

CYBORG ARTWORK*

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INTRODUCTION

Until now, a man has successively extended his reign over the external world. At present, we have and are developing skills in extending our physical and cognitive possibilities and the process is dynamically deepening. For example, co-founded by Elon Musk, Neuralink is developing neural lace technology that is to allow changing human thoughts into requests understandable for a computer. IT specialists and neurobiologists also expect that in the future the processing power of a computer will make it possible to simulate the activities of a human brain in a computer memory, which should result in the appearance of a brain analogous to the human one in this simulation. It is worth drawing attention to the fact that numerous projects showing modifiable bodies and brains have already emerged in transhumanistic concepts.¹ Artists of new media, such as Stelarc (Third Hand project), Tim Cannon (Cirkadia) or Neil Harbisson (Eyeborg), present pictures of complete integration of a man with a machine thanks to a modular composition of a human organism. They are motivated by an aesthetic vision in which everybody will be able to treat their body as artistic material.²

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¹ Transhumanism is an idea advocating for using science and technology for the purpose of overcoming human biological limitations. It should result in the creation of a post-man, an 'enhanced' man in such fields as life span, cognitive capacity or emotive ability; see Szymański, K., 'Tranhsumanizm', *Kultura i Wartości*, 2015, No. 13, p. 135 et seq.

² Gina, A., Nalepa, G.J., 'Człowiek z modułów – analiza adaptacyjności umysłu i ciała do wytworów techniki i technologii w kontekście teorii poznania rozszerzonego i ucieleśnionego', *Rocznik Kognitywistyczny*, 2015, No. 8, p. 6.

In the light of such a revolutionary technological progress, contemporary societies face great aesthetic and legal challenges. The advancing technicisation does not only force a reflection on the condition of a contemporary man but also new meditation on culture. The technological revolution (Rev. 4.0)³ poses completely new challenges to law. Contemporary copyright law must address not only a problem of creativity of machines and artificial intelligence works. Cyborg artists and their works constitute successive challenges. Not only a question arises whether the works by Stelarc, Moon, Ribas, or Neil HARBISON match the features of a work within the meaning of copyright law. Technologically improved people in an artistic work make use of extended cognitive capabilities. This presents a problem in marking borders between what is man-made and what is machine-made and cannot be protected by copyright.

The article aims to present the most important legal issues concerning copyright classification in relation to the artworks by cyborg artists. The first part of the article presents, of necessity in a short form, the issue of artworks within the meaning of copyright in relation to the anthropocentric approach to authorship established in the doctrine and case law. The second chapter presents the concept of a cyborg and examples of artwork by cyborg artists. The third part presents concepts concerning possibilities of attributing authorship to works made by cyborgs and attempts to determine the status of technological physicality in copyright law. The considerations end with conclusions concerning the future of copyright law in the context of questions about the efficiency and effectiveness of this legal protection system.

1. CONCEPT OF ARTWORK AND ANTHROPOCENTRIC APPROACH TO AUTHORSHIP IN COPYRIGHT LAW: AN OUTLINE

In accordance with Act on Copyright and Related Rights,⁴ a work means any manifestation of an individual artistic activity established in any form regardless of its value, purpose or way of expression (Article 1(1)). This synthetic definition is supplemented by a rather abundant list of particular categories of works. A work is subject to copyright the moment it is established to be one even if it is not finished and an author has the right to protection regardless of whether any formal requirements have been met (Article 1(3) and (4) of the Copyright Act). In addition, in the light of Article 2 Copyright Act, there are three categories of works distinguished in literature and case law: totally self-existent (not inspired by works by others), self-existent but inspired, and elaborations (case studies).⁵

³ Forth industrial revolution (*Industry 4.0*) from the point of view of J. Ryfkin is most often presented as a combination of IIoT (Industrial Internet of Things) and artificial intelligence of machines. See Schwab, K., *Czwarta rewolucja przemysłowa*, Warszawa, 2018, p. 17.

⁴ Act of 14 February 1994, Journal of Laws of 2019, item 1231, as amended, hereinafter "Copyright Act".

⁵ See the judgement of the Appellate Court in Łódź of 30 July 2012, I ACa 483/2012, OSA in Łódź, 2014, No. 2, item 9.

In the context of difficulties in determining the scope of the legal protection of authorship, the doctrine often points out the circumstances that are not important from the perspective of a given work protection. They include such features of a work as its size, completion,⁶ intended use,⁷ social/cultural significance/recognition,⁸ the way of expression,⁹ the process of creation,¹⁰ and an author's effort, labour input and competence.¹¹ In literature, attention is drawn to the fact that copyright law does not require any special intensity of creative features (the so-called principle of artistic neutrality).¹²

The central problem of copyright law consists in setting the premises of legal protection of authorship.¹³ We can observe considerable divergence of the assessment of what features allow classification of a product of human mind as a work. This disagreement is evident not only in the process of Polish law application. A stance appears in the CJEU judgements that copyright law protects intellectual property, an author's works, and the level of originality is unified.¹⁴ In the doctrine and case law, what is absolutely arbitrarily and rather liberally, and even discretionally indicated as necessary features of a work are: individual mark,¹⁵ artwork,¹⁶ originality,¹⁷ novelty,¹⁸

⁶ See Machała, W., *Utwór. Przedmiot prawa autorskiego*, Warszawa, 2012, p. 98.

⁷ Cf. the judgement of the Supreme Court of 30 June 2005, IV CK 763/04, OSNC, 2006, No. 5, item 92, in which the Supreme Court recognises the protective capability of works specified as "non-fictional".

⁸ Cf. the judgement of the Supreme Court of 25 January 2006, I CK 281/05, OSNC, 2006, No. 11, item 186. In its judgement, the Supreme Court recognises the features of a work in the objects: "Podręczny licznik kalorii" and "Podręczny licznik cholesterolu".

⁹ Cf. the judgement of the Supreme Court of 3 October 2007, II CSK 207/07, *Palestra*, 2009, No. 9–10, p. 261 et seq., in which the Supreme Court granted legal protection of authorship of a fictitious character created for the needs of a radio programme.

¹⁰ Cf. the judgement of the Appellate Court in Kraków, of 29.10.1997, I ACa 477/97, published in: Gawlik, B. (ed.), *Dobra osobiste. Zbiór orzeczeń Sądu Apelacyjnego w Krakowie*, Kraków, 1999, p. 282 et seq.

¹¹ Cf. Nowak-Gruca, A., *Przedmiot prawa autorskiego (utwór) w ujęciu kognitywnym*, Warszawa, 2018, pp. 238–242.

¹² Cf. the judgement of the Supreme Court of 5 March 1971, I CR 593/70, OSNC 1971, No. 12, item 212, in which the Supreme Court clearly states that a work should constitute an effect of an author's individual creation, not necessarily with strong intensity of creative features or big significance (value).

¹³ Nowak-Gruca, A., 'Konieczne cechy utworu. Uwagi po 20 latach obowiązywania ustawy o prawie autorskim i prawach pokrewnych', *Ruch Prawniczy, Ekonomiczny i Socjologiczny*, Year LXXVII, 2015, issue 2, p. 95 et seq.

¹⁴ See the judgement of CJEU of 16 July 2009 in the case C-5/08 *Infopac International A/S v Danske Dagblades Forening*, the judgement of CJEU of 22 December 2010 in the case C-393/09 *Svaz softwarové ochrany v Ministerstvo kultury*.

¹⁵ See Grzybowski, S., in: Grzybowski, S., Kopff, A., Serda, J. (eds.), *Zagadnienia prawa autorskiego*, Warszawa, 1973, pp. 37–38; Bleszyński, J., *Prawo autorskie*, Warszawa, 1985, p. 40. The criterion is used again in the latest statements of the doctrine, see Machała, W., *Utwór...*, op. cit., p. 117.

¹⁶ See Bleszyński, J., *Thumaczenie i jego twórca w prawie autorskim*, Warszawa, 1973, p. 20.

¹⁷ See a critical opinion about the use of the originality criterion, Sarbiński, R.M., *Utwór fotograficzny i jego twórca w prawie autorskim*, Kraków, 2004, p. 65.

¹⁸ Nowak-Gruca, A., 'Konieczne cechy utworu...', op. cit., p. 95 et seq.

statistical one-time only occurrence,¹⁹ cultural significance,²⁰ the scope of creation freedom (creative choices)²¹ and others. What poses the biggest problems is the issue of determining a certain minimum 'border' level of works that allows recognition of a given intellectual product as a work within the meaning of copyright law.²² The problem concerns not only the application of Polish law²³ but also the European²⁴ or common law²⁵ systems.

The difficulties in marking the borders of legal protection of authorship have been transferred onto courts, which results in the fact that most of the justifications concerning the recognition or refusal to recognise a work within the meaning of copyright law are based on purely intuitive criteria and not on whether a determined cognitive paradigm is matched.²⁶

In addition, in case law and legal literature, there is general agreement that we can speak about a work only in case the result of human activity is subject to assessment.²⁷ The limitation of the right to legal protection of authorship only in relation to human activities is explained in the doctrine in various ways. J. Ginsburg clearly states that in the light of the Berne Convention, the legal protection of authorship may be applied only to a man.²⁸ The Court of Justice (CJEU) seems to unambiguously state that by expressing its stance that "originality" must reflect "an author's own intellectual work".²⁹ According to CJEU, we deal with the feature

¹⁹ See Flisak, D., 'Maxa Kummera teoria statystycznej jednorazowości – pozorne rozwiązanie problematycznej oceny indywidualności dzieła', in: Matlak, A., Stanisławska-Kloc, S. (eds.), *Spory o własność intelektualną. Księga jubileuszowa dedykowana Profesorom Januszowi Barcie i Ryszardowi Markiewiczowi*, Warszawa, 2013, p. 283 et seq.

²⁰ See Machała, W., *Utwór...*, op. cit., p. 117.

²¹ Tischner, A., *Kumulatywna ochrona wzornictwa przemysłowego w prawie własności intelektualnej*, Warszawa, 2015, p. 199.

²² See Sokołowska, D., '„Omnis definitio periculosa”, czyli kilka uwag o zmianie paradygmatu utworu', in: Kępiński, M. (eds.), *Zarys prawa własności intelektualnej, t. 1: Granice prawa autorskiego*, Warszawa, 2010, p. 11.

²³ See e.g. judgement of the Court of Appeal in Kraków of 29 October 1997, I ACa 477/97, LEX No. 533708; judgement of the Supreme Court of 22 June 2010, IV CSK 359/09.

²⁴ See Rosati, E., 'Originality in a Work, or a Work of Originality: The effects of the infopaq decision', *European Intellectual Property Review*, 2011, issue 33, No. 12, p. 750.

²⁵ Kotzé, L.J., French, D., 'The Anthropocentric Ontology of International Environmental Law and the Sustainable Development Goals: Towards an Ecocentric Rule of Law in the Anthropocene', *Global Journal of Comparative Law*, 2018, No. 7(1), p. 5.

²⁶ See the judgement of the Supreme Court of 25 January 2006, I CK 281/05, OSNC 2006, No. 11, item 186; the judgement of the Supreme Court of 6 March 2014, V CSK 202/13, LEX No. 1486990; the judgement of the Supreme Court of 30 June 2005, IV CK 763/04, OSNC 2006, No. 5, item 92; *Orzecznictwo Sądów Polskich*, 2007, issue 6, item 67; *Biuletyn SN*, 2005, No. 9, item 14; the judgement of the Supreme Court of 13 January 2006, III CSK 40/05, LEX No. 176385; the judgement of the Supreme Court of 22 June 2010, IV CSK 359/09, OSNC 2011, No. 2, item 16; *Orzecznictwo Sądów Polskich*, 2011, issue 5, item 59, *Biuletyn SN*, 2010, No. 7, item 12.

²⁷ Cf. Szaciński, M., 'Wkład twórczy jako przesłanka dzieła chronionego prawem autorskim', *Państwo i Prawo*, 1993, No. 2, p. 50.

²⁸ Ginsburg, J.C., 'People Not Machines: Authorship and What It Means in the Berne Convention', *International Review of Intellectual Property and Competition Law*, 2018, Vol. 49, pp. 131–135.

²⁹ See Case C-5/08, *Danske Dagblades Forening* [2009] ECR I-06569, at para. 35; Case C-393/09, *Bepečnostní softwarové asociace-Svaz softwarové* [2010] ECR 2010 I-13971, para. 45;

of a work when an author makes free and creative choices and leaves his/her personal mark on it, which is interpreted as an obligatory human origin of a work. In literature, it is even pointed out that there is an anthropocentric requirement in copyright law.³⁰

The approach limiting the protection of copyright to man-made works is well established in German, Spanish, French and Polish law. In Anglo-American systems the approach to the legal protection of authorship is more pragmatic and less emphasis is placed on the protection of an author and more on the creation of legal incentives supporting the creation of works that are valuable for society. As a result, objections to the, at least partial, protection of machine-made works are less evident in those legal systems.³¹ Countries such as Great Britain, Ireland and New Zealand³² provide computer-generated works with the protection similar to copyright, and these are products that do not have a human author.³³ The entity that undertook steps necessary to create a work becomes an owner of the copyright of the work.³⁴

In accordance with Polish law, the stance on the application of the legal protection of authorship of only man-made works seems to be settled. Pursuant to Article 8(1) of the Copyright Act, an author owns copyright unless the statute stipulates otherwise. It is emphasised in the Polish doctrine that the provision lays down a general principle of copyright concerning the acquisition of the rights by an author, which is sometimes called an author's principle. "It is so because creative activity is typical only of a man. The above thesis is fully supported in the synthetic definition of a work. Thus, there is no need to introduce a provision clearly limiting an author's feature to natural persons."³⁵ W. Machała believes that the object of copyright must be an effect of a human activity and it should be based on Article 1(1) of the Copyright Act in the light of which a work results from a creative activity. The author emphasises that the whole legal system recognises only subjectivity of people and collectives organised by people (legal persons and organisational units without legal personality).³⁶

The issue complicates in connection with the movement of the border between what is man-made and what cannot be recognised as man-made. Works made by AI or androids are recognised as 'non-man-made' although machines are as

Case C-403/08 and C-429/08, *FA Premier League/Karen Murphy* [2011] ECR 2011, 1–09083, at para. 97; Case C-i 45/10, *Eva-Maria Painer/Standard Verlags* [2011] at para. 94; Case C-604/10, *Football Dataco/Yahoo* [2012] ECLI:EU:C:2012:1 15, at para. 38.

³⁰ Kotzé, J.L., French, D., 'The Anthropocentric Ontology...', op. cit., p. 14.

³¹ de Cock Buning, M., 'Autonomous Intelligent Systems as Creative Agents under the EU framework for Intellectual Property', *European Journal of Risk Regulation*, 2016, No. 7(2), p. 315.

³² See Copyright, Designs and Patents Act 1988, c. 48, § 178 (U.K.); Copyright and Related Rights Act 2000, pt. II, ch. 2, § 21(f) (Act No. 28/2000) (Ir.); Copyright Act 1994, § 2 (N.Z.).

³³ Maggiore, M., in: Bonadio, E., Lucchi, N. (eds.), *In Non-Conventional Copyright – Do New and Atypical Works Deserve Protection?* 2018, p. 391.

³⁴ Bonadio, E., McDonagh, L., Arvidsson, C., 'Intellectual Property Aspects of Robotics', *European Journal of Risk Regulation*, 2018, No. 9(4), p. 660.

³⁵ Sarbiński, R.M., in: Machała, W. (ed.), *Prawo autorskie i prawa pokrewne. Komentarz*, Warszawa, 2019, Article 8, Markiewicz, M., in: Markiewicz, R. (ed.), *Ustawy autorskie. Komentarze*. Tom I, Warszawa, 2021, Article 8.

³⁶ Machała, W., *Utwór...*, op. cit., p. 125.

good as or even better than a man in the area of creative activities. Today, there is no agreement on how to resolve the problem of works generated by intelligent systems.³⁷ Moreover, the issue of attributing authorship is becoming even more controversial in case of the works by such artists who, like Neil Harbisson, describe themselves as cyborgs and demand that social and legal systems recognise them.

2. CYBORG ARTISTS AND THEIR ARTWORK

The term cyborg was first explained in 1960 by Manfred Clynes and Nathan Kline in their article 'Cyborgs and space', published in a journal called *Astronautics*. The authors proposed a concept of a cyborg that is a product of a man's active participation in his own evolution: in the process of a man's change towards maximisation of capabilities to explore the environment.³⁸

What constitutes the concept of a cyborg is the idea of blurring the border between what is human and what is technical. In the cyborgs' culture, the border between a man and technique does not exist – cyborgs are human-technical hybrids and this union is what constitutes the essence of their existence. A cyborg as a man improved by technique is a successive form of a human being's evolution, a more complicated and highly complex one.³⁹

Despite demonisation of the concept of 'cyborg', these are contemporary people who seem to be 'artificial people' in whose bodies organic functions are supported or performed by cybernetic, digital or virtual systems and circuits.⁴⁰ "A contemporary man's organism is undoubtedly cyborg-like. Firstly, the extension of memory (computers, mobile technologies), which still remains outside the human structure, can be considered. Nonetheless, many technologies, e.g. contact lenses or hearing aids, which improve a man's cognitive capacity, become an integral part of a human organism. Pacemakers, transplants, artificial organs and bionic prosthetic devices go even further because they do not only allow better functioning but also supporting life. As a result, technologies have considerably moved the boundaries formerly imposed by the rules of nature".⁴¹

Kevin Warwick, a scientist who let a series of experiments be carried out on his body in order to extend the limits of human body and senses, is recognised to be the first cyborg. For example, he used electronic implants that sent information to his brain with the use of echolocation. Thanks to that, like a bat, he was able to have a clear picture of rooms without the use of eyes. Thanks to a hundred of

³⁷ Cf. Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union legislative acts, COM(2021) 206 final.

³⁸ Clynes, M., Kline, N., 'Cyborgs and space', in: Gray, C.H., Mentor, S., Figueroa-Sarriera, H. (eds.), *The Cyborg Handbook*, Routledge, New York, 1995, p. 17 et seq.

³⁹ Klichowski, M., *Narodziny cyborgizacji. Nowa eugenika, transhumanizm i zmierzch edukacji*, Poznań, 2014, p. 12 and the literature referred to therein.

⁴⁰ Sandberg, A., Bostrom, N., 'Converging cognitive enhancements', *Annals of the New York Academy of Sciences*, 2006, 1093.1, p. 201 et seq.

⁴¹ Gina, A., Nalepa, G.J., 'Człowiek z modułów...', op. cit., p. 4.

electrodes implanted into his nervous system of the left arm with the use of a neural interface, K. Warwick was able to control a wheelchair and an intelligent robot arm designed by Peter Kyberd. The implant was also able to activate artificial feelings by means of neural stimulation. Moreover, K. Warwick managed to communicate directly with the nervous system with no need to decode messages transferred in a language. He communicated with his wife, Irene Warwick, with the use of a direct neural communication system.⁴²

It should not be a surprise that cyborgs' activities are clearly marked in science and art. In Wikipedia, one can find explanation that cyborg art, also known as cyborgism, is an art movement that started in the mid 2000s in Great Britain. It is based on the creation and addition of new senses to the body via cybernetic implants and the creation of artworks through new senses. Cyborg artworks are created by cyborg artists; artists whose senses have been voluntarily enhanced by cybernetic implants.⁴³

The presentation of cyborg artists' works should start with information about Eduardo Kac, a pioneer of Bio Art (transgenic art),⁴⁴ who is first of all known for creating a genetically modified fluorescent rabbit called "Alba". Nevertheless, as early as in 1997, the artist implanted a RFID microchip in his body and used it in his work titled "Time Capsule".⁴⁵ However, one of the most famous cyborg artists is Neil Harbisson born in 1984. Suffering from a congenital defect of achromatopsia, i.e. total colour blindness, together with a group of scientists, he developed a device, which he called Eyeborg. Since 2004 N. Harbisson has had an antenna permanently implanted in his skull. It is connected to a camera placed over his head. It measures electromagnetic wave frequency and transmits it to a skull bone in the form of vibration received by the user as a sound signal. The implant is able to measure the spectrum of visible light as well as colours that are not visible to a human being: infrared and ultraviolet. Thus, it not only uses the phenomenon of sensor substitution but also extends the artist's cognitive processes by adding new senses. It is worth drawing attention to the fact that Neil Harbisson is strongly committed to the fight for cyborg rights. In numerous public lectures, he emphasises how difficult it was to find a surgeon who agreed to implant the device because physicians were rejected the bioethical commission's permission for the operation. He also fought a legal battle for the recognition of Eyeborg as part of his body and emphasised that the appliance allows the perception of colours. In 2010, together with Moon Ribas, he co-founded the Cyborg Foundation. Its aim is to help people become cyborgs, as well as do research and promote the availability of appliances developing senses. The Foundation is also involved in activities aimed at introducing cyborg rights.⁴⁶ On the other hand, the above-mentioned Moon Ribas is

⁴² See <http://www.kevinwarwick.com/> [accessed on: 22.08.2021].

⁴³ Wikipedia, https://en.wikipedia.org/wiki/Cyborg_art#cite_note-1 [accessed on: 22.08.2021].

⁴⁴ Bio-art or transgenic art is a form of artistic activities that uses the techniques of genetic modification to transfer natural genetic material or synthetic genes to an organism in order to create a new, unique form of life, Rozynek, M., 'Bioart, czyli mariaż sztuki i nauki', *Tutoring Gedanensis*, 2018, No. 3(1), p. 29.

⁴⁵ <https://www.ekac.org/timec.html> [accessed on: 22.08.2021].

⁴⁶ <https://www.cyborgfoundation.com/> [accessed on: 22.08.2021].

the first female cyborg well known for implanting seismic sensors in her feet, which allow her to feel earthquakes and to create dance pieces with the use of extended senses. A Catalan photographer, Manel De Aguas, who developed sensory fins that allow him to hear atmospheric pressure, humidity and temperature, joined the couple. The three artists initiated a social project and co-founded the Transpecies Society, aimed at raising awareness on challenges that transpecies face and promoting morphological freedom and the right to design and develop new senses and organs.

A. Łukasiewicz Alcaraz highlights the fact that both N. Harbisson and M. Ribas are aware of the consequences of the process of change they have undergone. The artists emphasise that “we did not always use to be people and we do not have to be ones”. They stress that the process of evolution has not ended on people. N. Harbisson states that in the same way as we witness transgender phenomena at present, we will soon witness trans-species phenomena that will be possible thanks to genetic engineering. Such projects are already present in artistic experiments. The author points out that it is a radically anti-anthropocentric movement.⁴⁷ She emphasises that with the development of technology it is necessary to consider not only the substitution of cyborgs for human beings. It should be taken into consideration that different types of persons will be able to exist: from a man to a species classified somewhere between a man and an animal, various types of hybrids created as a result of genetic modification, to cyborgs, robots and artificial intelligence.⁴⁸

3. ON PROBLEMS WITH COPYRIGHT:

“MAN-MADE VS. NON-MAN-MADE WORKS”

Anthropocentric attitude of contemporary copyright law that grants the status of an author only to a natural person somewhat automatically raises a question about the human nature. Nevertheless, a discussion about who a man is, due to the frames of the article, cannot be even started. However, it is worth highlighting the opposition between ‘human’ and ‘inhuman’. The indicated dichotomy is a form shaping our language and activities, which is always present. It is also especially topical in the light of problems with copyright and classification of works created by AI, androids and cyborgs.

Undoubtedly, many objects that are not man-made match the feature of originality, which in a different normative system would justify their recognition as works. However, rime on a window, a speleothem and a photograph taken by a monkey, which are non-man-made products, are not subject to protection of authorship. A series of disputes over the circle of persons entitled to authorship started in relation to *selfies* taken by Naruto, a macaque monkey. Nonetheless, the US District Court in California stated that the monkey called Naruto is not “an author” within the meaning of the American copyright law.⁴⁹ The representatives of the doctrine in

⁴⁷ Łukasiewicz Alcaraz, A., *Cyborg Persons or Selves*, Szczecin, 2019, p. 73.

⁴⁸ *Ibidem*, p. 90.

⁴⁹ <https://www.copyright.gov/title17/title17.pdf>; *Naruto et al. v David Slater, et al.*, No. 3:2015cv04324 – Document 45 (N.D. Cal. 2016), <https://law.justia> [accessed on: 23.08.2021].

other countries, including Poland, took a similarly tough stance on “animal-made” works.⁵⁰

At present, we witness a dynamic development of works generated by autonomous intelligent systems. For example, it is worth indicating that an autonomous robot named TAIDA won the 2016 Robot Art painting competition and the Grand Prize for the picture of Albert Einstein. The works by Ai-Da, the first humanoid robot-artist, who paints pictures and makes sculptures, are also very interesting. In June 2019, artworks by Ai-Da were featured in a gallery show called *Unsecured Features* at St. Johns College, Oxford.

As a result, various proposals for resolving the problem of the legal status of works created by artificial intelligence are put forward in the doctrine of copyright. Firstly, it is pointed out that copyright to those works might be granted to the programmers of AI systems. Secondly, it can be assumed that trainers and data providers are authors because their work is essential for the final functions of artificial intelligence systems. Thirdly, the feedback suppliers who help distinguish useful results from useless ones and correct information from incorrect one might be recognised as authors. Fourthly, the ‘owners’ of artificial intelligence systems might be given copyright. Fifthly, within the meaning of copyright law, a user who turns on an AI system may be recognised as an author. Sixthly, a buyer of a product of artificial intelligence may be subject to copyright. Seventhly, copyright may be granted to governmental entities. Eighthly, artworks created by AI may be recognised as works being in the public domain. There is also a proposal of the Work Made for Hire (WMFH) model in accordance with which an AI system is seen as a user’s creative worker or independent contractor.⁵¹ As concerns granting the authorship of a work, P. Księżak and S. Wojtczak propose to recognise the actual state: AI – an autonomous system – is a creator of artworks. It is clear for everyone that particular AI creates determined pictures or projects regardless of what the law stipulates. Thus, it is better, in conformity with facts, to indicate that particular AI is a creator of an artwork. Nevertheless, in the authors’ opinion, it does not mean that it must be a holder of the financial rights to a work or that it has, apart from the right to authorship, other rights.⁵² In my opinion, until the issue of AI authorship concerning personal and property rights are regulated, we can assume that we deal with a phenomenon of ghostwriting, which copyright law knows well. Ghostwriting is an activity consisting in creating a commissioned work, which is then disseminated under the name of the person who commissioned it and not the name of the real author. In this context, within the meaning of copyright, an author may be a user who turns on an AI system and initiates a creative activity and this way acts like a person who commissions a ghost writer to create a work. Therefore, we deal

⁵⁰ See Juściński, P.P., ‘Prawo autorskie w obliczu rozwoju sztucznej inteligencji’, *Zeszyty Naukowe Uniwersytetu Jagiellońskiego, Prace z Prawa Własności Intelektualnej*, 2019, No. 1(143), p. 39.

⁵¹ See Shlomit, Y.R., ‘Generating Rembrandt: Artificial Intelligence, Copyright, and accountability in the 3A Era – The Human-Like Authors are Already Here – A New Model’, *Michigan State Law Review*, 2017, pp. 671–673; Palace, V.M., ‘What If Artificial Intelligence Wrote This?’, *Florida Law Review*, 2019, No. 217, p. 231.

⁵² Księżak, P., Wojtczak, S., ‘Prawo autorskie wobec sztucznej inteligencji (próba alternatywnego spojrzenia)’, *Państwo i Prawo*, 2021, No. 2, p. 21.

with a machine-ghost, an electronic 'ghost author', creating works the creation of which a man only initiates.⁵³

Another problem arises here: how to classify cyborg artists' works. First of all, it is necessary to draw attention to the fact that artworks in the area of bio art or techno-science art in many situations will be classified as the so-called borderline works in relation to which, after getting to know their features, it is not possible to state whether they match the feature of artwork within the meaning of copyright law. Some of them belong to the category of conceptual or performance art, which is refused the status of an artwork.⁵⁴ Another problem is whether in case of cyborgs we can speak of an author-person within the meaning of copyright law. This, on the other hand, requires determining whether we deal with a man or a machine.

K. Warwick defines a cyborg as "partly a man and partly a machine".⁵⁵ A cyborg that is a hybrid of nature and technique, however, is not an anthropoid robot (an anthropoid). A robot is totally technical, something "totally mechanical". A cyborg, on the other hand, is a man's technical extension; it always has something human, although this does not have to be something physical. A cyborg is not a man and does not lead a human life, but always has a (minimal at least) human element.⁵⁶

Thus, the status of artworks created by cyborgs will depend on the decision whether they meet the criteria of a natural person within the meaning of civil law. The answer to the question is not obvious and requires deepened research, which cannot be done within the scope of this paper. Undoubtedly, artists have always used methods of changing or extending their conscience. In accordance with the approach established in the doctrine and case law, the mental state, capabilities, creative labour input or just the process of a work creation are not important for legal classification of authorship.⁵⁷ What is entitled to protection are objects that match the feature of individual artwork regardless of the features connected with the person of an author, however, with the reservation that it must be a man. At the moment, the technological possibilities of developing a man are not so advanced that we might speak about reaching the next level of evolution in the form of a technical-human hybrid, although work in this area is in progress and these are not science-fiction visions any more.⁵⁸ Nevertheless, at this stage of development, cyborg artists using their body as artistic material or extending their physical and cognitive capabilities may have the status of an author within the meaning of copyright law provided that their artworks match the statutory definition of a work.

⁵³ For more see Nowak-Gruca, A., 'Could an Artificial Intelligence be a Ghostwriter?', *Journal of Intellectual Property Rights*, 2022, No. 1, pp. 25–37.

⁵⁴ Cf. the judgement of the Appellate Court in Kraków, of 29.10.1997, I ACa 477/97 published in: Gawlik, B. (ed.), *Dobra osobiste. Zbiór orzeczeń Sądu Apelacyjnego w Krakowie*, Kraków, 1999, p. 282 et seq.

⁵⁵ Warwick, K., 'Cyborg morals, cyborg values, cyborg ethics', *Ethics and Information Technology* 5, 2003, p. 131.

⁵⁶ Bendle, M.F., 'Teleportation, Cyborgs and the Posthuman Ideology', *Social Semiotics*, Vol. 12, No. 1, 2002, p. 57; Roden, D., 'Deconstruction and Excision in Philosophical Posthumanism', *Journal of Evolution & Technology*, Vol. 21, No. 1, 2010, pp. 29–32, after Klichowski, M., *Narodziny cyborgizacji...*, op. cit., p. 13.

⁵⁷ Nowak-Gruca, A., 'Could an Artificial Intelligence...', op. cit., pp. 33–34.

⁵⁸ Łukasiewicz Alcaraz, A., *Cyborg Persons...*, op. cit., p. 73 et seq.

Summing up, the status of cyborg artists' works in the light of copyright law is highly uncertain due to difficulties in classifying them firstly, as works created by an author within the meaning of copyright law, and secondly, as works matching the objective premises of legal protection of authorship. At the same time, however, technological changes will force such classification rather earlier than later.

CONCLUSIONS

Despite the rapid technological development and the existence of cyborgs, androids and artificial intelligence in our world, contemporary legal systems in many countries treat non-man-made works with big amount of suspicion. The problem with legal classification of authorship is also complicated in case of cyborg artwork. Using technological achievements, cyborg artists go beyond the limits of human physicality and extend their cognitive capabilities and the scope of interaction with the environment. Their creative manifesto poses challenges to anthropocentric copyright law, which is not necessarily able to protect dynamically developing artwork by entities whose continuity of links with a human being is disrupted (cyborgs) or even completely halted (autonomous AI systems). There are many proposals to resolve the problem of the legal status of works created by artificial intelligence and each of the possible approaches has defects and limitations. Due to the lack of statutory regulations, we can only assume that we deal with an electronic 'ghost author', a machine-ghost that creates works the creation of which a man can only initiate. Therefore, in accordance with the conception I proposed in relation to artificial intelligence artwork, a user who turns on an AI system, initiates its creative activity and this way acts like a person who commissioned a ghost writer to create a work may be recognised as an author within the meaning of copyright law. In this context, we deal with a new, technological form of the phenomenon of ghostwriting known in copyright law; however, due to the fact that the legal system does not recognise the subjectivity of AI (ghost author), the phenomenon-related problems with disposing of the work authorship disappear.

Artwork is cumulative in nature, thus most works are inspired by what has already been created. The proposal for a resolution of the European Parliament 2020/2015 (INI) emphasises that artwork, the so-called traditional art and AI artwork, despite the differences in the creative act alone, keeps having a common aim consisting in the extension of cultural heritage. Cyborg artists define themselves as hybrids of nature and technique, thus something between a human being and a machine. In the contemporary copyright law, the status of works generated by autonomous systems remains unclear. Even if we assume that due to a human element, cyborg artwork belongs to the category of man-made works, additional problems arise in connection with the determination whether techno-artworks related to the extension of one's own body (e.g. works by Stelarc) may be recognised as artworks within the meaning of copyright law. Due to the lack of clear criteria that allow distinguishing artworks from other objects and difficulties in determining premises of protection, bio-art or bioscience artworks will seldom match the statutory definition of an artwork. Therefore, there is a situation in which copyright law provides protection to maps,

calendars, railway timetables, specifications of essential terms of contract and other so-called “small coins”, and contemporary artworks are refused protection. In accordance with the contemporary copyright law, the status of works by cyborg artists is highly uncertain due to the difficulties with their classification first of all as works created by an author within the meaning of copyright law; secondly, as works matching the premises of legal protection of authorship. In this context, it is necessary to ask a question about the future of copyright law, which is not able to precisely determine the object of protection and the attribution of authorship in case of artwork created by people-machines or machines alone.

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CYBORG ARTWORK

Summary

The copyright law enshrines the principle that copyright protection can be considered only in the case of works of human origin, which is mitigated in the Anglo-Saxon systems by introducing the category of computer-generated works. Nowadays we are dealing with a situation where, first of all, we are unable to precisely indicate the features of the subject of protection and copyright law grapples with an unresolved problem of distinguishing a work from other objects. Secondly, in the case of new phenomena such as the creation of AI, androids or cyborgs, there are difficulties with attributing the authorship of the work. This results in a too high level of uncertainty of legal effectiveness. The aim of the paper is to present the phenomenon of the work of cyborg artists in the context of the anthropocentric approach to

the authorship of the work, which is dominant in copyright law. The central problem here is the question of the copyright status of works that arise as a result of shifting the boundaries of human possibilities.

Keywords: copyright, cyborg, cyborg creativity, authorship, concept of a work

ARTYSTYCZNA TWÓRCZOŚĆ CYBORGÓW

Streszczenie

Na gruncie prawa autorskiego utrwalona jest zasada, że o ochronie prawnoautorskiej możemy mówić jedynie w wypadku dzieł pochodzących od człowieka, która jest łagodzona w systemach anglosaskich poprzez wprowadzenie kategorii dzieł generowanych komputerowo. Dziś mamy do czynienia z sytuacją, w której po pierwsze, nie potrafimy precyzyjnie wskazać cech przedmiotu ochrony, i prawo autorskie boryka się z nierozwiązanym problemem z odróżnianiem utworu od innych obiektów. Po drugie, w kwestii nowych zjawisk, takich jak twórczość AI, androidów czy cyborgów, pojawiają się trudności z przypisaniem autorstwa utworu. Rodzi to zbyt wysoki z punktu widzenia efektywności prawa poziom niepewności (co do przedmiotu i podmiotu prawa autorskiego). Celem artykułu jest przedstawienie zjawiska twórczości cyborgicznych artystów w kontekście dominującego w prawie autorskim antropocentrycznego podejścia do autorstwa utworu. Centralnym problemem staje się tu pytanie o autorskoprawny status dzieł, które powstają w wyniku przesunięcia granicy ludzkich możliwości, zarówno w obszarze cielesności, jak i zdolności kognitywnych.

Słowa kluczowe: prawo autorskie, cyborg, twórczość cyborgów, autorstwo, pojęcie utworu

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