Gender Bias in the Indian Judiciary System

Introduction

Structural inequalities based on gender, religion, caste, class and more are present in every society and are also the reason for a disparity between the opportunities offered to different people on the basis of gender, religion, caste, and more. To prevent this disparity in opportunities, the government has put in place rules and regulations which are implemented as part of policies by the legal system. But when the legal system itself suffers from such inequalities, how can one expect fairness in societies? (Ash et al., 2021).

What exactly is gender bias and why is it necessary to analyze gender bias in courts? This essay aims to explain in detail the role of judges and attorneys, how gender plays a key role in courts, the testimonies of men and women on gender bias, computational techniques that can be used to analyze the bias through linguistic models and other machine learning models and by using such techniques, this study seeks to answer the question laid out.

It is essential for us to first understand what bias exactly is. As defined by Random House Dictionary of the English Language (1967), bias is a tendency which prevents an unprejudiced opinion. The beliefs and attitudes of an individual leads to difference in bias and the role of such a subjective concept in courts produces an objective outcome (Hensler, 1992).
Bias is still a persistent phenomenon in court decisions where only a few of the gender-biased judgements grab media's attention, many more still remain unknown to the mass public which contributes to perpetuating unfairness in the legal systems of many countries (Pinto et al., 2020).

One important step towards reducing bias is the presence of women in senior positions. This would help them bring gender-biased behavior to the notice of the senior authorities and have the authority to make the much needed changes and raise the bar higher for fair procedures. It is essential for us to raise awareness about gender bias that exists in legal systems for one to demand equality of genders in courts and other legal settings thus creating the necessary changes in the judiciary and the law itself (Resnik, 1996).

The Indian Judiciary System

There is a hierarchical judicial system in India where the first point of entry is India's lower judiciary. The lower judiciary comprises the subordinate courts and above that, the district courts. Above the district courts in terms of power, India has high courts which are to be present in every state of India. The country's highest judicial court is the Supreme Court which is also the final court of appeal in the country. Currently, there are 33 judges comprising the Supreme Court of India including the Chief Justice and out of which only 4 are females. There are a total

of 650 High Court Judges in India and women make up 76 of them which is only 11.7% of the total number of High Court Judges (Kashyap, 2021).

The Supreme Court of India is an appellate court where under Article 129 of the Constitution of India the Supreme Court is a Court of Record. All of its judgements, proceedings are to be recorded for permanent memory and testimony and can act as a precedent without being questioned in future cases. The power of judges in India make them important policymakers and the current ratio of women in these positions make it evident that men have more say as policymakers of India.

To be sure of the factors that lead to gender-biased judgements, it becomes essential for us to understand the procedure through which judges are allocated cases in India. The procedure begins with the filing of an FIR and in whatever territorial jurisdiction the FIR has been filed, the court belonging to the same jurisdiction receives the case. If the court only comprises one judge, that particular judge will overlook the case otherwise a rule-based procedure determines the judge allocation to the case. A particular police station and the kind of case is allocated a specific courtroom and one judge resides in one specific courtroom for a few months. The judges remain in one court for a few years in which they rotate in the courtrooms thus keeping the procedure randomized. The procedure might not be completely randomized but it ensures that the defendant and prosecutors are not a part of any form of forum shopping. In other words, they are not able to choose a particular judge to seek a favorable outcome (Ash et al., 2021).

Judges to the lower judiciary of India are appointed by two means: direct and indirect. Through the direct means, the judge is appointed in consultation with a High Court judge and the governor in consultation. The indirect method is through promotion from the subordinate courts. In the district courts, women make up only 28% of the total number of judges (Ash et al., 2021). It is crucial to recognize the skewed sex ratio in the judicial system of India. Once we recognize the disparity, we can further understand whether unequal representation leads to gender-biased judgements and whether judges treat defendants differently when they are of the same gender.

In India, the district court judges do not exhibit such in-group bias based on gender (Ash et al., 2021). 'Measuring Gender and Religious Bias in the Indian Judiciary' (Ash et al., 2021) classified individuals on the basis of their gender and religion with a 97% accuracy using a deep neural network applied to the characters of the names. The authors compared the outcomes of two defendants with the same identity classification and charged under the same offense in the same court and the same month but were assigned judges of different identities. In addition to this, they used a regression discontinuity specification to measure the divergence and variation between outcomes heard immediately after and before transition. They aimed at finding gender bias in criminal activities involving sexual assaults and kidnappings of women where they concluded they could not find any in-group bias in this category of crimes.

A similar study done in Israeli small courts found that the judges did in fact favor defendants sharing their same religion (Shayo & Zussman, 2011).

These findings however do not completely rule out that the Indian Judicial System is biased in terms of gender. This study has focused on singular judgment of a judge to criminal-justice

outcomes (Ash et al., 2021). We would still be able to notice bias in appeal procedures, investigations, police decisions on file cases, severity of charges among others.

Gender Bias

How are we sure that gender bias exists in courts?

Gender Bias received significant attention in the 1980s with the National Judicial Educational Project to Promote Equality for Men and Women in the Courts (NJEP) which set up state task forces to ascertain equality between men and women in Judicial courts (Orcutt & Stepnick, 1996).
The federal courts of the largest appellate court of the United States, Ninth Circuit, instated The Gender Bias Task Force to examine the nature and the extent of gender bias in the courts by directly asking people who are a part of the Circuit(Huff et al., 1998). To do the same, they used traditional research techniques to discern the effect of gender in interactions among attorneys and judges. A four-way comparative analysis, namely, among male and female attorneys, among male and female judges, among male attorneys and female judges and lastly among female attorneys and male judges done by Orcutt and Stepnick (1996) in their paper 'Conflicting Testimony : Judges' and Attorneys' Perceptions of Gender Bias in Legal Setting' (Orcutt & Stepnick, 1996) also generated similar results but by using a 2-way Multivariate Analysis model.

The Circuit using focus groups and surveys posed questions around the way female lawyers were addressed, the comments on their appearance, and other courtroom interactions along with understanding if gender influenced interaction with clients, settlement deals, hiring practices, promotion and work life.(Hensler, 1992). They also collected statistical data on the gender composition of the Circuit and found that the courtrooms are dominated by men which is not only uncomfortable for the woman but also indicates the effect of gender on decision making processes. A few significant takeaways from this survey was the difference in the interpretation of reality by men and women. Firstly, female lawyers and judges attribute the dominance of men to their exclusion from important positions due to the gender differences in law firms whereas male judges and lawyers, on the other hand, attribute it to fair merit-based selections. Secondly, female judges and lawyers were more aware of the sexually laden interactions as compared to male judges and lawyers. Most of the gendered interactions took place among attorneys which usually happens in the absence of the judges. Due to the numerical dominance of men in courts, especially in positions of power, it is difficult for women to object to gendered interactions in fear of a negative outcome for the client and the client's view of the lawyer (Hensler, 1992).

Orcutt and Stepnick (1996) in Florida took a statewide sample of 40 female judges, 326 male judges, 414 women attorneys and 288 male attorneys randomly selected from the Florida Bar Association to investigate how both the genders play a crucial role in discrimination against women in legal settings (Florida Supreme Court Task Force, 1990). Similar to Hensler(1992), Orcutt and Stepnick (1996) also found that female judges and attorneys tend to be more aware of gender-biased behavior as compared to male judges and attorneys but unlike the survey conducted by the Ninth Circuit, Orcutt and Stepnick use multivariate analysis and other machine

learning models to understand the presence of gender gap as a result of age. As part of their analysis, they first sent out surveys to judges and attorneys with the help of the Gender Bias Study Commission formed in 1987 by the Florida Supreme Court. The results from the survey were consistent with the results of the Ninth Circuit being firstly, attorneys being frequent initiators of gender-biased behavior and secondly, women attorneys and judges being more aware of such behavior. The results from the surveys were then used to conduct multiple regression techniques which helped in assessing the "main effects and interactions between gender, position and age on perceptions of gender-biased behavior by male judges and attorneys" (Orcutt & Stepnick, 1996). The findings from multivariate analysis informs us about the difference in perceptions of the raters due to gender, age and legal positions of the raters. It is also noticed that young male and female judges are more aware of the gender-biased behavior by male judges than older men justices who see no such behavior (Orcutt & Stepnick, 1996).

Computational tools and Gender Studies

All processes that produce knowledge are situated. Situatedness is a part of knowledge production and practice and it refers to an individual constantly taking a stand socially, culturally and historically (Bjorkman, 2005). Technology is a product of culture and vice versa thus one needs to broaden the concepts of technology and the way one understands technology using a feminist perspective. The way one approaches a question, the knowledge produced will tend to reveal more information with every different approach that is taken since information is dependent on the position and the interpretation made by the participant. Therefore, data might exist in itself but information cannot and thus it is important for one to use gender research along with computing to broaden our horizons and open new research perspectives (Bjorkman, 2005).

Gender-Extended Research and Development (GERD) is a model developed to make IT systems more inclusive in terms of gender in computing research and development. For gender research to be applied in computing, some sort of translation has to exist to bridge the gap between the two fields and one can do so using abstraction, generalization and simplification (Draude & Maab, 2018). The need for such a model is well appreciated while conducting surveys. To collect data for understanding the gender-bias prevalent in legal systems, one needs to follow the GERD model to make sure there is no invisible work, that is, work that might go unnoticed and further produce erroneous results. This model focuses on eight concepts - Benefit, Power Relations, Knowledge, Values, Relevance, Human Image, Language and Work Culture in the context of gender. Using this design technique, one can ensure that research in gender and diversity studies provide a reflective perspective on the computational tools used in the study (Draude & Maab, 2018).

Once the data collected through qualitative methods has been translated using GERD, it will be used by computational methods that seek to analyze and interpret the data collected. Techniques like natural language processing, text mining, deep neural network analysis, and other supervised and unsupervised machine learning techniques are currently used the most

while interpreting legal texts and estimating the causal factors that shape the law (Frankenreiter & Livermore, 2020).

There are two perspectives of law - internal perspective and external perspective. Internal perspective takes into account the information provided by the legal actors and this is where GERD is useful. This kind of perspective also supports "distinct reading" thus saving time and resources. In the external perspective, the behavior of the legal actors is analyzed. In addition to this, there are also two ways of approaching legal texts, one called the law-as-data and the other law-as-code approach (Frankenreiter & Livermore, 2020).

The former is preferred in interdisciplinary studies and involves the use of computational tools to extract information from high dimensional datasets while the latter views the law as a set of logical rules (Frankenreiter & Livermore, 2020).

The law-as-code approach uses the law as a set of formal rules as input for the computer to process which for instance can be represented as a decision tree with two child nodes for each node thus offering binary choices at every step. The law-as-data approach needs to first go through the dimensionality reduction process since if the text in the transcript is treated as an ordered sequence of words, the dimensionality of texts increases exponentially and dimensionality reduction is essential in passing the data through a model. The three most frequently used ways for representing legal texts include the bag of words construct, skip grams, and the third depends on the methodology and the techniques chosen for the study (Frankenreiter & Livermore, 2020).

The bag of words technique conducts the analyzing through the frequency of the words thus summarizing the legal document through the high occurrences of the intensifiers. These intensifiers can then be processed through sentiment analysis to understand the degree of emotions. The frequency distribution of specific words can also help us identify gender bias by noting the number of times a female attorney has been interrupted by the judge in comparison to a male attorney during oral discussions (Patton & Smith, 2017). It can also note the word order and one can parse the text and discern the semantic structure of the judgment (Frankenreiter & Livermore, 2020).

The skip grams technique can be used to avoid dimensionality reduction. An example of the third approach is plagiarism checker. For example, noticing the similarity in the sequence of words would help us identify if the lower courts have used similar judgements as the Supreme Court.

Other methods include supervised and unsupervised machine learning techniques like topic modeling, principal component analysis (PCA) and other comparative techniques. For instance, regression analysis can identify causal relationships. The use of regression analysis in Orcutt and Stepnick's study (1996) to find relationships between gender and religion bias in relation to age in legal settings is an example of such a technique (Frankenreiter & Livermore, 2020).

Other techniques of importance are the natural language processing (NLP) techniques. Every judge is required to justify their judgment and there is no better way to detect bias than analyze

the texts since bias is linguistically present and explained in these texts. To analyze legal transcripts, the model created needs to be more complex than other models since there is a diversity in the linguistic levels of the text (Pinto et al., 2020). There is the lexical level, morphological level, the syntactic-semantic level and pragmatic and discursive levels. These levels look at a particular lexicon of sentiment, the internal structure of the words, the predicates and more. Thus, such a linguistic model integrating bias-inducing linguistic phenomena will help one to analyze in great depth the biases that exist in the vocabulary of the legal actors (Pinto et al., 2020).

Conclusion

Judicial Systems are responsible for implementing the policies made by the government and many of the policies aim at eradicating inequality. A lot of research has been done which proves that the very institution that is responsible for implementing policies for equality is itself biased in terms of gender. This is not just the case in India but also the case in other countries. One needs to create awareness about such disparities hoping for reforms.

Awareness can be created through directly being in contact with the affected people or going through the records from the legal courts. A lot of techniques of machine learning, NLP, and other statistical models have been tested to analyze gender-bias and other sorts of discrimination in depth in legal settings.

As future work, analyzing legal texts that come under Article 498A would be a reliable method to observe discrimination against women in the Indian Judicial Systems. Using the techniques of dimensionality reduction and natural language processing I believe one can detect the gender-bias in the judgements of legal courts of India.

References

1. Ash, E., Asher, S., Bhowmick, A., Chen, D. L., Devi, T., Goessmann, C., ... & Siddiqi, B. (2021). Measuring gender and religious bias in the Indian judiciary. Center for Law & Economics Working Paper Series, 2021(03).
2. Björkman, C. (2005). Feminist research and computer science: starting a dialogue. Journal of Information, Communication and Ethics in Society, 3(4), 179–188.
3. Draude, C., & Maaß, S. (2018, May). Making it work: integrating gender research in computing through a process model. In Proceedings of the 4th conference on gender & IT (pp. 43-50).
4. Florida Supreme Court Task Force. (1990). Report of the Florida Supreme Court Gender Bias Study Commission. Tallahassee: Supreme Court of Florida.
5. Frankenreiter, J., & Livermore, M. A. (2020). Computational methods in legal analysis. Annual Review of Law and Social Science, 16, 39-57.
6. Hensler, D. R. (1992). Studying gender bias in the Courts: Stories and statistics. Stan. L. Rev., 45, 2187.
7. Hug, P., Huff, M.L., & Coughenour, J.C. (1998) Ninth Circuit: The Gender Bias Task Force, 32 U. Rich. L. Rev. 735.
8. Kashyap, G. (2021, December 16). 11.7% of High Court judges are women. Supreme Court Observer. Retrieved December 10, 2022, from https://www.scobserver.in/journal/11-7-of-high-court-judges-are-women/
9. Patton, D. & Smith, J. L. (2017). Lawyer, interrupted: Gender bias in oral arguments at the US Supreme Court. J. of Law and Court.
10. Pinto, A. G., Cardoso, H. L., Duarte, I. M., Warrot, C. V., & Sousa-Silva, R. (2020, November). Biased language detection in court decisions. In International Conference on Intelligent Data Engineering and Automated Learning (pp. 402-410). Springer, Cham.
11. Resnik, J. (1996). Gender in Courts. Signs: The Journal of Women in Culture and Society, forthcoming.
12. Shayo, M. & Zussman, A. (2011). Judicial ingroup bias in the shadow of terrorism. The Quarterly Journal of Economics, 126(3).
13. Stepnick, A., & Orcutt, J. D. (1996). Conflicting testimony: Judges' and attorneys' perceptions of gender bias in legal settings. Sex Roles, 34(7), 567-579.