

PHIL 808k: Legal Reasoning
Syllabus Version #3
November 3, 2021

Logic (we may say) is generalized jurisprudence.
– Stephen Toulmin

A satisfactory theory of legal reasoning requires and is required by a satisfactory theory of law.
– Neil MacCormick

Description

This is an interdisciplinary course drawing on material from the separate fields of logic, legal theory, and artificial intelligence and law. The specific goals are: first, to understand and, I hope, advance recent work on formal models of legal reasoning; second, to explore the bearing of this work on more traditional issues in legal theory; and third, to explore the bearing of this work on a few apparently more distant topics, such as rights, patterns of reasoning in applied ethics, or the semantics of open-textured predicates.

Although the course will involve some mild logic, and there is real logical work to do for students who enjoy that way of thinking, there will also be plenty of material for students who prefer to think about problems in a different way—the emphasis will be conceptual, not technical.

Time and place

Thursday, 4:45–7:15, TWS 1100 (we’ll see if we can adjust this weird time)

Contact information

Office: Skinner 1101. Office phone: I don’t use my office phone. Cell phone: 301-408-8963, and you’re very welcome to call my cell phone. Email: horty@umd.edu. Office hours: I’ll let you know my exact office hours once they’ve sorted themselves out. Meanwhile, please feel free to write or call at any time if you’d like to meet.

Course materials

The readings for each topic are divided into three categories: primary readings, which you must read with some care in order to be able to participate in the class; secondary readings, which you ought to read, although it is not required; background and related material, which is provided primarily for students wishing to do research in a particular area—this is where I would start.

All primary readings will be on the course web site, as well as most secondary readings.

Course work

There are three kinds of course work:

Summaries and questions: Each week, each student in the class must turn in a brief (no more than one page, and a paragraph will do) summary of one of the primary readings—or if the reading is long, then one chapter, or section, or part—stating its primary objective or conclusion, and main argument. In addition to this summary, each student must provide one question concerning the reading you have summarized. Sometimes I will tell you which of the primary readings I want you to address with your summary and question. Your summaries and questions are due the *Tuesday* prior to class at midnight, so that I have time to read them before class. These summaries and questions are not graded, but you have to turn them in; their purpose is simply to give me a sense of how well you’re understanding the material and what your perspective on it is.

Presentation: The course will be run as a seminar, and everyone attending, students and auditors, will have to help present some of the material. These presentations will be short, low-key, and likewise not graded. In addition, we will set aside time toward the end of the term for students who are taking the course for credit to introduce and lead a discussion on their paper topics. This, again, is supposed to be low-key—the point is not to create stress and havoc in your lives, but simply to give you a chance to get feedback from the class on your ideas.

Written work: The main requirement for students taking the course for credit is a single extended paper of approximately 15–20 double-spaced pages, prepared as if for submission to a journal.¹ I will develop a list of paper topics as the term progresses, but of course, you are welcome to formulate your own, in consultation with me. We will have to agree on a topic by November 15, and you will have to turn in a draft of your paper by December 15; I will read and comment on your draft the next day, and then you will have until January 15, 2022, to turn in a final version. I’m happy to meet with you about your paper as much or as little as you’d like.

Course topics

Here is a tentative, initial list. The list may be revised during the term (be sure to check the version number on the syllabus). The plan is to get through all of the topics listed under categories 1 and 2, and then some of those from categories 3 and 4, as time permits and depending on interest.

1. Background

(a) The Hart/Dworkin debate

Primary readings: Dworkin [28], Hart [35]

Secondary readings: Raz [77]

Background, related, and additional material: Dworkin [29], Dworkin [32], Dworkin [30, Section 4], Hart [36, Chapter 6], Leiter [50], Schauer [89], Shapiro [96]

(b) Legal theorists on legal reasoning

Primary readings: Alexander and Sherwin [3, Introduction, Chapter 1–4], Schauer [94, Introduction, Chapters 1–7]

Background, related, and additional material: Alexander [2], McCormick [55], Schauer [90], Schauer [91]

¹This length is not set in stone, but please speak to me if you would like to write a paper shorter than 15 pages or longer than 20 pages.

2. The reason model of precedential constraint

(a) Basics

Primary readings: Horty [40, Introduction, Chapters 1–2], Lamond [46]

Secondary readings: Raz [78, Chapter 10], Simpson [100]

Background, related, and additional material: Alevén and Ashley [1], Ashley [5, Chapters 2–3], Alexander [2], Burton [24, Introduction and Chapters 1–4], Eisenberg [33], Lamond [47], Levi [51, Sections I–II], MacCormick [56], Perry [70], Rissland and Ashley [83]

(b) Variations, elaborations, discussions, complaints

Primary readings: Bench-Capon and Atkinson [14], Lamond [49], Mullins [64], Rigoni [81]

Secondary readings: Horty [41]

Background, related, and additional material: Horty and Bench-Capon [42],

(c) The standard model and the a fortiori model

Primary readings: Horty [40, Chapter 3]

Background, related, and additional material: Broughton [23], Horty [37], Prakken [73]

(d) Supporting the reason model

Primary readings: Horty [40, Chapter 4]

(e) Constraining natural reasoning

Primary readings: Horty [40, Chapters 5–6]

Secondary readings: Mullins [65]

Background, related, and additional material: Prakken and Sartor [75], Prakken and Sartor [76]

(f) Dimensions and magnitudes

Primary readings: Horty [38], Horty [39]

Secondary readings: Bench-Capon [9], Rigoni [82]

Background, related, and additional material: Bench-Capon [11], Bench-Capon and Atkinson [12], Bench-Capon and Atkinson [13], Bench-Capon and Rissland [15], Bench-Capon and Rissland [15], Rissland and Ashley [84]

3. Further topics

(a) Open-textured predicates

Primary readings: Waismann [112]

Secondary readings: Cumming [26], Shapiro and Roberts [98]

Background, related, and additional material: Baker [7], Bix [20], MacCormick [57], Lyons [54], Tur [111], Schauer [92], Schauer [95], Shapiro and Roberts [97], Shapiro and Roberts [99]

(b) Analogical reasoning

Primary readings: Stevens [106]

Secondary readings: Schauer [93], Spellman [103], Spellman [104], Spellman and Schauer [105]

Background, related, and additional material: Atkinson and Bench-Capon [6], Bartha [8], Brewer [22], Lamond [48], Posner [71], Sunstein [108], Weinreb [113]

- (c) Values, teleology, coherence
 Primary readings: Bench-Capon [10], Bench-Capon and Sartor [16], Berman and Hafner [19], Maguire [58], Prakken [72]
 Background, related, and additional material: Bench-Capon and Sartor [17]
 - (d) Values, reasons, balancing, proportionality
 Primary readings: Alexy [4], Sartor [86], Sartor [87],
 Secondary readings: Benzmüller et al [18], Maranhao et al [59], Maranhao and Sartor [60], Maranhao and Sartor [61], Sartor [88]
 Background, related, and additional material: Cohen-Eliya and Porat [25]
 - (e) Rights
 Primary readings: Liberto [52], Mullins [63]
 Secondary readings: Botterell [21], Oberdiek [66], Oberdiek [67]
4. And still further topics
- (a) Statutory reasoning
 Primary readings: Alexander and Sherwin [3, Chapters 5–8], Schauer [94, Chapter 8]
 Secondary readings: Rissland and Skalak [85], Skalak and Rissland [101], Skalak and Rissland [102]
 - (b) Evidence
 Readings: Moss [62]
 Background, related, and additional material: Prakken et al. [74] (Note: This is the editors’ introduction to a journal special issue on the topic—the whole issue is useful.)
 - (c) Legal reasoning and applied ethics
 Primary readings: Iltis [43], Richardson [79]
 Background, related, and additional material: DeGrazia [27], Gert *et al.* [34], Jonsen [44], Jonsen and Toulmin [45], Little [53], Paulo [68], Paulo [69], Richardson [80], Strong [107], Toulmin [109], Toulmin [110],

References

- [1] Vincent Aleven and Kevin Ashley. Evaluating a learning environment for case-based argumentation skills. In *Proceedings of the Sixth International Conference on Artificial Intelligence and Law (ICAIL-97)*, pages 170–179. The Association for Computing Machinery Press, 1997.
- [2] Larry Alexander. Constrained by precedent. *Southern California Law Review*, 63:1–64, 1989.
- [3] Larry Alexander and Emily Sherwin. *Demystifying Legal Reasoning*. Cambridge University Press, 2008.
- [4] Robert Alexy. On balancing and subsumption: a structural comparison. *Ration Juris*, 16:433–49, 2003.
- [5] Kevin Ashley. *Modeling Legal Argument: Reasoning with Cases and Hypotheticals*. The MIT Press, 1990.

- [6] Katie Atkinson and Trevor Bench-Capon. Reasoning with legal cases: analogy or rule application. In *Proceedings of the Seventeenth International Conference on Artificial Intelligence and Law (ICAIL 2019)*. The Association for Computing Machinery Press, 2019.
- [7] Gordon Baker. Defeasibility and meaning. In Peter Hacker and Joseph Raz, editors, *Law, Morality, and Society: Essays in Honour of H. L. A Hart*, pages 26–57. Oxford University Press, 1977.
- [8] Paul Bartha. *By Parallel Reasoning: The Construction and Evaluation of Analogical Arguments*. Oxford University Press, 2010.
- [9] Trevor Bench-Capon. Some observations on modelling case based reasoning with formal argument models. In *Proceedings of the Sixth International Conference on Artificial Intelligence and Law (ICAIL-99)*, pages 36–42. The Association for Computing Machinery Press, 1999.
- [10] Trevor Bench-Capon. The missing link revisited: the role of teleology in representing legal argument. *Artificial Intelligence and Law*, 10:79–94, 2002.
- [11] Trevor Bench-Capon. Representing Popov v. Hayashi with dimensions and factors. *Artificial Intelligence and Law*, 20:15–35, 2012.
- [12] Trevor Bench-Capon and Katie Atkinson. Dimensions and values for legal CBR. In *Proceedings of the Thirtieth International Conference on Legal Knowledge and Information Systems (JURIX 2017)*, pages 27–32. IOS Press, 2017.
- [13] Trevor Bench-Capon and Katie Atkinson. Lessons from implementing factors with magnitude. In *Proceedings of the Thirty First International Conference on Legal Knowledge and Information Systems (JURIX 2018)*, pages 11–20. IOS Press, 2018.
- [14] Trevor Bench-Capon and Katie Atkinson. Precedential constraint: the role of issues. In *Proceedings of the Eighteenth International Conference on Artificial Intelligence and Law (ICAIL 2021)*, pages 12–21. The Association for Computing Machinery Press, 2021.
- [15] Trevor Bench-Capon and Edwina Rissland. Back to the future: dimensions revisited. In *The Fourteenth Annual Conference on Legal Knowledge and Information Systems (JURIX-2001)*, pages 41–52. IOS Press, 2001.
- [16] Trevor Bench-Capon and Giovanni Sartor. Theory based explanation of case law domains. In *Proceedings of the Eighth International Conference on Artificial Intelligence and Law (ICAIL-2001)*, pages 12–21. The Association for Computing Machinery Press, 2001.
- [17] Trevor Bench-Capon and Giovanni Sartor. A model of legal reasoning with cases incorporating theories and values. *Artificial Intelligence*, 150(1-2):97–143, 2003.
- [18] Christoph Benzmueller, David Fuenmayor, and Bertram Lomfeld. Encoding legal balancing: automating an abstract ethico-legal value ontology in preference logic. Manuscript, 2021.
- [19] Donald Berman and Carole Hafner. Representing teleological structure in case-based legal reasoning: the missing link. In *Proceedings of the Fourth International Conference on Artificial Intelligence and Law (ICAIL-93)*, pages 50–59. The Association for Computing Machinery Press, 1993.
- [20] Brian Bix. H. L. A Hart and the open texture of language. *Law and Philosophy*, 10:51–72, 1991.

- [21] Andrew Botterell. In defence of infringement. *Law and Philosophy*, 27:269–292, 2008.
- [22] Scott Brewer. Exemplary reasoning: semantics, pragmatics, and the rational force of legal argument by analogy. *Harvard Law Review*, 109:923–1028, 1996.
- [23] Gabriel Broughton. Vertical precedents in formal models of precedential constraint. *Artificial Intelligence and Law*, 27:253–307, 2019.
- [24] Steven Burton. *An Introduction to Law and Legal Reasoning*. Little, Brown, and Company, 1985.
- [25] Moshe Cohen-Eliya and Iddo Porat. American balancing and german proportionality: the historical origins. *International Journal of Constitutional Law*, 8:263–286, 2010.
- [26] Samuel Cumming. Semantic reasons. Unpublished manuscript, 2019.
- [27] David DeGrazia. Moving forward in bioethical theory: theories, cases, and specified principlism. *Journal of Medicine and Philosophy*, 17:511–539, 1992.
- [28] Ronald Dworkin. The model of rules. *The University of Chicago Law Review*, 35:14–46, 1967. Reprinted in [31], pp. 14–45.
- [29] Ronald Dworkin. Social rules and legal theory. *Yale Law Journal*, 81:855–890, 1972.
- [30] Ronald Dworkin. Hard cases. *Harvard Law Review*, 99:1057–1109, 1975. Reprinted in [31], pp. 81–130.
- [31] Ronald Dworkin. *Taking Rights Seriously*. Harvard University Press, 1977.
- [32] Ronald Dworkin. *Law’s Empire*. Harvard University Press, 1986.
- [33] Melvin Eisenberg. *The Nature of the Common Law*. Harvard University Press, 1988.
- [34] Bernard Gert, Charles Culver, and K. Danner Clouser. Common morality versus specified principlism: reply to Richardson. *Journal of Medicine and Philosophy*, 25:308–322, 2000.
- [35] H. L. A. Hart. Positivism and the separation of law and morals. *Harvard Law Review*, 71:593–629, 1958.
- [36] H. L. A. Hart. *The Concept of Law*. Oxford University Press, 1961. Second edition published in 1994; pagination refers to the second edition.
- [37] John Horty. The result model of precedent. *Legal Theory*, 10:19–31, 2004.
- [38] John Horty. Reasoning with dimensions and magnitudes. *Artificial Intelligence and Law*, 27:307–345, 2019.
- [39] John Horty. Modifying the reason model. *Artificial Intelligence and Law*, 29:271–285, 2021.
- [40] John Horty. *The logic of precedent: constraint and freedom in common law reasoning*. Unpublished manuscript, 20xx.
- [41] John Horty. Grant Lamond’s account of precedent: a personal encounter. Manuscript, forthcoming, 20xx.

- [42] John Horty and Trevor Bench-Capon. A factor-based definition of precedential constraint. *Artificial Intelligence and Law*, 20:181–214, 2012.
- [43] Ana Smith Iltis. Bioethics as methodological case resolution: specification, specified principlism, and casuistry. *Journal of Medicine and Philosophy*, 25:271–284, 2000.
- [44] Albert Jonsen. Strong on specification. *Journal of Medicine and Philosophy*, 25:348–360, 2000.
- [45] Albert Jonsen and Stephen Toulmin. *The Abuse of Casuistry: A History of Moral Reasoning*. University of California Press, 1988.
- [46] Grant Lamond. Do precedents create rules? *Legal Theory*, 11:1–26, 2005.
- [47] Grant Lamond. Precedent and analogy in legal reasoning. In Edward Zalta, editor, *The Stanford Encyclopedia of Philosophy (Spring 2016 Edition)*. Stanford University, 2006. Available at <http://plato.stanford.edu/archives/spr2016/entries/legal-reas-prec/>.
- [48] Grant Lamond. Analogical reasoning in the common law. *Oxford Journal of Legal Studies*, 34:567–588, 2014.
- [49] Grant Lamond. Revisiting the reasons account of precedent. Unpublished manuscript, 2021.
- [50] Brian Leiter. Beyond the Hart/Dworkin debate: the methodology problem in jurisprudence. *American Journal of Jurisprudence*, 48:17–51, 2003.
- [51] Edward Levi. *An Introduction to Legal Reasoning*. The University of Chicago Press, 1949.
- [52] Hallie Liberto. The moral specification of rights: a restricted account. *Law and Philosophy*, 33:175–206, 2014.
- [53] Margaret Little. Moral generalities revisited. In Brad Hooker and Margaret Little, editors, *Moral Particularism*. Oxford University Press, 2000.
- [54] David Lyons. Open texture and the possibility of legal interpretation. *Law and Philosophy*, 18:297–309, 1999.
- [55] Neil MacCormick. *Legal Reasoning and Legal Theory*. Oxford University Press, 1978.
- [56] Neil MacCormick. Why cases have *rationes* and what these are. In Laurence Goldstein, editor, *Precedent in Law*, pages 155–182. Oxford University Press, 1987.
- [57] Neil MacCormick. On open texture in law. In Paul Amslek and Neil MacCormick, editors, *Controversies about Law’s Ontology*, pages 72–83. Edinburgh University Press, 1991.
- [58] Barry Maguire. The value-based theory of reasons. *Ergo*, 3:233–262, 2016.
- [59] Juliano Maranhao, Edelcio de Souza, and Giovanni Sartor. A dynamic model for balancing values. In *Proceedings of the Eighteenth International Conference on Artificial Intelligence and Law (ICAIL-2021)*. The Association for Computing Machinery Press, 2021.
- [60] Juliano Maranhao and Giovanni Sartor. Interpretive normative systems. In *Proceedings of the 15th International Conference on Deontic Logic and Normative Systems (DEON-2021)*, pages 301–322. College Publications, 2021.

- [61] Juliano Maranhao and Giovanni Sartor. Value assessment and revision in legal interpretation. In *Proceedings of the Eighteenth International Conference on Artificial Intelligence and Law (ICAIL-2021)*, pages 308–322. The Association for Computing Machinery Press, 2021.
- [62] Sarah Moss. Knowledge and legal proof. In Tamar Szabo Gendler and John Hawthorne, editors, *Oxford Studies in Epistemology, volume 7*. Oxford University Press, 2021.
- [63] Robert Mullins. Moral conflict and the logic of rights. *Philosophical Studies*, 177:633–651, 2020.
- [64] Robert Mullins. Protected reasons and precedential constraint. *Legal Theory*, 26:40–61, 2020.
- [65] Robert Mullins. Two factor-based models of precedential constraint: a comparison and a proposal. Unpublished manuscript, 2021.
- [66] John Oberdiek. Lost in moral space: on the infringing/violating distinction and its place in the theory of rights. *Law and Philosophy*, 23:325–346, 2004.
- [67] John Oberdiek. Specifying rights out of necessity. *Oxford Journal of Legal Studies*, 28:127–146, 2008.
- [68] Norbert Paulo. *Methods in applied ethics: a view from legal theory*. PhD thesis, Philosophy Department, University of Hamburg, 2014.
- [69] Norbert Paulo. Specifying specification. *Kennedy Institute of Ethics Journal*, 26:1–28, 2016.
- [70] Stephen Perry. Judicial obligation, precedent, and the common law. *Oxford Journal of Legal Studies*, 7:215–257, 1987.
- [71] Richard Posner. Reasoning by analogy. *Cornell Law Review*, 91:761–774, 2006.
- [72] Henry Prakken. An exercise in formalising teleological case-based reasoning. *Artificial Intelligence and Law*, 10:113–133, 2002.
- [73] Henry Prakken. A formal analysis of some factor- and precedent-based accounts of precedential constraint. *Artificial Intelligence and Law*, forthcoming, 20xx.
- [74] Henry Prakken, Floris Bex, and Anne Ruth Mackor. Editors’ review and introduction: models of rational proof in criminal law. *Topics in Cognitive Science*, 12:1052–1067, 2020.
- [75] Henry Prakken and Giovanni Sartor. Modelling reasoning with precedents in a formal dialogue game. *Artificial Intelligence and Law*, 6:231–287, 1998.
- [76] Henry Prakken and Giovanni Sartor. Logic and law: a review. Unpublished manuscript, 2014.
- [77] Joseph Raz. Legal principles and the limits of law. *The Yale Law Journal*, 81:823–854, 1972.
- [78] Joseph Raz. *The Authority of Law*. Oxford University Press, 1979.
- [79] Henry Richardson. Specifying norms as a way to resolve concrete ethical problems. *Philosophy and Public Affairs*, 19:279–310, 1990.
- [80] Henry Richardson. Specifying, balancing, and interpreting bioethical principles. *Journal of Medicine and Philosophy*, 25:285–307, 2000.

- [81] Adam Rigoni. An improved factor based approach to precedential constraint. *Artificial Intelligence and Law*, 23:133–160, 2015.
- [82] Adam Rigoni. Representing dimensions within the reason model of precedent. *Artificial Intelligence and Law*, 26:1–22, 2018.
- [83] Edwina Rissland and Kevin Ashley. A case-based system for trade secrets law. In *Proceedings of the First International Conference on Artificial Intelligence and Law (ICAIL-87)*, pages 60–66. The Association for Computing Machinery Press, 1987.
- [84] Edwina Rissland and Kevin Ashley. A note on dimensions and factors. *Artificial Intelligence and Law*, 10:65–77, 2002.
- [85] Edwina Rissland and David Skalak. Interpreting statutory predicates. In *Proceedings of the Second International Conference on Artificial Intelligence and Law (ICAIL-89)*, pages 46–53. The Association for Computing Machinery Press, 1989.
- [86] Giovanni Sartor. Doing justice to rights and values: teleological reasoning and proportionality. *Artificial Intelligence and Law*, 18:175–215, 2010.
- [87] Giovanni Sartor. Consistency in balancing: from value assessments to factor-based rules. In D. Duarte and S Sampaio, editors, *Proportionality in Law: An Analytical Perspective*, pages 121–136. Springer, 2018.
- [88] Giovanni Sartor. A quantitative approach to proportionality. In Gerald Postema, Antonio Rotolo, Giovanni Sartor, Chiara Valentini, and Douglas Walton, editors, *Handbook of Legal Reasoning and Argumentation*, pages 121–136. Springer, 2018.
- [89] Frederick Schauer. The jurisprudence of reasons. *The Michigan Law Review*, 85:847–870, 1987.
- [90] Frederick Schauer. Formalism. *The Yale Law Journal*, 97:509–548, 1988.
- [91] Frederick Schauer. *Playing by the Rules: A Philosophical Examination of Rule-Based Decision-Making in Law and Life*. Oxford University Press, 1991.
- [92] Frederick Schauer. A critical guide to vehicles in the park. *New York University Law Review*, 83:1109–1134, 2008.
- [93] Frederick Schauer. Why precedent in law (and elsewhere) is not totally (or even substantially) about analogy. *Perspectives on Psychological Science*, 3:454–460, 2008.
- [94] Frederick Schauer. *Thinking Like a Lawyer*. Harvard University Press, 2009.
- [95] Frederick Schauer. On the open texture of law. *Grazer Philosophische Studien*, 87:197–215, 2013.
- [96] Scott Shapiro. Beyond the “Hart-Dworkin” debate: a short guide for the perplexed. In Arthur Ripstein, editor, *Ronald Dworkin*, pages 22–55. Cambridge University Press, 2007.
- [97] Stewart Shapiro and Craig Roberts. Open texture, and its ramifications for logic and semantics. Unpublished manuscript, 2018.

- [98] Stewart Shapiro and Craige Roberts. Open texture and analyticity. In Dejan Makovec and Stewart Shapiro, editors, *Friedrich Waismann: The Open Texture of Analytic Philosophy*, pages 189–210. Palgrave Macmillan, 2019.
- [99] Stewart Shapiro and Craige Roberts. Open texture and mathematics. Unpublished manuscript, 2019.
- [100] A. W. B. Simpson. The *ratio decidendi* of a case and the doctrine of binding precedent. In A. G. Guest, editor, *Oxford Essays in Jurisprudence*, pages 148–175. Oxford University Press, 1961.
- [101] David Skalak and Edwina Rissland. Argument moves in a rule-guided domain. In *Proceedings of the Third International Conference on AI and Law (ICAIL-91)*, pages 1–11. The Association for Computing Machinery Press, 1991.
- [102] David Skalak and Edwina Rissland. Arguments and cases: an inevitable intertwining. *Artificial Intelligence and Law*, 1:3–44, 1992.
- [103] Barbara Spellman. Reflections of a recovering lawyer: how becoming a cognitive psychologist—and (in particular) studying analogical and causal reasoning—changed my views about the field of psychology and law. *Chicago-Kent Law Review*, 79:1187–1214, 2004.
- [104] Barbara Spellman. Judges, expertise, and analogy. In David Klein and Gregory Mitchell, editors, *The Psychology of Judicial Decision Making*, pages 149–163. Oxford University Press, 2010.
- [105] Barbara Spellman and Frederick Schauer. Legal reasoning. In Keith Holyoak and Roberg Morrison, editors, *The Oxford Handbook of Thinking and Reasoning*, pages 719–735. Oxford University Press, 2013.
- [106] Katharina Stevens. Reasoning by precedent-between rules and analogies. *Legal theory*, 24:216–254, 2018.
- [107] Carson Strong. Specified principlism: what is it, and does it really resolve cases better than casuistry? *Journal of Medicine and Philosophy*, 25:323–341, 2000.
- [108] Cass Sunstein. On analogical reasoning. *Harvard Law Review*, 1993:741–791, 1993.
- [109] Stephen Toulmin. The tyranny of principles. *The Hastings Center Report*, 11:31–39, 1981.
- [110] Stephen Toulmin. How medicine saved the life of ethics. *Perspectives in Biology and Medicine*, 25:736–750, 1982.
- [111] Richard Tur. Defeasibilism. *Oxford Journal of Legal Studies*, 21:355–368, 2001.
- [112] Frederick Waismann. Verifiability. In *Proceedings of the Aristotelian Society, Supplementary Volume 19*, pages 119–150. Harrison and Son, 1945. Reprinted in Anthony Flew, editor, *Logic and Language*, pages 117–144, Blackwell Publishing Company, 1951; pagination refers to this version.
- [113] Lloyd Weinreb. *Legal Reason: The Use of Analogy in Legal Argument*. Cambridge University Press, 2005.