

Phelan Final Report

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Introduction

Over the past academic year our small team asked whether the United States federal courts have changed the way they think about nature. The older approach treated the natural world mainly as property, and most litigation about it as a question of procedure and statutory compliance. A newer one gives weight to ecological, cultural, and rights-based concerns, among them climate change, environmental justice, and the claims of indigenous communities. A claim like this cannot be settled by reading a handful of prominent cases. It becomes answerable only when a large body of decisions is treated as data and read systematically, which is what we set out to do.

Research and Methodology

Across six decades of federal litigation over public land, we wanted to know whether the courts had really changed their reasoning, which arguments were gaining and which fading, who won and who lost, and where and when cases arose. Answering that meant gathering a large body of decisions reaching back to 1960 and scoring each for how it framed nature, from older property claims to newer ethical and rights-based ones. We worked on two fronts. A model read the whole corpus for the broad pattern, while Emma and I coded a representative sample by hand and passed it to our postgraduate colleagues for the statistical work. We would try a measure, watch it fail on a real case, and rebuild it before applying it at scale. My own part ranged widely, from verifying the model's output to working out why cases spiked in areas, to tracking down source material on the history of public land.

We pulled the cases from Westlaw, which returned just under five thousand decisions. From these we drew a ten percent sample of 469, weighted by decade. We used a large language model for the first pass, but only as a measuring tool, not a source of judgment. It pulled each case's synopsis, holdings, headnotes, and topics, and scored each from one to ten for how modern its arguments were. One to three meant ordinary procedural and statutory reasoning, as found under the National Environmental Policy Act or the Endangered Species Act. Four to six meant a mixture. Seven to ten meant openly modern, ethical, or rights-based argument. Shown who the parties were, the model would assume a case with an indigenous plaintiff was making a modern argument and invent one that was not there, so we told it to judge the arguments alone. Checking the early output myself, I found the headnotes dependable but the topic labels and scores unreliable on thin cases, which the model filled in regardless. We

fixed this by adding an insufficient-information option and filtering out public-lands cases with no environmental content. The hand coding took about fifteen minutes a case. For each, we noted whether nature was treated instrumentally, where it sat on the traditional-to-modern scale, who won and lost, and which agencies and parties were involved. The statistical work then used logistic and probit regression, LASSO variable selection, and random forests, with time handled carefully, since the cases are not a panel.

Data and Preliminary Findings

The descriptive results give consistent, if still preliminary, support for such a shift. Terms like ‘property,’ ‘states,’ and ‘United States’ are most common in the 1960s and early 1970s and fall away afterward, while ‘environmental law,’ ‘administrative law and procedure,’ and related terms climb from the 1980s onward . This is not simply a side effect of there being more cases. The same trend holds when each topic is measured as a share of all cases in a year, so what changes is the mix of what courts argue about, not the volume.

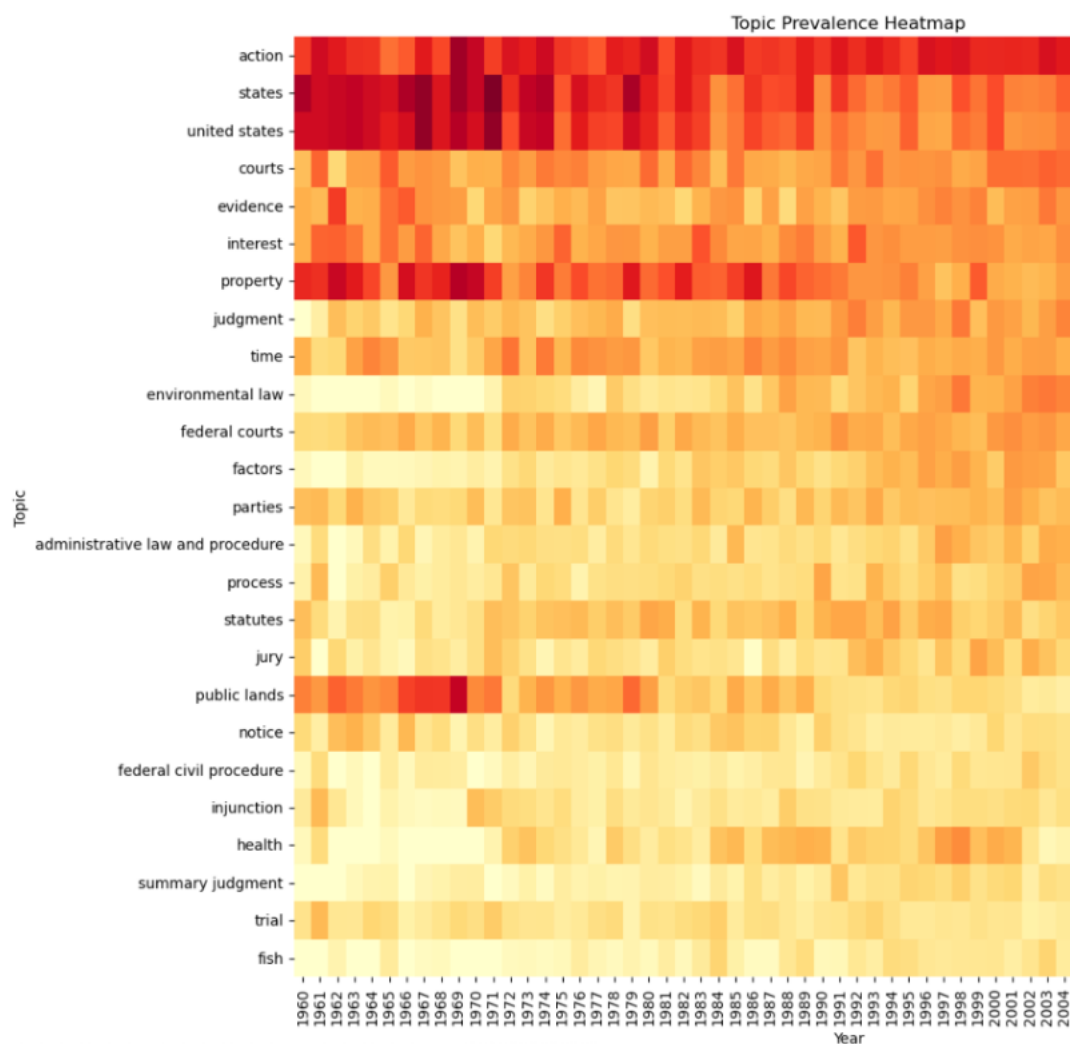


Figure 1. Topic prevalence across the corpus, 1960 to 2004. Property- and sovereignty-related topics dominate the early decades and cool over time, while environmental and administrative-law topics warm.

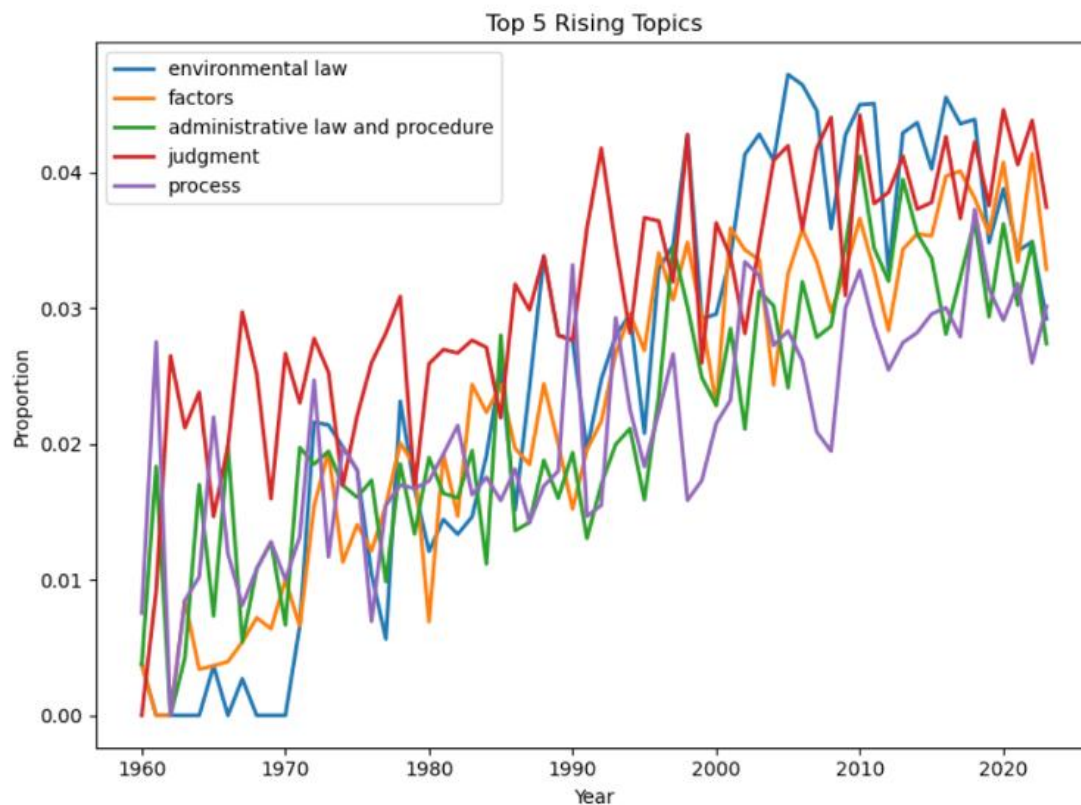


Figure 2. The five fastest-rising topics as a proportion of all cases. The upward trend confirms that the shift is compositional rather than a by-product of rising case volume.

The volume of cases did climb steeply, peaking around 2019 and 2020 (Figure 3). My own reading is that the rise has little to do with the courts and more to do with the environmental deregulation of 2017 and 2018, which took a year or two to surface as appeals. The cases are also unevenly spread. Most sit in the Ninth and Tenth Circuits, and very few reach the Supreme Court (Figure 4), which fits the western geography of public land and the known differences in temperament between circuits.

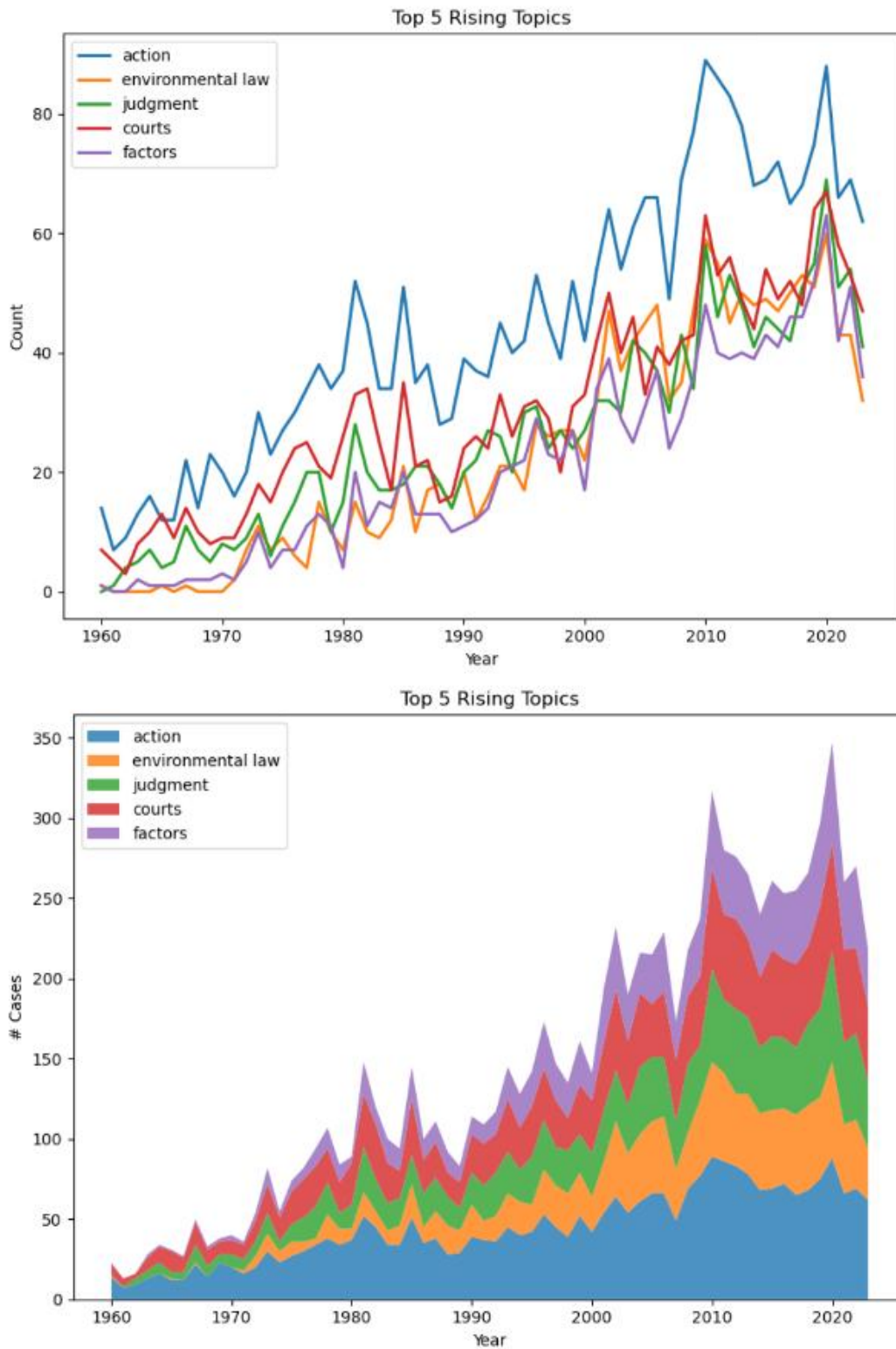


Figure 3. Volume of the five leading topics over time, as raw counts (upper panel) and cumulatively (lower panel), peaking around 2019 to 2020.

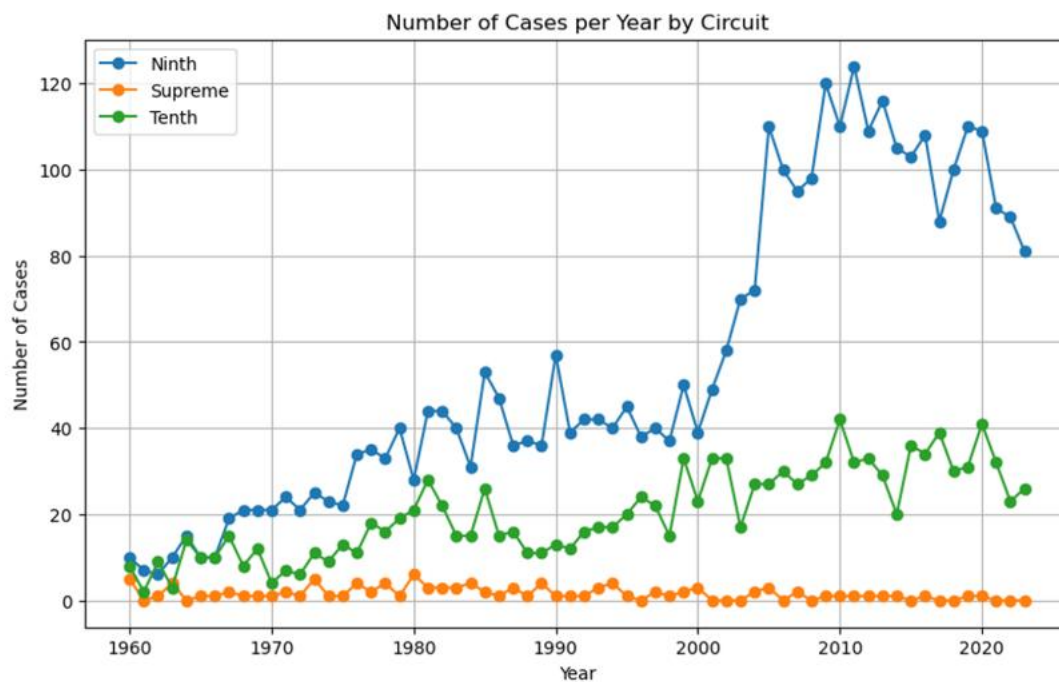


Figure 4. Cases per year by court. The Ninth Circuit predominates and the Tenth follows, while the Supreme Court hears very few public-lands cases.

Significance

The project belongs to empirical legal studies and the ‘text as data’ tradition in political science, which reads large collections of legal language for patterns. Three things shaped our approach. We drew on recent work on who carries the burden of environmental protection in court (Kagan and Katz, 2025), on a 2024 study of judicial outcomes and policy whose coding scheme we adapted, and on John Leshy’s history of America’s public lands. Just as useful were the people we spoke to. Eoin Jackson of the LSE’s Grantham Research Institute, a former US environmental lawyer, helped us group the cases into tort, statutory, and constitutional families, and showed how looser standing rules from the 1970s opened the courts to environmental groups. We talked through the Institute’s Climate Change Laws of the World data with Emily Bradeen, and the idea of a ‘modern’ argument was one our supervisor put to Dame Victoria Sharp. These questions are not only academic because how courts have understood nature speaks to how durable the 1970s environmental statutes are, and to the older question of who gets to claim, in law, to act on nature’s behalf.