## **On the Bias and Predictability of Asylum Cases**

**Authors :** Panagiota Katsikouli, William Hamilton Byrne, Thomas Gammeltoft-Hansen, Tijs Slaats **Abstract :** An individual who demonstrates a well-founded fear of persecution or faces real risk of being subjected to torture is eligible for asylum. In Danish law, the exact legal thresholds reflect those established by international conventions, notably the 1951 Refugee Convention and the 1950 European Convention for Human Rights. These international treaties, however, remain largely silent when it comes to how states should assess asylum claims. As a result, national authorities are typically left to determine an individual's legal eligibility on a narrow basis consisting of an oral testimony, which may itself be hampered by several factors, including imprecise language interpretation, insecurity or lacking trust towards the authorities among applicants. The leaky ground, on which authorities must assess their subjective perceptions of asylum applicants' credibility, questions whether, in all cases, adjudicators make the correct decision. Moreover, the subjective element in these assessments raises questions on whether individual asylum cases could be afflicted by implicit biases or stereotyping amongst adjudicators

raises questions on whether individual asylum cases could be afflicted by implicit biases or stereotyping amongst adjudicators. In fact, recent studies have uncovered significant correlations between decision outcomes and the experience and gender of the assigned judge, as well as correlations between asylum outcomes and entirely external events such as weather and political elections. In this study, we analyze a publicly available dataset containing approximately 8,000 summaries of asylum cases, initially rejected, and re-tried by the Refugee Appeals Board (RAB) in Denmark. First, we look for variations in the recognition rates, with regards to a number of applicants' features: their country of origin/nationality, their identified gender, their identified religion, their ethnicity, whether torture was mentioned in their case and if so, whether it was supported or not, and the year the applicant entered Denmark. In order to extract those features from the text summaries, as well as the final decision of the RAB, we applied natural language processing and regular expressions, adjusting for the Danish language. We observed interesting variations in recognition rates related to the applicants' country of origin, ethnicity, year of entry and the support or not of torture claims, whenever those were made in the case. The appearance (or not) of significant variations in the recognition rates, does not necessarily imply (or not) bias in the decision-making progress. None of the considered features, with the exception maybe of the torture claims, should be decisive factors for an asylum seeker's fate. We therefore investigate whether the decision can be predicted on the basis of these features, and consequently, whether biases are likely to exist in the decisionmaking progress. We employed a number of machine learning classifiers, and found that when using the applicant's country of origin, religion, ethnicity and year of entry with a random forest classifier, or a decision tree, the prediction accuracy is as high as 82% and 85% respectively, tentially predictive properties with regards to the outcome of an asylum case. Our analysis and findings call for further investigation on the predictability of the outcome, on a larger dataset of 17,000 cases, which is undergoing.

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