Law & Cognitive Science Conference

26-28 July 2023 Jagiellonian University in Kraków

Organizers: Future Law Lab & RECOGNISE Partnership





Venue:

Faculty of Law and Administration (12 Bracka Street), Auditorium Hall

Day #1 (Wednesday, 26 July)

9:30-10:00 Registration

10:00-10:30 Welcome & introductions

10:30-11:30 Session #1

Piotr Bystranowski (Jagiellonian University) Normative Ignorance and the Folk Concept of Law

Vilius Dranseika (Jagiellonian University) *Personal Identity and Legal Expertise: An Empirical Study*

Chair: Aleš Novak (University of Ljubljana)

11:30-12:00 Coffee break

12:00-13:30 Session #2

Louise Victoria Johansen (University of Copenhagen)

The Role of Emotions in Danish Courtrooms

Giuseppe Rocchè (University of Palermo) & **Michele Ubertone** (Maastricht University)

Moral Contamination and Legal Reasoning

Mehmet Sadik Bektas (University of Opole)

The Moral Foreign Language Effect: Do Languages Influence How We Make Moral Decisions?

Chair: Miha Hafner (University of Ljubljana)

13:30-15:00 Lunch break

15:00-16:00 Session #3

Piotr Litwin (Jagiellonian University)

Responsibility for Bad Beliefs

Wojciech Graboń (University of Warsaw)

Interpretation and Deidealization: Insights From Legal Theory and the Methodology of Science

Chair: Michele Ubertone (Maastricht University)

16:00-16:30 Coffee break

16:30-17:30 Session #4

Rafael Buzón (University of Alicante)

Reductionism and Legal Reasoning

Corrado Roversi (University of Bologna)

On Legal Facts and Their Cognitive Preconditions

Chair: Giuseppe Rocchè (University of Palermo)

20:00 Conference dinner at Stradom House (12–14 Stradomska Street)

Day #2 (Thursday, 27 July)

10:30-11:30 Session #1

Luisa Lodevole (Tor Vergata University of Rome)

Is the Internet Influencing Our Cognitive Structure?

Mikołaj Ryśkiewicz (University of Warsaw)

How NLP Deepens Our Understanding of the Linguistic Picture of the Legal World

Chair: **Antonia M. Waltermann** (Maastricht University)

11:30-12:00 Coffee break

12:00-13:30 Session #2

Artur Bogucki (Centre for European Policy Studies)

Trustworthy Hybrid Decision Making Systems: Ethical, Legal, and Socioeconomic Factors Analysis

Paolo Capriati (University of Palermo)

Machines and Democracy: Justifications and Role of AI in Legislative Production

Bojan Spaić (University of Belgrade) & **Miodrag Jovanović** (University of Belgrade)

Artificial Reason and Artificial Intelligence: The Legal Reasoning Capabilities of GPT Models

Chair: Rafael Buzón (University of Alicante)

13:30-15:00 Lunch break

15:00-16:00 Session #3

Tomasz Braun (Lazarski University)

Al Reasoning and Attribution of Accountability: A Scary Game of Hide and Seek

Magdalena Krysiak (University of Lodz)

Criminal Liability for Medical Error Committed by Artificial Intelligence on the Example of the Da Vinci Robot Experiment

Chair: **Bojan Spaić** (University of Belgrade)

16:00-16:30 Coffee break

16:30-17:30 Poster session

Julia Castro (University of Alicante)

Do Neuroscientific Advances Invalidate Theories of Criminal Action?

Adam Demczuk (Jagiellonian University)

Issues With Bias-Motivated Crimes: Can a Perpetrator Have No Prejudices?

Niccolò Faccini (Luiss Guido Carli)

The Secret Ethical Life of Criminal Law: The Legal Use of Emotions and Restorative Justice

Miha Hafner (University of Ljubljana)

Emotion in Criminal Law

Karolina Mania (Jagiellonian University)

Legal Protection of Revenge and Deepfake Porn Victims in the European Union: Findings From a Comparative Legal Study

Maciej Próchnicki (Jagiellonian University), Piotr Bystranowski (Jagiellonian University) & Bartosz Janik (University of Silesia in Katowice)
What Do We Punish For? An Experimental Inquiry in Criminal Punishment

Flavio Scuderi Di Miceli (University of Palermo)

Closer to the Citizen: The European Principle of Subsidiarity and Nudging

Chair: Corrado Roversi (University of Bologna)

Day #3 (Friday, 28 July)

10:00-11:30 Session #1

Monika Zalewska (University of Lodz)

Basic Norm and Fictionalism in Hans Kelsen's General Theory of Norms

Mateusz Domagała (Krakow University of Economics)

Neurobiology of Intellectual Property Law

Wiktor Iwański (Sołtysiński, Kawecki & Szlęzak)

Collective Entity Behaviour in Competition and Consumer Law: An Attempt to Apply the Theory of Distributed Cognition to the Problem of Attributability of Behaviour

Chair: Marco Brigaglia (University of Palermo)

11:30-12:00 Coffee break

12:00-13:30 Session #2

Linda Louis (Leiden University)

Discriminatory Policing: Understanding Implicit Bias and Tackling the Limitation of Training

Antonino Azzarà (Roma Tre University)

Heuristics and Cognitive Biases in the Use of Police Force

Izabela Skoczeń (Jagiellonian University)

Lies, Common Ground, and the Law

Chair: Julia Castro (University of Alicante)

13:30-15:00 Lunch break

15:00–17:00 Workshop: Behavioral Sciences, Criminal Law, and Criminal Policy

Mikołaj Iwański (Jagiellonian University)

From Punishment to Nudge: How Behavioral Sciences Can Affect Criminal Policy

Daniel Kwiatkowski (Jagiellonian University)

Heuristics, Biases, and Justice in Sentencing

Karolina Śliwecka (Jagiellonian University)

Behavioral Sciences and the Scope of Culpability

Witold Zontek (Jagiellonian University)

Reasonable Defensive Mistake Leading To "Mutually Justified Violence": On Different Standards of Information Acquisition by the General Public and Police Force in Self-Defense Cases

Karolina Sikora (Jagiellonian University)

The Passions of Criminal Law: Towards the Emotional and Intuitive Approach in Research on Criminal Law

Michał Derek (Jagiellonian University)

The Limits of the Application of Behavioral Economics to Criminal Law

17:00-17:30 Wrap-up & goodbyes

The conference is co-funded by the Erasmus+ Programme of the European Union under the project number 2020-1-IT02-KA203-079834: Legal Reasoning and Cognitive Science (RECOGNISE). DISCLAIMER: The conference reflects the views of the speakers, and the Commission cannot be held responsible for any use which can be made of its contents.



The conference is co-funded by the Future Law Lab flagship project within the Priority Research Area Society of the Future under the Strategic Programme Excellence Initiative at Jagiellonian University.





TALKS

Antonino Azzarà (Roma Tre University)

Heuristics and Cognitive Biases in the Use of Police Force

In recent years, the issue of police brutality has become a central issue. We have realised that police violence can lead to effects that involve the whole of society. Lately, in Europe as well as in the United States, police violence has generated the indignation of entire social groups, triggering violent protests. These events tell us that police violence cannot be thought of as individual violence (i.e. *bad apples theory*), inherent in the relationship between individuals. Police violence should be thought of in a collective, systemic and structural dimension, where stereotypes and prejudices have a fundamental epistemological importance in defining the ingroup and the outgroup.

The presentation will focus on how group cultural factors and the mission that prison police set themselves (Reiner, 1985; Weddington, 1999) can influence the use of force through the construction of narrative frameworks (Goffman, 1986) that justify violence. In fact, violence will be interpreted as the outcome of a multifactorial process that is observed through the categories of George Herbert Mead's symbolic interactionism (1934). In this way, violence can be justified ex ante by the actors who carry it out, through an interpretation of the situation within their own symbolic universe (Douglas, 1978; Athens, 2013), but is only legitimised ex post by those who judge on its legality (Cornelli, 2020).

Egon Bittner (1974) explains that the norm authorizing police use of force (in and out of prison) is always a norm with vague contours. This norm authorizes behavior that is forbidden to all but permitted or required of the police. Studies on police culture have identified correlations between excessive or illegitimate use of force and culture (Scalia, 2020).

In this contribution I will explain how stereotypes and prejudices, as a mental heuristic (Kahneman, 2011), are necessary for police officers to do their job: to be ready and respond immediately to threats. I will also highlight how stereotypes and prejudices from a culture opposed to the rule of law can threaten the fundamental rights of detained persons.

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Scalia, V. "The Stench of Canteen Culture: Cop Culture and the Case of Federico Aldrovandi." *Social Justice* 47, no. 1/2 (159/160) (2020): 117–34.

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Mehmet Sadik Bektas (University of Opole)

The Moral Foreign Language Effect: Do Languages Influence How We Make Moral Decisions?

Linguistics and philosophy have both stressed the significance of language as a communication tool. The Sapir-Whorf theory, developed by Edward Sapir and his collaborator Benjamin Lee Whorf, contributed to the rise of the idea that language affects the mind, even though Wittgenstein added a new level of complexity to this viewpoint. With the adoption of this concept, language not only remained a means of communication but also gained respect in the social science curriculum as an essential component in the formation of individual identities and the absorption of new information. The effect of a foreign language on morality and ethics was the most significant element that philosophers and linguists in their extensive research overlooked. For instance, little is known about how the terms we choose can influence how we understand morality and ethics. The emphasis of this article will now only be on how learning a foreign language affects our ability to make moral and ethical decisions, or how learning a foreign language affects our cognition of a language. To put it another way, how we make choices is greatly influenced by the language we use in both public and private life. This means that in order to understand a country's law or society, it is crucial to closely examine the language that country uses. The options or goals that are publicly acceptable are also closely related to the language, metaphors, and discourses used by that society. The contemporary world does not analyse these incidents from a linguistic perspective, but language has contributed to the creation of accepted legal and social standards.

Artur Bogucki (Centre for European Policy Studies)

Trustworthy Hybrid Decision Making Systems: Ethical, Legal, and Socioeconomic Factors Analysis

High-stakes decision making settings, such as healthcare, justice, financial inclusion, recruitment, and public services, where human decision makers carry the responsibility of choices that may impact other human subjects' lives, are extremely complex social ecosystems. In order to make a decision on a specific case, humans interact with multiple sources of information of varying reliability and uncertainty, related to the case(s) under scrutiny as well as to the experience accumulated in previous cases. Also, decision makers are subject to influence by colleagues, experts, etc., and need to cope with their conscious and unconscious biases. Introducing Artificial Intelligence (AI) assistants in such ecosystems is clearly a sensitive challenge, despite their promise of helping with managing information overload, bias and influence, and of enhancing the quality of human decision making. As a matter of fact, the rate of adoption of Al-based decision support systems in, e.g., hospitals, tribunals and public administrations, is very low. A recent report estimates that 84% of healthcare providers in Europe currently do not use any Al system. Adoption barriers include perceived challenges to human autonomy, excessive required effort and cognitive load, dissatisfaction with user interfaces, and above all trust issues due to the difficulty of assessing the assumptions, limitations and capabilities of Al assistants. Trust plays a central role in the adoption of new technologies, and even more so when technologies like AI or Machine Learning (ML) directly hack our cognitive sphere. Finally, transparency of intentions is a major problem given that the development of AI systems is monopolized by a handful of huge hi-tech companies.

Artificial Intelligence (AI) holds enormous potential for enhancing human decisions, improving cognitive overload and lowering bias in high-stakes scenarios. Adoption of AI-based support systems in such applications is however minimal, chiefly due to the difficulty of assessing their assumptions, limitations and intentions. To realise the promise of AI for individuals, society and economy, people should feel they can trust AIs in terms of reliability, capacity to understand the human's needs, and guarantees that they are genuinely aiming at helping them. This project will develop the theoretical basis for Ethical Legal, and Socioeconomic factors analysis for hybrid decision support systems (HDSS) in which humans and machines are aligned in terms of values and goals, know their respective strengths, and work together to reach an optimal decision. To this end, this project will consist of i) an extensive literature review on the ELSE factors to map areas of concern in the HDSS theories and applications. Additionally, interviews with stakeholders and experts will be conducted. ii) ELSE analysis of the scientific outputs of theory of mutual

understanding, theory of virtual bargaining, folk theory of hybrid decision making, and synergistic human-machine learning will be conducted with particular attention to the EU AI governance framework. iii) Analysis of compliance with existing and forthcoming EU Directives and Regulations. iv) a list of guidelines, recommendations and key questions for implementation, policy makers, and regulators.

Tomasz Braun (Lazarski University)

Al Reasoning and Attribution of Accountability: A Scary Game of Hide and Seek

One of many facets of currently observed technology progress is a machine ability of data interpretation. This feature of Artificial Intelligence evokes a multitude of consequences, and it does it with an unprecedented pace. Interpretation of data fed into the systems allows the machines for conclusion driving and also – debatable by some – reasoning. Here comes the problem: if All is truly to be considered as intelligence then its reasoning creates a basis for decisioning i.e. making choices. Within them, apart from the easy ones there are also those that are hard, in other words carrying ethical dilemmas. Therefore, AI decisioning brings a need for explaining and rationalizing of its choices. This opens discussion for a shockingly necessary question of autonomy of the AI, and the protocols to be deployed in case of mistakes as well as the meaningful consequences of them. Until a (quasi?) personality is legally attributed to AI and hence its autonomy is consented then the conceptualizing, designing, developing, operating of AI technologies will stay on humans. And until then accountability for Al mistakes will need to be determined. It is a timely question whom to blame and where the liability lies in case Al is wrong. Many do want to make use of this fascinating technology but not many are ready to stand up and accept responsibility for all potential consequences of its use.

Piotr Bystranowski (Jagiellonian University) Normative Ignorance and the Folk Concept of Law

"Sorry, I didn't know I wasn't allowed to do that." This is a frequently heard and often valid, or even convincing, excuse. In the context of many social rules, such as moral norms, local customs, or rules of etiquette, an ignorant transgressor has good chances of being forgiven and merely informed about the broken rule and reminded to abide by it in the future.

Legal rules are different, though. If there is any legal principle about which lay people and professional lawyers profess a comparable level of confidence, it is the ancient adage that everybody is presumed to know the law and that ignorance of law offers no excuse. While legal and moral philosophers continue to be puzzled by how an individual can be legally sanctioned for failing to follow a rule they did not even know existed, the harsh principle generally remains in place across legal systems. Unlike philosophers, regular people appear mostly comfortable with this distinctively legal way of approaching normative ignorance.

Assuming such an asymmetry between legal and non-legal ignorance, this project asks whether something interesting about the folk concept of legality can be uncovered by studying how people react to actors ignorantly violating different kinds of rules. Are there some factors that make people both believe a given rule is legal and not excuse a person who violated that rule out of ignorance?

I will present the results of an exploratory correlational study in which I confront participants with a battery of social rules, ranging from statutory and case law provisions through customs of informal social groups and household rules. While one group of participants is asked about the degree to which a given rules is law-like, the other group decides on the responsibility of an actor who violated such rules out of ignorance. The results paint a complex yet fascinating picture, in which both the ascription of legality and non-excusable ignorance are independently determined by multiple situational factors. Rich textual data produced by participants also point clearly to tensions embedded in the way people delineate the legal domain.

Paolo Capriati (University of Palermo)

Machines and Democracy: Justifications and Role of Al in Legislative Production

It is said from many quarters that democracy today is in crisis. This crisis has several faces. Mainly, the crisis manifests itself as a rupture of the link between political institutions/representatives and citizens and within the public sphere itself.

A certain trust is put back into the concept of collective intelligence. Collective intelligence is a key concept in the recent debate on democracy. There are several definitions of collective intelligence. One of these holds that it is the ability to make collective decisions that are at least as good or better than those of any of the members of a given group. It is also defined as the ability of a group of human beings to perform a task as if the group itself were a coherent, intelligent organism working with a single mind, rather than as a collection of independent agents.

In recent decades, a new type of collective intelligence has emerged. These are interconnected groups of computers and people acting collectively. In particular,

it is argued that some of these interconnected groups, in certain cases and under certain conditions, can generate higher forms of collective intelligence. These groups are also called "hybrid assemblies." Such assemblies fall under the broader concept of hybrid systems.

The debate, to date, has mainly focused on how algorithms determine access to information, the granting of credit, and the risk of a person to recommit another crime. The joint work of humans and machines in lawmaking, on the other hand, has not been adequately investigated.

It is, therefore, appropriate to first introduce the issues related to the acceptance of legislative production in which a machine also participates.

Although many authors have focused on the presence of bias in the tasks given to machines, such problems do not seem to be an insurmountable obstacle. Indeed, a large body of literature endorses the hypothesis that such biases can be eliminated through refinement processes. In other words, it would only be a matter of time.

In conclusion, the hypothesis of automation of some legislative processes is subject to acceptance that goes through two stages: the loss of credibility of democratic processes and the ever-increasing reliance on machines.

This analysis will look at arguments already used to legitimize the use of artificial intelligence in other fields of law to address the possibilities of acceptance of artificial intelligence at the stage of normative production.

Collaterally, the analysis will also touch on other issues, such as the role that machines can play within a democratic process: mere tools or real subjects.

Mateusz Domagała (Krakow University of Economics) Neurobiology of Intellectual Property Law

Nowadays, it is necessary to adapt existing laws to an ever-changing world. The development of advanced technologies and their commercial exploitation have prompted the need to revise the view of the law in general and intellectual property law in particular. The problems that the possibilities of artificial intelligence have created are highly significant. Specialization and an openness to the achievements of other sciences can improve legal regulation. This article aims to examine the intersection between neuroscience and intellectual property law. An interdisciplinary approach and the use of cognitive science/neuroscience in legal regulation open up a full spectrum of possibilities. The paper attempts to analyse neuroscience research that may influence the current form of copyright law.

Keeping in mind the ideas and goals behind intellectual property law and using cognitive sciences, a new holistic approach to the issues of creativity, cognitive capacities and artistic self-expression processes can be created. Furthermore,

the cultural aspects of human creativity and artificial intelligence, as well as the potential negative consequences of failing to protect them, were emphasized. Building new definitions based on the results of empirical research, particularly relating to neuronal brain activity, can provide a new level of trust in regulation. New possibilities for granting protection based on research into neuroaesthetic experiments and a new understanding of the concept of work may provide a direction for the legal regulation of artificial intelligence creativity. By defining creation and creativity in terms of measurable processes in our brain, it is possible to understand this area better and, on this basis, to change the legal approaches to both the concept of work and the granting of copyright protection accordingly.

Vilius Dranseika (Jagiellonian University) Personal Identity and Legal Expertise: An Empirical Study

Given that diachronic identity "is a necessary criterion of most interesting diachronic legal relations" (Tobia, 2022), it is natural that debates on rights "at the margins of life" (from embryonic research and abortion to advance directives and assisted suicide) are tightly interwoven with the philosophical discussions on personal identity. The dominant inference line in such arguments is that to settle normative bioethical questions about rights, metaphysical issues of identity must be settled first.

One recurring finding in empirical research on personal identity, however, is that ascriptions of personal identity seem to be sensitive to normative considerations. Someone who undergoes an abrupt change to their moral character is seen as transforming into a new person (Strohminger & Nichols, 2014, 2015, Prinz & Nichols, 2016; Gomez-Lavin & Prinz, 2019). This phenomenon was dubbed the essential moral self. Furthermore, such identity judgments depend on the direction of change. Moral deterioration is seen to be more disruptive to identity than moral improvement. This effect is called the Phineas Gage effect (Tobia, 2015; 2016; Earp et al., 2019).

I present four studies with lay and lawyer participants (total N = 3779), suggesting that there is a legal concept of sameness of person that, compared to the lay concept, is less susceptible to moral considerations and more tightly linked to rights. Lawyers seem to differ from lay participants in that their concept of sameness of persons is more insulated from moral concerns, both in being more immune to the change in moral character and less sensitive to the direction of such change. Furthermore, lay participants sometimes use ascriptions and denials of personal identity strategically (e.g., to justify denying rights to a morally flawed character). However, it is possible to make lay

participants think about personal identity more like lawyers do by putting them into a legal frame of mind.

Wojciech Graboń (University of Warsaw)

Interpretation and Deidealization: Insights From Legal Theory and the Methodology of Science

The main aim of the presentation will be to analyze the process of interpretation and application of the law in terms of deidealization of models of phenomena encoded in legal provisions. I would like to argue in favor of the thesis that such a juxtaposition, on the one hand, can support the methodology of legal interpretation, and, on the other hand, shed new light on the problem of deidealization from the perspective of legal heuristics.

Following the terminology from the field of philosophy of science, models are a special kind of operative representations. Due to their greater cognitive accessibility, as a result of idealization, they typically allow researchers to conduct surrogate reasoning: draw inferences, evaluate potential changes in the represented systems, or formulate predictions (Frigg and Nguyen 2020, Weisberg 2016).

Since contemporary theories of interpretation tend to emphasize the descriptive aspect of legal language, explicitly (e.g. Sarkowicz 1995) or in similar terms, such as narrative (e.g. Fish 1989), the effectiveness of the interpretative processes may depend to a large extent on reconstructing not only the normative elements, but also the representational ones contained in legal provisions.

In a broader philosophical and scientific context, however, it has been recognized that relating a model to reality is problematic due to the practical irreversibility of the typically understood idealizations used in model development. Nonetheless, it seems that this issue is similar to the problems that legal interpretation has to deal with. Knuuttila and Morgan (2019) indicate that deidealizing can be understood as recomposing, reformulating, concretizing, and situating.

Therefore, in the talk, I would like to explore to what extent such methods can find counterparts and support in jurisprudence. In the presentation, moreover, I will pay particular attention to the possibility of using the theory of Nowak (1992, 2000), who was one of the few philosophers of science who explicitly wrote about the issue of deidealization as concretization, and also took into account the theoretical-legal context. Such a twofold approach to the problem of deidealization can allow us to supplement the existing methods of legal interpretation with adequate conceptual tools, as well as show the possibilities of deidealization from the point of view of legal practice.

Wiktor Iwański (Sołtysiński, Kawecki & Szlęzak)

Collective Entity Behaviour in Competition and Consumer Law: An Attempt to Apply the Theory of Distributed Cognition to the Problem of Attributability of Behaviour

In criminal law, we are dealing with human behaviour which is subject to assessment. The first stage of the examination of the case seems relatively straightforward. We know that person X did something. However, when we are assessing the behaviour of collective entities (such as enterprises), the problem arises at the very beginning of the examination. The question arises as to the attributability of the phenomenon to the entity in question.

The competition and consumer protection law prohibit unfair market practices. However, in order for a collective entity to be held liable for unfair market practice, it is necessary to establish that the entity is engaging in any practice. In other words, that there is a conduct of the collective entity to be assessed. The CJEU's caselaw recognises as unfair market practices mainly behaviour that is a manifestation of the exercise of an economic strategy (Cf. e.g. the judgments of the CJEU in the case C-310/15).

We intuitively assume that the top-down actions by managers will determine the behaviour of the collective entity as a whole. However, what if the unfavourable for consumers state of affairs is the result of the actions of individual employees of the company and not the implementation of the collective entity's economic strategy? What about a situation where the employees fail to implement management's orders as a result of mistakes? Should the collective entity then be held liable for a system of organising work that facilitates the occurrence of such errors?

According to the idea of distributed cognition, cognition can take place with the mediation of the cognitive subject and the environment. Artefacts play an important role. These are elements of the environment that facilitate cognition, e.g. a memo or the cockpit of an aircraft. They are objects that enable people to solve complex problems. At the centre of a distributed cognition system is not necessarily an individual human being. The boundaries of the system are determined by the density of information flow. The ecological approach in cognitive science emphasises the importance of the subject - environment relationship.

My lecture will attempt to apply distributed cognition theory to the problem of attribution of behaviour to collective actors in competition and consumer protection law. The effects of this exercise may prove useful for the practice of law application. Incorporating into the analysis of the facts knowledge about the mutual affordance of cognitive processes by people (i.e. managers and

employees) and the role of artefacts (e.g. instructions from superiors, memos) could allow the investigator to more precisely determine whether the analysed facts indicate the realisation of a certain pattern of conduct (economic strategy). This would help determine whether there is behaviour, which could then be examined in terms of other legally relevant considerations, e.g. fairness. The lecture will include a case study.

Louise Victoria Johansen (University of Copenhagen) The Role of Emotions in Danish Courtrooms

This paper explores how criminal justice actors interpret and process defendants' and victims' emotional expressions. Investigating emotions is increasingly used as an approach to understanding interactions between legal institutions and lay people, resulting in an increased number of studies examining how, for instance, judges and prosecutors are actively involved in emotion management during criminal trials which are otherwise characterized by strict ideals for conduct. Although emotions appear intangible, they are theoretically conceptualized in this paper as the accumulation of what professionals perceive when emotions are performed at the police station or in court through language, gestures, and bodily postures. Based on three different qualitative, ethnographic studies on the interactions between legal institutions, on one hand, and defendants and victims involved in violence cases in Denmark, on the other, the paper demonstrates how police officers, probation officers, prosecutors, victims' counsels and judges each separately understand and evaluate emotional reactions in violence cases. These actors interpret feelings according to their own professional roles and motivations so as to gain an overview of a case and the actions required of them in relation to it, resulting in quite different perceptions of victims' as well as defendants' needs and degree of trustworthiness. At the same time, professionals also interact across institutions by writing and exchanging case files and in so doing police officers' perceptions of emotional reactions are often disclosed to both prosecutors and judges. The paper contributes to existing knowledge of how specific professional ideals influence the handling of people in the courtroom, while the more general consensus on 'appropriate emotions' simultaneously generates knowledge across professions and institutional settings.

Piotr Litwin (Jagiellonian University) Responsibility for Bad Beliefs

Can we blame people for holding certain attitudes? When we judge other people's actions, we refer to beliefs that guide their decisions and attribute irrationality or bad will to them, when they possess wrong beliefs. This happens,

for example, when we evaluate people for holding anti-scientific beliefs (like vaccine skepticism).

However, are we allowed to do this? And if we do, on what basis? The cognitive process and the analysis of evidence are mostly independent of the agent's decisions. If we want to blame someone for engaging in wishful thinking, we should be able to prove that the agent was doing it intentionally. It remains important to highlight at this point, that in this discussion I will be focusing on normative responsibility, not moral or causal.

Philosophers have been discussing this problem of doxastic responsibility for a while, since Alston argued that deontological conception of justification requires that our beliefs should be under volitional control (Alston 1988). According to him, they are not, so we are not responsible for our beliefs. Other authors have argued that this "doxastic involuntarism" could be either a psychological or conceptual truth about beliefs (Peels 2015). Many philosophers have attempted to deliver sufficient or necessary conditions for "deciding to believe" or argue for indirect control, which could be the basis for holding people responsible for beliefs. In my talk, I will defend the position according to which doxastic responsibility is possible, even if involuntarism remains a conceptual truth about beliefs.

My main claim is that our cognitive process is aimed at looking for truth, so we are not able to infer a belief completely voluntarily. How then can we explain wrong beliefs? Empirical researchers have two approaches to studying this "epistemic badness": (a) information deficit and (b) rationality deficit. Levy argues that both hypotheses are not able to explain how people hold onto wrong belief in cases where (a) such beliefs clash with those endorsed by recognized epistemic authorities and (b) are maintained despite the widespread availability of evidence that supports more accurate beliefs or of the knowledge that aligns with the positions held by said authorities (Levy 2021). According to him, we are better able to explain people's misconception by referring to "higher-order evidence", that is evidence about available evidence and its credibility. From this point of view, bad beliefs can be analyzed as arising from genuinely rational processes.

However, can we hold people responsible for misjudging higher-order evidence? In my talk, I intend to argue that we do. Drawing from the insights from the philosophical discussion over doxastic responsibility, I would like to present the possibility of assigning epistemic blame to people, who actively uphold bad beliefs and misconceptions about the world.

Literature:

Alston, William P. 1988. "The Deontological Conception of Epistemic Justification." Philosophical Perspectives 2:257–99.

Levy, Neil. 2021. "Bad Beliefs: Why They Happen to Good People." Peels, Rik. 2015. "Believing at Will Is Possible." Australasian Journal of Philosophy 93(3):524–41.

Linda Louis (Leiden University)

Discriminatory Policing: Understanding Implicit Bias and Tackling the Limitation of Training

The concept of implicit bias – articulated as a form of deep-set but unconscious prejudice towards certain groups, since its introduction in 1995 has taken center stage in conversations about stereotypes and prejudice. Implicit bias therefore, is now accepted as influencing impressions, beliefs and therefore attitudes. Typically however, human rights law and anti-discrimination law has required an allegation of discrimination to prove positive, conscious and deliberate intent to discriminate i.e proof of explicit prejudice. Implicit bias has largely been left to the realm of sociologists and psychologists, and attempted to be resolved through training and education. The capacity of implicit bias to lead to discriminatory behaviour with cascading effects on individual rights requires that lawyers engage substantively with the implications of this cognitive process. Implicit bias in policing in particular can have severe detrimental effects on fundamental rights. Aside from outright discrimination and corruption, bias can manifest in rudeness towards civilians, dismissal of complaints by individuals whom the police are biased against, and over-policing of the group that is the target of bias. Implicit bias is largely driven by stereotype formation and illusory correlation, cognitive shortcuts that our minds use in order to make sense of our surroundings and reduce the cognitive load associated with decision making. However, recent analyses and evaluations of the effects of such training reveal little, if any, enduring change. Recent research also suggests that rather than arising from 'association' (hence the use of the implicit association test to assess implicit bias), it arises because of propositionally structured beliefs. A deeper understanding of the cognitive architecture underlying implicit bias therefore, suggests a re-look at the approach to address it, for legal purposes. As stereotype formation is a cognitive process that our minds undertake to 'optimise' its functioning, it has proven to be stubbornly hard to stop. Since the influence of implicit bias on attitude and therefore behaviour has become clear, mainstream approach towards addressing it has focused on training, with bias training becoming a multi-million dollar industry.

As the shortcomings of trainings to moderate or mitigate implicit bias are becoming clear, research is also reflecting on the value of alternative approaches. Thus, rather than try to address implicit bias through 'education' (which can sometimes result in further concretization of the bias), incentivizing

a motivation to reject acting on implicit bias (motivated rejection of implicit bias) has had promising results in reducing the effects of implicit bias. Moreover, the behavioural outcome of refraining from acting on biased thinking changes the underlying attitude, through recall. Addressing discrimination, an established goal of human rights laws and equality laws, therefore requires a deeper understanding of the cognitive process at play in the formation of implicit bias, and a consideration of methods that accounts for the specific particularities of this form of unconscious bias.

Giuseppe Rocchè (University of Palermo) & Michele Ubertone (Maastricht University)

Moral Contamination and Legal Reasoning

Empirical researches prove that judges have difficulties in ignoring relevant but inadmissible evidences. One of the phenomena analysed by scholars to explain this difficulty is mental contamination. In mental contamination (I) information is considered relevant by the agent at least at one stage (it may be debunked later). (II) the agent wants to neglect information, and (III) the agent believes that she is successfully neglecting it, but (IV) despite her efforts her conduct is influenced by the forbidden information. The phenomenon has different contaminated articulations. information like processing and perseverance, but the general scheme consists in the agent's difficulty to compartmentalize her practical thoughts, severing what is admissible from what is forbidden. And the main difference with other psychological distortions of judgement lies therein, that the agent is aware of the distorting factor she is facing- although he believes he is successfully disregarding it.

In the abovementioned researches the forbidden information is not contaminating the normative evaluation of facts, but the reconstruction of facts itself. In this presentation we want to contribute to the analytical clarification of mental contamination by inquiring on the possibility to apply this concept to the normative evaluation of facts. More specifically, our purpose is to apply mental contamination to the relationship between law and morals, introducing the notion of *moral contamination*.

Our starting point is that morality is not only a conscious affaire. Haidt's theory of moral judgment, for example, depicts morality as a layered domain in which high – socially accepted – layers fail to control the responses of deeper levels. Morality is out of moral control. We ask whether the category of mental contamination may be usefully applied to Haidt's account of morality – this is controversial since, at least prima facie, in Haidt's model moral judgment the agent is not aware of a conflict between her public morality and her deep-moral impulses.

Then, we move to the legal domain. We argue that moral contamination may help to elaborate from a psychological point of view the conflict between law and morality. Contaminating information are those features of the case which are immaterial for the legal system, but elicit a moral response in the agent, and are not successfully disregarded. Finally, we ask whether there are hopes that morality out of moral control may be subjugated by the law.

Corrado Roversi (University of Bologna) On Legal Facts and Their Cognitive Preconditions

Law makes possible certain kinds of facts. If there were no legal system and rules, it would not be possible for the President of the Republic to appoint life senators, for us to acquire the age of majority, and for a man and a woman to marry. A significant part of the reality we live in—in which, among other things, there are presidents, people of age, and married couples—is, therefore, a legal reality. Though this reality is mind-dependent, it is also objective. There could not be presidents or marriages without human beings being able to think about these things, but, on the other hand, the fact that I am married does not depend on us believing that I am: given the rules, I am married independently of what we believe, just as the President really appointed a life senator, or the Parliament objectively enacted a statute, believe it or not. How can something real depend on our minds but not on our actual beliefs? The purpose of this chapter is to bring contemporary cognitive sciences to bear on this metaphysical question, showing which mental capacities of human beings are necessary to make legal reality possible and why, at the same time, human beings can conceive that reality as objective despite its mind-dependent character. I will argue that four cognitive capacities are necessary to underpin social reality in general and that three other elements, each with its cognitive underpinning, are required to understand the specificity of legal reality within the social domain. The cognitive capacities necessary for the emergence of social reality, in general, are those that make possible joint intention, hypostatization of norms, status attribution, and games of make-believe. The cognitive features that underpin law are those connected with punishment, authority, and validity. This framework aims to provide a starting hypothesis for cognitively based research about the nature of law and legal institutions, thus enriching a traditional problem of legal theory with the contribution of contemporary cognitive sciences.

Mikołaj Ryśkiewicz (University of Warsaw)

How NLP Deepens Our Understanding of the Linguistic Picture of the
Legal World

The linguistic worldview is a concept firmly rooted in the framework of semantic research. The very application of it to the theoretical and legal world is a momentous event - research in this area was developed by T. Gizbert-Studnicki. Meanwhile, however, the emergence of more and more new research methods makes it possible to analyse the world of legal language in a deeper way than before. Natural Language Processing (NLP) - subject to very rapid change and development - offers further perspectives that, if applied thoughtfully, are capable of expanding our understanding of how the legal world is constructed.

Understanding this phenomenon is useful if only because the law does not operate in a vacuum. Decoding the cognitive constructs enshrined in law (even unknowingly!) by a number of legislators allows us to better understand how we attempt to establish social order and how we ourselves perceive the objectified world of obligations. As a further consequence, it is a contribution to the notion of how we try to categorise the world.

The opportunities that NLP offers in this respect are very great, although not obvious. Tools developed in other contexts need to be skilfully transposed into semantic-legal research in order to arrive at conclusions that are indeed suitable for serious analysis. An example of such a conclusion might be an in-depth study of the fundamentally noun-oriented nature of legal language, which - in combination with research on the consequences of noun disorders - allows us to grasp what simplifications we make when looking at the world of obligation. The presentation will cover this aspect, as well as introducing a number of further ones, including the landscape of perspectives that the broader implementation of NLP into cognitive-legal research unfolds.

Izabela Skoczeń (Jagiellonian University) Lies, Common Ground, and the Law

There are two famous US cases concerning the legal definition of a lie (perjury). In both cases the defendant said something literally true, but only one was a conviction (DeZarn v US), while the other (Bronston v US) an acquittal. Bronston said something true that implicated something false, while DeZarn answered truthfully a question about an irrelevant fact and didn't correct the inquiring lawyer. The differing judicial decisions can be explained by the linguistic common ground theory (see for instance Stalnaker, 1978; Pagin, 2016). This is a theory, which claims that the common ground is a set of propositions that the interlocutors agree to treat as true and each new contribution to the conversation is a proposal to update the common ground, or to treat the additional proposition as true. In the legal cases only Bronston tried to update the common ground and thus it was the duty of the lawyer to inquire

further if Bronston's implicature was true or false. However, in both cases the jury stated that the defendant lied and is guilty. In the experiment (N=262) I presented participants with a vignette describing John, a candidate for local governor, who attended two parties, one in the spring and one in autumn; at one of the parties he gave bribes to the guests so that they would vote for him in the elections. Next, participants were randomly assigned one of the three conditions below (labels in bold omitted):

- 1 Question: The questioning lawyer asks John whether he gave bribes to the guests at the autumn party. John replies:
- 'I did not give any bribes at the autumn party.'
- 2 Implicature: The questioning lawyer asks John whether he gave bribes to the guests at any party. John replies:
- 'I did not give any money to anyone at any party.'
- 3 Control: The questioning lawyer asks John whether he gave bribes to the guests at any party. John replies:
- 'I did not give any bribe to anyone at any party.'

Next, participants were asked whether John intended to make part of the common ground that he gave no bribes at any party. Subsequently, participants were informed that: John gave bribes in the form of expensive delicacies at the spring party but not at the autumn party. Finally participants had to rate how much they agreed with the statement that John's answer is a 'real lie, even though technically it is not a lie'.

I find that lay participants do not perceive the difference in common ground updating and agree that the speaker's utterance 'is a real lie, even though technically, it is not a lie' in all conditions. The answers on both dependent variables are correlated.

I conclude that this might be due to the fact that the core of the folk concept of a lie is the intent to deceive, while the legal definition is different, as it revolves around the maxim that no one has the duty to self-incriminate oneself.

Bojan Spaić (University of Belgrade) & Miodrag Jovanović (University of Belgrade)

Artificial Reason and Artificial Intelligence: The Legal Reasoning Capabilities of GPT Models

In this paper we identify the main traits artificial reason of law and the artificial reasoning of dominant LLM variants of artificial intelligence to evaluate the possibility of current iterations of GPT LLMs to reason like a lawyer.

In a 1607 dispute Chief Justice Sir Edward Coke wrote to King James I that, although "God had endowed His Majesty with excellent science, and great endowments of nature ..." still "his Majesty was not learned in the laws of his

realm of England, and causes which concern the life, or inheritance, or goods, or fortunes of his subjects, are not to be decided by natural reason, but by the artificial reason and judgment of law, which law is an art which requires long study and experience, before that, a man can attain to the cognisance of it." Legal reasoning involves interpreting sources of law and applying legal norms to cases. It requires a deep understanding of legal concepts, analytical, and logical skills. In the first part of the paper, we'll identify whether there are features of legal reasoning that make it artificial compared to ordinary reasoning.

In the second part of the paper, we'll discuss the literature on the reasoning behind LLM Artificial Intelligence models, dominantly GPT4 and GPT3.5. GPT (Generative Pre-trained Transformer) models are language models that use deep learning techniques to generate human-like text. These models have demonstrated language generation capabilities, including the ability to understand and generate grammatically correct and semantically meaningful text. GPT models also have limited logical reasoning and inference capabilities. They can identify patterns in text and use them to make predictions or generate new text. In other words, GPT models can generate text, but they are incapable of reasoning like humans. Depending on our conception of the artificiality of legal reasons, the lack of human-like reasoning capabilities of GPT models can either be a problem or an advantage for legal reasoning. There have been assessments of logical reasoning of the models (Liu et al., 2023, #76930), natural language understanding, and perspectives of LLMs in logic and natural language understanding (Liu et al., 2023, #169108). Legal reasoning capabilities assessments have been lacking.

In the third part of the paper, we'll conduct a series of tests to evaluate the strengths and weaknesses of GPT3 and GPT in tests related to legal reasoning. We'll test the modes of ordinary reasoning in law as well as the modes of reasoning that are characteristic of legal reasoning to access the ability of LLM AI to reason like a lawyer.

Monika Zalewska (University of Lodz)

Basic Norm and Fictionalism in Hans Kelsen's General Theory of Norms

Hans Kelsen's last book, 'General Theory of Norms', is considered rather an unsuccessful endeavour due to several changes that Kelsen made in his pure theory of law. One of the most controversial changes is done with regard to the basic norm, the signature category of Kelsen's theory. In General Theory of Norms, basic norm is no hypothetical assumption anymore. Instead, Kelsen explains that the basic norm is a self-contradictory fiction. If read directly, this revision might actually deprive Kelsen's theory of its purity, especially in the field

of separation between Is and Ought. Fortunately, it is possible to read this change in the context of the Vaihingerian philosophy of 'As-If', as a fiction, which, although not in agreement with reality, is still useful for cognition. Although fictionalism in Vaihinger's version was abandoned, in the 1980s such a framework was again explored, bringing new arguments into the nominalistrealist debate. At the same time, fictionalism describes practises and thought processes common in almost every field of human activity, including science. This reading opens new possibilities for the interpretation of Kelsen's pure theory of law in the spirit of modern fictionalism in its ontological variant, as well as in the field of philosophy of science. The results are promising and indicate that the fictional character of the basic norm is a 'tip of an iceberg' because such an understood basic norm is a consequence of the assumption of purity of Kelsen's theory, especially Is-Ought separation. This reading has the potential to explain the purity of Kelsen's theory, weakened in the General Theory of Norms, in the new framework. For this reason, it is worthwhile to explore Kelsen's General Theory of Norm in the light of fictionalism more thoroughly. While fictionalism in philosophy of science aptly reflects the thought process in which Kelsen is involved while claiming that there is a separation between Is and Ought, fictionalism at the field of ontology has a potential to shed some light on the problems surrounding such practise.

Hence, this presentation will in the first step argue in the favour of fictional framework in Hans Kelsen's General Theory of Norms, describing practices which are involved in the thought process that underlies the pure theory of law. The next step will be critical assessment of such practise and will include among others, some arguments raised by Stephen Yablo against instrumental fictionalism, which are: the problem of real content, the problem of correctness and the problem of pragmatism. They seem to be especially valid in the context of the fictional character of the basic norm.

Rafael Buzón Ibañez (University of Alicante) Reductionism and Legal Argumentation

Some of the advances of current neurosciences question epistemological and ontological assumptions established in the legal world. Faced with this challenge, many theories try to incorporate these changes into their conceptual system. However, the recurrent slip of taking the part for the whole often leads to adopting neurosciences as the canon of evaluation of any phenomenon, generating a large number of unjustified reductionisms. In this lecture I will present a philosophical toolkit to avoid falling into certain reductionisms that, in the end, are directly affecting the conceptualization of legal phenomena.

POSTERS

Julia Castro (University of Alicante)

Do Neuroscientific Advances Invalidate Theories of Criminal Action?

Some neuroscientific experiments point to the idea that human beings have no free will, calling into question the idea of culpability that underpins criminal law. This deterministic doubt goes even further, calling into question the whole language of action on which the criminal system is based, since the difference between something that happens and the fact that someone acts only makes sense if freedom exists. The question is, therefore, whether the new neuroscientific experiments and techniques invalidate the classical theories of criminal action and force us to rethink the conception of the free human being presupposed in law, constituting a true paradigm shift in terms of a "scientific revolution" that radically challenges the current legal culture. In this conference I will present the answers given by some neuroscientists and criminal scientists, noting the need to take into account philosophical considerations, because once neuroscience intends to extrapolate its research to areas such as law (and vice versa), conceptual and methodological problems of philosophy necessarily appear.

Adam Demczuk (Jagiellonian University) Issues With Bias-Motivated Crimes: Can a Perpetrator Have No Prejudices?

According to mainstream definitions, hate crimes or, more importantly biasmotivated crimes, are described as crimes motivated by prejudice or bias, where perpetrator acts against a victim because of their perceived membership of a certain group, either non-minority social group, or minority social group. Those types of crimes are designed to protect vulnerable groups of interest and to deter openly-biased individuals from conducting crimes.

Social cognitive psychology is concerned with the topic of biases, prejudices, and stereotypes. provided numerous quantitative evidence to support the claim, that most of the people are indeed biased or prejudiced to some or the other groups. One the one hand, the data indicates, that even toddlers exhibit bias towards racial groups. According to some, it is even impossible to grow up without the biases in a world culturally imbued in bias-overflowing children's books or cartoons. On the other hand, biases can be implicit or explicit. The only difference in implicit or explicit bias is its expression. Explicit biases are more consciously expressed, while implicit biases are not, having nonetheless

significant impact on the behaviour. In some situations, this expression of biases can be controlled, in other (for example the infamous "shooter task") it is nearly impossible. In external-to-law reality, proving whether someone was really, implicitly or explicitly biased while in the moment of committing an offence, is extremely difficult, that one may argue whether is it even doable. Based on scientific-achievements of social cognitive psychology and based on the bias-motivated crime definition, following problems arose: One may wonder, whether can one conduct hate crime without being biased or prejudiced, and whether one can commit any crime without being truly biased.

The poster will provide empirical data and quotations to support mentioned claims, and to showcase and elaborate on the problems. The emphasis will be put on dilemmas in borderline situations: first one, where the perpetrator can not in fact control their actions and the second one where perpetrator commits a hate crime, while in fact not being biased. It seems, that the question of how the implicit bias is understood and functions as motivating element in the criminal science, is worth pondering.

Niccolò Faccini (Luiss Guido Carli)

The Secret Ethical Life of Criminal Law: The Legal Use of Emotions and Restorative Justice

For centuries emotions have been debased as factors of pollution of human reasoning and banished from the terrain of continental criminal law. The European legal systems have de-emotionalized the criminal response: the formalistic setting of contemporary criminal law has treated crimes as abstract entities and thus eliminated the procedural space for the emotional experience of the people involved. The *emotionless* procedural paradigm has embraced a hyper-specialist language made up of redundant syntactic constructions and an almost sacred ritualism: a transparent communicative failure. Nowadays, the marginalization of the emotional dynamics of judges, victims and perpetrators collides with the new achievements of neuroscience, bioethics and restorative justice. It would be simply anachronistic to pretend that the protagonists of criminal law are only perfectly rational agents: emotions are everywhere and guide their behaviour.

The recent acquisitions of neuroscience undermine the dogma of the general irrelevance of emotional and passionate states, propose a humanization of law and give a strong acceleration to the path of personalization of criminal liability. In the field of bioethics, the physiognomy of the protected legal assets has changed due to the growing complexity of reality, but euthanasia, brain death, embryonic stem cells, genetic manipulation, allocation of health resources and funds for research into rare diseases, resuscitation in intensive care units and

enhancement technologies concern the most intimate of everyone's conscience, to the point that any juridical option is already experienced as invasive in itself, regardless of its contents. Precisely because of the specific nature of bioethical issues, it cannot be excluded that criminal law – if it wants to find its legitimacy – must protect the feelings and even the sentiment of the concrete case.

My thesis is that today it is impossible to disavow the secret ethical life of criminal law or to deny its post-modern and liquid dimension. It should be noted that the State itself bases retributivism on revenge – a surgical act without a general-preventive value – as an institutionalized emotion: the *ratio* underlying the state reaction equivalent to the action does not reside in an objective principle, but in a feeling. Therefore, if emotions also pertain to the judgment on the need for punishment, it would be necessary to examine the conceivability of the *legal use of emotions* (Di Giovine, 2022) also in the phase following the commission of the crime. The aim of this work is to question the potential of *restorative justice* as a path of healing the relational fracture caused by the offense, aimed at re-establishing, on an emotional level, a more just balance between the figure of the victim and that of the perpetrator, in the belief that the legal systems of the continent need a model of justice that encounters the crime in its disconcerting globality and concreteness.

Miha Hafner (University of Ljubljana) Emotion in Criminal Law

This poster presents the role of emotion in criminal law decision making. It reviews how emotions are integrated into the decision making process and how they may influence legal reasoning, as well as the role of empathy therein. It briefly reviews empirical research in this field and illustrates the findings with the example of anger.

Karolina Mania (Jagiellonian University)

Legal Protection of Revenge and Deepfake Porn Victims in the European Union: Findings From a Comparative Legal Study

The unauthorized use of individuals' images in a pornographic context on the Internet, without their prior consent, has become an increasingly prevalent form of infringement. Illicit activities involving the use of generated images and artificial intelligence represent a subcategory of this phenomenon. Instances such as revenge porn and deepfake pornography highlight the inadequacy of legal systems in keeping pace with this rapidly evolving reality.

This project aims to compare the existing legal regulations in selected European Union countries and the mechanisms of legal protection accessible to victims. The text presents the disparities present in the legal systems of the analyzed countries, along with an assessment of potential solutions at both the legal and technological levels to confront the prevailing problem.

To address this issue, a comparative analysis was conducted using the method of comparative law, which involved a review of the existing laws in selected European Union (EU) Member States. The objective was to create a comprehensive overview of the legal protection available to victims of revenge porn. The findings revealed that, among the countries studied, three have specific legal provisions addressing revenge porn. However, the conceptual scope of these definitions varies significantly, thereby influencing the legal avenues available to victims seeking to assert their rights.

Maciej Próchnicki (Jagiellonian University), Piotr Bystranowski (Jagiellonian University) & Bartosz Janik (University of Silesia in Katowice)

What Do We Punish For? An Experimental Inquiry in Criminal Punishment What do we punish for, sentencing a person convicted of a crime? The answer may seem obvious both from the viewpoint of the general public, and theory of criminal law: the penal sanction should be tailored to the gravity of the criminal deed. This rule seems to be in danger in a number of cases – including a situation often present in a criminal trial, when some formally unproven circumstances are at play when convicting and sentencing.

Our main objective is to examine whether a suspicion of some formally unproven criminal activity will influence sentencing decisions and the attitudes towards the perpetrator. Our two fields of study are proxy crimes and pretextual prosecution. "Proxy crime" is not perceived as morally wrong in itself, but tends to co-occur with some other crime that is hard to prove (e.g. criminalization of possession of lock picking tools). Pretextual prosecution is a situation in which a perpetrator is harshly punished for a lesser crime while felonies remain unproven (recall Al Capone's tax evasion).

We will present two experimental studies (between-subject design). In the first one, participants are facing two different vignettes, each in one of three versions: the defendant is suspected of a serious felony and charged with it ("primary"); the defendant is suspected of a serious felony, but charged with the proxy one ("proxy+suspicion"); the defendant commits only the proxy offense ("mere proxy"). In the second one, participants are facing three out of six vignettes, in three conditions: the defendant commits pretextual offense and is charged with it, they are as well suspected of committing another serious felony

("serious suspicion"); the defendant commits pretextual offense and is charged with it, they are as well suspected of committing another petty offense ("petty suspicion"); the defendant commits pretextual offense and is charged with it without any additional suspicions ("control").

Hypotheses: Participants will perceive proxy and pretextual charges as more serious when a perpetrator is suspected of another morally important misconduct, thus presenting more punitive attitudes. Laypeople will be more formalist (treating proxy and pretextual charges at face value), while legal professionals will be more pragmatic (treating proxy and pretextual charges as a vehicle to punish for some other deed).

In pilot study 1 (426 participants, including 208 legal experts), we found some support for the thesis that the conviction rate will be the highest in proxy+suspicion and the effect will be stronger for legal experts, as well as support for the thesis that punishment will be most severe in the primary case and the least severe in the proxy case (the results for expertise were mixed). In pilot study 2 (160 lay participants), we found support for the thesis that moral outrage and character will be the most severe in the serious suspicion case, although we did not manage to get a significant result when it came to punitive intent.

Flavio Scuderi Di Miceli (University of Palermo)

Closer to the Citizen: The European Principle of Subsidiarity and Nudging The relation will explore whether the EU's subsidiarity principle justifies the use of nudging as a more effective administrative policy to achieve social and public objectives. Article 5 TEU sets out the principle of subsidiarity, whereby the EU does not act, except in areas of exclusive competence, unless its action is deemed more effective than that taken at national, regional or local level. Within this limitation, dictated by the action-attribution relationship, a new vision of public intervention is provided by the behavioural sciences approach to law, more precisely by nudging techniques. The latter makes it possible to overcome the traditional hierarchical scheme, typical of the sources of law, by flanking the classical command-and-control activity with non-coercive public policies, better suited to the new social challenges. Moreover, the European Union has specific competences in the fields of public health, consumer protection and the environment, which can be used as a justification for nudging policies and, in terms of focusing on the ultimate effect of these, fulfilling the principle of subsidiarity more fully by focusing on the 'lower' rungs of the administration and the intermediate bodies of society. Precisely in the field of public health, the example of the COVID-19 pandemic policies will be introduced to highlight the main ethical-legal problems associated with nudging.

Nudge techniques, therefore, can be a useful tool to ensure the cohesion and coherence of EU policies, as they can help to promote desired behaviour and improve the effectiveness of European policies by bringing the focus back to action closer to the citizen.

WORKSHOP

Behavioral Sciences, Criminal Law, and Criminal Policy

The emergence of behavioral sciences (behavioral economics, cognitive psychology, behavioral game theory, etc.) in the last decades has changed the way how we think about the nature of human decisions. The results of experimental studies have shown that the traditional, economic model of human decision-making is highly simplified and has no bearing in reality. Humans are much less rational and have much less power but also much more altruistic than the traditional model assumed. We are prone to systematic biases, heuristics, and cognitive errors. New studies lead also to new ways of thinking on the topic of how the legal system may affect human behavior. This new school of thought is often referred to as: "behavioral economic analysis of law" or "behavioral analysis of law".

Criminal law and criminal policy may also become the subject matter of behavioral analysis of law. This workshop will provide a wide-range spectrum of topics, concerning the problems of relations between behavioral sciences and criminal law and criminal policy.

The workshop will contain six short presentations and discussion. The presentations:

- Mikołaj Iwański (Jagiellonian University) From Punishment to Nudge: How Behavioral Sciences Can Affect Criminal Policy
- 2. Daniel Kwiatkowski (Jagiellonian University) Heuristics, Biases, and Justice in Sentencing
- 3. Karolina Śliwecka (Jagiellonian University) Behavioral Sciences and the Scope of Culpability
- 4. Witold Zontek (Jagiellonian University) Reasonable Defensive Mistake Leading To "Mutually Justified Violence": On Different Standards of Information Acquisition by the General Public and Police Force in Self-Defense Cases
- Karolina Sikora (Jagiellonian University) The Passions of Criminal Law: Towards the Emotional and Intuitive Approach in Research on Criminal Law
- 6. Michał Derek (Jagiellonian University) The Limits of the Application of Behavioral Economics to Criminal Law