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Report:
The Robot Judge: Law, Technology and Historical Patterns of Change
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On 15 June 2018, Professor Jørn Øyrehagen Sunde, Faculty of Law, University of Bergen, gave a presentation about "The Robot Judge: Law, Technology and Historical Patterns of Change" as part of the LunchTimeSeries on Law, Technology, and Society (LTS). Despite the upcoming examination week, an interested audience took the opportunity to learn more about this lecture's thought-provoking topic. After a short personal introduction by Professor Iris Eisenberger, Institute of Law, University of Natural Resources and Life Sciences, Vienna, Professor Sunde was warmly welcomed by the audience.

In his presentation, Sunde traced back the idea of a robot judge before examining historical patterns of change in the Norwegian legal system. He subsequently used the lessons drawn to assess possible fields of application for the robot judge. He concluded by highlighting potential obstacles that lawmakers and computer scientists need to consider before implementing a robot judge.

An interesting feature of the lecture was its unorthodox approach. According to Sunde, legal scholars nowadays often team up with engineers and other natural scientists to better understand emerging technologies. Yet, he pursued a different sort of interdisciplinary approach and analysed historical and cultural patterns of change whenever new technologies have challenged the legal system in place. Professor Sunde also clarified that his goal was not to assess whether the development of a robot judge was good or bad from a moral point of view. Instead he compared the (potential) emergence of a robot judge with other technological shifts in the past.

First, Sunde pointed out that fascination for machines goes back as far as the age of the Enlightenment. The earliest example he presented was the *Schachtürke* or "chess Turk". The chess Turk was invented at the end of the 18th century and can be described as a fake chess-playing machine. Its creators claimed that the machine was able to play chess on its own. While their claim raised a lot of public attention, the "chess Turk" in reality only worked with a human player hidden inside the construction. The technology for a mechanical chess player was not there yet. In a certain way the story of the *Schachtürke* echoes also the current discussion about the robot judge; in late 2016 several newspapers published reports about a study by Aletras et al. called "Predicting judicial decisions of the European Court of Human Rights: A Natural Language Processing perspective". In these reports, they exaggerated the findings of the study. As a result, the development of the robot judge seemed imminent to the

Schachtürke by Racknitz (1789), copper engraving

general public. Eventually, this misleading news coverage prompted even the Norwegian government to ask scientists how the robot judge could be implemented in the Norwegian legal system.

In the second and third parts of his presentation, Sunde took the audience on a stroll through roughly one thousand years of Norwegian legal history. In doing so, he showed that each major development in communication technology also had a severe impact on the character of the law. The first example thereof was the change from oral law to written law. This shift enabled the central authorities to promote internal legal unity and wide-scale legislation, thus rendering the law an instrument for targeted governance.

Building on the legal history, Sunde returned to the question of the robot judge. He argued that we can already observe the massive use of computer programmes in areas like public administration or contract design. However, he highlighted the obstacles we have to face if the ongoing digitalisation leads to the development of a robot judge. Among the concerns he mentioned was the independence of the judiciary. Since a robot has to be programmed, its decisions are predetermined by the algorithms used. As a result, the robot judge would not be independent. Another issue raised was the public purpose of a court system. That is to say that a justice system also needs to reflect the changing public sense of justice. However, it remains unclear if and how the robot judge could develop the necessary ability to learn morals. This in turn might lead to decisions that the public perceives as unjust. Lastly, the orality of the proceedings might be a practical problem for the robot judge. Usually, oral proceedings do not

follow a strict form, but are a complex series of questions and answers. As a consequence, it might be difficult for a programme to process the argument properly.

The subsequent discussion centred on the robot judge's potential advantages and disadvantages. On the one hand, a part of the audience argued that such a programme might just turn out to be a tool assisting the human judge in doing his or her work more efficiently and more objectively. On the other hand, some expressed concerns that the robot judge might pose a threat to modern liberal democracies because a robot judge cannot engage in moral considerations. Another issue raised was the question of causality; Professor Sunde portrayed the law primarily as a phenomenon shaped by the communication technologies at hand. Yet, it remains debatable in how far the law in return affects the use of the available means of communication.

While some of the questions had to remain unanswered, the discussion showed once more the importance of interdisciplinary approaches for the successful governance of emerging technologies.

Michael Fürmann, June 2018