Exploring Arbitrariness in Sentencing for Murder in Taiwan, 2013-2024

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Abstract

Preventing arbitrary punishment, especially the death penalty, is a fundamental human rights goal and a key objective for judiciaries worldwide. The idea of a non-arbitrary decision, inspired by the concept of Rule of Law, is meant to be informed by reasonable, relevant factors (no implicit bias), and be consistent and unaffected by the noise to a certain degree (robustly predictable). This paper aims to rigorously examine whether court decisions are arbitrary for intentional murder, the most common crime eligible for the death penalty in Taiwan. We first follow common empirical studies that focus on the former, legally irrelevant factors — demographic disparities — with regressions. Then, to evaluate potential arbitrariness holistically by applying the principle of "treat like cases alike", we use UMAP, a dimension reduction algorithm, to characterize case similarity given plenty of relevant features, with outcomes marked. The two outcomes received could be considered significantly different if the symbols imposed on UMAP to represent different sentences are in the immediate proximity. Our results not only provide prima facie reason to suspect potential arbitrariness in the criminal judgments, but also offer a new direction for both the empirical discourse on sentencing practices and the contentious issue of the death penalty.

Keywords: arbitrary(-ness), death penalty, sentencing, treat like cases alike, dimension reduction (DR), (intentional) murder