### 2. INTELLECTUAL PROPERTY RIGHTS ON THECHNORE ign

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permitting solution of private international law problems on the internet without the recourse to national law and judicial systems. Today, the Internet has already convincingly demonstrated its self-regulation ability. Largely, this ability concerns technical aspects such as universal unity. From a legal point of view, methods of selfregulation can be seen in the practice of disputes concerning infringement of intellectual property rights in domain names. The WIPO Arbitration and Mediation Center provides flexible mechanisms to resolve Internet domain name disputes without the need for litigation in state courts. Thus, the first question of private international law is omitted. The second question can be missed as well, though not necessarily. The WIPO Overview of WIPO Panel Views on Selected UDRP Questions ('WIPO Jurisprudential Overview 3.0') says: '... a panel shall decide a complaint on the basis of ... any rules and principles of law that it deems applicable.'2 It appears that the Uniform Domain-Name Dispute-Resolution Policy (UDRP) system is so broadly accepted that it can operate as a global representation of general trademark law principles and it is not necessary to apply particular national laws.

The main purpose of this article is to outline new tendencies in private international law, including legal grounds and possible obstacles for the development of self-regulation mechanisms of the Internet with respect to intellectual property relations. These problems have significant importance for Belarus. There are prerequisites for the intense development of the Internet intellectual property relations, but there is no relevant practice. On one hand,

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## 2. UBIQUITOUS INFRINGEMENTS AND TERRITORIALITY OF INTELLECTUAL PROPERTY

The notion of 'ubiquitous' is not clear from the legal point connection of the infringement with several jurisdictions. The term became widely used due to 'Intellectual property: Principles governing jurisdiction, choice of law, and judgments in

transnational disputes' (ALI principles) of the Am pr prALla

The rules of jurisdiction of the Code of Civil Procedure of the

Republic of Belarus<sup>14</sup> of January 11, - do not

exclude the possibility of filing a lawsuit in Belarus despite

the fact an infringement of intellectual property rights took

place abroad. It also concerns cases where a place of an

infringement is unknown or cannot be associated with one

Intellectual Property Disputes (IT&IP Arbitration Court) is a division of the Association of Information Technology (AKIT). The court was registered in accordance with the decision of the Justice Department of the Minsk City Executive Committee in 2015. It aims to settle disputes between legal entities and individuals in the ICT sphere, including disputes concerning recognition and challenging of authorship; recovery of compensation under license, sublicense, or other agreements; compensation and damages arising from illegal use of intellectual property and suppression of intellectual property rights infringements.<sup>27</sup>

There are factual and institutional grounds for the rapid development of Internet relationships on intellectual property in Belarus, leading to the high probability of ubiquitous infringements disputes. However, there exist the necessary means for resolving such disputes. There are two main options, either to sue in national courts and rely on private international law rules and mechanisms of lex fori, or to use alternative dispute resolution and choose the applicable law. From a practical point of view, legal instruments in both options are quite complex and require a certain strategy to meet the risks associated with recognition and enforcement of foreign judgments and arbitral awards. From the standpoint of legal technique, current Belarusian private international law demands modifications to make conflict of laws norms transparent and functional. The main problem is these norms can be interpreted in different ways and do not regulate many aspects. For example, arbitrability and exclusive jurisdiction for intellectual property disputes and restrictions on party autonomy to choose applicable intellectual property laws are not regulated by these norms. The problem of modernization of the Belarusian legislation is rather complex. To emphasize the specifics of a flexible understanding of the territoriality of intellectual property, we dwell upon the necessary changes to conflict of laws rules.

#### A. SELF-REGULATION ABILITY OF THE INTERNET

The second of the two options mentioned above is based on self-regulation mechanisms. To a certain extent, the Internet can be viewed as a space where disputes can be resolved without the use of national legal systems, including state legislation, courts and government bodies

dispute resolution, such as an amicable settlement or an arbitral award, can be enforced without the use of state mechanisms, the problem of territoriality can be avoided and not be take3.3 (i)-2.7 (o)en (ut)-3. (a)-6 (4 (bl)-16(w)-10 (ha)-6 (a)-6 (4 (bl)-

<sup>&</sup>lt;sup>27</sup> IT&IP Arbitration Court

<sup>&</sup>lt;http://www.akit.by/index.php?option=com\_content&view=articl e&id=16&Itemid=10> accessed 10 November 2018.

<sup>&</sup>lt;sup>28</sup> Lilian Edwards, 'The Role of Internet Intermediaries in AdvancingPublic Policy Objectives Forging Partnerships for Advancing Policy

country's law is at stake. From the material regulation perspective, it is the law of the country where the ISP has received a permit for professional activities in the corresponding capacity. However, conflict of laws rules do not allow that easy an answer. The established patterns of behaviour of ISPs in different relationships brightly illustrate the problems of conflict of laws for intellectual property relationships because they have private legal nature.

ISPs do not make payments in jurisdictions where activities placed under control or banned, such as Internet gambling transactions. The territoriality of intellectual property does not allow such a simple variant of solution. Ubiquitous infringement of intellectual property rights implies ubiquitous protection of these rights. ISPs cannot check

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two key places, i.e. the place of litigation and the place of afforded and recognized protection. There are several reasons to abandon this rule. First, ambiguity demands the application of rules of qualification (Article 1094 of the Belarusian Civil Code) and delays case consideration. Second, the localization factor doubles the question of jurisdiction. Finally, the rule contradicts some material norms, in particular norms taking into account foreign intellectual property law.

The rule of *lex loci protectionis* cannot provide flexibility to the territoriality of intellectual property. It is not for conflict of laws to decide whether an intellectual property object is protected or not. This question is considered on material norms of imperative nature. Belarus has a specific interest in access to knowledge for the purposes of innovation as well as scientific and technological development and these norms express the goals of public policy. The economic rationale for *lex fori* (in precise wordings 'the law of the Republic of Belarus') is that intellectual property is a monopoly permissible under the prescriptions of national legislation which limits free access to the modern achievemenins sc5-1.7 (e)0.7 (n.6 (c)-7.7 (e)0,6 (c-12..6 (c)-7u4 (b)1 (l)-14 ( t)-2u4 (h)-12r[(l)-1.7 (e)0,')-7.3 ( a)r[(l)-1410. Tw ,')-7..

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# 3. ARTIFICIAL INTELLIGENCE AND A NEW CORNERSTONE FOR AUTHORSHIP

### Fredy Sánchez Merino\*

'What is the heart but a spring; and the nerves but so many strings; and the joints, but so many wheels' - Thomas Hobbes, 1651

### ABSTRACT

The 20th century's digital technological revolution has transformed our world in ways once thought almost impossible. What was once deemed mere science fiction, has now become reality. Of these developments, one of the most controversial is that of the growing dependence on robots and Artificial Intelligence (AI). Al development has led to a scenario in which non-human entities generate scientific, artistic, and industrial outputs that meet the requirements to be protected as intellectual

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Parliament, for example, recently proposed a motion with recommendations for the civil regulation of the aptly named 'electronic citizens'<sup>5</sup> The proposal is complex, requiring the consonance of other branches of the law. This is a result of the impact of AI on discrete branches of law such as the law of persons in particular legal personality, legal capacity and civil liability, among others. Its proposal presents an opportunity to define areas in IP law that have yet to be regulated.<sup>6</sup>

The purpose of this paper is to provide clarity on the 'Algenerated work' dilemma. It will start with some basic concepts of artificial intelligence, for a better understanding of the concept of 'authoring'. The the existence of errors in the

	AI), it must 'actually' think (have a strong AI). In a weak AI, authorship belongs to the machine's programmer, rather than the machine itself, as the creation of work is simply a						
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- self-learning ability, from experience and by interaction (optional criterion);
- that it has at least a minor physical support;

legal regulation, but within the current legal parameters and given the separation between moral and pecuniary rights, it is a possible solution.

The primary arguments against granting legal personality to artificial intelligence systems are all anthropocentric based. These arguments revolve around the idea of robots not being human, lacking a soul, or not showing feelings, interests, desires, intentionality, etc. They are all derived from social constructs created by humans, and therefore, are modifiable. It is not the purpose of this paper to exhaust the doctrinal positions regarding the granting of legal

personality to robots. Hithwafeelab1.02 0 Texth(a)33[(d)(ea)0(i)-0a0 Tc 0 Tw 11.4(32 006701TIB)Fev 7, i5 Tc 00((pText))7.507 Tc 0 Td()Tj[((per)Tj0 Tc 0)7]

rights to an agent that is not capable of exercising or defending them? Because by making authorship attributable to 'someone,' the work is prevented from falling into the public domain. Should rights be granted to these entities, three questions follow:

- 1. Once the agent is granted rights, is it going to enforce them?
- 2. Is it necessary to enforce authorship rights in order to regard such works as worthy?
- 3. What does this have to do with the ownership of an Al generated work?

In the civil system, moral rights contain two kinds of prerogatives: positive, which allows the owner to use the rights as it sees fit; and negative or *ius prohibendi*, which allows the author to keep third parties from infringement of exclusive rights.

The enforcement of moral rights more often than not is displayed in its negative form because of the ubiquitous character of intangible assets. If no infringement is perpetrated, then there is no need for the enforcement the moral rights. Does this mean that moral rights depend on their exercise to exist? Not at all. The separation of the right's existence and its exercise is supported by scholar Georg Jellinek, and his theory on AI authorship.<sup>37</sup> This theory argues that the ownership and exercise of these rights should rest on different persons. Such a premise is the clearest example that moral rights do not depend on their exercise to exist. They arise once the work is created, can remain dormant without being used even once and are there whenever they are needed, outliving both the author and the work itself.

Agents should not have to exercise moral rights only because they exist. But even if they do, there is a possibility

animal, lacking legal standing.<sup>42</sup> However, animals cannot be compared to rational agents, because the latter3546pod[(t)A0 0 Tdli66Tw T84pTodd6 .32()57(i)199 rationality comprises some of the traits scientists have deemed to be essential in the human mental process that distinguishes it from other creatures. t0.005Tw-2.4i(I)Twcfraccompact (a)(i)-2.07(s)(df)T(es)]] = 201Ts224Tov13 dt001Ts224Tov13 dt001Ts224-(i)-d CoTrad(be)Tj.001t.7 (i)-2.7 (s)

Hristov's solution is based on the premise of inevitably granting authorship to human 1.-0.005 Tc 0.005 0 733 T--11.3 (r)-2.7ient

work, the better it reflects the personality of the author, and as a result, the attribute of individuality is more

elements that cannot be added, because the agent lacks the required ability to do so.

4. The agent's percept sequence to date. This can be translated as the capability of the agent to change its previous knowledge and consequently take necessary uentquipriede. io ou 16/d(y)]TJ01376084/800T6t(())Tj00007570.0020570.0020570.0.22234(4Td(ft3)3j0d[f3)-.Tc(0n0)]Jf00Tfc[(0170.1.6770-0df(d))-T)-00202570.00202570.0.20204

and despite all the flaws this solution poses, it takes a step towards the regulation of such matters. <sup>59</sup>

However, the current state of laws is still not sufficiently complete to protect AI creations. A common effort must be made to create specialized laws on the matter. Situations like the attribution of legal personhood to rational agents, subsequent granting of rights relating to authorship and economic exploitation must be regulated with necessary precision. Until then, the legal and economic vacuum surrounding such creations will continue to exist, restraining the development of the AI industry as a result of a lack of economic motivation.

### 7. CRITICAL ASPECTS DERIVED FROM THE AUTHORSHIP BY AI

Attributing authorship to a rational agent involves addressing profound philosophical questions that would shake the foundations of longstanding legal systems. Doing so implies a deep reform of various legal situations adjacent to the issue of authorship of a work. Some of those situations include the current approach to the legal regulation of the subject in some legal systems: economic exploitation and moral rights exercise; duration of exclusive rights for rational agents; and a considerable amount of ethical issues and fundamental rights related to the acknowledgment of authorship to Al systems. The next section of the paper will address some of those issues and their immediate legal consequences.

a) We will begin by tackling the 'derivative work' school of thought which has been developed within the copyright system. It aims to solve the legal regulation of authorship in rational agents by using the current state of law. First, there is no chance for an AI generated work to be considered, *a priori*, a derivative work, because derivative works are those derived from preexisting works, not 'made' by a preexisting work. It would be oxymoronic to state that AI generated work is derivative and that AI *per se* is preexisting work because by doing so, we would be unfairly denying the AI authorship and granting it to the programmer. This implies that the AI cannot be the author and the work itself at the same time.

When making a derivative work of art, the primal work remains unaltered while a new work is created. Therefore, derivativeness in works of art revolve around origin, not originality. A derivative work can be original or not, though never originative. In this sense, originality in an Al system artwork may be questioned because of its content, but never because it was created by an Al, which in turn was created by a human.

On the other hand, the copyright system uses a double standard for originality. This adds another level of complexity, because if AI generated works were to be taken as derivatives, then an even higher, yet extremely subjective, standard of originality would be applied. It has already been explained, how the concept of originality should be applied differently to AI systems, so no extra standard should be added in order to grant authorship or conferring copyright protection, at least not if the purpose is to 'save' AI creations from the public domain.

b) As for the duration of economic rights, Berne's standard should apply. The division of

<sup>&</sup>lt;sup>59</sup> U.K. Copyright, Designs, and Patents Act 1988.

<sup>&</sup>lt;sup>60</sup> Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1886, as revised at Paris on July 24, 1971 and amended in 1979 S. Treaty Doc. No. 99-27 (1986).

As to moral rights, given their *intuito personae* character and the fact that they are virtually perpetual, only their exercise can be transferred to third parties. This works within the scenario where a rational agent lacking the capabilities to the

- Authorship can only be granted when the AI system creates a work of art containing features intended but not controlled by the programmer.
- Since originality in its formal concept is unachievable by rational agents because they lack intention, we propose to substitute intention with rationality, a feature that machines not only possess, but that is their modus operandi.
- Al generated works of art should not be considered a derivative work, for that would be contradictory regarding the recognition of authorship towards AI.
- An analogy as to the duration of pecuniary rights for legal entities can be applied when it comes to rational agents that generated rights which are held by third parties.
- 11. Ethical aspects must be carefully taken into consideration when contemplating to grant legal personhood to rational agents.

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