Abstract:

Legal scholarship and practice are predominately based on the case analysis method. The law is articulated based on limited "leading" cases, identified by judges or researchers having a bound of authority. This chapter presents a different approach, known as systematic content analysis of legal text (SCA). Shifting the focus away from leading cases towards the day-to-day application of the law, SCA attempts to bring the rigour of social science to the study of law. It represents a sought for transformation from an authority- to a scientific-based methodology and invites investigations into underreported legal, economic, and political effects of rules and the decision-making process.

The chapter explores the epistemological roots of SCA, points to its power in exposing politics, as well as the limitation placed on it by politics. It draws attention to the role it may play in the future of legal research and practice, especially in Europe.

Key words: systematic content analysis; empirical legal studies; case analysis method; Legal Realism; quantitative research methods; qualitative research methods

Or Brook (ORCiD ID: https://orcid.org/0000-0001-7636-3615)

Dr Or Brook is a Lecturer in Competition Law and the deputy-director of the Centre for Business Law and Practice at the University of Leeds, where she teaches EU and international competition law, business regulation, and quantitative research methods. Holding an academic background in law and economics, she employs empirical approaches to the study questions related to the goals of competition law, the role of public policy, decentralised enforcement, and the exercise of enforcement discretion. Or is co-director of ASCOLA UK.

Politics of coding: on systematic content analysis of legal text

Or Brook

1. INTRODUCTION: SYSTEMATIC CONTENT ANALYSIS AS A POLITICAL ACT

Legal scholarship and practice are profoundly based on the case analysis method. According to this paradigm, the legal scholar or practitioner must identify and articulate the legal rules on the basis of statutes and a limited number of "leading" cases, that is, path-breaking cases in which the highest court introduces a novel legal doctrine or reinterprets the law. The legal rules are derived from those leading cases by applying a logic of deduction and analogy. In turn, judges rely on such legal arguments, to apply and interpret the law with reference to those past decisions. Conclusions about the law are drawn from a limited number of cases the legal community recognises as significant. "The law, often becomes what the judges say it is".[1]

Although the case analysis method is rooted in common law traditions, it is fundamental to all traditional legal methodologies and is an important component of how law is being taught, researched, and practiced.[2] But can we really understand the law by studying a handful of selected cases? Can we assume that there are no other cases that apply different legal tests or reach different conclusions? That all courts and judges converge to a rule that is prescribed in a leading case? That personal attributes of the parties or the judge - such as race, gender, or socio-economic background - do not affect the way the law is administered? That there is no bias in the selection of cases for prosecution and the manner in which they are handled and reported? And that the same legal rules apply to cases that are not litigated, discontinued, or settled?

This chapter presents a different approach to studying law, known as systematic content analysis of legal text ("SCA"). Emerging in the US in the late-1950s and inspired by Legal Realism,[3] SCA offers a methodical and replicable tool to analyse a large body of legal text. This legal-empirical methodology is typically comprised of

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[1] Ronald Dworkin, *Law's Empire* (Harvard University Press 1986), 2.
[2] Kay L. Levine, 'The Law Is Not the Case: Incorporating Empirical Methods into the Culture of Case Analysis' (2006) 17 U. *Fla. J.L. & Pub. Pol'y* 283, 284.
[3] See Section 2 below.

three stages:[4] first, creating a database of a representative category of legal text, such as courts' judgments or administrative agencies' rulings ("cases") based on robust selection criteria; second, systematically recording (manually or in an automated manner) quantitative and/or qualitative features of the cases based on pre-defined protocol ("coding"); and third, a reflection stage, in which the scholar categorise the cases into common themes and draws inferences about their use and meaning.

SCA offers a middle ground between traditional and quantitative-centric empirical legal scholarship:[5] similarly to doctrinal or comparative studies, it explores the collection of cases, searching for common threads that link them, and commenting on their significance. Yet, contrary to traditional legal methodologies, SCA shifts the focus away from studying leading cases – which are viewed as idiosyncratic – and towards the general, day-to-day application of the law.[6]

This shift often results in different research questions and findings.[7] SCA welcomes investigations into underreported legal, economic, and political effects of rules and the decision-making process. As a form of "law in context", it draws attention to the social problem a rule aims to serve rather than to the rule itself, aiming to expose gaps between the law as stated in leading case to its day-to-day application. It explores how the law is administered in practice, its interactions with other aspects of social organisation, and its effects on different members of society.[8] As such, coding is fundamentally political.

But this is not the only difference between SCA and traditional legal methodologies. As an empirical methodology, SCA aspires to bring the rigour of social science to studying law.[9] It seeks to offer a scientific understanding of the law,

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[4] For best practices, see Fred Kort 'Content analysis of judicial opinions and rules of law' in Glendon Schubert (ed) *Judicial Decision-Making* (Free Press of Glencone 1963), 134; Robert Philip Weber, *Basic Content Analysis* (Sage 1990); Mark A. Hall and Ronald F. Wright, 'Systematic Content Analysis of Judicial Opinions" (2008) 96 Calif. L. Rev. 63; Kimberly A. Neuendorf, *The Content Analysis Guidebook* (Sage 2016); Maryam Salehijam, 'The value of systematic content analysis in legal research' (2018) 23 Tilburg Law Review 34.

[5] See Section 2.3 below.

[6] Katerina Linos and Melissa Carlson, 'Qualitative Methods for Law Review Writing' (2017) 84 U. Chi. L. Rev. 213, 214.

[7] Hence, SCA relates to both aspects of "politics of questions" and "politics of answers", as identified by Marija Bartl, Pola Cebulak, and Jessica Lawrence, 'Introduction: The Politics of Method' [add full reference].

[8] Mike McConville and Wing Hong Chui, "Introduction and Overview", in Mike McConville (ed.) *Research Methods for Law* (Edinburgh University Press 2017), 1.

[9] Hall and Wright (n 4), 68-69.

in the sense of generating falsifiable and reproducible knowledge on the scope of the law and how it is applied in practice.[10]

To this end, SCA represents a sought for transformation from an authority-based to a scientific-based study of the law. The case analysis method inherently relies on the researcher's authoritative expertise to single out the relevant cases and identify their implications.[11] The quality of a study is contingent on the researcher's judgment as to which cases are worth attention and what principles can be derived from them. In such a paradigm, a study is considered to be of value precisely because the authority of the scholar, publisher, or editor deemed it to be.[12] Moreover, the legal community is likely to reward studies conducted by scholars, judges, and practitioners having a bond of authority (upper social class; older, white men, working in prestigious universities or law firms);[13] and such studies, in turn, are likely to draw attention and replicate their system of values and believes. Consequently, there is a risk of discouraging challenges against the functioning of authoritative organisations and powerful institutions.[14]

SCA, in comparison, is (expected to be) divorced from the personal attributes and authority of the researcher.[15] It places a premium on evidence, rather than on argumentation. SCA is based on the assumption that the research design and output can be replicated – at least to an extent - by other researchers. Accordingly, it demands that researchers would be open and explicit about their definitions, assumptions, methods followed, and benchmarks used to assess their findings. Admittedly, this is good practice for all legal studies, including those which follow the case analysis method. Yet, SCA ties those methodological choices to the conventions of social science. While such choices are certainly prone to the researcher's set of biases and beliefs, SCA invites scrutiny and criticism.[16] A study is expected to be valued in light of the robustness of such definitions, assumptions, and methods rather than the reputation of the author.

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[10] Ibid, 64; Neuendorf (n 4), 16-17.
[11] As mentioned in the text accompanying footnote 2 above, although the case analysis method is rooted in common law traditions, it is fundamental to all traditional legal methodologies.
[12] Mark Hall, 'Coding Case Law for Public Health Law Evaluation' [2013] PHLR 1 5-7.
[13] William W. Fisher et al. *American Legal Realism* (OUP 1993), 165.
[14] Michael McConville, 'Development of Empirical Techniques and Theory' in Mike McConville (ed.) *Research Methods for Law* (Edinburgh University Press 2017), 213.
[15] Klaus Krippendorff, *Content Analysis: An Introduction to its Methodology* (Sage 2018), 24.
[16] See Section 4.1 below.

The remainder of this chapter is structured as follows: Section 2 explores the epistemological roots of SCA. It demonstrates that SCA was developed as a method in social sciences and as a methodology inspired by Legal Realism to expose the political effects of legal rules. Differing from other interdisciplinary approaches stemming from Legal Realism and using empirical methodologies, SCA was not developed into a distinct school of thought championing a set of intellectual traditions or normative policy-relevant concerns. Section 3 examines the growing use of SCA in recent years. Titled "coding politics", it outlies the common types of legal questions examined by this methodology. Section 4, "politics of coding", discusses some of the considerations that discourage the use of SCA and that may explain its scarce use in Europe. Section 5 concludes.

2. EPISTEMOLOGICAL ROOTS

The origins of SCA of legal text stem from two separate traditions. SCA was first developed as a *method* in social science. Later, its application to the field of law as a *methodology* was heavily influenced by Legal Realism. This section explores those epistemological roots, demonstrating that from the outset, both traditions have used SCA to expose the systematic effects of legal rules.

2.1. Content analysis as a method: social science

The origins of SCA can be traced to a 17th century inquisitorial pursuits by the Swedish Lutheran State Church, investigating whether a collection of hymns posed a threat to its authority.[17] A fascinating record of this saga was presented by *Dovring*, pointing to the central role SCA played in settling this heated legal, political, and religious debate. [18] Whereas the first edition of this collection did not raise controversy, the second edition was about to be printed at a time when the orthodox clergy of the Church was challenged by a dissenting German pietistic movement. The Church warned against "contagious" effects of the collection in increasing the dissenting movement's power, manifested for instance by violating the legal obligation to attend a church in the district of residence and the use of the hymns in forbidden private religious meetings.

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[17] Krippendorff (n 15), 10 referring to Otto Groth, *Die Geschichte der deutschen Zeitungswissenschaft* (K. Weinmayer 1948), 26.
[18] Karin Dovring, 'Quantitative semantics in 18th century Sweden' (1954) 18.4 *Public Opinion Quarterly* 389.

The controversy surrounding the collection had instigated a series of proto-SCA studies. Scholars from opposing sides of the debate recorded the use of religious symbols in the collection to understand the context in which they have acquired meaning, their literal and metaphorical value, whether the pietistic movement complied with the orthodox doctrine, and how such practices compared to other outlawed religious movements. Those studies suffer from noticeable methodological errors, related to the sampling of cases, interference of meaning, and statistical analysis. Yet, they have set the grounds for the development of SCA.[19]

A more modern approach to SCA emerged in the US following the economic crisis of 1929. At a period when mass media was blamed for rising crime rates, breakdown of cultural values, and harm to democracy, sociologists began to research how the media reflected and shaped public opinion. [20] Similarly to the Swedish collection of hymns, this strand of scholarship used SCA to uncover social and political phenomena. It examined how different groups or ideas were represented in the press[21] and the degree to which they were presented in a fair and unbiased manner.[22]

SCA was further developed during World War II by American researchers, inspecting radio and press communications to predict Nazi propaganda strategies and underlying policy implications. These studies were fundamental to the conceptualisation of SCA's aims and methods.[23] After the War, SCA spread to other disciplines - particularly to psychology, anthropology, and history[24] - and experienced a convergence across disciplines. *Berelson*'s famous 1952 monograph codified the methods used by previous studies, defining it as "a research technique for the

[19] Krippendorff (n 15), 11.
[20] Ibid, 13.
[21] E.g., George Eaton Simpson, *The Negro in the Philadelphia Press* (University of Pennsylvania Press 1936); Arthur Walworth, *School Histories at War* (Harvard University Press 1938); Helen Martin, 'Nationalism in Children's Literature' (1936) 6.4 *The Library Quarterly* 405.
[22] Gordon W. Allport and Janet M. Faden, 'The Psychology of Newspapers: Five Tentative Laws' (1940) 4.4 *Public Opinion Quarterly* 687.
[23] Krippendorff (n 15), 14-17; Harold D. Lasswell, 'The uses of Content Analysis Data in Studying Social Change' (1968) 7.1 Social Science *Information* 57; Alexander L. George, *Propaganda Analysis: a Study of Inferences made from Nazi Propaganda in World War II*' (Evanston 1959); Alexander L. George 'Prediction of political action by means of propaganda analysis' in Dan Caldwell (ed) *Alexander L. George: A Pioneer in Political and Social Sciences* (Springer 2019).
[24] Pool (n 26).

objective, systematic and quantitative description of the manifest content of communication".[25]

Most of the early studies were quantitative in nature, recording frequency of occurrence of a *manifest content* (i.e., which is on the surface and can be easily observed).[26] Critics argued that such simple quantification did not guarantee the validity and reliability of the results, as it prevented drawing inferences about *latent content* (i.e., focusing on the underlying meaning of the text), the motives of the authors of the texts, and the effects on readers. Accordingly, SCA has gradually expanded also to more qualitative approaches and to the inclusion of latent content.[27]

SCA has rapidly expanded from the 1980s onwards, both in terms of usage and range. Empirically recording this expansion, *Neuendorf* illustrates that only the arts and humanities remained relatively aloof to such techniques. This expansion is often attributed to the advancement of computer-aided text analysis, the online availability of resources, and in recent years – the advent of automated content analysis.[28]

2.2. Content analysis as a methodology: Legal Realism

SCA was developed as a method, a research technique, in social sciences. Law, in comparison, was not transformed into a scientific field. Legal scholars and practitioners have mostly stayed away from empirical legal research in general, and from SCA in particular, thereby continuing to rely on the case analysis methodology and on the power of legal rhetoric and authority.

Some suggest that the scientific revolution has passed the field of law because unlike other disciplines of social science, law already saw itself as scientific. As early as 1768, Judge *Blackstone* described law as a science "committed to his charge, to be cultivated, methodized and explained". Perceived as a "rational science", law could be realised and reduced to discoverable principles.[29] Legal scholars, in the words of *Schlegel*, "passed law off as a species of empirical study by making the thoroughly

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[25] Bernard Berelson, *Content Analysis in Communication Research* (Free Press 1952), 18.
[26] Ithiel de Sola Pool (ed), *Trends in Content Analysis* (University of Illinois Press 1959), 7-8.
[27] Wilfried Bos and Christian Tarnai 'Content analysis in Empirical Social Research' (1999) 31.8 *International Journal of Educational Research* 659, 662.
[28] Neuendorf (n 4), 2-5; Krippendorff (n 15), 14-17; Chad M. Oldfather et al. 'Triangulating Judicial Responsiveness: Automated Content Analysis, Judicial Opinions, and the Methodology of Legal Scholarship' (2012) 64 Fla. L. Rev. 1189; Justin Grimmer, and Brandon M. Stewart, 'Text as Data: The Promise and Pitfalls of Automatic Content Analysis Methods for Political Texts' (2013) 21.3 *Political analysis* 267.
[29] William Blackstone, *Commentaries on the Laws of England* (Oxford 1768), 3.

misleading, but intensely revealing, assertion that the law library was the law professor's laboratory and by arguing for the politically neutral, and so 'objective,' results of the appropriate juridical method".[30] In particular, law was understood as an objective apolitical notion, a timeless and sacred ideal, unaffected by those administering it. "[L]ike some ancient god whose shrine only an elite and priestly castle tended, [law] could choose not to interact in the society which worshipped it, but would not (and should not) be swayed by that society's desire".[31]

One notable exception to this paradigm emerged from American Legal Realism. Developed in the late-1800s, Legal Realism rejects Legal Formalism's search for independent doctrines that constrain legal actors.[32] Instead, law is understood as the product of ongoing political, economic, and societal conflicts. Legal principles are seen as the expression of contentious political and moral choices, divorced from natural law or morality. Realists argue that all economic and social activities are organised by an elaborate network of legal rules, conferring advantages on certain parties and disadvantages on others. Courts must examine what sorts of liberties economic actors should enjoy, and how a legal system should be used to institute such a state of affairs.[33]

Understanding what constitutes law, according to Legal Realism, is akin to predicting what a court or a decision-maker is likely to do in a specific case. In addition to the black letter-law, decision-makers are affected by their views on public policy, changing social conditions, personalities, and experiences.[34] As famously summarised by one of the forefathers of Legal Realism, Judge *Holmes*, "prophecies of what the courts will do in fact, and nothing more pretentious, are what I mean by the law".[35] Hence, decisions of judicial and administrative bodies are seen not only as a reflection of the law *but rather as the law itself*.[36]

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[30] John Henry Schlegel, *American Legal Realism and Empirical Social Science* (University of North Carolina Press 1995), 1.
[31] Justin Zaremby, *Legal Realism and American Law* (Bloomsbury 2013), 2.
[32] Hall and Wright (n 4), 77-79. More generally see Herman Oliphant 'A Return to Stare Decisis' (1928), 14 ABAJ 71.
[33] Fisher et al. (n 13), 99-100, 232-33; Frans L. Leeuw and Hans Schmeets, *Empirical Legal Research: A Guidance Book for Lawyers, Legislators and Regulators* (Edward Elgar 2016), 20-23.
[34] Charles Grove Haines, 'General Observations on the Effects of Personal Political and Economic Influences in the Decisions of Judges' (1922) 17 Ill. LR 17 96, 102.
[35] Oliver Wendell Holmes, 'The Path of the Law' (1897) 10 HARV. L. REV. 457, 1001.
[36] Hall and Wright (n 4), 78, 84-86.

Holmes viewed Legal Realism as the progenitor of empirical jurisprudence. As skilfully explored by *Pavone* and *Mayoral* in Chapter _ of this book, Holmes and his successors argued that jurisprudence should follow scientific methods to expose the political, economic, and societal conflicts driving the legal rules. Hypotheses must be tested against empirical evidence, and case law should be scientifically exploited.[37] Holmes considered the empirical exercise to be the first step of an inherently political movement. He called on legal scholars to use empirical methods to "get the dragon out of his cave on to the plain and in the daylight … [to] count his teeth and claws, and see just what is his strength". The next stage, "is either to kill him, or to tame him and make him a useful animal".[38] Empirical data, in other words, is expected to harness reform.

Whereas most Realists did not undertake empirical studies in practice, their ideas carried an important influence. Legal Realism shaped US public policy, especially because a large group of Realists served in the federal government during the New Deal and took part in building most of the American administrative agencies.[39]

Since the late-1950s, American scholars began to employ SCA to explore legal questions, resulting in an impressive collection of studies.[40] As detailed in Section 3 below, SCA was used to expose political and moral choices embedded in legal text.

2.3. A non-institutional methodology

Despite the strong Legal Realism influences, SCA was neither truly embedded in Legal Realism nor was it formed into a distinct legal movement. Unlike other interdisciplinary approaches stemming from Legal Realism and using empirical methods - such as Law and Society, Critical Legal Studies, and Law and Economics[41] - SCA was not developed into a distinct school of thought championing a set of intellectual traditions or normative policy-relevant concerns. There are no institutions, journals, or conferences dedicated to SCA nor common normative underpinning. Like SCA, those movements emphasise law as a social construct and expose gaps between the black latter law and its application in practice *inter alia* by the use of empirical

[37] Also see Leeuw and Schmeets (n 33), 20-23; Oliphant (n 32).
[38] Holmes, (n 35), 1001.
[39] Fisher et al (n 13), xiv.
[40] Hall and Wright (n 4), 68-69.
[41] Gary Minda, *Postmodern Legal Movements: Law and Jurisprudence at Century's End* (NYU Press 1996), 83-84.

tools. Yet, they are not inherently based on *systematic* analysis and often rely on case studies.

SCA was also not embedded within the Empirical Legal Studies movement (ELS). As *Pavone* and *Mayoral* note, ELS embraced a narrow conception of the term empirical, limiting it to quantitative manifest content. Qualitative and interpretive approaches of latent content, which are often employed by SCA, are viewed as insufficiently rigorous.[42] SCA, therefore, was not developed alongside the disciplinary and knowledge politics lines of ELS.

In fact, SCA was only identified as an independent approach as late as 2008 in a seminal paper by *Hall* and *Wright*, documenting the growing usage of SCA techniques. SCA was mostly employed to study US law, focusing on questions of legal methods, judicial decision making, and statutory interpretation.[43] Hall and Wright observed that although some of those studies were published in leading law journals and generated much academic debate, "[i]n project after project, legal researchers reinvent this methodological wheel on their own", and that they have too "learned how to do content analysis on the fly, feeling at first as if we each discovered something new until we learned that we had each done the same thing independently".[44]

In the decade since Hall and Wright restated SCA as a distinctive legal methodology, it continued to gain increasing popularity, and scholars have begun to explicitly refer to SCA as a methodology and followed Hall and Wright's best practices. SCA's reach also crossed the Atlantic to Europe and to other areas of the globe. At the same time, SCA was not (yet?) established as a distinct legal movement. Many studies still attempt to "reinvent this methodological wheel", do not refer to it by name, and do not follow a clear set of conventions. SCA is not associated with a distinctive normative school of thought or an intellectual tradition. This will be further discussed in Section 4.

3. CODING POLITICS

[42] [reference to Pavone and Mayoral's chapter].
[43] Hall and Wright (n 4), 70-76.
[44] Ibid, 74-75.

The previous section illustrated that from its very inception, SCA was developed as an instrument to expose political implications of legal rules and decision-makers. This section moves to explore the types of research questions and objectives that are typically pursued by SCA.

As illustrated below, SCA is typically used to study four types of research questions, each having the potential of contributing to the development of a host of approaches to law and normative agendas. Hence, rather than an attempt to champion SCA as a legal methodology, this section aims to highlight the benefits of SCA in complementing the study of research questions that were traditionally pursued by case studies-based analysis.

First, SCA is used to *map law as applied in practice* by generalising the principles observed in a representative database of cases and *exposing the attitudes and biases* that may go unnoticed when relying on case analysis.[45] SCA investigates how different courts and judges interpret and apply the law, the process of administrative and judicial decision making, and the interaction between different stakeholders in the decision-making process.[46] The cases are seen as an in-depth expression of the perspectives on law, the actions of various stakeholders, and the societal context in which these operate.

To this end, SCA is particularly of value for studying legal discretion. By coding large datasets and variables, SCA can point to differences between what decision-makers say they are doing (i.e., matters of law and fact as identified as relevant by the decision-makers) to factors that can statistically explain variation among cases. Such studies may resemble similar contributions made by Critical Legal Studies and Law and Society. The distinctive feature of the SCA, however, lies in the

[45] E.g, in constitutional law: James J. Brudney and Corey Ditslear, 'The Warp and Woof of Statutory Interpretation: Comparing Supreme Court Approaches in Tax Law and Workplace Law' (2009) 58.7 *Duke Law Journal* 1231; David S. Ardia, 'Free Speech Savior or Shield for Scoundrels: An Empirical Study of Intermediary Immunity under Section 230 of the Communications Decency Act' (2009) 43 Loy. LAL Rev 373. Corporate law: Peter B Oh, 'Veil-Piercing' (2010) 89 Tex. L. Rev. 81; IP law: John R. Allison et al, 'How Often Do Non-Practicing Entities Win Patent Suits' (2017) 32 Berkeley Tech. LJ 237.

[46] E.g., Lee Petherbridge and David L. Schwartz, 'An Empirical Assessment of the Supreme Court's Use of Legal Scholarship' (2012) 106.3 Nw. UL Rev. 995; David K. Scott and Robert H. Gobetz, 'The US Supreme Court 1969-1992: a shift Toward an Individualistic Style of Judging' (2003) 54.2 *Communication Studies* 211; Matej Avbelj and Janez Šušteršič 'Conceptual framework and empirical methodology for measuring multidimensional judicial ideology' (2019) 10 *DANUBE: Law, Economics and Social Issues Review* 2.

focus on the systematic, aggregated application of the law rather than on selected case studies.

Second, SCA is also employed to *test hypotheses and challenge common perceptions.* It of particular value for testing economic and critical legal theories, developed on the basis of leading cases.[47] An important strand of scholarship examines, for example, how law enforcement is affected by or discriminates against people from a certain race, gender, or class,[48] and reveals links between the backgrounds of specific judges to their judgments.[49] Revealing how political and personal attitudes drive judicial decision-making, they questioned the fundamental premises of the rule of law that judges apply neutral principles of law.

Third, SCA can inform *evaluative research questions* studying the operation and effectiveness of law, which can later harness *policy reform*. Similarly to other empirical methods, such studies may point to gaps between the objectives of the law to its operation and outcome in practice, between its costs and benefits, and measure how it affects different members of society.

Finally, SCA can also be employed for *predictive purposes*, to anticipate how a rule would be applied in a given set of legal and factual circumstances. Such predictions may relate to the application or interpretation of a rule in general, or to variations in the manner different institutions or judges apply it. The predictive function of SCA was developed by the works of American political science scholars in the late-1950s.[50] Those studies are likely to become even more prevalent upon the development of big data and machine learning techniques.[51]

4. POLITICS OF CODING

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[47] E.g., Willy E. Rice, 'Race, Gender, Redlining, and the Discriminatory Access to Loans, Credit, and Insurance' (1996) 33 *San Diego L. Rev*. 583; Kimberly Richman, 'Lovers, Legal Strangers, and Parents: Negotiating Parental and Sexual Identity in Family Law' (2002) 36 *Law & Soc'y Rev*. 285.

[48] E.g., George Wilson et al, 'Prejudice in Police Profiling: Assessing an Overlooked Aspect in Prior Research' (2004) 47.7 *American Behavioral Scientist* 896; Marc L. Miller and Ronald F. Wright, 'The Black Box' (2008) 94 *Iowa L. Rev.* 125; Richard H. McAdams, 'Race and Selective Prosecution: Discovering the Pitfalls of Armstrong' (1997) 73 *Chi.-Kent L. Rev.* 605.

[49] E.g., Stuart S. Nagel, 'Multiple Correlation of Judicial Backgrounds and Decisions' (1974) 2 Fla. St. UL Rev. 258.

[50] Stuart S. Nagel, 'Applying Correlation Analysis to Case Prediction' (1963) 42 *Tex. L. Rev.* 42 1006; Stuart S. Nagel, 'Predicting Court Cases Quantitatively' (1965) 63.8 *Michigan Law Review* 1411; Fred Kort, 'Predicting Supreme Court decisions mathematically: A Quantitative Analysis of the 'Right to Counsel' Cases' (1957) 51.1 *American Political Science Review* 1; Kort (n 4).

[51] Michael Evans et al. 'Recounting the Courts? Applying Automated Content Analysis to Enhance Empirical Legal Research' (2007) 4.4 *Journal of Empirical Legal Studies* 1007.

As a scientific research method, SCA attempts to offer an "objective" understanding of the law, in the sense of generating falsifiable and reproducible knowledge on the scope of the law and how it is applied in practice. Nevertheless, coding is also inevitably political. This section discusses some of those politics of coding, focusing on the European context.

4.1. Reproducing political biases

While SCA pursues the standards of a scientific research method, the case selection criteria, coding protocol, and benchmarks for assessment may reflect the political positions of the researcher, society, or legal system. For example, a research design that is restricted to formal forms of enforcement, may overlook the impact of prosecutorial biases and alternative enforcement instruments, which carry an equally important influence on the scope and application of the law. Definition of variables (e.g., what is a "family", what is "competition in the market"), may foreground political-normative premise or alternative meanings. In such instances, ironically, the objective-scientific allure of SCA may aggravate the political nature of the study by presenting subjective interpretations as unbiased facts. To overcome this risk, SCA-based studies must strive to articulate their assumptions clearly, thereby inviting questioning and criticism.

SCA of EU law may be particularly susceptible to such lurking of politics. The multi-levelled governance systems and the different legal, economic, and social traditions of the Member States question the generalisability of findings. As EU law may take different forms in different national settings, the research design and analysis merits special attention to national variations.

Political bias can also be reflected by the choice of variables. While SCA is not restricted to the measurement of purely quantitative manifest content as other empirical methods, it may encourage focusing on variables that are relatively easy to generalise and code. This may affect the research topics as well as the definitions and proxies used to measure such subjects. *Micklitz* argues that European politics promote the modelling and the quantitative measuring of EU law, especially with the rise of neo-liberalism and the shift to political-science-inspired governance. This runs the

risks that law, as a moral and political category, will be "sacrificed on the altar of mathematics and statistics".[52]

Finally, depending on the research question, political biases can also affect the selection of the assessment benchmarks. Certain fields of research, like business or medicine, have a clear goal. The success of a medical operation can be assessed against the contribution to the patient's health, and the success of a business strategy against the increase in profit. Law is lacking a unifying, organising principle. Since almost all areas of law pursue multiple and often conflicting goals, SCA alone cannot dictate legal policy. It will always be linked to the selection and definition of benchmarks, which reflect a political preference.

4.2. Threat to the institutions of justice

SCA, as mentioned, is well-suited to expose unnoticed patterns, attitudes, and biases embedded in the legal process. As such, it inherently challenges the conception of law as an objective science of reason, which to an extent is upheld within legal systems despite the influence of Legal Realism.

An illuminating example is found in a controversial law recently adopted in France, as part of a reform aimed at increasing the transparency of judicial data. In parallel to granting a free, online access to higher courts' judgments, the law criminalises the use of SCA and other forms of data analytics for studying and predicting decision-making patterns of specific judges or clerks. Violation of this provision may result in a severe sanction of up to five years in prison.[53]

These limitations on data analytics were vindicated by protecting the privacy of judges, even at the expense of promoting important social values as the transparency and accessibility to judicial data.[54] Critics, nevertheless, described this prohibition as a form of institutional resistance against the shift from authority to a scientific-based approach to law. Moreover, they pointed out that in addition to barring judges from scrutiny and accountability, the law may protect lawyers from competition among the

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[52] [Reference to Micklitz's chapter].

[53] LOI n° 2019-222 du 23 mars 2019 de programmation 2018-2022 et de réforme pour la justice, Article 33.

[54] Florence G'sell, 'Predicting courts' decisions is lawful in France and will remain so', Wolters Kluwer news law (2019), available at https://www.actualitesdudroit.fr/browse/tech-droit/donnees/22630/predicting-courts-decisions-is-lawful-in-france-and-will-remain-so.

data analytics industry that could have replaced or compete with their functions.[55] Such protectionist effects may be reinforced, as shortly after the reform passed, the French Bar Association demanded that the identity of lawyers will enjoy equal protection.[56] If such an approach is accepted, not only the decision-making process of judges will enjoy protection, but also the work of lawyers.

This example may reflect a fundamental opposition to a transformation in the nature of the judicial process in Europe. In Civil Law traditions, such as those that hold sway in most European countries, judgments are drafted in an impersonal language. Individual decisions are rendered in the name of the people, and in the case of a panel of judges, the deliberations remain confidential and result in a collective judgment with no dissenting opinions. Differing from Common Law traditions, the identity and influence of the individual judges disappear behind the institution of justice. This anonymity is perceived as a safeguard for the independence and impartiality of judges and the force and authority of their pronouncements.[57] This could perhaps explain the limited use and resistance to SCA of judicial opinions in Europe, in comparison with the US.[58] By shedding light on the characteristics of specific judges, SCAs-based studies may go against this very notion.

4.3. Institutional politics: academia and funding

Institutional politics related to academic culture and funding may discourage the use of SCA, affect the quality of research, or limit the types of studies conducted:

First, many law students, scholars, and practitioners are still relatively unfamiliar with empirical methodologies, which require basic training in qualitative and quantitative techniques and understanding of statistics.[59] This does not only deter the use of SCA, but may also limit the interest of traditionally trained scholars in such studies. It may also affect the quality of the studies that are being conducted. Despite

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[55] John O. McGinnis, 'Transparency and the Law in France', Law & Liberty's (2019), available at https://www.lawliberty.org/2019/06/20/transparency-and-the-law-in-france/; Jena McGill and Amy Salyzyn, 'Judging by Numbers: How will Judicial Analytics Impact the Justice System and its Stakeholders?' (2021) 44:1 Dal LJ.

[56] Résolution du Conseil national des barreaux, portant sur l'open data des décisions de justice 15.6.2019, available at https://www.cnb.avocat.fr/sites/default/files/cnb-re2019-06-15_open_datafinal.pdf.

[57] Valerio Grementieri and Cornelius Joseph Golden, 'The United Kingdom and the European Court of Justice: an Encounter between Common and Civil Law Traditions' (1973) 21.4 *The American Journal of Comparative Law* 664, 669.

[58] See, for example, Avbelj and Šušteršič (n 46), 131-133, and the many references there.

[59] Leeuw and Schmeets (n 33), 1.

a growing enthusiasm towards the use of empirical tools, the editorial boards of peer or student reviewed journals often lack the expertise to ensure the quality and robustness of those studies.[60] This is particularly true in light of the relatively new status of SCA as an independent methodology, as described in section 2.3. While some good practices exist, many scholars do not follow a clear set of rules that safeguard the reliability and validity of the results.

Second, SCA-based studies may not comply with academic assessment and incentives systems guiding many universities and law faculties. The internal and external frameworks used for measuring researchers' quality and allocating resources often rely on quantitative measures (e.g., number of published papers in specific formats, journals, and languages).[61] Research funding, promotions, and career trajectories become more and more dependent on the number of such outputs.[62] SCA, by comparison, is typically more time-consuming than studies based on traditional legal methodologies. The gathering, coding, and analysis of the data are lengthy and may require long-term team collaboration, meaning that visible research outputs may take longer to realise. Academic assessment criteria, moreover, frequently favour studies that make a clear normative suggestion. Hence, SCA projects aimed at mapping may invite similar opposition as is voiced against Empirical Legal Studies, arguing that they are lacking theoretical depth or normative ambitions.

Third, SCA may require the cooperation of governmental and other influential institutions to get access to data. Such bodies, in turn, enjoy a considerable power to influence the research design, scope, and results by denying access to the data on which the study is based. This may hamper important findings, especially when such studies are related to controversial legal, economic, or social phenomena. This risk was illustrated by *McConville*, describing the hurdles placed by the UK Home Office on conducting his research on high acquittal rates by juries. He argues that powerful

[60] Kathryn Zeiler, 'The Future of Empirical Legal Scholarship: Where Might We Go from Here' (2016) 66 J. Legal Educ. 78, 78.
[61] Staffan Larsson, 'An Emerging Economy of Publications and Citations (2009) 29 *Nordisk Pedagogik* 34; Ingrid Gogolin et al (eds.) *Assessing Quality in European Educational Research: Indicators and Approaches* (Springer 2014).
[62] Andreas Fejes and Erik Nylander, 'The Economy of Publications and Citations in Educational Research: What About the "Anglophone Bias?"' (2017) 99.1 *Research in Education* 19.

institutions can promote secrecy under the guise of confidentiality, to the determinate of members of society that do not enjoy the bounds of authority.[63]

5. CONCLUSIONS

This chapter explored the SCA methodology, seeking to frame its power in exposing politics, as well as the limitation placed on it by politics. While it does not offer a formula on how to exercise or overcome the effects of coding as a political act, it intended to invite a discussion on its advantages and limitations, and on the role it may play in the future of legal research and practice.

This discussion may be of particular value for European legal scholarship, where empirical legal methodologies in general, and SCA in particular, are still greatly underdeveloped. This chapter has shown that despite the limited use and times even the resistance towards SCA in Europe, SCA can foster research into previously unexplored legal questions and complement the study of fields of law that were mostly pursued by case analysis-based methods.

[63] McConville (n 14).