

# Chapter 13

## Observational Databases

Benjamin G. Engst  
University of Konstanz  
Department of Politics  
and Public Administration  
benjamin.engst@uni-konstanz.de

Thomas Gschwend  
University of Mannheim  
School of Social Sciences  
gschwend@uni-mannheim.de

**Abstract.** Why do we need databases in research on comparative judicial behavior? In this chapter we argue that comprehensive assessments of common models on judicial behavior require data on decisions, judges and environmental characteristics. An expert survey shows that data on these characteristics were often published in rectangular datasets focusing on courts in the United States or specific International Courts mostly allowing assessments of the attitudinal model of judicial behavior. Complex databases on courts in other regions that allow to assessing judicial behavior are published more recently. Databases allow for the modelling of different entities – such as information on decisions and information on judges – and establishing the relationships between them; e.g. linking specific judges to specific decision outcomes. The advantage of designing databases is to summarize clearly specified concepts in parsimonious and flexible ways without producing redundancies when collecting data. Comparative judicial databases including information on the action of multiple courts are scarce. However, scholars of judicial politics can learn from existing comparative projects such as the Comparative Study of Electoral Systems (CSES) to design a Comparative Study of Judicial Behavior (CSJB).

## 1 Introduction

Why do we need databases in research on comparative judicial behavior? In order to assess competing behavioral models data of similar nature but partially different content is necessary. Data are “systematically collected elements of information about the world” (King, Keohane and Verba, 1994, 23) commonly structured in rectangular datasets. Consider the legal model of judicial behavior which is built on the premise that judges are constrained by constitutional norms and their legal training when making decisions (Parcelle Jr., Curry and Marshall, 2011, 29-32). To assess this model, we need to understand the ways in which opinions are written which requires data on decision characteristics. On the contrary, the attitudinal model assumes that the individual preferences of the judges matter when they make decisions (Parcelle Jr., Curry and Marshall, 2011, 34-39). Data on decision characteristics is essential to the attitudinal model as well but a comprehensive assessment requires identifying the relationship between decision characteristics and characteristics of individual judges, e.g. their potential partisan leaning or voting pattern. Databases are helpful tools to establish such relationships and enable scholars and practitioners to link datasets of different content and complexity. Specifically, databases model real-world objects – both entities (e.g., judges, the actor who nominated them, and judicial decisions) and relationships (e.g., ‘Chief Justice Roberts’ who was ‘nominated by President George W. Bush’ voted ‘with the majority in *Dobbs v. Jackson Women’s Health*’) – and capture structure between them (Foster et al., 2021, 71).

This chapter is no technical guide for computing databases, but the research cited here provides a point of departure for scholars eager to develop comprehensive and comparative databases in judicial politics. This is of great importance because courts do not operate in a vacuum. To understand the wider implications of judicial behavior we require data structures that situate the judiciary within different societies and

politics.

In this chapter we argue that databases in judicial politics are necessary to connect different characteristics to efficiently assess competing models of judicial behavior. To make this argument we outline the characteristics that we require data to cover in order to assess these behavioral models. The results from an expert survey show that existing data structures already include these characteristics to varying degrees. However, the data structures are developed for single cases and are seldom comparative in nature. Thus, they do not allow for an analysis of judicial behavior across countries or regions. Therefore, we continue outlining important features of database using one of the projects as an example. This allows to finally present ideas on how to develop an international comparative data-infrastructure project, the “Comparative Study of Judicial Behavior” (CSJB), accounting for the identified features.

## **2 Datasets and databases to study judicial behavior**

In this section we argue that the different models of judicial behavior require data summarizing different characteristics of the judicial process. An expert survey we conducted shows that there are different data structures that already link multiple of those characteristics. However, databases that allow to study judicial behavior comparatively across countries or regions are scarce.

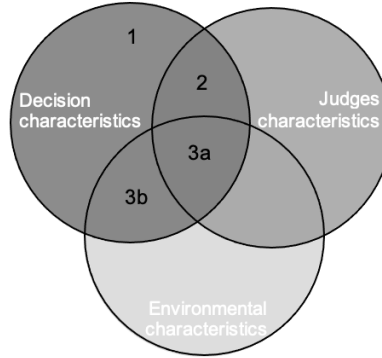
The most common models used to explain judicial behavior are the legal, attitudinal, and strategic model (see XXX in this volume; Epstein, Šadl and Weinshall 2022). Each model is built on different premises which is why assessments require different information. The legal model assumes that judges make decisions based on their legal training using jurisprudential methods (Parcelle Jr., Curry and Marshall, 2011, 29-32). Accordingly, judges are constrained by the legal system (George and Epstein, 1992). Therefore, if judges wish to incorporate their preferences into their decisions then they can only do so through the means of decision characteristics; e.g.

citing certain legal sources to derive at a particular verdict. Decision characteristics are a necessary precondition to contextualize judicial behavior. Without decisions there is no judicial behavior. Thus, we argue that a comprehensive assessment of the models of judicial behavior always requires decision characteristics.

The attitudinal model assumes that judges are unconstrained actors who follow their sincere preferences when making decisions (Schubert 1965; Rohde and Spaeth 1976; Segal and Cover 1989; Parcella Jr., Curry and Marshall 2011, 34-39). Thus, judges' characteristics are essential in order to identify judicial preferences. These characteristics include for example patterns identified in individual judicial votes or background information on the judges. Finally, the strategic model extends upon the attitudinal model adding the assumption that judges are constrained by the decision-making environment (Murphy 1964; Epstein and Knight 1998; Parcella Jr., Curry and Marshall 2011, 39-49). Thus, judges account for fellow judges, political, or societal actors as well as the institutional setting when making decisions. These environmental characteristics structure judicial behavior and constrain judges in voicing their preferences; for example, when judges confront declining public support for their decisions and alter the clarity of writing in their decisions (Staton and Vanberg, 2008).

Figure 1 visualizes the considerations made. Decision characteristics are necessary to assess the legal model of judicial behavior (zone 1). These characteristics are also necessary to assess all other models. When individual judicial characteristics are added then assessments of the attitudinal model become possible (zone 2). Finally, analyzing the strategic model requires environmental characteristics either coupled with judicial characteristics (zone 3a) or not (zone 3b). The table below figure 1 highlights examples of data structures that included the different characteristics. These examples are from a non-representative expert survey conducted in April 2022 among contributors to this handbook and among scholars that are mentioned in

Figure 1: Overlapping data structures to assess models of judicial behavior



| Models          | Type            | Example  | Access        | Regions           | Authors                  |
|-----------------|-----------------|--|---------------|-------------------|--------------------------|
| 1 - Legal       | Database        | PITAD.beta on investment arbitration cases       | OA            | various countries | Behn et al. 2019         |
|                 | Datasets        | National High Courts Database                    | OA*           | various countries | Haynie et al. 2007       |
|                 | Database        | European Court of Justice Data                   | OA            | Europe            | Carrubba / Gabel 2011    |
|                 | Datasets        | Comparative Constitutional Reasoning Project     | OA            | various countries | Jakab et al. 2015        |
|                 | Database        | Inter-American Court of Human Rights Project     | OA            | South America     | Loyola Law School        |
|                 | Database        | Websites by courts publishing decisions          | OA            | various countries | courts                   |
|                 | Database        | Proprietary databases such as West Law           | CA            | various countries | often special publishers |
| 2 - Attitudinal | Datasets /-base | Supreme Court Database                           | OA            | United States     | Spaeth et al. 2017       |
|                 | Datasets /-base | Israeli Supreme Court Database                   | OA            | Israel            | Weinshall et al. 2018    |
|                 | Database        | CJEU Database (IUROPA Project)                   | LA            | Europe            | Naurin et al.            |
|                 | Database        | Doranoh Database                                 | LA            | Norway            | Grendstad et al. 2015    |
|                 | Datasets        | UK Supreme Court Data                            | OA            | Great Britain     | Hanretty 2020            |
|                 | Datasets        | U.S. Courts of Appeals Databases                 | OA            | United States     | Songer et al. 2008       |
|                 | Datasets        | DDL Judicial Data Portal                         | OA            | India             | Ash et al. 2021          |
|                 | Datasets        | Swedish Supreme Court Database                   | NP            | Sweden            | Lindholm et al.          |
|                 | Datasets        | European Court of Human Rights Database (ECHRdb) | OA            | International     | Cichowski / Chrun 2017   |
|                 | Datasets        | EEOC Litigation Database                         | OA            | United States     | Kim et al. 2013          |
| Database        | Fee Law Project | OA   | United States | Lissner et al.    |                          |
| 3a - Strategic  | Datasets        | Inter-American Court of Human Rights Database    | OA            | South America     | Stiansen et al. 2020     |
|                 | Datasets /-base | Constitutional Court Database                    | OA            | Germany           | Engst et al. 2020        |
|                 | Datasets        | European Court of Human Rights Database          | OA            | International     | Stiansen / Voeten 2019   |
|                 | Dataset         | Judicial Review of Congress Database             | OA            | United States     | Whittington 2019         |
|                 | Datasets        | Comparative Law Project                          | NP            | various countries | Gabel                    |
| 3b - Strategic  | Dataset         | Compliance with Human Rights Tribunals Dataset   | OA            | International     | Hillebrecht 2016         |

Note: Access OA is open access; LA is limited access either requiring registration or contacting the author(s); NP is data not published; CA is commercial access which requires a purchase. \* Indicates that data is open access but downloaded files cannot be processed. Source: Non-representative expert survey among judicial politics scholars.

the acknowledgments in Garoupa, Gill and Tiede (2022, p. vii).<sup>1</sup> The experts mentioned different datasets and -bases and we reviewed the characteristics included in the data. The list makes no claim to be complete. We exclude datasets composed of tailor-made data collected for individual research projects that address very specific

<sup>1</sup>We like to thank all participants of our expert survey for their valuable input.

research questions. This includes for example Vanberg’s (2005) data on Germany or Staton’s (2010) data on Mexico. In line with our argument, we also excluded data that does not include decision characteristics, such as Hamann’s (2019) data on German justices. What do we learn from the table in figure 1 on data available to study comparative judicial behavior?

Overall most data structures mentioned by the experts include judges’ characteristics and are suitable for assessments of the attitudinal model. Among these is the Supreme Court Database (Spaeth et al., 2017), which is one of the most popular data structures in judicial politics. The Supreme Court Database is a prime example of data often not being published in a database format. Databases are flexible and allow for the modelling of entities and relationships to capture the structure between them (Foster et al., 2021, 71). In the originally published Supreme Court Database, entities and relationships are already connected in a case-centered or justice-centered dataset. Only recently an online tool was added that allows the browsing of the data in a flexible database format. Publishing datasets readily available for analysis instead of underlying databases seems not as uncommon as the column “Type” of the table in figure 1 may indicate.

Comparing the publication dates mentioned in the column “Author(s)” across the column “Models” and the “Regions” uncovers further patterns in the data available to study judicial behavior. First, datasets and -bases that allow for assessments of the legal and attitudinal model are longer established than more complex data-structures suitable for analyses of the strategic model. Second, older data structure mostly cover courts in the United States from Courts of Appeal (Songer, 2008), certain decisions by Federal Courts (Kim, Martin and Schlanger, 2013) to the Supreme Court (Spaeth et al., 2017; Whittington, 2019) as well as popular highest international courts such as the European Court of Justice (Carrubba and Gabel, 2011) or the European Court of Human Rights (Cichowski and Chrun, 2017). Data on courts from individual

countries such as the UK Supreme Court (Hanretty, 2020), the German Constitutional Court (Engst et al., 2020) or Indian Courts (Ash et al., 2021) has been published more recently. Moreover, while there are only a few data structures that collect information on various different countries such as the PITAD Database on investment and arbitration cases (Behn et al., 2019), the National High Courts Database (Haynie et al., 2017), or the Comparative Constitutional Reasoning Project (Jakab, Dyevre and Itzcovich, 2017) most data structures focus on a single international court or national courts, e.g. the Inter-American Court of Human Rights (Stiansen, Naurin and Bøyum, 2020), the Norwegian (Grendstad, Shaffer and Waltenburg, 2015) or Israeli Supreme Court (Weinshall and Epstein, 2020). Finally, participants in our expert survey mostly mentioned European and U.S. American courts.

The column “Access” in figure 1 indicates that the overwhelming majority of data is open access albeit some projects do not get updated anymore. In this regard one should note that proprietary databases such as Thomson Reuters *Westlaw* or Germany’s equivalent *Juris* provide numerous original legal documents that allow to collect information for complex datasets but only as commercial licenses. The proprietary databases do not provide ready-to-use data structures for behavioral analyses. Instead, these databases are a collection of documents that allow deriving legal characteristics in raw form. The same holds true for official websites of individual courts that make decisions and legal documents searchable.

In sum, figure 1 shows that data structures that include decision and justice characteristics are well established in judicial politics. Moreover, scholars published more complex data structures adding environmental characteristics in recent years. Thus, data to assess the different models of judicial behavior is available open access. Nevertheless, while the available data includes international courts the majority of data does not allow for comparative research across individual countries or regions. This is why in the next section we outlined how databases for comparative judicial behavior

can be designed.

### 3 Developing comparative databases

In this section we identify features essential to the design of databases. To do so we present the Constitutional Court Database (CCDB, Engst et al. 2020) as an example of a complex database computed for a single country to assess judicial behavior. Afterwards we outline how to transfer the features important to the design of the CCDB to a larger international and comparative project.

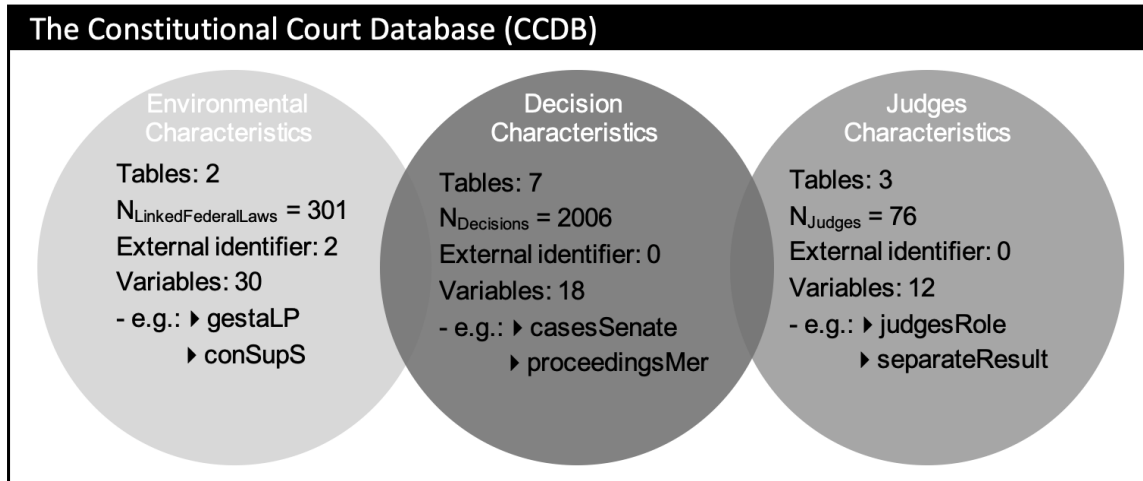
#### 3.1 Features of a database for a single court

The CCDB is a database recently published that includes decisions, judges, and environmental characteristics. The database summarizes information on 2006 decisions that include 3284 proceedings initiated by 4088 plaintiffs who referred 6790 issues to the German Federal Constitutional Court between 1972 and 2010 (*decision characteristics*). The database also includes information on separate opinions and background information on 76 judges who served on the court (*judges characteristics*). Finally, the database includes a layer that allows linking the 301 federal laws referred to the constitutional court to a dataset on Germany's legislative proceedings (*environmental characteristics*). Figure 2 presents summary statistics on the database accounting for the characteristics we require to assess judicial behavior. What can we learn from the design of the CCDB?

First, the database consists of twelve different tables similar to rectangular datasets. The tables can be linked through identifiers internal to the databases and each table has at least one of these identifiers; e.g. the 2006 decisions can be linked to the 76 judges to compute a dataset that allows identifying the (normally) eight judges that make each of the 2006 decisions. Instead, of coding the judges' information 2006 times when creating the initial dataset, it is only necessary to code the judges' information



Figure 2: The Constitutional Court Database as a tool to study judicial behavior



Note: Variable counts only include substantive variables and no technical identifiers. See Engst et al. 2020 for further information on the Constitutional Court Database.

76 times. 76 entries can be evaluated by the coders much easier than 2006 entries. When an error is identified for information on a single judge then the correction applies equally to all decisions this judge is linked to. Therefore, a database *reduces redundancies* in coding information which makes the data collection less prone to error. If an error on one of the tables is identified it can be corrected easier than when reviewing a long dataset.

Second, a legitimate claim of importance to all data-driven projects is to resist irrational “data exuberance” (Weinshall and Epstein, 2020, 429-430). Reducing redundancies in coding is one way to achieve this. Moreover, linking information across tables in a database allows to stay focused on essential information of relevance to a data table. It is much easier to answer the question of the characteristics of judges one is interested in when looking at judges independent from decisions or votes. Thus, while the CCDB might appear complex at first sight, figure 2 shows that there are only about 60 substantive variables that allow to cover many characteristics necessary to assess judicial behavior. In our opinion that make the database *parsimonious*. This also makes its future maintenance easier.

Third, the different tables of the CCDB can be linked internally in multiple ways. For instance, the date a decision was published – which is a feature of a table summarizing information on a case – can be linked to a date included in a table summarizing public opinion data on Germany’s political parties. This way one can identify the support for a political party, say the Social Democrats (variable `conSupS`), on the date a decision was made. Equipped with this data scholars can begin to assess how political support influences judicial decision-making. Similar questions have been studied with tailor-made datasets in the past (e.g. Vanberg, 2005). Moreover, figure 2 shows that the CCDB also includes external identifiers as part of the environmental characteristics. These identifiers allow links to preexisting data external to the CCDB, for instance to Germany’s legislative proceedings. In sum, internal identifiers allow linking data within the CCDB in multiple ways while the external identifiers provide even more opportunities to add or create a number of datasets for a variety of specific research questions. This *flexibility* is a major advantage of databases over single datasets.

Finally, in order for a database to be parsimonious and flexible one has to be clear about the information coded. This is not only a question of the number of variables included in a database but also a question of how to transfer latent judicial concepts into relatable concepts understandable to a wider audience. Take for example the complex way in which judges write an opinion and argue a case on the merits. Most likely a majority of people is not interested in the legal details but a simplifying measure on the merits. In the CCDB the decision on the merits has been coded per proceeding in a trichotomous variable that indicates whether a referred proceeding is not justified, partially justified or justified on the merits (variable `proceedingsMer`). Similarly, the German Constitutional Court seldom publishes individual judicial votes which are frequently used in analyses of the attitudinal model in the US context (Epstein and Knight, 1998; Martin and Quinn, 2002). However, in rare instances the

German judges publish separate opinions and while specific details on those opinions are not included in the CCDB, the results are coded in a trichotomous variable. This variable summarizes whether a separate opinion is written as a concurring, partially dissenting or fully dissenting opinion (variable `separateResult`). The way the dissenting opinions are coded should be compelling to a wide audience. Therefore, not all information can be coded in a parsimonious database and it is essential to simplify information while being *conceptually clear*.

In sum, databases are powerful tools to account for variables on each characteristic necessary to assess models of judicial behavior. Databases help to reduce redundancies, permit parsimonious data collection and provide for high flexibility in dataset production. To enable a large audience to work with databases scholars need to make sure that the concepts underlying the data collection efforts are clearly specified. The CCDB is an example of a database designed for the German Constitutional Court as a single case, though. Indeed, figure 1 shows that the overwhelming majority of databases are designed for single courts. This is why in the next section we outline how features of the CCDB can be transferred to a comparative project.

### **3.2 Conceptualizing a comparative judicial behavior database**

What does our experience with developing the CCDB teaches us when conceptualizing a high-quality data infrastructure for the analysis of courts and judicial behavior (within and) across countries? We identified four features that we consider important when designing a high-quality data infrastructures and layout what they imply for conceptualizing a comparative judicial behavior database as an international project.

Our first argument concerns an aspect we previously identified as *reducing redundancies*. As a field we would immensely profit if we take advantage of opportunities to learn systematically from each other's expertise on particular courts and judicial systems in order to conceptualize and implement such a data infrastructure project.

Such a project could be a driver of new and different comparative research particularly *across* courts and legal systems. It is not unreasonable to predict that such a data infrastructure might be even a game-changer for the type of research questions we try to answer and for how we will conduct comparative research in the next decades. Currently, more often than not comparative research in judicial politics is often merely equated with studying courts and their decision-making behavior outside of the United States. Recent summaries of the comparative literature by regional specialists clearly demonstrate again that the dominant research design of the studies they report on is characterized by country-level or court-level case studies (see the respective chapters in Garoupa, Gill and Tiede, 2022). More systematically, Driscoll (2022) conducted a content analysis of articles published in the best peer-reviewed journals in political science between 2000 and 2018 (*American Political Science Review*, *American Journal of Political Science*, *The Journal of Politics*, *British Journal of Political Science*, *Comparative Political Studies* and the *Journal of Law and Courts*) and finds supporting evidence that only a minority of published studies implement an explicit cross-national design. One obvious benefit for the field, of course, would be the provision of comparable data across countries (or courts). However, we are convinced that a second benefit for the field lies already in the development of such an infrastructure project because it requires scholars to coordinate their efforts to conceptualize the design of such a database and, thereby, reduces redundancies (beyond mere technical aspects when working with databases rather than datasets as we described in the previous section) by incentivizing scholars contributing to a common good rather than duplicating each other's data-collection efforts.

Second, when developing a comparative database what does a *parsimonious data collection strategy* imply? In order to allow scholars to eventually use the most common explanatory models of judicial behavior for their analytical strategy any data infrastructure should provide information not only on decision and judge character-

istics but also on environmental characteristics. As with children just before their birthday, though, the wish lists quickly become quite long. These data are not only compiled at some point in time but also needs to get updated over time if the project can be maintained. Thus, scholars designing such an infrastructure project need to resist data exuberance. Less is actually more! After taking stock of what is already available – for instance, the database on the Israeli Supreme Court (Weinshall and Epstein, 2020) is in many respects modeled after the US Supreme Court Database – scholars need to define “core characteristics” that should get collected for all the courts and countries that will be included in the database. Given that such characteristics describe decisions, judges as well as the environment, they obviously live on different observation levels. While having a master plan is definitely a good thing, scholars are not simply a bunch of Trotskyist internationals. They allow themselves to change plans – for instance when updating the data across countries and courts. Scholar might therefore distinguish core characteristics cross-sectionally as well as longitudinally to allow those new characteristics to make it in the set of “core characteristics” when starting to update the initial data collection plan. Ideally, one can develop pipelines to automatically update some of those characteristics. The less human judgment is involved in coding decisions, the more reliable the data collection strategy is. The more data can be collected automatically or the fewer characteristics need to get updated, the more room there is to implement ideas for new characteristics that should get coded. Moreover, besides “core characteristics” there can be characteristics that apply only to a subset of courts or countries. For the infrastructure project characteristics that require data collection efforts should only be relevant if they apply to a large enough subset that allows for a cross-country comparative analysis of those characteristics. To sum up, each data collection phase to maintain the data infrastructure requires scholars to have a list of characteristics that should get collected but that this list might partially change when moving from one to the

next data collection phase.

Third, when designing a comparative database scholars should take advantage of the *flexibility* of databases as opposed to stand-alone datasets. Scholars should not only have a plan for what to collect comparatively and on which level of observation but should also think about how this information could get systematically combined with existing data infrastructure projects or newly collected data. While databases provide internal links to efficiently combine data that is saved in separate datasets, when designing a comparative database scholars should also think about providing external links through which scholars could easily add specialized information to enrich the data. For instance, by adding a time variable for court decisions scholars could collect their own environmental information to better characterize a particular feature of the political environment in which the respective decisions are published, such as election results or the popularity of the respective government, for instance. Another possibility would be that such time and decision identifiers allow tracking down (potentially using external data) the actual decision text to conduct a citation analysis of who cites whom among the apex courts and which potentially common other legal sources have been cited. Including court and country identifiers further provides an external link to add, say existing (or to be newly collected) country-level datasets about institutional characteristics to the analysis, e.g., information about the system of governance or the legal system. Thinking ahead and trying to anticipate how different data sources can be added by interested scholars when using the information in the database for their analysis will not only make the data infrastructure even more helpful but will also increase the number of its users.

Fourth, and probably the most challenging feature that is required when designing a comparative database is *conceptual clarity*. This calls for an agreement among scholars about the relevant theoretical concepts that should get measured and how to measure them on which level of observation. One needs to build on the expertise

of a diverse group of experts not only to overcome challenges with translating relevant terms and concepts but also to ensure that concept specifications travel across countries and legal systems. It is well known that even the meaning of the most fundamental concepts such as case outcome, a judge’s ideology, or case characteristics varies across countries (e.g., Gill and Zorn, 2022, p.312–318) and, hence, is not simply comparable. This is a rather typical challenge in the field of comparative politics. One way the literature (e.g., van Deth, 1998) suggests dealing with such challenges is by specifying “functional equivalent” rather than identical concepts, i.e., concepts that are related other concepts in an analogous way across contexts. This often requires to “increas[ing] the level of abstraction of the concepts” (van Deth, 1998, p.6) until context-specific differences seem not to matter anymore. This is not a free lunch, as increasing abstraction could easily lead to concept stretching such that the functional equivalent concepts lose their analytical power. Take for instance how one could conceptualize case outcomes. One way, for instance, the Supreme Court Database (SCDB) does this by focussing on the ideological direction of the decision, i.e. whether the outcome is liberal rather than conservative. Case outcomes of court decisions in other countries might vary along very different substantive dimensions – for instance, more or less EU integration for case outcomes of the CJEU – in order to relate this to any predictions based on the attitudinal or the strategic model. By increasing abstraction of the concept one could avoid any substantive characterization of case outcomes that might hardly travel across contexts and use hard facts instead. A case outcome could be simply specified in terms of whether the plaintiff wins the case, partially wins a case or whether the defendant wins. When operationalizing case outcomes with regard to those facts we might eventually end-up with an even more abstract operationalization, e.g., plaintiff wins the case or not and avoid defining what “partially wins” implies, in order to develop a valid as well as reliable measurement strategy that travels well across different contexts. As always,

though, the validity of cross-national measurement strategies have to be established rather than assumed while the respective coding protocols should try to minimize human judgment in order to increase reliability. Reliability is an important criterion to define a reproducible strategy that works well for updating the observations in one context across a new time frame but also to ensure that observations in new contexts can get added to the existing infrastructure.

Finally, conceptual clarity is also increased by mapping out a precise case selection strategy that defines criteria under which an observation should be included as well as the appropriate level of observation for each characteristic that should get coded. If we take the example of case outcomes again, we could look at the case-level outcome. Alternatively, a more refined strategy would look at how the court disposes of each legal issue per case. The latter suggestion provides obviously more nuances that would be missed otherwise. Refined coding strategies are not necessarily better, though. They require more effort and potentially more human judgment within the coding process. Moreover, if neither the underlying theory nor other variables vary across different legal issues within a case it is questionable why one should invest more coding effort in getting a more detailed picture of one variable. To sum up, providing conceptual clarity is of utmost importance and will be very challenging. Designing a comparative database requires laying out case selection, conceptualizations and coding protocols that travel across contexts such that the procedures are reproducible for others to add new countries and courts or to update the existing ones for a different time frame.

#### **4 An institutional proposal for action: The “Comparative Study of Judicial Behavior”**

How should we move forward? While maybe controversial decades ago (e.g., Tate, 1989, 1992) by now it seems to be common sense for everyone working on courts



comparatively that the field needs to find ways how to compile, regularly update and maintain a high-quality data infrastructure for the analysis of courts and judicial behavior both within and across countries. In order to make real progress and to spend our time and resources compiling data more efficiently, we as a field have to change in order to overcome the dominant data collection strategy, the so-called “one-off” approach (e.g., Epstein and Weinshall, 2021; Weinshall and Epstein, 2020). Currently, scholars often collect merely data and measures that fit their particular research questions, theories, and their chosen institutional and political context to test their hypotheses. While individually rational – scholars, of course, need to spend their time and research money efficiently – as a field, we would be much better off if only we could find a way to avoid duplicative scholarly efforts.

How can we put such a high-quality data infrastructure on the right track? We are proposing to look at how scholars of comparative political behavior have done this previously. We can learn from them because scholars in this field face very similar challenges than we do when studying judicial behavior comparatively. Running comparable election studies by surveying voters in different electoral systems is similarly challenging. Implementing the same survey instrument requires case-specific knowledge. Scholars need to understand the political context in which the survey is fielded. They also need to possess knowledge about the nature of party competition in a country and how its institutional context such as the electoral system pre-structures various party strategies and the behavior of voters. Finally, they need to understand the language well enough by which the voters are addressed to check whether the different implementations of the same survey items in different languages are comparable. This cannot be sufficiently done if scholars do not cooperate and pool their resources and expertise.

We are proposing to establish a “Comparative Study of Judicial Behavior” (CSJB) as a collaborative program of research teams from around the world in order to

institutionalize and maintain a high-quality data infrastructure for comparative judicial research akin to the “Comparative Study of Electoral Systems” (see <https://cses.org/> for more information) that was institutionalized by scholars of comparative political behavior two decades ago.

The research design, the respective required comparative data as well as the study design, e.g., inclusion criteria, could be developed by a planning committee, an international committee of scholars of judicial behavior in political science, law and neighboring fields such as sociology and economics. The design is then implemented in each participating country by a scholar or a team of scholars – the country collaborators – possessing enough case-specific knowledge to organize the data collection. This requires the planning committee to lay out conceptualizations and coding protocols that travel across legal systems and are (reliably, i.e. minimizing human judgment) reproducible (Weinshall and Epstein, 2020).

The respective planning committee needs to decide which case-level and judge-level data should get collected systematically. Moreover, in addition to case-level and judge-level data the committee should define macro-level characteristics such as features about the court and its internal decisions-processes, as well as characteristics of the legal system together with variables (or at least external identifiers for them) that define the political environment (e.g., public opinion data, election results) in which the decisions are made. Such characteristics are on the macro level in the sense that they apply, for instance, to each case-level variable in the same way.

Actively resisting data exuberance is of utmost importance for the committee to motivate scholars participating in this endeavor and to help update already compiled data. Thus, not every characteristic of judges, courts, decisions, and the political environment can be included. But whatever characteristic should get coded (at whatever level of observation) requires a detailed coding protocol to make sure the data is valid and can be reliably collected by the country collaborators. Similar to the CSES, the

planning committee of the first “Comparative Study of Judicial Behavior” module could establish a baseline set of variables and measures first that got expanded and updated in successor modules. The sources from which this data is generated are manifold. In addition to the decisions itself including accompanying text material such as briefs, press releases or news reports one could also include qualitative interview data, survey marginals but also potentially variables derived from verbatim notes, audio or video files from hearings of the cases or results from crowd-sourced coding or lab experiments as well. The sky is the limit. While potentially not all variables can be updated, nevertheless, a master plan is required that defines which key variables should get updated from one module to the next (or even automatically if such pipelines can be established). Such a plan ensures that the infrastructure is sustainable while not growing too big such that new country teams can still join this collaborative program at a later stage without hesitation. The CSES is meanwhile coordinating its 6th data module.

Why should scholars participate in this comparative infrastructure project? One incentive to participate in the “Comparative Study of Judicial Behavior” research program could be to get access to a (centralized) tech-support infrastructure that develops and adapts data-collection pipelines to automatically and, thus, reliably code the respective characteristics within a given context. Hand-coding should be avoided as much as possible. This would enable researchers with less knowledge and expertise in automatic data-collection strategies (e.g., web-scraping, regular expressions ect.) and programming expertise to also collect more than the required data to further their personal research agenda as well. In addition to defining particular characteristics, the tech-support infrastructure could provide tools to automatically use the text of a decision to categorize it depending on the agenda defined by the module’s planning committee. The resulting data should be open and accessible. Therefore, it should get deposited along with coding protocols of the macro data to the project’s headquarter

for data checking and to prepare for its immediate release to the research community.

## 5 Conclusion

Why do we need databases in research on comparative judicial behavior? The assessment of common models on judicial behavior requires knowledge of decisions, judges, and environmental characteristics. Databases allows us to summarize information on all these characteristics in parsimonious and flexible ways without producing redundancies in collected data. An expert survey shows that while common rectangular datasets were originally used to study the attitudinal model of judicial behavior more complex databases addressing the strategic model are published in recent years. However, most existing data structures address single national courts or specific international courts. In order to design an international database for a Comparative Study of Judicial Behavior existing comparative projects, such as the Comparative Study of Electoral Systems can function as role models.

The development of judicial databases is of major importance to modern research on democracy. Databases allow us to embed courts and judicial action within political systems and societies. Thus, they portray courts as what they are: key institutions in the separation of powers. In order to understand developments within political regimes open access data on the judiciary is as essential as data on the executive and the legislative branches. Thus, it is important that we as a community are able to engage in large scale comparative data driven projects. Developments that limit the opportunity to analyze complex data structures (e.g. the French Article 33 LOI n° 2019-222 du 23 mars 2019) eventually hinder scientific progress. After all, databases in judicial politics allow to evaluate the independence of judges, the judicialization of politics as well as the politization of the judiciary and the protection of individual rights as essential features of democracy.

## References

Ash, Elliot, Sam Asher, Aditi Bhowmick, Sandeep Bhupatiraju, Daniel Chen, Tanaya Devi, Christoph Goessmann, Paul Novosad and Bilal Siddiqi. 2021. “In-group bias in the Indian judiciary: Evidence from 5 million criminal cases.”.

**URL:** <https://www.devdata.org/judicial-data>

Behn, Daniel, Malcolm Langford, Ole Kristian Fauchald, Runar Lie, Maxim Usynin, Taylor St John, Laura Letourneau-Tremblay, Tarald Berge and Tori Loven Kirkebø. 2019. *PITAD Investment Law and Arbitration Database: Version (2019-02-12T09:28:49.184Z)*. University of Oslo: Pluricourts Centre of Excellence.

Carrubba, Clifford J. and Matthew J. Gabel. 2011. *European Court of Justice Data*.

Cichowski, Rachel and Elizabeth Chrun. 2017. *European Court of Human Rights Database (ECHRdb), Version 1.0 Release 2017*.

Driscoll, Amanda. 2022. Comparative Studies of Judicial Behavior. In *High Courts in Global Perspective.: Evidence, Methodologies, and Findings*, ed. Nuno Garoupa, Rebecca D. Gill and Lydia B. Tiede. Charlottesville and London: University of Virginia Press pp. 275–306.

Engst, Benjamin G., Thomas Gschwend, Christoph Hönnige and Caroline E. Wittig. 2020. “The Constitutional Court Database: Conceptualizing a Relational Database.”.

**URL:** <https://ccdb.eu/>

Epstein, Lee and Jack Knight. 1998. *The Choices Justices Make*. Washington, D.C: CQ Press.

Epstein, Lee and Keren Weinsahl. 2021. *The Strategic Analysis of Judicial Behavior:*

- A Comparative Perspective*. Elements in Law, Economics and Politics Cambridge University Press.
- Epstein, Lee, Urška Šadl and Keren Weinshall. 2022. “Symposium: The Role of Comparative Law in the Analysis of Judicial Behavior.” *The American Journal of Comparative Law* pp. 1–31.
- Foster, Ian, Rayid Ghani, Ron S. Jarmin, Frauke Kreuter and Julia Lane. 2021. *Big Data And Social Science. Data Science Methods and Tools for Research and Practice*. 2 ed. Boca Raton: CRC Press.
- Garoupa, Nuno, Rebecca D. Gill and Lydia B. Tiede. 2022. *High Courts in Global Perspective: Evidence, Methodologies, and Findings*. Charlottesville and London: University of Virginia Press.
- George, Tracey E. and Lee Epstein. 1992. “On the Nature of Supreme Court Decision Making.” *American Political Science Review* 86(2):323–337.
- Gill, Rebecca D. and Christopher Zorn. 2022. Overcoming the Barriers to Comparative Judicial Behavior Research. In *High Courts in Global Perspective.: Evidence, Methodologies, and Findings*, ed. Nuno Garoupa, Rebecca D. Gill and Lydia B. Tiede. Charlottesville and London: University of Virginia Press pp. 307–330.
- Grendstad, Gunnar, William R. Shaffer and Eric N. Waltenburg. 2015. *Policy making in an independent judiciary : the Norwegian Supreme Court*. Colchester: ECPR Press.
- Hamann, Hanjo. 2019. “The German Federal Courts Dataset 1950–2018: From Paper Archives to Linked Open Data.” *Journal of Empirical Legal Studies* 16(3):671–688.
- Hanretty, Chris. 2020. *A Court of Specialists: Judicial Behavior on the UK Supreme Court*. Oxford: Oxford University Press.

- Haynie, Stacia L., Reginald S. Sheehan, Donald R. Songer and C. Neal Tate. 2017. *High Courts Judicial Database*. Accessed at the University of South Carolina Judicial Research Initiative.
- Jakab, András, Arthur Dyevre and Giulio Itzcovich. 2017. *Comparative Constitutional Reasoning*. Cambridge: Cambridge University Press.
- Kim, Pauline T., Andrew D. Martin and Margo Schlanger. 2013. *EEOC Litigation Database*.
- King, Gary, Robert O. Keohane and Sidney Verba. 1994. *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton: Princeton University Press.
- Martin, Andrew D. and Kevin M. Quinn. 2002. “Dynamic Ideal Point Estimation via Markov Chain Monte Carlo for the U.S. Supreme Court, 1953-1999.” *Political Analysis* 10(2):134–153.
- Murphy, Walter F. 1964. *Elements of Judicial Strategy*. Chicago: Chicago University Press.
- Parcelle Jr., Richard L., Brett W. Curry and Bryan W. Marshall. 2011. *Decision Making by the Modern Supreme Court*. Cambridge: Cambridge University Press.
- Rohde, David W and Harold J Spaeth. 1976. *Supreme Court Decision Making*. San Francisco: Freeman.
- Schubert, Glendon A. 1965. *The Judicial Mind. Attitudes and Ideologies of Supreme Court Justices, 1946-1963*. Evanston: Northwestern University Press.
- Segal, Jeffrey A. and Albert D. Cover. 1989. “Ideological Values and the Votes of U.S. Supreme Court Justices.” *American Political Science Review* 83(2):557–565.
- Songer, Donald R. 2008. *U.S. Courts of Appeals Databases - Phase II*.

- Spaeth, Harold J., Lee Epstein, Andrew D. Martin, Jeffrey A. Segal, Theodore J. Ruger and Sara C. Benesh. 2017. *Supreme Court Database, Version 2017 Release 01*.
- Staton, Jeffrey K. 2010. *Judicial Power and Strategic Communication in Mexico*. Cambridge: Cambridge University Press.
- Staton, Jeffrey K. and Georg Vanberg. 2008. "The value of vagueness: Delegation, defiance, and judicial opinions." *American Journal of Political Science* 52(3):504–519.
- Stiansen, Øyvind, Daniel Naurin and Live Standal Bøyum. 2020. "Law and Politics in the Inter-American Court of Human Rights." *Journal of Law and Courts* 8(2):359–379.
- Tate, C. Neal. 1989. "Scientific Comparative Judicial Politics: An Assessment and a Call to Action." *Law Courts Newsletter* 7(1):1–8.
- Tate, C. Neal. 1992. "The development of comparative judicial politics." *Perspectives on Political Science* 21(3):138–144.
- van Deth, Jan W. 1998. Equivalence in comparative political research. In *Comparative politics. The problem of equivalence*, ed. Jan W. van Deth. London: Routledge chapter 1, pp. 1–19.
- Vanberg, Georg. 2005. *The Politics of Constitutional Review in Germany*. Cambridge: Cambridge University Press.
- Weinshall, Keren and Lee Epstein. 2020. "Developing High-Quality Data Infrastructure for Legal Analytics: Introducing the Israeli Supreme Court Database." *Journal of Empirical Legal Studies* 17(2):416–434.



Whittington, Keith E. 2019. *Repugnant Laws: Judicial Review of Acts of Congress from the Founding to the Present*. Lawrence: University Press of Kansas.