

CRIMINAL LAW ASSESSMENTS OF THE EXPLOITATION OF PROSTITUTION PRACTISED BY HUMANOID ROBOTS

JERZY LACHOWSKI*

DOI 10.2478/in-2024-0001

Abstract

The subject of this study is the criminal law issue of exploiting prostitution practised by humanoid robots. Interest in this issue stems from two main reasons. Firstly, the development of new technologies, including artificial intelligence capable of self-education, analysis of the surrounding reality, and decision-making necessitates the consideration of its legal subjectivity. Secondly, the emergence of brothels employing humanoid robots prompts reflection on the criminal responsibility of those who benefit from the prostitution facilitated by them. This article aims to highlight the phenomenon of using humanoid robots in prostitution, offer a criminal law assessment of such behaviour from the perspective of Polish criminal law, and suggest the direction for the development of domestic criminal law to accommodate this phenomenon in the future. Additionally, it addresses the issue of criminal liability for harm caused by a humanoid robot equipped with artificial intelligence while providing sexual services. The article predominantly employs the dogmatic-legal method, performing an exegesis of the provisions of Article 204 of the Criminal Code in the context of the issue signalled. The analyses have concluded that this norm does not encompass in which the perpetrator facilitates, induces prostitution of a humanoid robot or derives financial benefits from such activities, despite such behaviour being detrimental to morality, the fundamental good protected under Article 204 of the Criminal Code. De lege lata, a humanoid robot may also not be subject to criminal liability if it harms a person using its sexual services, as such an 'essence' does not align with the current structure of crime and the concept of criminal punishment. However, the liability of manufacturers or users of such devices is not ruled out. It should be noted that as humanoid robots become more autonomous, holding producers or

^{*} LLD hab., professor of UMK, Chair of Criminal Law Faculty of Law and Administration Nicolaus Copernicus University in Toruń (Poland), e-mail: jerzy.lachowski@law.umk.pl, ORCID: 0000-0002-6669-2105



users criminally liable for damages they cause becomes less justifiable, and the applicability of artificial intelligence liability similar to the criminal liability of legal persons becomes more relevant.

Keywords: law, criminal law, exploitation of prostitution, artificial intelligence, humanoid robots

INTRODUCTION

The relationship of artificial intelligence (hereinafter 'AI') to criminal law is increasingly addressed in the doctrine. Discussions include whether AI may be subject to criminal liability, and how the manufacturer, seller, or user of an AI-based device should be liable if the device causes harm to a third party. There is no doubt that AI's actions or usage can lead to negative consequences, such as the death of a human, damage to health, or destruction of protected information, yet the question of AI's own criminal liability remains contentious. This is particularly intriguing given AI's ability to learn and make decisions based on gathered information.

Provisions in the Criminal Code where the object of the executive act may be another person include the offence under Article 204 § 1 and 2 of the Criminal Code ('CC'), which criminalises soliciting, facilitating the practice of prostitution by another person, or deriving financial benefit from another's prostitution.¹ With the rapid development of technology, including AI, the question arises whether it can be treated as a 'person' within the meaning of the mentioned standard.

The criminal assessment of profiting from prostitution by humanoid robots, until recently, might have seemed a concept from science fiction. Yet, this phenomenon already exists in reality. In 2018, Neesweek published an article entitled 'Sex with a robot? A new Moscow attraction awaits football fans'. The article reported on the creation of Moscow's first brothel where customers could spend the night with a robot, each equipped with AI and a distinct character.² The potential for this phenomenon to expand is undeniable, with humanoid robots being created using both organic and inorganic elements, including AI (homo digitalis).³ The German literature has already addressed the criminal assessment of providing sexual services by robots, although it was deemed 'contrived'.⁴ However, the example of the Moscow brothel illustrates otherwise.

Polish law does not have a separate statute legalising prostitution; instead, Article 204 § 1–2 CC criminalises the exploitation of prostitution. This raises the

 $^{^{1}}$ $\,$ In view of the topic of this study, the provision of Article 204 \S 3 CC remains outside the area of interest.

 $^{^2\,}$ ´Seks z robotem? Nowa moskiewska atrakcja czeka na kibiców futbolu', Newsweek Polska, https://www.newsweek.pl/swiat/spoleczenstwo/seks-z-robotem-w-moskwie-otwartodom-publiczny-z-seks-robotami/6ftqbwd [accessed on 5 April 2024].

³ Radutniy, O.E., 'Adaptation of criminal and civil law in view of scientific-technical progres (artificial intelligence, DAO and digital human)', Проблеми законності, 2019, Вип. 144, р. 139.

⁴ Hilgendorf, E., 'Introduction: Digitalization and the Law – A European Perspective', in: *Robotik und Recht. Digitalization and the Law*, Baden-Baden, 2018, p. 12.

question of whether, in cases where the perpetrator facilitates or profits from prostitution practised by a humanoid robot resembling a human, one can still speak of criminal liability under Article 204 § 1 or 2 of the Criminal Code, or if this standard requires amendment to criminalise such phenomena.

CRIMINAL LIABILITY FOR EXPLOITATION OF PROSTITUTION IN POLAND DE LEGE LATA

According to Article 204 § 1 CC, criminal liability is imposed on anyone who induces or facilitates another person to engage in prostitution for financial gain. Meanwhile, Article 204 § 2 CC states it is an offence to derive financial benefit from another's prostitution.

These provisions fall within the chapter on offences against sexual freedom or morality. Acts under Article 204 CC primarily harm morality, as the exploitation of prostitution and the provision of sexual services for money are viewed negatively from a moral standpoint.⁵ Some literature suggests human dignity is also a protected interest under this regulation,⁶ though this has been criticised since the perpetrator's actions under Article 204 § 1 and 2 of the Criminal Code do not directly threaten the dignity of those engaging in prostitution.⁷ Additionally, these provisions are interpreted as protecting public order by preventing the proliferation and normalisation of prostitution, a source of crime.⁸ M. Budyn-Kulik criticised the view that the action described in Article 204 CC does not have to be performed in public.⁹

Prostitution is defined as the repeated provision of sexual services in exchange for remuneration. In its current formulation, it consists of offering one's body for another's use, aiming to profit. In the context of prostitution, there is no emotional involvement from the service provider, and there is a limitation on the right to

⁵ See judgment of the Administrative Court in Szczecin of 12 February 2020, II AKa 263/19, OSA 2020, No. 5, item 5; Warylewski, J., Nazar, K., in: Stefański, R.A. (ed.), Kodeks karny. Komentarz, Warszawa, 2023, commentary on Article 204, thesis 2, Legalis 2023; judgment of the Administrative Court in Wrocław of 13 November 2013, II Aka 330/13, Legalis; see also Warylewski, J., in: Stefański, R.A. (ed.), Kodeks karny. Komentarz, Warszawa, 2015, p. 1284; on social evaluations of prostitution see, for example, Kowalczyk-Jamnicka, M., Społeczno-kulturowe uwarunkowania prostytucji w Polsce, Bydgoszcz, 1998, p. 8 et seq.; and Warylewski, J., in: Warylewski, J. (ed.), System Prawa Karnego. Tom 10. Przestępstwa przeciwko dobrom indywidualnym, Warszawa, 2016, pp. 913–914.

⁶ Cf. e.g., Hypś, S., in: Grześkowiak, A., Wiak, K. (eds), Kodeks karny. Komentarz, Warszawa, 2019, p. 1089; Kłączyńska, N., in: Kodeks karny. Część szczególna. Komentarz, Warszawa, 2014, p. 566.

⁷ See Budyn-Kulik, M., Kulik, M., in: Królikowski, M., Zawłocki, R. (eds), Kodeks karny. Część szczególna. Tom II. Komentarz do art. 117–221, Warszawa, 2017, p. 803.

⁸ Hypś, S., in: Kodeks..., op. cit., p. 1089, and authors cited therein; see also Bielski, M., in: Wróbel, W., Zoll, A. (eds), Kodeks karny. Część szczególna. Tom II. Komentarz do art. 117–211a, Warszawa, 2017, p. 817.

⁹ Budyn-Kulik, M., Kulik, M., in: *Kodeks...*, op. cit., p. 804; for more on the subject of protection under Article 204 CC see Piórkowska-Flieger, J., 'Tak zwane przestępstwa okołoprostytucyjne', in: Mozgawa, M. (ed.), *Prostytucja*, Warszawa, 2014, pp. 78–79, and authors cited therein.

choose one's sexual partners. ¹⁰ It is irrelevant to the definition of prostitution whether the service user feels emotionally involved in the sexual act. Both the provider and the recipient 'regard each other not personally but in transactional terms'. ¹¹ The voluntariness or coercion of the prostitute is immaterial to the definition of prostitution. These circumstances are not part of the essence of the concept. If the essence of prostitution were to include the individual's full awareness and freedom of will in the course of the practice, then coercion would negate its existence, rendering Article 203 of the Criminal Code unreasonable and inherently contradictory. This norm concerns forced prostitution, whereas in the case of coercion, which may limit free will to a great extent, one could not speak of prostitution at all.

Facilitating prostitution encompasses actions that make practising prostitution easier. The law does not specify the behaviours that constitute this facilitation, so any action that simplifies the practise of prostitution applies. This could include connecting the service provider with their client, offering premises or transport, providing travel funds, or ensuring the service provider's safety during the transaction.¹²

Soliciting involves various persuasion methods to engage in prostitution, distinguished by the absence of unlawful threats or violence.¹³ In such instances, Article 203 CC may apply.

Benefiting from prostitution establishes a causal link between the asset increase of the perpetrator or a third party and the prostitution practised by another person. ¹⁴ It signifies that the offender's assets increase as a result of another's prostitution, though it need not be a substantive offence. A financial gain is any asset increase for the perpetrator or another person, and it is acknowledged in literature that it need not be the sole or primary source of income for the perpetrator. ¹⁵

The content of the provisions of Article 204 § 1 and 2 CC may prompt questions as to whether a single act of soliciting, facilitating, or obtaining financial gain from prostitution already fulfils the elements contained therein, or whether repetition of such behaviour is necessary. According to J. Warylewski, 'Facilitating prostitution and pimping described in Article 204 of the Criminal Code do not exhaust themselves in one-off behaviours. They are procedural in nature, just like prostitution itself.' Conversely, M. Budyn-Kulik and M. Kulik advocate for the view that one-off

Antoniszyn, M., Marek, A., Prostytucja w świetle badań kryminologicznych, Warszawa, 1985, p. 6; Hypś, S., in: Kodeks..., op. cit., thesis 4; Warylewski, J., Nazar, K., in: Kodeks..., op. cit., Warszawa, 2023, commentary on Article 203, thesis 2, Legalis 2023.

¹¹ See Charkowska, K., *Żjawisko prostytucji w doświadczenia prostytuujących się kobiet,* Kraków, 2010, pp. 11–12.

¹² Budyn-Kulik, M., Kulik, M., in: *Kodeks...*, op. cit., p. 804; Kłączyńska, N., in: *Kodeks...*, op. cit., p. 566.

¹³ See, e.g., Budyn-Kulik, M., Kulik, M., in: *Kodeks...*, op. cit., p. 804; Warylewski, J., in: *Kodeks...*, op. cit., Warszawa, 2015, p. 1285; Kłączyńska, N., in: *Kodeks...*, op. cit., p. 566.

¹⁴ Warylewski, J., in: System Prawa..., op. cit., p. 933.

¹⁵ Budyn-Kulik, M., Kulik, M., in: *Kodeks...*, op. cit., p. 805, and the authors cited therein.

¹⁶ Warylewski, J., in: *Kodeks...*, op. cit., p. 1284; idem, in: *System Prawa...*, op. cit., p. 932; similarly, Kłączyńska, N., in: *Kodeks...*, op. cit., p. 566, who, with regard to pimping, refers to the fact that Article 204 § 2 CC uses the plural of the noun 'benefit'; see also Berent, M., Filar, M., in: Filar, M. (ed.), *Kodeks karny. Komentarz*, Warszawa, 2016, pp. 1266–1267.

behaviours can also fulfil the elements indicated in the provision.¹⁷ M. Bielski presents a similar stance regarding facilitating prostitution and pimping. ¹⁸ A literal interpretation of the provisions of Article 204 § 1 and 2 of the Criminal Code does not preclude acceptance of the latter view. Inducement, facilitation, and profiteering can be understood, in a grammatical sense, as activities occurring over a longer period or on a one-off basis. Systemically, endorsing the former position would erroneously suggest that incitement (Article 18 § 2 CC) and aiding and abetting (Article 18 § 3 CC) are also multi-actual in nature. Regarding profiteering from prostitution, it is significant to note that when the legislator envisages a specific procedure comprising such behaviour, it is explicitly highlighted. This is the case in Article 65 of the Criminal Code, which pertains to deriving a permanent income from committing crimes. The phrasing of Article 204 § 1 and 2 CC does not imply such a requirement. The use of the plural in Article 204 § 2 CC is insufficient to support a thesis advocating for the necessity of multiple actions. It is conceivable that the perpetrator, on a single occasion, obtains various types of financial benefits (e.g., receives money, securities, and a car). To assume that deriving varied benefits on one occasion is not punishable would place the perpetrator at odds with the legal interest protected by Article 204 § 2 CC.

From the perspective of fundamental considerations, the executive act's object under Article 204 § 1 and 2 CC, which is another person, is crucial. It is generally accepted that this refers primarily to a natural person engaged in prostitution, regardless of gender. However, it remains an open question whether other human-like 'entities', such as 'electronic persons' or humanoid robots, could also fall under this definition. 19

The subjective side of the offence under Article 204 § 1 CC involves acting with the intent to obtain a pecuniary benefit, i.e., to enrich oneself. Soliciting or facilitating prostitution, whether for personal gain or not, does not constitute an offence under Article 204 § 1 CC. Article 204 § 2 CC does not specify any intent; however, it pertains to deriving a pecuniary benefit from another person's prostitution. Thus, the perpetrator need not have a predefined commercial intent; the benefit may be incidental, but must be accepted as the provision addresses 'taking advantage'. Gaining personal benefit from prostitution does not meet the criteria of the offence under Article 204 § 2 CC.

CRIMINAL LAW ASSESSMENTS OF THE EXPLOITATION OF PROSTITUTION PRACTISED BY HUMANOID ROBOTS

Addressing whether the use of robots equipped with artificial intelligence for prostitution purposes circumvents provisions of Article 204 § 1 and 2 CC necessitates determining whether such an entity could be regarded as a person, the subject of

¹⁷ Budyn-Kulik, M., Kulik, M., in: Kodeks..., op. cit., p. 804.

¹⁸ Bielski, M., in: *Kodeks...*, op. cit., pp. 820–821.

¹⁹ This issue will be elaborated on later in the paper.

an executive act within the scope of the said norm.²⁰ It is essential to examine what are the attributes of the artificial intelligence with which the humanoid robot is equipped. Subsequently, it is also necessary to consider whether such a robot can partake in prostitution.

The literature indicates that such a robot may have the following skills:

'perception of information, memory without gaps, exchange, analysis, comparison, evaluation of certain data, generalisation and the most optimal use of information for solving problems, recognition of all objects and their classification, perception of all signals of the surrounding world without exception, true summing-up of any situation, effective selection of strategy and method of its behaviour, planning, generation of new knowledge, full awareness of the principles of its construction and work, self-education, self-development, self-rebuilding, self-improvement (the first version forms an improved version of itself and thus rewrites the programme to infinity), accelerated decision-making speed, processing of significant spaces of information and their effective use, full concentration of attention, construction of value judgements, independent decision-making and independent implementation, self-organisation.'21

The capabilities of artificial intelligence that can be incorporated into humanoid robots encourage the consideration that such technology might surpass human beings in terms of capabilities and could, therefore, be regarded as something more than a natural person. Given that under Article 204 § 1 and 2 of the Criminal Code, the term 'person' is typically understood to denote a human being, and considering artificial intelligence's superior capabilities, it might well be argued that AI could be considered the object of the executive act. Indeed, it could be viewed as an 'electronic person' in essence, especially since the provisions of Article 204 § 1 and 2 of the Criminal Code do not explicitly state that only natural persons are implicated. This argument gains further credence in light of steps towards the legal recognition of artificial intelligence at the European Union level, notably the European Parliament's resolution of 16 February 2017, which contains recommendations to the European Commission on civil law provisions on robotics advocating creation of an electronic

²⁰ The criminal law doctrine includes discussion on the phenomenon of so-called virtual rape, purportedly committed by an avatar controlled by a human or a participant in the virtual world (for more details see Piesiewicz, P.F., 'Przestępstwo w wirtualnym świecie', in: Gardocki, L. et al. (eds), Aktualne zagadnienia prawa karnego materialnego i procesowego, Warszawa, 2009, pp. 135-136; the description of this case is also reproduced by Sobczak, J., 'Odpowiedzialność za przestępstwo popełnione w sieci: czy można zgwałcić awatara?', in: Mazurkiewicz, J., Szymaniec, P. (eds), Prawne i administracyjne aspekty komunikacji elektronicznej, Wałbrzych, 2018, pp. 37-38). The perpetrator, a participant in the game, appropriated the identity of another person and impersonated her, took control over the avatar of a female user also participating in the game, and the rape was said to consist of describing in text form how this female user, existing in virtual reality as an avatar, sexually satisfies the perpetrator, with the text being available to other users (Piesiewicz, P.F., 'Przestępstwo...', op. cit., pp. 135-136; Sobczak, J., 'Odpowiedzialność...', op. cit., pp. 37-38). It seems, however, challenging to relate this event to the subject under consideration in this paper, since it takes place in a virtual world. This paper focuses on humanoid robots, which are already an element of the reality that surrounds us, thus existing objectively and also interacting with humans in a tangible way in the real world, unlike the virtual realm.

²¹ Radutniy, E., 'Adaptation...', op. cit., p. 144.

legal person.²² Similarly, granting citizenship to the Sophia robot in Saudi Arabia aligns with the trend towards recognising artificial intelligence,²³ not as a natural person, but granting it a status comparable to that of a legal person, i.e., as a legal entity that is non-human. As such, a humanoid robot equipped with artificial intelligence could potentially be considered a person within the meaning of Article 204 § 1 and 2 of the Criminal Code, suggesting that the current regulation indeed covers the phenomenon addressed in this paper.

It is crucial to note, however, that despite artificial intelligence's capabilities far exceeding those of humans, there are significant differences between the two. Firstly, artificial intelligence makes decisions based on specific algorithms in an automated manner, unlike the reflective decision-making process in humans. Secondly, humans possess the capacity for emotion, including the ability to experience pain and suffering, attributes that artificial intelligence lacks. Thirdly, human decisionmaking often involves intuition, a trait absent in artificial intelligence. Additionally, humans have the conscious ability to refrain from certain actions (freedom of choice), a capacity not afforded to an artificially intelligent entity programmed to act in predetermined situations. These considerations imply that a humanoid robot equipped with artificial intelligence cannot be regarded as a person. However, this does not relegate it to the status of a mere tool. Given its capabilities and potential to surpass human abilities, it may be more accurately described as intermediate between a physical person and an object (device). Nonetheless, categorising such a robot as an 'electronic person' under Article 204 § 1 and 2 of the Criminal Code would constitute an expansive interpretation of the norm, which is not permissible under Polish criminal law.

Considering a humanoid robot as an entity between a human being and a device with the above-mentioned abilities may raise the question of its capacity to engage in prostitution, if we recall that prostitution fundamentally involves the provision of sexual services in exchange for benefits. In other words, it is a specific service that is not provided for free, but for a specific compensation, primarily economic. It is true that up to now, the practice of prostitution has been equated with human activity.²⁴ The concept that sexual services could only be provided by a woman or a man now requires reevaluation in light of technological advancements leading to the creation of humanoid robots capable of fulfilling human sexual needs. This situation differs markedly from the use of sexual gadgets for erotic satisfaction, as a humanoid robot can interact with a potential client establishing what their erotic needs are, and then it is the humanoid robot that adapts its service to these needs. In this case, the client is talking to the service provider, so it is an extremely different situation from the one in which a human uses erotic tools, such as a vibrator. The client in question will certainly not talk to the vibrator, and this device will not adapt 'its service' to all

²² Another European Parliament resolution of 6 October 2021 concerns the use of artificial intelligence by the police and the judiciary.

²³ See Auleytner, A., 'Can a robot incur criminal liability', *Law and Standards*, 2017, No. 12, p. 78.

²⁴ See also, e.g., Sobczak, J., 'Prostytucja w internecie', in: Mozgawa, M. (ed.), *Prostytucja*, Warszawa, 2014, pp. 212–213.

the client's needs, a level of interaction not achievable with inanimate objects such as vibrators. Furthermore, the act of posting nude photographs or pornographic content online for sexual gratification is also deemed prostitution.²⁵ This is one of the manifestations of so-called e-prostitution, which does not necessitate direct physical contact between the client and service provider. Therefore, if such activities are considered prostitution, the provision of erotic services by a humanoid robot, which receives payment for its services, should be regarded similarly. However, it cannot be concluded that the person using a humanoid robot to satisfy another's erotic needs is practising prostitution, as the entity does not provide any erotic service directly.

Considering the foregoing, it should be concluded that a humanoid robot may engage in prostitution, i.e., provide erotic services and accept payment for them. However, the perpetrator taking advantage of prostitution facilitated by a humanoid robot might only meet some criteria of the statutory elements defined under Article 204 § 1 or 2 of the Criminal Code. Undoubtedly, such an individual could facilitate a robot's engagement in prostitution in a manner corresponding to the elements of Article 204 § 1 CC. Conversely, persuasion to engage in such practices is hard to envisage if the robot operates in an automated manner, possibly programmed to provide such services. It should be emphasised that programming a robot for prostitution does not equate to incitement. Furthermore, financial benefits can indeed be derived from the prostitution practiced by a humanoid robot equipped with artificial intelligence. In this instance, the focus is not on a person, as no human is involved, but on a 'being' capable of engaging in prostitution. Such actions do not satisfy the criteria under Article 204 § 3 CC, which pertains to minors. A humanoid robot cannot be considered in these terms. Thus, an individual exploiting prostitution facilitated by a humanoid robot does not fulfil all the offence elements under Article 204 § 1, 2, and 3 CC.

The question then arises whether, de lege lata, an individual who facilitates or profits financially from prostitution practiced by a humanoid robot could be liable for an ineffectual attempt under Article 204 § 1 or 2 of the Criminal Code. Under Article 13 § 2 of the Criminal Code, an attempt also occurs when the perpetrator is not himself aware of the fact that committing it is impossible because of the lack of a suitable object on which to perpetrate the prohibited act or because of the use of means not suitable for perpetrating this prohibited act. It is pertinent to consider whether this 'another person' referred to in Article 204 § 1 and 2 of the Criminal Code constitutes the object or the means referred to in Article 13 § 2 of the Criminal Code. Since facilitating prostitution involves a specific individual, it must be assumed that, in this context, the individual is the object of the executive action, with facilitation centred on this very subject. A different assessment applies to profiting from another person's prostitution. Here, the other individual merely serves as a means to an end in the form of obtaining financial gain from prostitution, with their activity generating these benefits. Consequently, the executive act's object is the financial gain derived, while the individual practising prostitution is merely

²⁵ Ibidem, pp. 222–223.

a means to committing the act under Article 204 § 2 CC. Considering the issue from the perspective of the object, it is evident that in the case of exploiting prostitution practiced by a humanoid robot, as described in Article 204 § 1 or 2 of the Criminal Code, neither the object of the executive act nor the means in the form of a person suitable for committing the act exists. This scenario renders committing an offence under Article 204 § 1 and 2 of the Criminal Code objectively impossible, suggesting that the elements of an ineffectual attempt are partially met. Nevertheless, we cannot overlook the subjective aspect of an ineffectual attempt, focusing on the perpetrator's unawareness that performing the prohibited act is not feasible. It is difficult to justifiably assume that an individual utilising a humanoid robot for the acts specified in Article 204 § 1 and 2 of the Criminal Code would contend in court that they were unaware of the robot's non-person status. Such a claim would subject them to criminal liability under the provision of Article 13 § 2 of the Criminal Code in conjunction with Article 204 § 1 and 2. Instead, it is likely that they would argue that they always regarded the robot as distinct from a human being and were fully aware that committing the offence under Article 204 § 1 and 2 of the Criminal Code was not possible. This scenario falls outside the scope of Article 13 § 2 of the Criminal Code, indicating a situation where the perpetrator is cognisant that these offences cannot be committed and thus undertakes actions that mimic the causative action specified in Article 204 § 1 and 2 of the Criminal Code.

These deliberations lead to the conclusion that employing a humanoid robot for activities specified in Article 204 § 1 and 2 of the Criminal Code remains unpunished *de lege lata*. Consequently, the Polish legal framework permits financial gain and facilitation of prostitution by humanoid robots for financial profit. Such behaviours are morally condemnable and detrimental to the legal good that lies at the heart of criminal law protection under Article 204 § 1 and 2 of the Criminal Code. This necessitates considering future amendments to these provisions to include humanoid robots alongside the concept of 'person'.

The inability to attribute the offence under Article 204 § 1 and 2 of the Criminal Code to a perpetrator who uses a humanoid robot in the specified manner precludes the possibility of ruling the forfeiture of such a robot under Article 44 § 2 of the Criminal Code. Since the offence has not been committed, this measure is inapplicable. Moreover, it is questionable whether a humanoid robot qualifies as an ordinary object within the meaning of Article 44 § 2 CC. Similarly, the financial benefits derived by the perpetrator within the meaning of Article 204 § 2 CC cannot be subjected to forfeiture (Article 45 § 1 of the Criminal Code) either, as they are neither directly nor indirectly obtained from the offence.

It is also pertinent to explore the criminal liability of a humanoid robot engaged in prostitution, as employed by the perpetrator, for causing harm to the service user or committing theft against the client.

This inquiry relates to the broader issue of whether artificial intelligence is subject to criminal liability *de lege lata*. To address this, one must compare characteristics of artificial intelligence with the structural elements of crime. It appears implausible to attribute a criminal act to artificial intelligence, fundamental to criminal law

assessment.²⁶ It is worth recalling that such an act comprises an objective side, manifested as behaviour in the form of action or omission, and a subjective side, involving perception of external stimuli and action based on free will. Although a humanoid robot equipped with AI may exhibit various behaviours and may also receive and process external stimuli, it is doubtful that it can act based on free will. Free will is the ability to make a conscious decision and choose between different behaviours, whereas AI operates based on data processing and automated decisionmaking guided by its programming and algorithms. Its decisions are determined not by free will but by software. Therefore, AI is unlikely to be acknowledged as committing an act within the criminal law context. Although an AI (humanoid robot) may occasionally meet the objective criteria of a criminal act, challenges arise concerning the subjective aspect.²⁷ It is impossible to ascribe intent, a will-based action, to an AI, as it does not operate on the basis of free will. It is difficult to conceive that a robot desires something or anticipates and accepts a certain outcome, given that its decisions are automated and AI likely lacks self-awareness of its surrounding reality. Its perception of reality is indeed algorithm-based and automatic, unrelated to consciousness and will, which underpin human actions. Lastly, we must consider the possibility of attributing fault to an AI (robot) in a normative sense.²⁸ Guilt, in this context, implies accusing the perpetrator because, faced with a choice between lawful and unlawful conduct, they opt for the latter. The foundations for attributing guilt include age, sanity, awareness of illegality, and action in a typical motivational scenario. The first criterion is irrelevant for AI. The second is incompatible with AI, as sanity consists in the ability to recognise the significance of an act and direct one's behaviour, which is improbable for a humanoid robot (AI) given its dependency on algorithmic operation. Consequently, such a being's actions are predetermined, making it difficult to discuss its ability to control its behaviour. While it may operate under normal or less typical conditions and select actions based on those circumstances, this is not indicative of free will but rather algorithmic analysis and compelled action selection. Therefore, attributing guilt in the strict legal sense, as applicable to individuals, is unfeasible. The justification for holding a robot criminally responsible is thus questionable. Furthermore, the concept of criminal punishment, entailing specific disadvantages for the offender, is incompatible with such an 'entity'.29 A robot (AI) cannot experience discomfort, rendering traditional criminal punishment ineffective.

The impossibility of criminally prosecuting a prostitution robot for harm caused to a person using its services does not exclude the liability of the entity utilising the robot or that of the manufacturer. In the latter case, criminal liability

²⁶ In the literature, it is possible to identify authors who believe that AI can fulfil the external element of the criminal act, known as *actus reus*. See, e.g., Hallevy, G., 'The criminal liability of Artificial Intelligence Entities – from science fiction to legal social control', *Acron Intellectual Property Journal*, 2016, Vol. 4, Issue 2, Article 1, p. 187. What is more, the author argues for independent criminal liability of AI.

²⁷ Similarly, Filipkowski, W., 'Prawo karne wobec sztucznej inteligencji', in: Lai, L., Świerczyński, M. (eds), *Prawo sztucznej inteligencji*, Warszawa, 2020, Legalis 2023.

²⁸ Ibidem.

²⁹ Ibidem.

for an intentional offence is conceivable if the manufacturer knowingly constructs the 'device' in a manner likely to harm or damage another person. If the user is also aware of this risk, then liability for an intentional act is likewise conceivable.³⁰ It is pertinent to note, however, that if the robot possesses self-education capabilities and can learn independently, the more knowledge it acquires, the more autonomous it becomes, reducing the likelihood of criminal liability for the manufacturer or user.³¹ This likelihood decreases further if the manufacturer informs the user, and the user, in turn, informs the customer of such risks. The manufacturer's criminal liability is also negated if the customer uses the robot in a manner contrary to the provided instructions, thereby exposing themselves to harm or damage. Criminal liability for unintentional offences of exposing a person to direct danger (Article 160 § 3 CC) or for unintentional harm (Article 157 § 3 CC, Article 156 § 2 CC) may also be relevant. Generally, this liability is determined by a breach of the precautionary principle at the production stage, when constructing the usage instructions by indicating any risks associated with the robot's use, upon making it available to the customer, and in informing them of the usage rules.³²

While it is true that *de lege lata* it is not possible to impose criminal liability on a humanoid robot (artificial intelligence), future legislation (de lege ferenda) should contemplate the possibility of introducing vicarious liability for such an 'entity', dependent on the criminal liability of the producer or user, similar to the liability of collective entities for criminal offences. A robot equipped with artificial intelligence exists somewhere between a human being and a legal entity, similar to a legal person. Given that legal systems recognise corporate liability,³³ it is worth considering the applicability of such liability to robots. The issue, however, is whether this liability should always rely on the responsibility of the user or manufacturer, as the more autonomous the entity becomes through its knowledge and experience, the less it depends on the manufacturer or user, and consequently, the less their criminal liability should influence the robot's liability. Moreover, legislation should allow for the removal of such a 'being' from the market, especially when there is no criminal liability of the manufacturer or user, despite the absence of a conviction for damages caused by the robot (artificial intelligence). Potential measures could include the robot's forfeiture through destruction, a prohibition on its production or future use.³⁴ Admittedly, all these measures restrict rights and freedoms (property rights, liberty), their implementation would be justified by the protection of public order and safety, as per Article 31(3) of the Polish Constitution.

³⁰ Giannini, A., Kwik, J., 'Negligence failures and negligence fixes. A comparative analysis of criminal regulation of AI and autonomous vehicles', *Criminal Law Forum*, 2023, No. 34, p. 72.

³¹ Cf. ibidem, p. 44.

³² For a more extensive discussion on liability based on the unintentional unawareness of an artificial intelligence producer, see ibidem, p. 60.

³³ Similarly, Jankowska-Prochot, I., 'Criminal liability and the activity of autonomous robots. Challenges in the Polish and global scientific discourse', in: Chmielnicki, P., Minich, D. (eds), *Law as a future project*, Warszawa, 2022, pp. 172 and 182.

³⁴ Ibidem, pp. 184–185.

BIBLIOGRAPHY

- Antoniszyn, M., Marek, A., Prostytucja w świetle badań kryminologicznych, Warszawa, 1985.
- Auleytner, A., 'Can a robot incur criminal liability', Law and Standards, 2017, No. 12.
- Berent, M., Filar, M., in: Filar, M. (ed.), Kodeks karny. Komentarz, Warszawa, 2016.
- Bielski, M., in: Wróbel, W., Zoll, A. (eds), Kodeks karny. Część szczególna. Tom II. Komentarz do art. 117–211a, Warszawa, 2017.
- Budyn-Kulik, M., Kulik, M., in: Królikowski, M., Zawłocki, R. (eds), Kodeks karny. Część szczególna. Tom II. Komentarz do art. 117–221, Warszawa, 2023, commentary to Article 204 CC, thesis 5, Legalis 2023.
- Charkowska, K., Zjawisko prostytucji w doświadczenia prostytuujących się kobiet, Kraków, 2010.
- Filipkowski, W., 'Prawo karne wobec sztucznej inteligencji', in: Lai, L., Świerczyński, M. (eds), Prawo sztucznej inteligencji, Warszawa, 2020.
- Giannini, A., Kwik, J., 'Negligence failures and negligence fixes. A comparative analysis of criminal regulation of AI and autonomous vehicles', *Criminal Law Forum*, 2023, No. 34.
- Hallevy, G., 'The criminal liability of Artificial Intelligence Entities from science fiction to legal social control', *Acron Intellectual Property Journal*, 2016, Vol. 4, Issue 2, Article 1.
- Hilgendorf, E., 'Introduction: Digitization and the Law a European Perspective', in: Hilgendorf, E., Feldle, E. (eds), *Robotik und Recht. Digitization and the Law*, 2018, Vol. 15.
- Hypś, S., in: Grześkowiak, A., Wiak, K. (eds), Kodeks karny. Komentarz, Warszawa, 2020, commentary to Article 204, thesis 4, Legalis.
- Jankowska-Prochot, I., 'Odpowiedzialność karna a działalność autonomicznych robotów. Wyzwania w polskim i światowym dyskursie naukowym', in: Chmielnicki, P., Minich, D. (eds), *Prawo jako projekt przyszłości*, Warszawa, 2022.
- Kłączyńska, N., in: Kodeks karny. Część szczególna. Komentarz, Warszawa, 2014.
- Kowalczyk-Jamnicka, M., Społeczno-kulturowe uwarunkowania prostytucji w Polsce, Bydgoszcz, 1998.
- Piesiewicz, P.F., 'Przestępstwo w wirtualnym świecie', in: Gardocki, L. et al. (eds), *Aktualne zagadnienia prawa karnego materialnego i procesowego*, Warszawa, 2009.
- Piórkowska-Flieger, J., 'Tak zwane przestępstwa okołoprostytucyjne', in: Mozgawa, M. (ed.), *Prostytucja*, Warszawa, 2014.
- Radutniy, O.E., 'Adaptation of criminal and civil law in view of scientific-technical progres (artificial intelligence, DAO and digital human)', Проблеми законності, 2019, Вип. 144.
- Sobczak, J., 'Odpowiedzialność karna za przestępstwa popełnione w sieci: Czy można zgwałcić awatara?', in: Mazurskiewicz, J., Szymaniec, P. (eds), *Prawne i administracyjne aspekty komunikacji elektronicznej*, Wałbrzych, 2018.
- Sobczak, J., 'Prostytucja w internecine', in: Mozgawa, M. (ed.), *Prostytucja*, Warszawa, 2014. Warylewski, J., Nazar, K., in: Stefański, R.A. (ed.), *Kodeks karny. Komentarz*, Warszawa, 2023, Legalis 2023.
- Warylewski, J., in: Stefański, R.A. (ed.), Kodeks karny. Komentarz, Warszawa, 2015.
- Warylewski, J., in: Warylewski, J. (ed.), System Prawa Karnego. Tom 10. Przestępstwa przeciwko dobrom indywidualnym, Warszawa, 2016.

Cite as:

Lachowski J. (2024) 'Criminal law assessments of the exploitation of prostitution practised by humanoid robots', Ius Novum (Vol. 18) 1, 1–12. DOI 10.2478/in-2024-0001