databases and to online freely available content'. What is undisputable however is that there should be a licensing agreement with the author and a form of remuneration specified, corresponding to the actual benefit of the application of the author's invention to the world and its good use in service of society. The need for remuneration comes from the nature of the copyright of published works/scientific articles.

3.3. Issues Concerning Anti-Plagiarism Software

The debate is about the origin of ideas and who holds the ownership of ideas. There is still a debate that software does not catch stealing of ideas (originality, ideas as property rights). On the other hand, any investigation, tracing such origin, most likely lies on probabilities. Furthermore, as many antiplagiarism companies acknowledge, similarity coefficients are quantity rather than quality based so there is a need for thorough analysis of the anti-plagiarism report. So, following from this, the form of the licensing agreement with the author is very important in order to be accepted as a single universal agreement, protecting the author and the user at the same time. Anti-plagiarism machine analyses require authorisation from copyright owners.

Related issue concerns the applicability of the well-known American concept of 'fair use' to the EU legislation. The concept means that 'certain copyright restrictions are waived to allow limited use of copyrighted material for certain purposes (education) as long as copyright owner is acknowledged'. While there are exceptions to copyright restrictions within the EU, they differ at national level and can be difficult to apply. It is, therefore, important to have copyright permission for material.

4. CONCLUSIONS

Having in mind the existence of numerous problems related to plagiarism's interpretation and anti-plagiarism software, it is necessary to focus on the creation of an action plan with recommendations to tackle those problems. Among those recommendations, there are two types of measures: first, those stimulating a unified approach and second, those emphasizing the need for differentiation in the interpretation and the penalties applied.

Unified approach:

- Application of a Code of academic ethics, measuring the degree of harm and degree of personal gain, as well as determining the final penalty;

- Application of EEA plagiarism and copyright infringement as a single template for the definitions and rules concerning plagiarism and copyright infringement;
- Crafring a single, publicly accessible online portal in the EU in order to avoid violations;
- Application of the concept of collective licensing with rightholders under the form of a single framework for licensing;
- Enhancing cross-border cooperation in the exchange of lessons learned-stenning from different application of laws.

Differentiation:

- Proper interpretation of anti-plagiarism reports with the required expertise;
- Distinguishing from intentional versus unintentional plagiarism with different penalties;
- Differentiation between rules/ penalties about students and academics, concerning plagiarism;
- Combining those two measures, as well as integrating a more elaborate methodology for plagiarism prevention and detection could minimise the negative sides of the problem and improve anti-plagiarism software.

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