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by Stanislava Nedeva

Executive Summary

Young-OGEMID conducted its seventeenth virtual symposium, The Role of Artificial Intelligence in Shaping ADR Practices, from 17th until 24th July 2023. It focused on the important role of AI in furthering dispute resolution as well as on examining some of the challenges with it, and the future of AI.

As various artificial intelligence (AI)-driven processing tools, such as ChatGPT, Google's Bard, and many more continue to gain prominence, AI has become the subject of discussions within the legal world, particularly in the alternative dispute resolution (ADR) community. AI is swiftly emerging as a disruptive force, poised to revolutionize the field of ADR and reshape the practices of arbitrators, lawyers, and various legal professionals in both the present and the future. We will delve into AI's integration into arbitration processes, exploring its potential benefits and the challenges it poses. Additionally, we will also explore topics that reflect the developments and opportunities AI brings and will also discuss the ethical considerations that should underpin its responsible and equitable use.

The structure of the symposium and list of speakers who kindly agreed to share their insights as well as their respective topics are as follows:

1. July 17th, 2023 - Prof. Amy Schmitz - Opportunities and Challenges of AI in Arbitration
2. July 19th, 2023 - Ms. Mihaela Apostol - Role of AI in Arbitral Decision-Making
3. July 21st, 2023 - Dr. Paul Cohen - Ethical and Fair Use of AI in Arbitration
4. July 24th, 2023 - Mr. Abhinav K. Mishra - The Possible Future of AI in Arbitration

Earvin Delgado (MCI Arb, Senior Young-OGEMID Rapporteur) acted as moderator of the Symposium.

Speaker 1 - Prof. Amy Schmitz - The Ohio State University Moritz College of Law

Seminar/Topic 1: Opportunities and Challenges of AI in Arbitration

Mr. Delgado officially opened the first session of the symposium by introducing the first speaker Prof. Amy Schmitz.

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2 Prof. Schmitz is a full professor at The Ohio State Moritz College of Law and Program on Dispute Resolution as the John Deaver Drisko-Baker & Hostetler Endowed Chair in Law and a Co-Director of the Translational Data Analytics Institute (TDAI) for Responsible Data Science at The Ohio State University. She is also affiliated with The Ohio State Program on Data Governance and is a Co-PI with the Divided Community Project. Prior to teaching, Prof. Schmitz practiced law with large law firms in Seattle and Minneapolis and served as a law clerk for the U. S. Court of Appeals for the 8th Circuit. She teaches courses in Contracts, Lawyering and Problem-
Prof. Schmitz thanked Young-OGEMID for inviting her to contribute on this topic and shared her insights by outlining a number of opportunities and challenges AI poses in arbitration:

“Indeed, AI is the “shiny toy” in law, and every conversation seems to be focused on AI these days. Furthermore, I have been presenting on AI and Arbitration in many venues and continually learn about new developments from those in the field, as well as technologists and technology companies eager to profit from the AI boom. The pace of change is incredible in this space! The key is to understand the promise and pitfalls of AI, and focus on responsible use of AI in arbitration. My tagline about AI in arbitration: “It is not all good or all bad, it is how you use it!”

To kick off the discussion, I decided that it would be fun to simply ask ChatGPT “What are the opportunities and challenges for AI in arbitration?” and see how it does. Here is what it said:

“AI presents various opportunities and challenges in the field of arbitration. Here are some of the key aspects:

Opportunities:

1. Efficient Case Management: AI can assist in managing arbitration cases by automating administrative tasks such as document management, scheduling, and tracking deadlines. This allows arbitrators to focus more on substantive issues and expedites the overall arbitration process.
2. Data Analysis and Prediction: AI tools can analyze large volumes of case data and identify patterns, precedents, and legal arguments. This assists arbitrators in making well-informed decisions and predicting case outcomes based on historical data.
3. Document Review and Discovery: AI-powered technologies, such as natural language processing (NLP) and machine learning, can aid in the review and categorization of documents, reducing the time and effort required for discovery and facilitating more comprehensive analysis of evidence.
4. Decision Support: AI systems can provide arbitrators with relevant legal information, statutes, regulations, and precedents, thereby supporting decision-making and ensuring consistency in rulings.
5. Language Translation: AI-based language translation tools can help overcome language barriers in international arbitration, enabling efficient communication and understanding between parties from different linguistic backgrounds.

Challenges:

1. Bias and Fairness: AI algorithms are prone to biases based on the data they are trained on, potentially leading to unfair outcomes. Ensuring that AI tools used in arbitration are unbiased and promote fairness is a significant challenge.

2. Interpretation and Context: AI systems may struggle with interpreting complex legal concepts, nuanced arguments, and the contextual understanding required in arbitration. The reliance on AI for decision-making needs to strike a balance between automation and human judgment.

3. Privacy and Confidentiality: Arbitration involves sensitive information, and the use of AI technologies introduces concerns regarding data privacy and confidentiality. Adequate measures must be in place to safeguard the privacy and security of data used in AI-based arbitration processes.

4. Ethical Considerations: AI raises ethical questions, such as accountability, transparency, and the ethical responsibility of decisions made by machines. Addressing these ethical considerations is crucial to ensure the integrity and legitimacy of AI-driven arbitration.

5. Technical Limitations: AI technologies are continuously evolving, and their effectiveness in complex legal tasks may still have limitations. Development and implementation challenges need to be addressed to ensure the reliability and accuracy of AI systems in the arbitration context.

It is important to approach the integration of AI in arbitration thoughtfully, recognizing the potential benefits while carefully managing the associated challenges to maintain fairness, transparency, and the integrity of the arbitration process.”

This is a pretty good start! However, the opportunities are more nuanced, as are the challenges. Machine learning and Large Language Models (LLMs like GPT) are only as good as the data upon which they are trained or based – and often there is missing data. For example, any prediction based on only published cases, fails to consider private arbitration awards and settlements – how most cases are resolved. The outliers are published court cases.

Also, there is danger of “anchoring bias” in that a human who is provided a prediction based on “the data” may be anchored on that outcome and fail to use independent judgement – which is particularly important when the prediction is false or biased. For example, the lawyers who used GPT for a brief assumed that AI produced accurate cases and failed to check the cases to be sure that they were legitimate and accurate. Of course, reliance on GPT to produce case names is bad lawyering, but it is an example of how our psychology interacts with AI and humans are prone to assume the accuracy of something that is nominally “based on the data.”

To end her opening post, Prof. Schmitz stated that AI can be very useful for arbitration and arbitrators, but one must treat it with caution and understanding of the risks and limitations of AI. Moreover, AI may be used to expand Access to Justice, and could assist self-represented litigants. She then referred the audience to useful sources:
Mark Kantor posted the first question, noting that discussions of AI in arbitration have focused on the impact on arbitrators and counsel, but there are other participants in the arbitral process. Therefore, Mr. Kantor asked what uses of AI Prof. Schmitz has seen, or expects to see, by witnesses, consultants and experts. He was interested in knowing whether there are any ethical or transparency differences when the user is not an attorney.

Prof. Schmitz thanked for the question and started by expressing her belief that AI will be useful in preparing witnesses, experts, and consultants:

“For example, LLMs are very useful in providing summaries of documents and evidence. However, there are ethical dangers that arise and attorneys must be careful in using AI to assist in witness/expert preparation. Attorneys must not simply “cut/paste” from client documents and place this in an open system like ChatGPT. That would violate client confidences! Still, there may be secure tools that could be used and we are seeing development of AI systems within law firms that are secure. Furthermore, attorneys could first extract all client confidences. Of course, AI translation systems also may be helpful for witnesses, experts, and consultants.

Additional ethical issues may arise as well if experts directly rely on AI and do not use their independent judgement. Already, judges are issuing orders demanding disclosure of use of AI: https://www.cbc.ca/news/canada/manitoba/ai-court-documents-manitoba-1.6893518.”

Dr. Damien Charlotin added:

“To jump on Mark's question, when I teach coding to law students (now, including Large Language Models - LLMs), my point is centred around what can be described as "mundane utility": not the grand, epoch-making changes entailed by technology (which are yet to happen, mind you), but the tiny bits of working life that can be automated and/or are better left to a machine. The point of teaching them to code is, in fact, not necessarily for them to code, but to be able to identify these quality-of-life improvements (and then maybe ask an engineer to code it). This is especially pertinent for younger lawyers whose tasks are more susceptible to be automated.”

He then proceeded to outline the three examples of improvements in his practice based on AI:

- “Semantic search and retrieval: instead of reading docs from A to Z, I convert all texts to vectors with OpenAI's embeddings, and insert the content most relevant to a given query as context to an LLM, which is then able to provide me with specialised, taylor-made answers;
- Filtering: for all these alerts and mails I receive, first give them to an LLM (before that, to a ML model) to highlight those most relevant;
• **Cite-checking:** in a given written submission, being able, for each footnote or cross-reference, to (i) find the text being referred; and (ii) compare the source text and the target text to evaluate if the footnote does support the source text.”

He also observed a link between the degree of ethical fraughtness of a practice/use and its susceptibility of being left to a model.

**Earvin Delgado** referenced and agreed with one of the early points made in the opening by **Prof. Schmitz**: “It is not all good or all bad, it is how you use it!” He noted that despite the rapid advancements in AI technology, it will take a while for it to become a proper threat to the field of alternative dispute resolution since it is only as good as the prompts instructed to it, and information that is not necessarily most up-to-date.

“However, what I'm worried about is how it tends to 'fill up' what it lacks in information and legal basis with false or imaginary statements. Hence, while it takes time for the technology itself to be more up-to-date, it does not necessarily stop people from using it. Recently, some lawyers in New York State have been sanctioned by a New York federal judge for writing a legal brief using ChatGPT which included citations of nonexistent court cases.”

Therefore, **Mr Delgado**’s question was whether there are solutions (proposed or existing) in the legal field to prevent lawyers and other legal professionals from using AI technology irresponsibly.

To this question, **Prof. Schmitz** replied positively stating that such systems are already developed and being developed. As an example, she gave Universities learning about the use of AI detection systems to catch students in using LLMs and other AI tools to complete their papers and exams. While she acknowledged that these systems do not yet have the capacity to prevent all irresponsible use of AI, she expressed support for the existence of courses such as the example **Dr. Charlotin** gave. Prof. Schmitz further emphasised the importance to teach students about how LLMs work, and how to “look under the hood” of an AI system to understand how it works. She maintained that AI can augment human work, but that it is also increasingly important to be able to decipher when AI can be most useful (such as mundane tasks). She finished her response with the following statement:

“The goal: Give to AI what machines do best and preserve for humans what humans do best.”

**Mark Kantor** brought the discussion back to his earlier question to **Prof. Schmitz** and referred to the Practice Direction by the Manitoba Court of King’s Bench Chief Justice⁴, which states that "when artificial intelligence has been used in the preparation of materials filed with the court, the materials must indicate how artificial intelligence was used":

“To my untutored non-Manitoban eye, that requirement appears to call inter alia for expert witnesses to disclose how AI was used to research and prepare their expert reports submitted to the Court. Arguably, it also covers fact exhibits filed with the

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Court, whether presented by counsel or appended to a witness statement or expert report (although finding out how AI was used in the preparation of documentary evidence from a party's files or from third-party sources will surely be daunting). Indeed, the Practice Direction encompasses any and all "materials filed with the court" when AI "has been used in the preparation" of those materials.

As issued by the Chief Justice, the Practice Direction thus covers far more than just the text of legal submissions by counsel.

Why?

The New York state court incident to which Earvin refers was uncovered through regular diligence in the adversarial process by opposing counsel and the judge, AKA cite checking. The regulatory means to address the incident were the standard civil procedure rules and judicial authority to deal with bad faith conduct, as the judge held in his sanctions order.5

Therefore, the question for Prof. Schmitz was if there is anything, in the context of AI, that might require additional protection beyond the adversarial process, procedural rules and existing juridical authorities.

Prof. Schmitz welcomed the point and reminded of her initial note about “bad lawyering” in the New York case:

“I agree that regular due diligence should play a primary role in detecting improper use of AI. Indeed, cite checking is essential and remains essential. My initial thought about the Manitoba Direction when it first came out was that it may be unnecessary and overbroad for the reasons that you allude to here. We have long used electronic research of various types and courts did not require a separate memo on how such research was used in drafting briefs or developing expert reports. I believe that judges are overly fearful of being “duped” by AI? Perhaps they worry that counsel will not do the type of due diligence that is necessary? Perhaps they simply do not understand how AI works in a given context and believe that this type of disclosure will protect the integrity of the court?

To answer your question more directly: In talking with judges at recent events, I believe that generative AI in particular seems “scarier” because it is so nimble and it often is tough to detect if a human or AI created content. It feels like “fraud” or plagiarism to allow experts and attorneys to be able to submit papers that they did not create. Also, new and emerging machine learning tools sit closer to the decision-making and create a “black box” in terms of transparency – which creates a threat in the eyes of some judges.

Nonetheless, some directives (and similar court orders) seem like window dressing, and we must remember that we have long used spell check and other technologies to help with writing….”

5 https://storage.courtlistener.com/recap/gov.uscourts.nysd.575368/gov.uscourts.nysd.575368.54.0_2.pdf
Mr. Earvin Delgado added to the discussion and elaborated on Dr. Charlotin’s post, by noting that other existing examples where AI can be used in the improvement of practice include proof-reading some works for grammar oversights, even though these outputs are not confidential in nature. He further stated that AI can be a big help for most ‘non-legal’ elements in alternative dispute resolution, and the legal profession, overall. He then asked the audience if they were aware of free and/or accessible programs or resources available for law students and early-career professionals where they could learn more about AI, coding, and Large Language Models.

With regards to this question, Prof. Schmitz proposed the following sources:

- Credo AI⁶ - Leader in Responsible AI Governance – they often have resources and blogs, as well as a taxonomy of iterative AI.
- Free webinars with Lexis + AI and others⁷
- AI Terms for Legal Professionals⁸
- Summer series with webinars⁹ related to Law, Technology and Legal Education offered by AALS.
- Generative AI Resources¹⁰ for Berkeley Law Faculty & Staff.

Building on the discussion regarding the utility of AI in the legal field and judicial application, Naimeh Masumy followed up with a question about AI’s capacity in aiding decision-makers (i.e., arbitrators and judges) in rule-based reasoning and proceeded with the following observation:

“In rule-based reasoning, arbitrators usually take a rule (custom, general principles, precedents in case law, etc) and apply it to a set of facts. They seek to extract ‘an irrefutable conclusion’ by heavily engaging in deductive reasoning. Deductive reasoning is best defined as reasoning from general principles to particular cases either by way of analogy or making a distinction between different factual premises. Thus, deductive reasoning, in general, does not require formidable creativity to accomplish!”

Therefore, the question was if AI tools, such as ChatGPT, which is said to have the ability to imitate deductive logical reasoning can do the following key types of deductive reasoning:

- **Generalized**: extrapolates general rules from different cases where specific facts vary and propose a general rule based on empirical observations.
- **Analogous**: draws a conclusion based on finding similarities between the facts of the precedent case and the facts of the present case.
- **Predictive**: draws a conclusion based on past experiences and/or legal principles that have been applied to historical cases.

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⁶ https://www.credo.ai/
⁹ https://www.aals.org/sections/list/technology-law-and-legal-education/
¹⁰ https://www.law.berkeley.edu/library/legal-research/chatgpt/
And whether AI tools can sometimes serve as logical operators.”

Prof. Schmitz replied to Naimeh Masumy that it can and that there are already developments of mediation tools which can help with idea generation by “reframing” parties’ discussions. Prof. Schmitz referred to demonstrations at ICAIL and the proceedings therein.11

Another question was asked by Shreya Jain with regards to one of the leading challenges of AI, namely that AI algorithms are prone to biases based on the data they are trained on, potentially leading to unfair outcomes. Ms Jain noted that the data set of arbitral awards is more limited as arbitral awards are confidential or in a redacted form; and that interlocutory decisions, such as procedural orders, are also seldom publicly available. She recognised that this would make it more challenging to use AI in data analytics and predictive assistance and asked if there are other challenges that are unique to the arbitration context.

Prof. Schmitz thanked for the question and agreed that this is an important limitation in arbitration.

“There are new movements toward gathering and using anonymized procedural data in arbitration to help with understanding the true costs of arbitration (comparing costs plus awards vs. costs plus settlements earlier in the process).

Additionally, use of LLMs may provide incorrect predictions and summations due to jurisdictional differences. International arbitration is incredibly robust, but LLMs may be jurisdictionally limited in terms of the training data (depending on the tool). Furthermore, there are equitable and more nuanced principles used in arbitration that may not receive attention in a model based on published case decisions, for example.

Arbitrators also may offer more nuanced dispute resolution assistance, including mediation in a Med/Arb process – and parties could be too hung up (anchoring effect) on predictions based on data from court decisions in setting settlement expectations.

These are just a few and I welcome others to add to the list!”

Prof. Strong thanked everyone for contributing to the discussion and for Prof. Schmitz’s detailed responses and made several observations. She referred to one of Prof. Schmitz’s earlier points that generative AI can be useful in expanding access to justice, which is particularly important, especially in some forms of domestic arbitration (i.e., consumer or employment arbitration in the US) where not all parties will have legal representation.

“The argument, I suspect, is that these unrepresented litigants are better off with an AI-assisted legal submission than without.

Access to justice issues also arise with respect to the cost of hiring a lawyer. There are already claims that generative AI saves time and money by creating a first draft for attorneys to work off of (though many people are ignoring the cognitive distortions that Amy mentioned, like anchoring bias, as well as status quo bias and path dependency).

While that sounds true and good and exciting, I don’t think it’s the whole story. In its current, error-filled state, generative AI in dispute resolution simply offloads the task of researching and reviewing the accurateness of opposing counsel’s submissions onto the judge/arbitrator/opposing counsel. While Amy noted that in the US sanctions case, the judge found the ChatGPT errors through normal diligence, not every judge or arbitrator will be that diligent. Furthermore, opposing counsel may be working on a budget, and money spent on checking the other side’s submissions reduces the ability to research new points. As a result, generative AI can increase overall inefficiencies and inequities while simultaneously increasing costs or at least shifting them to other participants in the process (including an arbitrator who may be paid by the hour). This can be especially problematic in jurisdictions (like the US) that do not typically follow the loser-pays rule of costs.

All that focuses on party submissions. As Mark noted, there’s also the possibility that other actors, including arbitrators, could use generative AI. Indeed, there are reports that a judge in Colombia has already done so (see link below). The problem here is that doing so could open an award up for challenge in multiple ways. For example, the US standard for vacatur discusses awards produced by fraud, corruption or misconduct that prejudices the rights of a party. There could be quite a lot of expensive litigation about whether use of ChatGPT by arbitrators falls within this standard or other standards, such as Article V of the New York Convention.\textsuperscript{12} Again, these challenges don’t have to be successful to be expensive.

Finally, I have significant concerns about erosion of public confidence in arbitration if advocates and arbitrators are known to rely on computer programs to do their work. I’ll doubtless raise this point with other speakers (being the loudest Luddite on the listserv!), but I know Amy has doubtless thought about these issues, and I would love her views. (Full disclosure: Amy and I worked together at the University of Missouri for many years, so I know her for the superstar and charming person that she is!).”

Finally, Prof. Strong provide a full reference to this article: Lauren Croft, \textit{Use of ChatGPT in Courts Should Be Approached “With Great Caution,”} \textsc{LAWYERS WEEKLY} (Feb. 13, 2023).\textsuperscript{13}

Prof. Schmitz thanked for and agreed with the above comments. She did concur that there are real dangers, such as if “we “offload” consumer and self-represented cases to AI, while those with means get human resolutions – we could see “second class” or “tiered” justice systems for the “haves” vs. the “have-nots” – which is very problematic!” She further asserted that those with resources will have the most robust and secure AI and know how to use it – while those without means will have less robust tools and may not have any idea how to use it. “\textit{This is clear when you compare the power of Lexis + AI (paid subscription) vs. ChatGPT (free).}” She further referred to other dangers she has recognised:

- \textbf{Limited Capacity:} Law evolves; legal reasoning is complex & not easily codified
- \textbf{Transparency:} Public participation, trust & transparency are vital to procedural justice
- \textbf{Gaming the System:} Unequal access to AI & data analytics tools perpetuates inequality, while “repeat player” advantages = digital “haves” win

\textsuperscript{12} \url{https://www.newyorkconvention.org/english}
• **2nd Class Justice:** SRLs get robo-justice while those with resources enjoy live DR, and best of tech.

Prof. Schmitz further stated that arbitrators should not solely rely on AI and AI-generated awards, as this would be unethical and AI-generated awards – would likely be unenforceable. However, AI should not be ignored, or its use “outlawed”. Her opinion is that AI will be “an increasingly important tool in the legal toolbox” and that legal educators have a duty to help students understand how to use AI responsibly.

Additionally, Prof. Schmitz directed the audience’s attention to her webcast, and now podcast, *The Arbitration Conversation*[^14], and specifically to the following interviews on the topic of AI:

- Episode 40: Prof. Nicolas Vermeys of the University of Montreal Law School.[^15] Explanation of “AI” and discussion of AI in arbitration along with ways it can assist with dispute resolution.
- Episode 75: Prof. Angie Raymond, Kelley School of Business, Indiana University.[^16] In this episode of the Arbitration Conversation Amy interviews Anjanette (Angie) Raymond, an Associate Professor in the Department of Business Law and Ethics, at the Kelley School of Business, Indiana University, and an Adjunct Associate Professor of Law at Maurer Law School (Indiana). The focus of the discussion was on AI and how it works in the real world.


The discussion was then continued by a question from Wooseok Shin. He thanked for the fruitful discussion in the symposium so far. Mr. Shin reiterated an identified earlier that the unavailability and confidentiality of arbitral awards may lead to training biased AI arbitrators or generative legal tools. He also argued that if certain biases in arbitration are unavoidable or even desirable to some degree (e.g., commercial practices in particular industry), the parties may tailor the educating process of AI arbitrator instead of obtaining adjudication from already educated AI arbitrator. Mr. Shin then asked the following questions:

> “If the AI Arbitrator system can develop specific bias tailored by the parties as the arbitration gradually develops, would it be possible to remove bias concerns? What would be potential obstacles to such an option to let parties tailor a substantial part of the education of AI Arbitration case-by-case (e.g., parties not being able to reach a consensus on AI training materials)?”

Prof. Schmitz thanked Mr. Shin for the question, acknowledging that it raises interesting and nuanced issued. She replied:

> “First, AI tools can be trained in specific ways and it is possible to “train” the AI away or toward certain “biases.” For example, ChatGPT has been “tweaked” and trained

[^14]: https://arbitrate.podbean.com/
[^16]: https://youtu.be/MT40W3oWyYk
over time to have a certain “personality” or tone (of course, it is not sentient and does not have a personality, but the tone can be trained and this is sometimes referred to as “personality” in the literature). It tends away from adversarial or combative answers, for example. This can be helpful if you use GPT for helping parties frame their conversation (for example, ask GPT to provide alternative framing when a party seeks to inject a combative response in a mediation).

Second, this “training” does not mean that it is free of bias. Algorithms are value laden and created by humans – who have biases. Accordingly, there may still be biases of various types and kinds.

Third, this may be a good thing – as you note. For example, you could train an AI arbitrator to follow lex mercatoria for business claims – but, as you note, there will be questions as to why that is preferred over other orientations. Accordingly, in the end, you end up with new disputes over the selected orientation. Nonetheless, this is not a new problem. Parties often disagree over selection of arbitrators!

As with anything, there is no easy answers! Still, it is important to note that AI tools are becoming more sophisticated and accurate. Lexis + AI, for example, uses legal data along with the conversational tone of generative AI to provide a more sophisticated tool.”

Next, Joseph Siyaidon expressed his concerns and asked Prof. Schmitz to share her thoughts with the audience. First, he expressed his concern that “missing data” may result in inequality of arms for arbitration practitioners from less developed jurisdictions. As an example, he considered that while AI would readily translate witness testimony from French to English, it would find it more challenging to translate from a local dialect, such as for example ljaw – a dialect in the oil rich Niger Delta Region of Nigeria, to English/French. Therefore, his argument is that if arbitration involves parties from the Niger Delta, i.e., an arbitration and/or parties whose main language is a dialect, the deployment of AI may result in inequality of arms between the parties. His second concern was whether the deployment of AI will result in bias (conscious or unconscious), especially as developers of AI tools may choose to input only data that is tailored towards achieving a particular outcome. Hence, once AI is required to give feedback, it will produce feedback based on that preconceived outcome planned by its creator.

Prof. Schmitz thought that this could indeed create an inequality of arms, noting that AI is “value laden”, and depends on who creates it. She reiterated her earlier post in which she referred to the real dangers of AI, of the risks of “offloading” the consumer and self-represented cases to AI; and the potential problem of seeing “second class” or “tiered” justice systems for the “haves” vs. the “have-nots.” Referring to her earlier argument, she recognises that those with resources will likely have the most robust and secure AI and will know how to use it; whilst those without means, will have less robust tools and not know how to use it. As an example, she compared the power of Lexis + AI (paid subscription) vs. ChatGPT (free).

The discussion was furthered by Marjan Fazeli, who expressed the opinion that one’s perspective about the advantages or threats of AI in arbitration varies based on various factors, such as acting in arbitration as an arbitrator or counsel, having a technical background in AI, and coming from a developing or developed country, etc. She then made the following observations:
“In my opinion, having a technical background in AI or not (like most lawyers), significantly affects how we perceive AI. Often, those who only possess a legal background tend to be more critical and underestimate the potential benefits/abilities of AI.

Furthermore, the advantages of using AI in international arbitrations can be perceived differently depending on whether an individual is from a developed or a developing country. For example, a lawyer from a developing country working as an in-house counsel in international arbitration may benefit greatly from using an AI platform to select an arbitrator and check for conflicts. This can enhance access to justice in underrepresented regions. Also, from this perspective, data bias, particularly in investment arbitration, can be viewed as a significant problem for AI. However, if we assume that AI can be developed by controlling data bias, it can undoubtedly help establish public trust (especially for underrepresented regions) in international arbitration.”

In response, Prof. Schmitz agreed that one’s background impacts how one views AI in arbitration as well as how one assesses AI in a context. From her experience as Co-Director of the Translational Data Analytics Institute (TDAl) Responsible Data Science CoP at Ohio State University, she has learnt that terms like “fairness” mean very different things depending on one’s discipline. “Mathematicians use statistics and equations to determine “fairness” in machine learning, while legal experts use due process and indicia of “justice” to assess the use of technological tools.”

Additionally, Prof. Schmitz concurred with the point about AI helping to expand access to justice in some developed countries. Nevertheless, her continuous concern is that developers are not fully addressing jurisdictional biases which may be built into AI systems. Once again, she also raised her concern about the “new digital divide”, where more robust tools are only available to those with means. Prof. Schmitz was however hopeful that with the proliferation and expanded availability of these technological tools, there will also be more of an “equalizing force” that provides value in developing countries, in addition to those tools which are already available.

She finished this post with the remark that she believes that AI is becoming more robust and will continue to expand in importance: “It is up to us to learn how to best use AI responsibly! Moreover, we must be vigilant to preserve for humans what humans do best.”

Speaker 2 – Ms. Mihaela Apostol – ArbTech

Seminar/Topic 2: Role of AI in Arbitral Decision-Making

Earvin Delgado introduced the second topic of the Symposium: "Role of AI in Arbitral Decision-Making” and the second speaker: Ms. Mihaela Apostol.17

17 Ms. Apostol is a civil and common law qualified lawyer (Avocat of the Bar of Bucharest, Romania; Solicitor of the Supreme Court of England and Wales). Mihaela has all-round experience in international arbitration having worked as counsel and tribunal secretary in over 37 investment and commercial arbitration cases covering construction, technology, intellectual property, energy and oil and gas disputes. Ms. Apostol is an active member of the arbitration community and is involved in various projects and initiatives. She is the co-founder and moderator of ArbTech (discussion forum focusing on the impact of new technologies
Ms. Apostol opened the discussion with her post:

“Thank you, Earvin for the introduction. It is a pleasure to follow up on Prof. Amy Schmitz’s post from Monday and to see the community’s great interest in AI.

I will share some thoughts on the Role of Artificial Intelligence (AI) in Arbitral Decision-Making

The implications of using AI in the arbitral decision-making process vary based on what we understand by AI and at which stage of the process we use it.

"AI" is a broad term encompassing tools with various functions and pitfalls (machine learning, generative AI, analytical AI, etc). Simply put, even Google search\(^{18}\) is seen as an example of AI. At the moment, the majority of legal research tools which we are familiar with, and use in our practice, employ a form of AI. However, the most controversial AI tools in the context of decision-making are generative AI (a form of artificial general intelligence meant to replicate how humans think).

In simple terms, AI is a form of technology. Some arbitration rules recognise the arbitral tribunal’s power to employ "technology to enhance the efficiency and expeditious conduct of the arbitration" (LCIA Rules, Art. 14.6(iii)), and to “adopt suitable procedures for the conduct of the arbitration in order to avoid unnecessary delay or expense, having regard to ... the effective use of technology” (HKIAC Rules, Art. 13).

A study about the use of technology showed that individuals care more about the moment when technology is used in the decision-making process rather than the level of automatization (Algorithms in the court: does it matter which part of the judicial decision-making is automated?, Dovilė Barysė & Roee Sarel Artificial Intelligence and Law (2023)).

Now turning to the stages of the decision-making process of an arbitrator. We can divide them as follows:

- Stage 1 – Understanding the case (familiarisation with the submissions);
- Stage 2 – Analysing the issues (applying the facts to the law);
- Stage 3 – Reasoning (how to arrive at a particular outcome, where the balance of probability lies);
- Stage 4 – Award (giving a form to the decision and expressing it in writing).

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\(^{18}\) https://en.wikipedia.org/wiki/Artificial_intelligence
I will analyse each stage and give examples of how AI can be used and what would be the implications.

**Stage 1** - The tribunal reads the case, organises the information on different topics, creates chronologies, etc. This tends to be a time intense (and costly) task. The help of AI tools that could comprehensively structure that information tends to be less controversial. Some courts are already testing this (e.g. use of SUPACE\(^\text{19}\) in India – an AI tool which generates an overview of the case, a chronology of events, etc.).

**Stage 2** - The tribunal connects the dots between the facts and the law. Sometimes there are gaps in the case, obvious issues which were not addressed by the parties, or information missing from the pleadings, but might be in the exhibits. In a poorly pleaded case, the tribunal’s work becomes heavier simply by having to invest time to collect the information they need from the exhibits. Would AI help in this instance and save costs? – Certainly, yes. For example, one can ask AI to collect all exhibits which are titled “Notice of Dissatisfaction” and indicate their date (some e-bundling service providers are already helping with similar services).

**Stage 3** – Reasoning: who should get what and why? This is the key part, it often takes less time than the previous stages. Using AI at this stage (especially generative AI) can be considered off-limits. The mandate of the arbitrators is considered “intuitu personae” - they were appointed taking into account their expertise. However, one can identify instances where AI can help even at this stage. Assuming that there is a trademark infringement case (two similar trademarks), what if the AI is fed with all the exhibits submitted by the parties and asked to outline the differences between the two trademarks? Can this be done quicker than the human eye/mind, certainly? This can be very efficient in emergency arbitrations or interim measures, where one party needs to prove a “prima facie” case. Another example is the use of AI for damage calculations, sometimes the parties’ expert reports are miles apart, and one can use AI to analyse the underlying documents and help with the calculation of damages.

**Stage 4** – Writing the decision. In this instance, one can envisage the use of AI to summarise parties’ positions, generate the procedural history (similar to what a tribunal secretary role), or use AI to transform speech into text, where the arbitrator can dictate the reasoning part and then polish the draft.

Of course, all these can raise various issues, that were already mentioned and I will not address in detail: bias, confidentiality, anchoring, lack of enough data, etc. But it is up to us to set boundaries and find ways how to make our work efficient and safeguard due process. The more we use these systems, the better and more efficient they will become. A couple of years ago, we didn’t even have internet, we did not think it would be possible to ask a machine how is the weather now in Vanuatu.

Looking forward to hearing your thoughts.”

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The first questions on this topic were asked by **Radha Lamba**, who was interested to know what level of connection (if any), or any issues Ms. Apostol sees with the use of AI in generating the documents that the arbitrators review. **Ms. Lamba** further asked if the rules need to set boundaries for the level of diligence required in preparation of submissions and materials that come to the arbitrator so as to make the decision-making process as efficient and void of potential bias.

**Ms. Apostol** thanked for the question and replied as follows:

“Indeed, the arbitrator’s decision is impacted by the documents submitted by the parties. If counsel uses generative AI to prepare the submissions, as we have seen in the widely reported US case (Mata v. Avianca, Inc., No. 1:2022cv01461), and the information proves to be inaccurate or misleading, then the counsel might be liable under their applicable Bar Rules. As pointed out on the forum already, some courts have issued orders requiring lawyers to disclose the use of AI.

When it comes to the use of generative AI to prepare submissions for arbitration proceedings, it can be handy to take inspiration from the CIarb Framework Guideline on the Use of Technology in International Arbitration, which provides that the arbitral tribunal has (arguably) the power to issue directions when the technology used by one of the party can affect the fairness of the proceedings: “There may be circumstances, however, where the technology used privately by one party might affect the proper course of the arbitral process and/or result in an unfairness for the other party. For example, the technology used by one party to store and review documents and data might not allow the arbitrators and the other party to understand whether that party has complied with a duty to disclose information. Further, the technology used by one party might impact the rights of another party to the arbitration: For example, storage of data by a party might lead to concerns about whether it is taking sufficient steps to comply with its duty to keep confidential the information relating to the arbitration. In such circumstances, the arbitrators arguably have the power to issue directions to the relevant party in relation to its private use of technology, to safeguard the due process of the arbitration and/or ensure the arbitral process remains efficient and cost-effective.”

The next question was posed by **Mark Kantor**, who, looking at the above-mentioned four stages, asked how they would apply to intra-tribunal interactions on a three-person tribunal, as opposed to a sole-arbitrator tribunal, when some but not all tribunal members rely on AI tools.

**Ms. Apostol** replied to Mr. Kantor acknowledging that the decision-making process of a three-member tribunal is indeed more complex:

“The problems that arrive are by rapport to the type of tool used and for what purpose, namely, what exactly was “delegated” to the AI.

If, for example, one of the arbitrators uses AI for the reasoning part, and that is not something disclosed to other arbitrators and agreed upon by the parties, then it could

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be problematic to show to what extent the arbitration was conducted in accordance with the parties’ agreement (art. V (1) d. NYC).

Also, if one of the arbitrators relies on AI tools, and there are issues of bias for example, that could be passed on unintentionally to other members as well.”

Next, Prof. Strong thanked for the informative posts so far and asked a few questions:

“First, I looked at the link to the Indian SUPACE system (which has been in place since 2021), and I saw that it intended to focus on factual issues rather than affecting the legal decision-making process. However, I recently conducted several large-scale empirical studies that showed that factual determinations are central to commercial decision-making in both litigation and arbitration. See S.I. Strong, Legal Reasoning Across Commercial Disputes: Comparing Judicial and Arbitral Analyses 85, 295(2020) (citing two different empirical studies). Do you think the fact-law distinction really holds up?

Second, the Financial Times recently ran an opinion piece discussing the wide variation (and thus access to justice/equality of the parties concerns) relating to use of AI in dispute resolution. How do you see the arbitral community responding to that?

Links below.


Financial Times Opinion: https://www.ft.com/content/2aba82c0-a24b-4b5f-82d9-eed72d2b1011 ."
Intelligence in judicial systems and their environment\textsuperscript{23}, it is from 2018, but they do a great job in highlighting the main issues.

Regarding the Financial Times piece, I will summarise it for other readers - The main issue highlighted is that the majority of court cases are available behind a paywall, that’s why the generative AI results are not accurate. They mention that access to data widens the gap for access to justice and creates more imbalance between the parties, between those who can afford to pay for AI tools trained on comprehensive legal data and those who do not have the necessary means. I agree with that, law firms which can afford to work with AI tools or train their internal software [as we have seen here,\textsuperscript{24} and here\textsuperscript{25}] will have a competitive advantage. How is the arbitration community responding to that? – I believe we follow the same pattern, the little information that is out there on arbitration awards, or arbitrators requires a subscription to access it. I am not sure how that can change in the future.”

In response, Prof. Strong noted that some countries are very good at posting many/all/key legal decisions and legislation on public sources. One could look at different country/regional posts on worldlii.org and notice the varying levels of reporting. Prof. Strong noted that other times, the data is available on judicial or legislative websites hosted by the government; but also, that “less sophisticated parties would not know about worldlii.org and similar free databases, nor would they know how to use them.” In arbitration, there are free resources, such as those available on CLOUT (Case Law on UNCITRAL Texts) but without clarity as to how many people outside specialist practice know or use the resource.

In that context, Prof. Schmitz emphasized her point regarding the “digital divide” due to differential access to information and data. She pointed out that law firms already create their own AI tools using their own data, and that companies, such as LexisNexis\textsuperscript{26} create paid AI tools tailored to legal practice. “This is only the tip of the iceberg!”

Ms. Apostol also referred to Jus Mundi\textsuperscript{27} as a recent example of using generative AI and large language models tailored for arbitration data.

The discussion was joined and furthered by Earvin Delgado:

“Your lecture certainly made me dive deeper into the intricacies of using AI in arbitral decision-making. It’s also a great follow-up to the first topic discussed by Prof. Schmitz.

I was particularly intrigued by ’Step 3’ in your discussion where you talked about the reasoning stage in the arbitrator’s process of making, formulating, and writing the decision. Although AI can be an advantage during the reasoning stage, do you think its

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\item \textsuperscript{23} https://rm.coe.int/ethical-charter-en-for-publication-4-december-2018/16808f699c
\item \textsuperscript{25} https://www.hoganlovells.com/en/news/hogan-lovells-launches-own-legal-tech-brand-eltemate
\item \textsuperscript{26} https://www.lexisnexis.com/en-us/products/lexis-plus-ai.page
\item \textsuperscript{27} https://blog.jusmundi.com/jus-mundi-introduces-jus-ai-a-game-changing-gpt-powered-ai-solution-for-the-arbitration-community/
\end{itemize}
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power to analyze and identify patterns and trends in past arbitration decisions be a violation of the impartiality of an arbitrator?

Also, re-examining the stages of the decision-making process of an arbitrator which you have discussed, it seems that a possible future of a fully 'automated' arbitration proceeding led by an AI software or combination of various AI systems is not so far off. Of course this is more complicated and intricate than it sounds, but what are your thoughts on this?

On a side note, I can't help but think how interrelated the developments in AI are to other advancements such as blockchain technology and smart contracts!”

With respect to the sidenote, Prof. Schmitz referred us to the following source: https://stanford-jblp.pubpub.org/pub/resolving-nft-blockchain-disputes/release/3.

With regards to Mr. Delgado’s first question, Ms. Apostol answered the following:

“On your first point, whether an arbitrator would breach their duty of impartiality at the reasoning stage if they rely on AI tools trained on past arbitration decisions. I think it is difficult to strike a balance between ensuring consistency in interpreting the law and avoiding perpetuating bias. Even without using AI-powered tools – arbitrators tend to check and take inspiration from previous arbitration decisions and tests set by other tribunals, especially in the context of investment arbitration (Salini test – criteria for an investment, Glamis test – criteria for bifurcation). Professors Franco Ferrari and Friedrich Rosenfeld published a recent book on Deference in International Arbitration, where there is a dedicated section on deference to previous arbitral decisions. Regarding bias, let’s assume that the AI is trained on investment arbitration awards and there is a certain bias against a state (based on the number of awards against that state, or the wording used by arbitrators when referring to that particular state), then that might be surfaced by the AI and passed to the arbitrators.”

With regards to the second question, Ms. Apostol stated:

“I believe the first trial initiatives will target small value cases (travel disputes, services, insurance, etc.). At the moment, AI is used in automated negotiations in the context of ODR (one example here), where the parties bid blindly on how much they want, and AI helps them find a middle ground. The same could apply to low-value disputes. With enough data, AI could create thresholds for different types of arbitration disputes.”

Next, Naimeh Masumy posted the following:

“It appears that ‘advanced’ AI tools can be harnessed to perform important tasks in both procedural and substantive phases of an arbitral proceeding with stunning quality, accuracy, and speed.

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28 https://law-store.wolterskluwer.com/s/product/deference-in-international-commercial-arbitration/01t4R000000ZgPQA1
29 https://www.smartsettle.com/algorithms
From your discussions, it looks like AI can ‘effectively’ examine a text, claim or argument, and identify the hidden structure: for example, legal and non-legal issues; premises and hypothesis; factual, theoretical and (perhaps) ideological assumptions of an underlying case. Such analysis and evaluation are the crux of ‘critical analysis’, which is a broader interpretation of “to think like a lawyer” - so to speak!

Therefore, Ms. Masumy’s question was whether AI can imitate ‘creative thinking’, in that it can discern and determine the most appropriate response from the spectrum of available responses, especially in the reasoning stage of an arbitral proceeding.

In answering this question, Ms. Apostol recognised that causation vs correlation is what distinguishes human thinking from AI “thinking.” She noted that while humans apply causation in their reasoning (cause and effect), AI applies correlation (showing how one or more variables are related):

“Here\(^{30}\) is an example of how AI found correlations between different artworks, however, if this was in the context of a copyright dispute, an intellectual property lawyer might take a different view. Apart from that, one of the main issues with AI “thinking” is the so-called “black box” - sometimes even those who set up the AI cannot understand how the AI arrived at a specific result.”

Speaker 3 - Dr. Paul Cohen – 4-5 Gray’s Inn Square, Silicon Valley Arbitration & Mediation Centre (SVAMC)

Seminar/Topic 3: Ethical and Fair Use of AI in Arbitration

Once again, Earvin Delgado introduced the topic, Ethical and Fair Use of AI in Arbitration and the third speaker, Dr. Paul Cohen.\(^ {31}\)

Dr. Cohen opened the discussion with this post:

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\(^{31}\) Dr. Cohen is an English barrister and American attorney, and is among the world’s foremost international arbitration practitioners. A prominent presence in international arbitration forums, Dr. Cohen represents global clients in arbitrations under the rules of the ICC, LCIA, ICDR, ICSID and other arbitral institutions, as well as in ad hoc proceedings. He is very well-known for his work in international anti-bribery and fraud, as well as in the energy, financial, and technology sectors. His clients have included sovereign governments, international manufacturers, major pharmaceutical makers, financial institutions, airlines, international insurance companies and professional services firms located in Africa, Asia, Europe and North America.

Dr. Cohen also practiced for many years with the late Arthur Marriott QC, one of the founding fathers of modern international arbitration.

Dr. Cohen is the Director of Duncan, Cohen Legal - a boutique firm regulated by the UK Bar Standards Board, and Duncan, Cohen and Associates - a bespoke strategy company. In addition, he heads the international group at 4-5 Gray’s Inn Square Chambers. Dr. Cohen also holds a longstanding interest in technology in arbitration, and currently serves as the President of the Silicon Valley Arbitration and Mediation Center (SVAMC).

Dr. Cohen is one of the world’s authorities on the topic of bribery in international investigations and disputes. He is the co-author of International Corruption (Sweet & Maxwell, 2nd ed 2018), the first book to address bribery and corruption from a multinational perspective.

You may learn more about him in the following links:
[https://www.4-5.co.uk/barristers/profile/paul-h-cohen](https://www.4-5.co.uk/barristers/profile/paul-h-cohen);
"Thank you, Earvin. It's a privilege once again to address the young OGEMID community, on a topic I suspect it understands better than its senior counterpart.

Amy touched on many ethical issues in her presentation. We also came across ethical conundrums in Mihaela's posts. I won't reiterate them here.

Instead, I'm going to make a contrarian argument: we're overly concerned about potential ethical issues in AI. When you boil them down, the issues that today's AI presents aren't that different from ethical problems we already wrestle with. The technology is new, but the issues are longstanding.

To see why, let's go back to basics: we have ethical duties because as lawyers we're expected to behave a certain way. We do see because the game of law has rules; those rules are there to preserve the perception and reality of fundamental fairness in dispute resolution.

Thus, it's obviously unethical (as well as illegal) to bribe a judge or arbitrator; that's because doing so perverts the course of justice. For the same reason -- albeit more prosaically -- we wouldn't want an arbitrator to have been the maid of honour at one of the counsel's wedding. Who would trust that award if she wrote it?

I could go on: don't spy on opposing counsel, don't make stuff up, don't encourage witnesses to lie. I'm not suggesting that ethical decisions are always straightforward, but they start from the same basic premises.

Let's take another one: it would be unethical to give one side the chance to file 10 submissions when the other side gets only two. That's the principle that's (I think misleadingly) called equality of arms.

But how about this: no bribery, no best friends on the tribunal, equal number of submissions, equal time, no misbehavior or lack of decorum -- but one side spends a lot of money and has 30 hotshot lawyers, while the other can only afford three. Is that an ethical breach?

People in our field might say that's unfortunate, but is it unethical? There are imbalances of this kind in any number of arbitrations. I suspect most people would say it's beyond a tribunal's remit to insist that a party slim down on its legal team.

Can technology step in and serve as the force multiplier in lieu of large numbers of lawyers? Of course it can. But that then raises the question: why would it be unethical if one party has access to this force-multiplying technology and the other doesn't.

In other words, if you accept that one party can employ more human resources than another without running into ethical issues, why is the situation different where one party can employ more technological resources than the other?

We've been here before. Several decades ago, some counsel had access to legal databases such as Lexis; others didn't. Yet we never had a protocol for disclosure about when a side was resorting to databases, rather than looking up precedents in books.
Let's take another example: one side on a legal team relies overmuch on a brilliant young lawyer who also just happens to be a pathological liar and fabulist. Part of this lawyer's responsibility is to conduct legal research and provide case citations. Most of the time he's spot-on and does the work incredibly quickly; but every now and then he just likes to make up a quotation for a case. Occasionally he even invents cases of out of whole cloth.

Must the people signing the submission on their clients' behalf take responsibility for this ethically-challenged lawyer's flights of fancy? I would think so -- they surely have an independent ethical duty to ensure that whatever goes under their name is accurate.

You see where I'm going, right? What is the difference between the supervising lawyer relying on the brilliant but erratic associate and the supervising lawyer relying on the brilliant but erratic AI? To me, the ethical responsibilities look indistinguishable.

Similarly, why are the ethical duties of arbitrators different with respect to AI than they would be with respect to any other information input? You could argue that the arbitrators fundamentally don't understand how the AI arrives at a conclusion of fact or law. But exactly how much of the inner workings of a model does an arbitrator need to understand?

Let's say a damages expert submits a report proposing a quantum of $1 million. If the report is halfway competent, a reader will presumably be able to identify the variables and understand the basis for the proposed number. She shouldn't need to be more than passingly familiar with regression analysis, Monte Carlo simulations, or any of the other mechanics of the calculation. Nor, usually, will the reader take out her calculator and double-check the inputs on the Excel spreadsheet.

Likewise with AI: much has been made of AI's "black box" problem -- the idea that it can arrive at an elegant or correct answer, but that even trained programmers can't tell how it got there. But the "black box" is the engine inside the car; we can still drive the car without having a clue how the engine works.

If an AI were to spit out the same $1 million damages calculation as the expert above, it would still need to provide written reasoning (in general terms) of how it got there. Otherwise it would be disregarded.

But once again, explaining reasoning is not the same as showing how the engine under the proverbial hood works, any more than a human expert's making her calculations available would be useful to any but the most technical of arbitrators.

Here, for example, are some coding parameters for a fairly basic machine learning algorithm:

```python
model = ANN()
model.add(layers.layer(24, 'ReLU'))
model.add(layers.layer(12, 'sigmoid'))
```
```python
model.add(layers.dense(6, 'ReLU'))
model.add(layers.dense(1, 'sigmoid'))
model.set_learning_rate(0.8)
model.fit(X_train, Y_train)
acc_val = model.get_accuracy()
acc_avg_val = model.get_avg_accuracy()
plt.figure(figsize=(10, 6))
plt.scatter(np.arange(1, len(acc_avg_val)+1), acc_avg_val, label='mu')
plt.title('Average Loss by epoch', fontsize=20)
plt.xlabel('Training data', fontsize=16)
plt.ylabel('Loss', fontsize=16)
plt.show()
predictions = model.predict(X_test)
# Plot the confusion matrix

cm = confusion_matrix(Y_test, predictions)
df_cm = pd.DataFrame(cm, index = [dict_live[i] for i in range(0,2)], columns = [dict_live[i] for i in range(0,2)])
plt.figure(figsize = (7,7))
sns.heatmap(df_cm, annot=True, cmap=plt.cm.Blues, fmt='g')
plt.xlabel('Predicted Class', fontsize=18)
plt.ylabel('True Class', fontsize=18)
plt.show()
```

Maybe this means something to you. I confess it wouldn't be useful to me as information about how an AI did its job in any arbitration I can conceive.

So, am I saying we don't need to worry about ethics in AI and arbitration? Not exactly: I'm saying that the functions AI currently performs or could for the medium term perform in arbitration don't need any separate, self-standing ethical standards (this is something Brother Kantor has hinted at on Old OEGEMID.)
We're lawyers; a handful of us may also be programmers or data scientists, but the vast majority are not. Lawyers reason by analogy; because AI is busy doing or threatening to do what humans or other technologies already do in arbitration, there are comparable scenarios in which you can substitute the AI's function for that of a human, and think about what (if any) ethical issues these scenarios raise. As noted above, it seems to me that, if we reason by analogy, the current ethical landscape adequately equips us for AI's interventions.

What about current lacunae in human ethics? Stacie raised the interesting point that judges in some jurisdictions don't consider it their duty to check cases and citations. But in the adversarial world of arbitrations, if one side used an AI that got fanciful with its case law, surely the other side would observe that the case of Smith v. Ruritania does not actually exist.

What new ethical issues, then, might AI raise in arbitration? In my view, we need to think about things that it could do that humans cannot -- look for the gaps where the analogies with current practice (if you're convinced by my analogies) fail us.

For example, AI is pretty close to being able to read our minds – literally. That strikes me as something of a fundamentally different nature than cross-examination, which is our very imperfect attempt to get at the truth. What will be the ethical issues with using such technology -- or drawing adverse inferences when witnesses refuse to do so?

What about when an AI gets so smart that it can act like an oracle, essentially writing an instant award -- and explaining it to us dumb humans in terms we can comprehend -- without bothering with lawyers and witness testimony as we understand it? Would we have an ethical obligation to our clients to tell them to engage in this process because it was faster, cheaper, and more reliable than old-fashioned arbitration -- even at the cost of our own jobs?

I've written more than enough. I invite you to consider what other such futuristic scenarios might hold, and what the ethical implications of those would be.

Or you can tell me why I'm an ethical know-nothing who ought to be disbarred for failing to see the obvious ethical pitfalls of arbitration using AI's current capabilities.

Thanks for reading.

The first question was posed by Mark Kantor. He noted that non-lawyers rarely sit on international arbitration tribunals (perhaps more often in commercial fields such as construction, insurance and IP) and that they would defer to the lawyers on the tribunal with respect to legal issues. Therefore, his question was if a non-lawyer (not bound by law society or bar association codes of conduct) used generative AI tools to level the legal playing field on the tribunal, whether this might raise ethical concerns. Secondly, he asked if AI could create an impetus for more subject-matter expert but non-lawyer members of the tribunal and if so, when.

32 https://www.science.org/content/article/ai-re-creates-what-people-see-reading-their-brain-scans
In response, here is what Dr. Cohen said:

“Fair point, Mark.

Today, as you note, a non-lawyer arbitrator will usually sit on a tribunal because she has a particular subject matter expertise — say an engineer in a complex construction dispute. If she’s using AI in the context of the factual matrix and she has an ounce of common sense (she’s an engineer, she ought to!), she’ll disclose the nature and context of that use in a way that doesn’t raise ethical concerns.

But of course the non-lawyers may end up using AI to supplement the legal aspects of the case. So indeed you might have AI (the brilliant but fabulist young lawyer) assisting the non-lawyer arbitrator who has no ethical obligation to double-check the AI’s work, and doesn’t necessarily suspect when it’s making stuff up.

I agree that there will be more non-lawyers arbitrating in future. And I suspect that the lawyers might end up intervening as consults on the legal AI that they use, to keep the AI honest.

So we’ll be in the very unusual position where the non-lawyers are the core decision-makers and the lawyers are the consultants and independent experts.”

The next question, concerning regulating AI, was asked by Prof. Schmitz:

“These are all important points and I do believe that arbitrators face new ethical issues in the age of AI. At the same time, what are your thoughts about new laws and statements regarding responsible use of AI, and how this may affect arbitration? Of course, there is the new AI Act in the EU and just today, the White House in the United States declared a new voluntary commitment from 7 companies: “Since taking office, President Biden, Vice President Harris, and the entire Biden-Harris Administration have moved with urgency to seize the tremendous promise and manage the risks posed by Artificial Intelligence (AI) and to protect Americans’ rights and safety. As part of this commitment, President Biden is convening seven leading AI companies at the White House today – Amazon, Anthropic, Google, Inflection, Meta, Microsoft, and OpenAI – to announce that the Biden-Harris Administration has secured voluntary commitments from these companies to help move toward safe, secure, and transparent development of AI technology.” See https://www.whitehouse.gov/briefing-room/statements-releases/2023/07/21/fact-sheet-biden-harris-administration-secures-voluntary-commitments-from-leading-artificial-intelligence-companies-to-manage-the-risks-threats-posed-by-ai/.”

Therefore, Prof. Schmitz asked Dr. Cohen about his thoughts on regulating AI and how this might affect the use of AI in arbitration.

Dr. Cohen replied with the following post:

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33 https://artificialintelligenceact.eu/
“Thanks, Amy. I suspect that these inevitable regulations will create a lot of work for lawyers trying to ensure that companies abide by them -- just as data protection laws have created a cottage industry of electronic privacy specialists.

Whether those regulations will achieve the requisite aims is another matter. I’m not exactly sure what new AI regulations are supposed to do -- other than assuage our fears about a very fast-moving technology that’s caused a lot of hand-wringing.

I believe that these new regulations will impel calls for new rules and practices in arbitration. I imagine, for example, that we’ll soon have an ethical obligation of some kind to do due diligence on video evidence to satisfy ourselves that it’s not a deepfake.

But yet again, I think that's qualitatively no different than our current obligation to ensure we're not submitting false or misleading information.

I suppose some overzealous jurisdictions might also bar certain kinds of AI altogether; that would raise ethical issues about the use of AI in arbitrations involving lawyers from one of those jurisdictions.

But, thorough-going cynic that I am, I can’t help but think about the general confusion and consternation that accompanied the coming of the internet 30 years ago. Young Ogemiders won't remember, but we were twisting ourselves into knots back then about how the internet meant the end of forum and jurisdictional analysis as we know it, and how we would need a Lex.”

The next question was asked by Dr. Stanislava Nedeva. In the context of gaining the parties’ trust in that AI will be/is reliable and will assist the arbitrators in their decision-making, Dr. Nedeva was interested in knowing whether Dr. Cohen considers that trust in AI might pose an issue or limitations to its current and future use, especially in light of the ethical concerns already raised. Trust placed by the parties in the arbitration as a dispute resolution method is a crucial element to the effectiveness of the process; and some research suggests that there is a decreased engagement with a virtual agent during dispute resolution (albeit here34 in the context of mediation).

Dr. Cohen agreed that a lack of trust in AI will prevent its wider use. He then continued:

“Paradoxically, however, I think strict regulation of AI in IA would fuel that distrust. We’d be giving credence to the notion that a useful technology is only as good as its worst-case scenario.

This is the kind of slippery-slope argument we often encounter when a new technology arises. We get worried that it'll be used for the most nefarious purpose conceivable.

Call me naive (as well as a cynic -- what a combo), but I think our ethical baselines as lawyers proceed from the assumption that we're fundamentally fair and honest people who believe in justice and due process. So I think our distrust of systems that could help us is misguided.

34 https://www.sciencedaily.com/releases/2019/10/191016094909.htm
I believe tech-optimists should bear that in mind when they call for regulation of new technologies.”

To this answer, Mark Kantor added:

“There is not now, nor will there be in the future, only one flavor of AI to trust or not trust. Developments are not that simple.

Consequently, it is highly likely there will not be one form of regulation to control risks.

Paul will recall what I said over on Old OGEMID - I prefer to understand what I am regulating before I regulate, rather than regulating before I understand.

Just to illustrate my point, the use of documentary generative AI to write juridical submissions does not bother me anywhere near as much as the use of Deep Fakes, regardless of which of the five senses is being faked and regardless of whether used in arbitration or courts, in commerce or government, in espionage or national security, or etc. And, given how quickly that technology is developing, you can imagine how much more fussed I am going to be about Deep Fakes in 5-10 years from now.

I would like to regulate Deep Fakes now, for example through watermarking obligations. But I cannot see such regulation being terribly enforceable (particularly globally among State and non-State actors).

From Politico's report of its interview a day ago with UK MI6 spy chief Richard Moore.

**On the rise of AI in spying:** Moore argued that human intelligence remained crucial to do what “machines cannot do,” while underscoring that MI6 was “experimenting like mad” with AI. “If AI is taken in a direction which is beyond international coordination and developed for evil intent, that is highly dangerous. As we can tell already with the possibilities of generative AI, this will have to be handled with real care.”

Moore also said:

"It will be a significant part of our role going forward into the future to try and uncover, detect, and disrupt people who would like to develop AI in directions which are dangerous,” Moore said. “It’s really important that we work to preserve human agency over the technologies we’re developing, and not all actors out there may approach this with the same degree of responsibility that we in the U.K. do.”

And finally, Mr. Kantor added:

“Fake photos, fake videos, forged documents and fake audio as evidence. We have already seen forged documents in international arbitration going back decades. Imagine how much more difficult it will be to identify such materials with the impressive development of Deep Fake tools.
I am not the only one with this bugbear - http://arbitrationblog.practicallaw.com/deepfakes-a-rising-threat-in-international-arbitration/.

Dr. Cohen agreed that the authenticity of documents question exists:

"American practitioners will recall that a whole subsection of the Federal Rules of Evidence is devoted to the authentication of documents.

I guess I’ve not yet seen all that much video evidence in arbitrations. That might change. The exception of course is live witness testimony—when we’re able to deepfake that, then it is indeed a different ballgame."

Prof. Strong then continued the discussion by sharing her thoughts and questions with the audience:

“One of the ethical issues I have is that generative AI like ChatGPT could (and maybe should) be argued as constituting the unlicensed practice of law when relied on by pro se litigants (those who are not using a lawyer). After all, it is doing what a lawyer alleges he/she/they does best - identify authorities (albeit some fake ones), parse their meaning (albeit badly), and present conclusions. If we would condemn and regulate that activity if done by a layperson without a law license, why is not equally inappropriate if carried out by a computer? This is particularly true given the current, error-filled state of generative AI. If a lawyer produced that kind of product, he/she/they would be subject to a malpractice claim (which I suspect is being brought in the US case of Mata v Avianca, Inc, to which Micaela provided a link).

What about if judges use ChatGPT as one in Colombia already has (I think I sent the link already)? Would that breach the relevant codes of judicial conduct? Would it be a breach of the analogous code of conduct if a law clerk relied on generative AI to produce the first draft of a judicial opinion? Law clerks in the US (and perhaps other countries) often write first drafts, and law schools around the world are considering whether and to what extent to train law students on use of generative AI, so within a few years, law clerks may think that’s an entirely appropriate research tool."

Dr. Cohen stated that “the logic of punishing the AI for unlicensed practice of law is unimpeachable. But something about that scenario sits poorly with me. I suspect it’s that the essence of ethics is about fair play, and depriving a pro se litigant of a tool to compete — even if it’s an unreliable one — strikes me as wrong. Imagine the outcry if we said AI was ok if supervised by “proper” lawyers, but not kosher for the uninitiated or unlicensed.

Like Mark, I’m not terribly exercised by the issue of generative AI to help with drafting, for all the reasons suggested earlier in the thread."

Prof. Strong referred back to Prof. Schmitz’s equal protection concerns wherein lawyers might get the “good” version of generative AI and pro se litigants - the "bad" (cheap/free) version. In that sense, she proposed a solution according to which subscription providers are required to allow pro se litigants to use her databases as a public service - “kind of like how we require radios and television stations to broadcast public service announcements. The pro se litigants could use it for free or a de minimis sum. Unfortunately, we then get into the problem of whether
small law firms/solo practices should get the same benefit (I handled a few very small domestic arbitrations when I was just starting out as an arbitrator, and it became apparent the law firms were doing NO legal research, likely because the case couldn't bear the cost).” Prof. Strong therefore advocated for some guidance to be put in place, such as soft law and guidelines as a starting point before binding law and rules are created.

Dr. Cohen commented that he agreed with the points on ODR and consumer arbitration but did not see these issues disturbing the ethical status quo in international arbitrations, “where it’s usually big ugly company versus other big ugly company or big ugly sovereign.”

Prof. Strong agreed that the stereotypical international dispute will have two similarly sized “behemoths” battling it out. There is an increase in small and medium sized companies in international disputes, which causes a concern about fairness and costs, but not such as in consumer arbitration and ODR.

The discussion was joined by Prof. Schmitz who concurred that ethical guardrails are necessary, or at least standards that could be tied to a trust mark, for ODR and use of AI in ODR:

“As a Co-Chair of the ODR Task for of the American Bar Association35, we worked for 4 years with 3 working groups to create ethical guidance. Attached is the final product. It does not have “teeth” (sadly) and I would bore you with the long saga that required a great deal of negotiation to even arrive at this document!

We also have an article coming out about the process: David Larson, Amy J. Schmitz, and Alan Weiner, ABA ODR Guidance Has Been Adopted, 39 OHIO STATE J. ON DISP. RESOLUTION 1 (2023). See also the work of APEC on this topic: https://www.apec.org/publications/2023/03/apec-workshop-on-enhancing-implementation-of-online-dispute-resolution-(odr)-through-the-apec-odr-collaborative-framework-and-other-fora-including-courts.”

Prof. Petra Butler also contributed to the discussion with her note:

“Many MSMEs work on trust, i.e., they don’t have tidy comprehensive written contracts. For them personal relationships are really important. They also are very capacity-poor. That means, many of them rather negotiate their differences and the last thing they want to do is sit in front of a computer and be part of an anonymous process (see A Study of International Commercial Arbitration in the Commonwealth).36 There are some cultural/regional differences of course…”

A comment was further made by Mr. Benjamin Davies:

“ODR has already advanced into unknown areas with AI not far behind.

35 https://kb.osu.edu/handle/1811/103218
I find your points to be interesting, but things are much further along than most people realize. For example, my co-research and AI development for Kleros ODR has already completed months ago, and we have some interesting results from it such as sentiment analysis of evidence provided to crowd-based jurors who follow some strange patterns.

On top of that, AI regulation already exists for employee job applications in many states, but AI is such a new field that no one knows just how far we can take pattern recognition. For example, there is innovative research showing AI can determine the gender of who wrote tweets or cover letters even though any identification was sanitized before the AI reviewed the documents/paragraphs. I can think of hundreds of ways that AI could be misused, but my own research in this field with AI models of all kinds (not just generative, MLM, or LLM’s) show there are virtually no limits on what could be imagined if you have the right creative ideas, knowledge, and background. I started using AI models to apply for federal/state clerkships back in 2017, and I've had amazing success since then.

As to Amy's point on ethical guardrails, yes, we do need them, but if they're not built to change over time and adapt to novel AI models/strategies, these regulations will likely either be irrelevant or might even encourage unethical behaviour. For example, false analytics on judges could be sent out to destroy any potential judicial figure which may endanger any legal field such as insurance reform, tort reform, legal malpractice growth, etc. We need to build an environment where AI can be given incentives to work towards positive ODR/ADR/ethical outcomes.

Very interesting area of discussion.”

A final question was posted by Ms. Naimeh Masumy, addressed to Prof. Schmitz, who asked for her views on whether AI-informed decision-makers make “fairer” decisions than human decision-makers, especially in an ADR setting.

“Not much has been discussed about the perception of fairness and its role in AI-assisted decision-making in ADR field, which usually strives to resolve disputes based on socially satisfying equity factors.

AI decision-making process can be described as calibration; a process by which “Black Box AI” attempts to establish the relationship between the factual premises of a case and some relevant legal rules. Although such calibration is ubiquitous in legal decision-making, and appears at first glance seemingly desirable, it might negate the value of adjudicative discretion.

Do you think it would be sensible to solely rely on AI, or ODR in this case, if the rigorous application of a law leads to grave injustice in the circumstances of a particular case? And, does the idea of applying equity to balance fair results in some individual circumstances still warrants human interventions in the ADR landscape?”

As noted in her earlier interventions, Prof. Schmitz stated that ODR is not proper in all cases, and certainly not in cases where it will cause injustice. She reiterated that human interventions remains extremely important in ADR and ODR. She also emphasised that ODR and AI are not synonymous. While she was not aware of any ODR systems that use AI for decision-making, she asserted that considerations of equity and fairness be put “front and centre.” Prof. Schmitz
maintained that human-centric system design remains foundations for all dispute resolution; and that perceptions of fairness are important for the legitimacy of any system. She then continued with the following observations:

“I would like all of us to remember the key considerations for system design - which can be helpful in any context. My good friend and co-author, Janet Martinez from Stanford University in the U.S., has laid out an analytic framework (with others) with six elements: goals, stakeholders, context and culture, structures and processes, resources, and accountability.

Specifying the goals of the system is the most critical of the design elements: what does the designer seek to accomplish and what disputes will be addressed? Goals can include efficiency, compliance, access to justice, innovation, dispute prevention, reputation, and more, all of which are likely desirable. But someone, or some decision-making body, will need to decide which goals are most important. Attention to justice and ensuring fairness should remain key goals for any ADR or ODR process.

A second framework element is the identification of stakeholders, their interests, relationships, and relative power. Stakeholders include the people and organizations that create, host, use, and are affected by a system; ideally, they will be involved in the design from the start and share experience as users.

Context and culture comprise the third element - meaning the circumstance or situation in which a system is diagnosed and designed. By “culture”, we mean the implicit assumptions and values held by the surrounding community that help define the dispute. In international arbitration, this is an important element!

Structures and processes include examining how the processes are related to each other and the formal legal system, and include the range of process types: direct negotiation to third-party facilitation, mediation, or arbitration, and court adjudication.

Resources are critical. What financial, human, data, technological, information, and training resources are needed and available to support a system. Leadership from the top combined with understanding of the users’ perspective, are critical.

Lastly, a system’s accountability and success will depend on the degree of transparency around its operation and whether the system includes monitoring, learning, and evaluation components.

Note with respect to accountability and evaluation - we need more research around AI. As to your first question, we have no comparative analysis of AI vs. human decision-making in a legal context that has withstood rigorous examination. We need more research - certainly that research is necessary to unleash any use of an AI arbitrator in IA!”

Speaker 4 - Abhinav K. Mishra - Center for AI and Digital Policy, MyLawman
Seminar/Topic 4: The Possible Future of AI in Arbitration

Earvin Delgado introduced the final speaker – Mr. Abhinav K. Mishra

Abhinav K. Mishra elaborated on the discussion in the symposium so far and built up on the posts by the previous speakers with the following post:

“I have been given the privilege to continue (and probably finish the discussion; only for this virtual symposium) on the future of AI in arbitration, building upon the insightful speeches given by esteemed experts in the field. Professor Amy Schmitz emphasized the importance of understanding the promise and pitfalls of AI in arbitration, reminding us that it is not all good or all bad, but rather how we use it that matters. We must approach the integration of AI thoughtfully, recognizing its potential benefits while carefully managing the associated challenges to maintain fairness, transparency, and integrity of the arbitration process.

AI tools and Robo-Arbitrators

Mihaela Apostol highlighted the various stages of the arbitral decision-making process and how AI can be utilized to enhance efficiency and effectiveness. From automating case management tasks to assisting in data analysis, document review, and even damage calculations, no doubt, AI presents numerous opportunities to streamline and augment arbitration proceedings. We can see the increased use of various digital tools and AI-based software/tools for legal and Arbitration processes - viz. Litigate38 and Clio39 for Practice Management; Contract Intelligence40 for Contract Review and due diligence; ThoughtRiver41 for Information Management; BlueJ42 Legal Analysis and Prediction; and DoNotPay43 and LexisNexis+ AI44 and ROSS45 for Legal Research including Arbitration specific - such as iManage46 for conflict management, OPUS-247 for International Arbitration and

37 Dr. Mishra is currently an AI Policy Fellow at the Center for AI and Digital Policy in Washington, United States, and a Doctoral Fellow in Artificial Intelligence and Law in the United Nations-mandated University for Peace in Costa Rica. He is a professor and advocate of intellectual property, media and cyber laws. Dr. Mishra is also the founder of MyLawman, a law blog and open journal of law and policy discussions, as well as the Founder Partner and CEO of LexPlex, a legal tech consultancy. He is an avid researcher and speaker and has been a resource person to many programs including FDPs, conferences, expert talks at IIT, Jodhpur, NMIMS, University of Lapland, IPEM Law Academy, Lloyd Law College, and Manav Rachna University, and more.

You may learn more about him here:
https://www.linkedin.com/in/abhinav-k-mishra/
https://www.mylawman.co.in/p/abhinav-k-mishra-founder-ceo-mlawman.html.
38 https://litigate.ai
39 https://www.clio.com/
40 https://mricontractintelligence.com/solutions/legal-ai/
41 https://www.thoughtriver.com/product
42 https://www.bluej.com/ca/bluej-le
43 https://donotpay.com
45 https://www.rossintelligence.com/features
46 https://imanage.com/products/conflicts-manager/
47 https://www.opus2.com/en-sg/international-arbitration
Virtual hearings, **GAR's Arbitrator Research Tool**\(^{48}\) helping find potential Arbitrator help Arbitration faster, easier and pocket-friendly.

We see the use of AI tools merely supporting Arbitration process and Human Arbitrators, still the research is on to bring in **Robo-Arbitrators**\(^{49}\) suggesting for removing of the role of human Arbitrators, taking decision-making in machine’s hands. Where, Ms. Apostol urged us to consider the ethical implications of AI usage, especially in decision-making processes, and suggested that the issues surrounding AI may not be fundamentally different from longstanding ethical problems in arbitration.

Paul Cohen, in his thought-provoking speech, presented a contrarian argument, asserting that we may be overly concerned about ethical issues in AI. He drew parallels between the ethical responsibilities in human-led processes and AI-led processes, arguing that if we can trust human experts despite their limitations and potential biases, we should consider extending the same trust to AI systems. He urged us to focus on the scenarios where AI can perform tasks that humans cannot, and explore the ethical implications of such advancements.

**As we delve into the future of AI in arbitration**, it is essential to consider the nuances of both the opportunities and challenges associated with AI integration. On one hand, AI can greatly assist in streamlining the arbitration process, enhancing data analysis, and providing valuable decision support. By automating mundane tasks, AI frees up arbitrators’ time to focus\(^{50}\) on the more critical substantive issues. Furthermore, AI’s language translation capabilities can break down communication barriers in international arbitration, promoting efficient dialogue among parties from different linguistic backgrounds.

Because of above mentioned virtues and opportunities, AI tools are increasing day by day and proving to be very crucial in Arbitration - e.g. Arbitrator Selection, Legal and Facts Analysis, Legal Research and Predictive Justice, Drafting and Reviewing Documents etc.

Furthermore, AI has already been used as a tool for decision-making in several countries: **Estonia** is developing an AI judge to adjudicate small claims disputes (less than €7,000), also a **court in Beijing** is presided over by an AI judge\(^{51}\) and American courts have started using AI tools in criminal proceedings to determine the possibility of parole. (Wisconsin v Loomis, 2016 WI 68)

These examples pave the way for arguing towards the inclusion of Robo-Arbitrator in Arbitration, However, the complexity and novelty of issues in Arbitration require something more than just an automated decision.

\(^{48}\) https://globalarbitrationreview.com/tools/arbitrator-research-tool
\(^{50}\) https://uk.practicallaw.thomsonreuters.com/7-203-6664
\(^{51}\) https://scholarship.law.missouri.edu/jdr/vol2021/iss2/5/
Limitations of Robo-Decision Making

It is crucial to acknowledge the limitations of AI and the potential pitfalls it may introduce in the arbitration process. Biases inherent in AI algorithms\(^{52}\) can lead to unfair outcomes, requiring careful selection and monitoring of AI tools to ensure impartiality. Moreover, while AI may provide fast and efficient solutions in certain areas, human judgment remains indispensable in complex legal reasoning and nuanced arguments. It is vital to strike a balance between the use of AI and human involvement in decision-making processes.

One major drawback of Robo-Arbitrator is that the reasons given by RoboArb’s Automated Decisions are not transparent.\(^{53}\) The developers of the software are reluctant to disclose the algorithms and coding that has resulted in the output. This means that it is difficult to understand how the decision was made\(^ {54}\) and to challenge it if necessary.

Another drawback of automated decision-making is that it can be inherently conservative. This is because outputs are based on analysis of existing data. This means that the ability to change or develop the law in response to changes in human thinking is stifled. Existing biases and assumptions are replicated and perpetuated.

In short, it takes a human to think outside the box.\(^ {55}\)

The evolving nature of AI and its dependence on data also requires consideration. As Mihaela Apostol highlighted, AI models are only “as good as the data on which they are trained”. Failing to account for private arbitration awards and settlements may skew predictions and outcomes, necessitating a comprehensive and diverse dataset to enhance AI’s accuracy and reliability.

The Way Forward: Rely upon AI with HE

It is essential to reflect on how AI can complement the work of human experts rather than replace them entirely. While AI can offer speed and efficiency, human experts provide essential qualities such as empathy, contextual understanding, and ethical reasoning. Ensuring AI’s transparency and providing an explanation for its decisions are vital to maintain trust in the arbitral process and prevent any perception of the "black box" problem. This is to say that AI tools should be used to complement the Human Arbitrators' invaluable experience (HE) and give it the required speed and efficiency by using the right tools powered by the innovation of AI (AI). The complex nature of disputes involving novelty of issues can only be solved by one human expert and experienced in subject matter, where we need to rely on Human Experience coupled with innovations offered by AI.

\(^{53}\) https://uk.practicallaw.thomsonreuters.com/w-013-1478
\(^{54}\) https://uk.practicallaw.thomsonreuters.com/w-005-6264
Also, we can take note of the suggestion given by Marrow, Karol and Kuyan in Artificial Intelligence and Arbitration: The Computer as an Arbitrator — Are We There Yet? To use Robo-Arbitrators (Automated Decision-making) only for small arbitration cases with less complex issues. And further, serious cases may be reserved for disposal by Human Arbitrators.

On an additional note, AI’s potential to expand access to justice and assist self-represented litigants, as Amy Schmitz and John Zeleznikow's research suggests, can neither be ignored nor set aside. By leveraging AI to provide more accessible and understandable legal information, we can empower individuals who lack legal representation, promoting a fairer and more inclusive arbitration system.

As we look to the future, we must continue these discussions, not just within the legal community, but also with technologists and experts in AI development. By collaboratively addressing the challenges and ethical concerns, we can harness the true potential of AI in arbitration while upholding the principles of fairness, transparency, and integrity that define our profession.

I invite you all to participate actively in this conversation, as we collectively shape the future of AI in arbitration, ensuring it remains a valuable tool while safeguarding the principles that underpin our pursuit of justice.”

The first question concerned problems of AI developers being reluctant to disclose the algorithms implemented which result in output decisions and was posed by Sara D’Sousa. Ms. D’Sousa asked if intellectual property laws constrain the public interest in AI decision-making. She also asked if there is scope for allowing ‘cross-examination’ of any kind when a Robo-Arbitrator is used, especially if a decision affects the public interest, or if a system of appellate review is a better path forward when AI is incorporated with HE.

As a starting point, Dr. Mishra stated that AI cannot be held solely responsible for the technicalities of IP.

“AI relies on data, especially big data (both open and closed source), which is used to train it behind the scenes. This means that AI may have inherent human biases, as well. In the public interest, the making and workings of AI are being highly regulated. Regulatory efforts are underway to address the implications of AI in the public interest. Various regulations, such as the US Act and EU Act on AI, aim to tackle the issue of transparency primarily to safeguard the public interest, even if it may lead to some dilution of IP rights and other protections.

Another significant concern lies in the concept of Black Box AI, wherein AI operates without direct human intervention, making its decision-making processes less transparent and understandable. To protect the public interest, this aspect also requires thorough attention and examination.

One proposed approach to mitigate potential risks associated with AI decision-making is to involve human experience and expertise in the process. By having a human arbitrator working in tandem with AI tools, additional review steps can be avoided. The

existing judicial process in many countries incorporates checks and balances to ensure fair outcomes, and this approach can reinforce the pursuit of justice while leveraging AI’s capabilities responsibly.

However, if a scenario arises where AI judges independently, careful consideration becomes essential. While there are concerns about the biases and reliability of AI judges, it is undeniable that the day may come when AI plays a more significant role in the judicial system. In such cases, it might be prudent to establish an additional review process where human arbitrators or experts approve or assess the AI’s decisions. Nevertheless, this approach might pose challenges, potentially burdening the arbitration process, which typically aims to simplify and expedite justice delivery. (This is a topic that needs to be discussed and researched further.)

In conclusion, the convergence of AI, IP, and public interest necessitates thoughtful discussion, research, and the implementation of effective regulations. Balancing technological advancements with the welfare of society requires a holistic and collaborative effort to harness the full potential of AI while safeguarding human rights and values.”

The final questions were asked by Earvin Delgado:

1. The use of “robo-arbitrators” has been proposed as a means to automate decision-making in arbitration. Perhaps a decision made by a “robo-arbitrator” or an AI judge can be verified by an actual human (with the proper qualifications, of course) before it becomes final? Do you think that would make the process more trustworthy?

2. How can transparency in the AI’s decision-making process be achieved to build trust and confidence in the arbitral process? I'm asking this question since it has been mentioned that the use of AI judges has been pioneered in some jurisdictions.

3. The general consensus during the symposium is that AI should complement human arbitrators and not replace them in complex cases. What criteria should be used to determine which cases are suitable for "AI arbitrators" and which ones require the expertise of human arbitrators in the future?"

Dr. Mishra replied to each question in the order it was raised:

1. Kindly see my previous mail reply to Ms. Sara, where I have already discussed it. (The Answer is yes, but there seems a problem of overburdening of process, around it)

2. Well, I applaud this question. Actually, This point was missed in my deliberation. Thanks for asking and coming with this up.

To answer, A lot of literature and Organisations have been working on the idea of Trustworthy AI, Responsible and Explainable AI (XAI) See- Europe's Ethics Guidelines for Trustworthy AI (TAI) Playbook U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES 58,

58 https://www.hhs.gov/sites/default/files/hhs-trustworthy-ai-playbook.pdf
IBM's Trustworthy AI\textsuperscript{59}, Deloitte's Trustworthy AI Framework\textsuperscript{60}, NIST's Responsible and Trustworthy AI\textsuperscript{61}, NIST's Four Principles of Explainable Artificial Intelligence\textsuperscript{62}, Royal Society's Policy Briefing on Explainable AI\textsuperscript{63} etc.

On 8 April 2019, the High-Level Expert Group on AI presented Ethics Guidelines for Trustworthy Artificial Intelligence\textsuperscript{64}, which states that trustworthy AI should be: (1) lawful - respecting all applicable laws and regulations (2) ethical - respecting ethical principles and values (3) robust - both from a technical perspective while taking into account its social environment. The Guidelines put forward a set of 7 key requirements that AI systems should meet in order to be deemed trustworthy. Those are- Human agency and oversight, Technical Robustness and safety, Privacy and data governance, Transparency, Diversity, non-discrimination and fairness, Societal and environmental well-being, and Accountability.

Apart from that - A few other means can also be followed such as -

- **Algorithmic Auditing**- Conduct regular and independent audits of the AI algorithms used in arbitration. The audit process should evaluate the fairness and potential biases of the AI.

- **Data Disclosure and Transparency** - Transparency can be improved by disclosing the sources and types of data used to train the AI model. This includes ensuring that the data is accurate, representative, and free from biases.

- **Sufficient Disclosure** - Disclosure of the AI model used in the arbitration including its architecture, parameters, and performance metrics, enabling better understanding and scrutiny.

- **Regulatory and Monitory Reports**- Making and submission of reports regarding relevant data, inputs, and decision outcomes or other data affecting Decisions of AI.

- **Public Consultation and Feedback Mechanisms**: Encourage public consultation on the use of AI in arbitration and invite feedback from stakeholders to address concerns and improve transparency.

- **Ethical Review Boards**: Consider implementing independent ethical review boards or expert committees to assess and oversee AI usage in arbitration.

- **Public Education**: Educate the legal community and the public about AI’s role in arbitration, its limitations, and the steps taken to ensure transparency and fairness.

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\textsuperscript{59} https://research.ibm.com/topics/trustworthy-ai
\textsuperscript{61} https://www.nist.gov/trustworthy-and-responsible-ai
Finally - **Human Arbitrator Intervention/Approval** for each/random decision.

3. I think that the following factors may be crucial for deciding the use of Human Arbitrators-

- **Cases involving complexity**- involving novel and legal complexity. / involving legal ambiguity / requires specific interpretation on the question of law due to special facts, circumstances, and ambiguity of the law

- **Cases involving the question as to uncertainty or clarity regarding the admissibility of Evidence.**

- **Cases involving questions of Public Policy, Public Interest, or Societal Concern.**

- **Cases involving the Ethical and Moral Questions**

- **Cases having parties' consent/preference** - not to involve AI Judges

- **Cases requiring Human reason or judgment, clarity, experience, or Subject matter expertise**

- **Cases requiring a high level of Privacy, Transparency, and Accountability”**

**Earvin Delgado** officially closed the Young-OGEMID Symposium, "The Role of Artificial Intelligence in Shaping ADR Practices" and thanked the esteemed panellists for taking the time to share their experiences to the members of the listserv, as well as everyone who participated in the symposium.