PRÁVNICKÁ FAKULTA
Univerzita Karlova

OPPONENT'S OPINION

Applicant's name	:	**Andreas Nanos LL.M.**
Thesis topic	:	**Comparative Analysis of Criminal Liability of Autonomous Driving and Strong Artificial Intelligence**
Pages	:	131
Date of dissertation	:	2023-08-24

1. Topicality (novelty) of the topic:

The applicant's topic is highly topical and severe. Artificial intelligence is a relatively new phenomenon that is undergoing a wide social debate regarding many aspects, including, among other things, morality, justice, and law. In conjunction with autonomous driving, the issue of liability arises in particular. The topic has already been examined in foreign literature. However, there is no comprehensive discussion of this phenomenon in the Czech Republic. It is a topic that is, to a certain extent, a challenge that can take the current knowledge a step ahead.

2. Requirements of the topic concerning theoretical knowledge, input data and their processing, and the methods used:

- Theoretical knowledge – Especially the knowledge of substantive criminal law, however, also of criminal procedure law as well as the knowledge from non-criminal fields with a focus on the knowledge of civil law or legal philosophy was necessary; non-legal issues of professional (technological) nature then represent a separate knowledge.
- Input data and its processing - The Ph.D. student collected the above-standard volume of input data with regard to the topic and available resources when processing it subsequently in a creative and adequate way.
- Methods used – They correspond to the standards of scientific work; mainly descriptive and analytical-synthetic methods were used.

3. Formal and systematic division of the work:

-   In conformity with the Measure of the Dean No. 17/2017 (Articles 18 to 20 and Annex No. 4). The thesis is divided into 12 parts, including the introduction and conclusion; it is further subdivided internally, having an unambiguous and logical structure. In the introductory chapter, the author presents the key issues of the topic, focusing on the issues of liability, artificial intelligence, and its possible punishing. Chapter 1 is of a terminological nature, explaining the topic to the reader, while Chapter 2 deals with information on the typology of artificial intelligence. The subsequent chapters deal with placing robots into context and with the technical grounds of the issue. Chapters 5 and the following ones then deal with legal issues. At first, a historical background (considerations) regarding liability issues is discussed. The following text deals already with the merits of the case. In Chapter 6, the applicant deals with product liability related to artificial intelligence, including the application of principles of substantive criminal law, including the issues of fault. The author builds here on general considerations based on current knowledge while accepting the opinion that it is necessary to take the current legal framework as the basis. He also refers to the cases that have already been judicially heard. In the Chapter 7, the author arrives at partial conclusions, particularly in relation to liability. It is possible to agree with these conclusions. However, the author, unfortunately, neglects the issue of criminal liability. In Chapter 8, the author is about to pronounce the opinion on whether it would be possible to justify the criminal liability of artificial intelligence, particularly on the grounds of criminal liability of legal persons (and electronic personhood referred to below). However, the argumentation based on the fact that robots can become emotional seems to me too strong and unbalanced. Chapter 9 deals with criminal liability itself and can be seen as the fulcrum of the thesis. The author discusses here the terms such as negligence, omission, or liability in relation to different subjects. The author deals with the issues that we, as a society, will have to resolve in a few years. In general, it is a well-written chapter and one can agree with its conclusions. Chapter 10 deals with the possible criminal liability of robots, focusing on their various aspects, particularly the issue of fault. The last chapter of the presented thesis is the conclusion, where it is possible to agree with the key conclusion that it is essential to address the problems associated with the identification of the person liable for any failure of an AI system.

4. Thesis statement: The presented work represents a very good analysis of the chosen topic. It concerns a comprehensive treatise in which the applicant proceeds from general to specific. The thesis is of an analytical nature where the applicant's interest in the researched topic is evident. Some considerations are almost of a visionary character. It is a unique combination of legal topics and artificial intelligence. It is necessary to

appreciate the conclusion of the thesis, where the author comprehensibly formulates the key ideas.

5. Criteria of work evaluation:
- **Aim accomplishment:** The applicant did not explicitly state the aim of the thesis. Nevertheless, the way in which criminal law or criminal regulations deal or will deal with artificial intelligence and its liability can be considered the aim of the work. The objective of the thesis was certainly accomplished.
- **Independence when processing the topic (including the work evaluation regarding plagiarism):** The work is original and authentic, dealing with the presented issue when no objections can be made regarding the sources known to the opponent. This fact has been verified by the Turnitin system (27% of similarity) and by checking for plagiarism when the results, however, are of limited predictive value due to the foreign language of the thesis.
- **Logical structure of the thesis**: The thesis has a logical, systematic structure that can be accepted.
- **Work with sources (use of foreign language sources), including citations**: The author follows a unified standard of citations; they are satisfactory. With regard to the sources presented it can be stated that the range of sources is of the above standard level in relation to the topic. The electronic sources are abundant. The notes are also abundant. The thesis contains exclusively foreign sources when this is quite logical.
- **Depth of the analysis made (in relation to the topic):** It is of the above standard level considering the scope of the work and requirements for this qualification work.
- The layout of the thesis (text, graphs, tables): The submitted dissertation work is well-graphically organized. The author manifested a careful work with the text.
- **Linguistic and stylistic level**: At a very good level. Despite its high technical level, the work is well readable.

6. Comments and questions to be answered during the defence

As part of the defence, I recommend that the applicant addresses the following questions:
a) To what extent is the current state of the law merely catching up with technological developments? Will law enforcement authorities be able to cope with the rapid technological developments in the field of artificial intelligence?
b) If artificial intelligence (robots) is held criminally responsible, who will represent it in criminal proceedings?
c) Will the principles of continental European criminal law need to be amended with the onset of artificial intelligence?

The submitted thesis quite clearly accomplishes the content and formal requirements for completion of the dissertation, and I therefore recommend it for defence before the competent dissertation defence committee.

In Prague on January 3, 2024

Doc. JUDr. Lukáš Bohuslav, Ph.D.
Opponent of the Thesis