1. ARBITRATION LITERATURE

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I. Introduction

International arbitration entertains a particular relationship with its own literature – the written knowledge in the field and about the field. This relationship is marked by one big mix, be it in the form of competition¹ or cooperation,² of practitioners who use it, legal entrepreneurs who make and change it, and scholars who analyse it, with more or less permanent alternations and confusions of these roles. Of course, Schrödinger's Cat-type problems³ make some of this intertwinement inevitable: Indeed, can one really analyse it without, by the same token, changing it by giving a certain representation of it? Can one use it without analysing it and, by using it,

¹ Yves Dezalay and Bryant G Garth, *Dealing in Virtue: International Commercial Arbitration and the Construction of a Transnational Legal Order* (University of Chicago Press 1998).

² Florian Grisel, 'Treaty-Making between Public Authority and Private Interests: The Genealogy of the Convention on the Recognition and Enforcement of Foreign Arbitral Awards' (2017) 28 European Journal of International Law 73.

³ Schrödinger's Cat is a thought experiment suggested by Austrian physicist Erwin Schrödinger, in which a cat is put in a box with a flask of poison. The mechanism releasing the poison is triggered by a system based on quantum mechanics, which, long story short, means that the cat is simultaneously dead and alive, until the researcher opens the box, at which point reality collapses into one of the two possibilities. Observation, the point is for us here, can influence, change the object of the observation by interfering with it. (Of course: 'No animals were harmed during the making of either this experiment or the current chapter.')

changing it? Can one make it without, in sense, using it and at least pretending to analyse it? Not really. But in arbitration, this relationship (call it, quite normatively, expertise-enhancing cross-fertilisation or rather mind-narrowing dogmatic collusion, as you will) has a strength that would probably appear curious, and worth investigating, in many other fields in which public interests are at stake.

This is what this chapter starts doing. It offers to put the starting point of this investigation in knowledge, empirically acquired and then abstractly, intuitively typologized. The chapter moves in two main parts. The first asks questions such as: What sort of literature has the field produced? By whom and citing whom? On what topics? Which journals structure the field, which landmark books have guided it? Who are, citation-wise, the great, impactful authors of international arbitration, and how do they cluster in groups? We seek to answer these questions with a scientometric analysis. The second part of the chapter then offers a typology of the main types of literature that fuel the field, and suggests hopefully credible hypotheses about the factors that determine what gets written, by whom, and where.

II. Charting the arbitration literature: A bird's-eye view

A. The question

Arbitration literature has a long history—one long enough in itself to its study.⁴ So far, however, no attempt has been made to examine it and its evolution systematically and with a quantitative approach.

The lack of investigation of this research question is, in and by itself, surprising. Clearly, the literature plays a strong role in shaping the thinking and making of international arbitration law. Beyond extreme views that might see scholarship as directly amounting to a source of law,⁵ if a subsidiary and unprivileged one, no arbitration conference, or foyer discussion, would omit mentions of its camps, theories, and schools of thought. The literature is thus, and at the very least, the material evidence of these camps, theories, and schools of thought, and can be taken as the litmus test of how they catch on, evolve, and have a meaningful impact on other thinkers and practitioners.

An alternative way of looking at the same problem suggests that the importance of the research question may go beyond this point. Literature—and scientific literature in particular—is a privileged conduit for the various actors in the social field of international arbitration.⁶ It acts, first and foremost, as a channel of learning and communication, through which these actors can portray themselves as 'value providers' for the system, or otherwise shape it by striving to publish activist or justificatory efforts.⁷ What is more, and not at all in contradiction with the preceding

⁴ See, for example, with reference to investment law and arbitration, Stephan W Schill, 'W(h)Ither Fragmentation? On the Literature and Sociology of International Investment Law' (2011) 22 European Journal of International Law 875.

⁵ These questions mainly arise in the field of international investment arbitration for its conceptual vicinity with and necessary application of public international law, the sources of which include (in the most widely-accepted formulation, contained in Article 38[1][d] of the ICJ Statute) 'the teachings of the most highly qualified publicist' as subsidiary means for the determinations of rules of law. Ole Kristian Fauchald, 'The Legal Reasoning of ICSID Tribunals – An Empirical Analysis' (2008) 19 European Journal of International Law 301; Sondre T Helmersen, 'The Use of Scholarship by the WTO Appellate Body' (2016) 7 Goettingen J. Int'l L. 309; Sandesh Sivakumaran, 'THE INFLUENCE OF TEACHINGS OF PUBLICISTS ON THE DEVELOPMENT OF INTERNATIONAL LAW' (2017) 66 International & Comparative Law Quarterly 1.

⁶ E Gaillard, 'Sociology of International Arbitration' (2015) 31 Arbitration International 1.

⁷ ibid 9.

remarks, it also provides important clues as to the ways in which these actors interact and their overall connectedness.

These assumptions make good sense intuitively, but they must be tested empirically to properly map and measures tendencies and approaches. Facing the open sea of scholarly publishing in international arbitration, we must cast our nets wisely. Enter *scientometrics*.⁸ This field was first defined as 'the quantitative methods of the research on the development of science as an informational process'. Methodologically, it is a development of *bibliometrics*, or 'the quantitative methods of the research on the development of science as an informational process'. However, it is specifically concerned with 'the exploration and evaluation of scientific research'.⁹

On the scientometrics market the citation is the main currency.¹⁰ It serves as a flexible unit of measurement, and the measurement has a number of real-world implications—for example, as an index for universities to assess when considering a candidate for a position—and universities, it bears recalling, are one of the traditional 'holding pens' of the members of the arbitral community. The rationale is that citation counts are positively associated with subsequent impact. ¹¹ To take an extreme case, high citations have even been correlated with the likelihood of being awarded a Nobel prize.¹² Therein, then, lies the connection with influence and social capital.

After parsing citations from scholarly works, a variety of techniques can be used to make the data say something. Most obviously, one can simply count the number of citations that are received by any scholarly work. High citation counts, as we said, are a good predictor of impact, so this already is meaningful, as it suggests how much a given work, and its author, likely have made a dent in the literature, have steered the knowledge in the field in a certain direction. Fine. But this is a bit crude. It is in fact a brutal over-simplification to say that there is one single, common body of knowledge in a field, as if everyone in the field knew roughly the same things, understood them in the same way, believed in the correctness or appropriateness of the same things. In many, perhaps most, fields of knowledge, there likely are very few central ideas which really structure the entire field, central ideas which are accepted by everyone in the field. Knowledge in a field is likely better thought of as a set of entangled and partly overlapping clusters of ideas, beliefs, values, and postulates. To make the data show this, and how it plays out in the field of arbitration, we can use essential notions of network analysis to a scientific field: the data now tells us who cites whom or what.¹³

Technically, this can be done through co-authorship analysis, where individual nodes in the network (authors) are given greater connectedness on the basis of the number of works that they have authored together. Or it is possible to consider basic citation analysis, which shifts nodes closer together depending on the number of times two authors tend to cite each other. Still, it is possible to go further, making relatedness a function of how many times two works *are cited*

⁸ The development of scientometrics as a field is generally credited to Derek de Solla Price. See Derek John de Solla Price, *Little Science*, *Big Science-- and Beyond* (Columbia University Press 1963).

⁹ John Mingers and Loet Leydesdorff, 'A Review of Theory and Practice in Scientometrics' (2015) 246 European Journal of Operational Research 1, 1.

¹⁰ ibid.

¹¹ Yves Gingras and Matthew L Wallace, 'Why It Has Become More Difficult to Predict Nobel Prize Winners: A Bibliometric Analysis of Nominees and Winners of the Chemistry and Physics Prizes (1901–2007)' (2010) 82 Scientometrics 401.

¹² Gregory J Feist, 'Quantity, Quality, and Depth of Research as Influences on Scientific Eminence: Is Quantity Most Important?' (1997) 10 Creativity Research Journal 325, 326.

¹³ For an overview, see Farideh Osareh, 'Bibliometrics, Citation Analysis and Co-Citation Analysis: A Review of Literature I' (1996) 46 Libri 149; Farideh Osareh, 'Bibliometrics, Citation Analysis and Co-Citation Analysis: A Review of Literature II' (1996) 46 Libri 217; Howard D White and Katherine W McCain, 'Visualizing a Discipline: An Author Co-Citation Analysis of Information Science, 1972-1995' (1998) 49 Journal of the American society for information science 327.

together (co-citation analysis) or even of the number of times they cite the same works together. The possibilities of course go much further, and the research questions one can address through one such approach are numerous. In the balance of this chapter, we hope to demonstrate the interest of this new methodology, by highlighting latent patterns in the arbitration literature and thus illuminating our overall, bird's-eye picture of it: from an intuitive guess about what happens in arbitration scholarship we can now progressively turn to a more informed, crisper picture.

B. Measuring arbitration literature

We measure the arbitration literature in two ways. First, we determine which works are the most cited, in absolute terms and over time, for two different time windows (see Table 1 and 2). This is, if you will, the equivalent of scouting for the highest summits in a mountain range. In the terms from above, these are, then, the works that likely have had the most impact on the knowledge in and about arbitration, where this knowledge is taken as a single, common whole. Second, we look at what the co-citation network can tell us about the makeup of the world of arbitration literature. This allows us to see 'invisible colleges', and we thus seek to confirm our hypotheses, anticipating encounters with islets, archipelagos, and whole continents. These are the expected clusters of ideas, beliefs, values, and postulates from above, which go beyond the simplistic idea of arbitration knowledge as single, common whole.

In order to do so, we need, of course, to gather citation data on arbitration literature. Yet this brings us to a common problem in scientometrics: the quality of the source data. Indeed, citation analyses of this kind are only as good as what is fed into the machine. (Computer scientists, not prone to convoluted literary metaphors, call this the GIGO Principle: Garbage In Garbage Out.) Generally speaking, Clarivate's Web of Science¹⁵ is the preferred source for extracting citation data, which can be downloaded in computer-readable format, but it is by no means perfect. Not only is it not a freely accessible service, but it is also fairly under-inclusive, especially when scholarly works such as books and book chapters are concerned (even Oxford Handbooks). This may be problematic in the context of the arbitration literature, where different sources, some far less formal than others, all have their place.¹⁶ The obvious alternative, Google Scholar, mitigates these problem: it is freely accessible, speedy, and more thorough for the counting of sources such as books and working papers posted on SSRN.¹⁷ It does, however, suffer from the opposite problem: it is prone to over-inclusiveness, duplicate entries, and—most problematically—significant consistency problems with regard to the spelling of names and citation accuracy. In addition to these problems, Google renders automatic mining of its data difficult.

To compensate for these limitations, we combine the two sources. First, we rely on Google Scholar for the first type of analysis, thus benefiting from the broader outlook. For the analysis of the data obtained from this source—in order, then, to count the number of citations—we use software called Publish or Perish, a standard in the field. For the second type of analysis, when we hunt for islands of knowledge, when we conduct co-citation analyses, we rely on Web of Science. Perhaps this does not map the entire field of arbitration, because of the under-

¹⁴ Diana Crane, 'Social Structure in a Group of Scientists: A Test of the 'Invisible College' Hypothesis' (1969) 34 American Sociological Review 335; Oscar Schachter, 'Invisible College of International Lawyers' (1977) 72 Nw. UL Rev. 217; Markus Gmür, 'Co-Citation Analysis and the Search for Invisible Colleges: A Methodological Evaluation' (2003) 57 Scientometrics 27.

^{15 &}lt; http://webofknowledge.com>.

¹⁶ Just like arbitral awards are sometimes sent out to colleagues or mailing lists prior to their formal publishing, the world of academia knows

¹⁷ Anne-Wil K Harzing and Ron Van der Wal, 'Google Scholar as a New Source for Citation Analysis' (2008) 8 Ethics in science and environmental politics 61; Nabil Amara and Réjean Landry, 'Counting Citations in the Field of Business and Management: Why Use Google Scholar Rather than the Web of Science' (2012) 93 Scientometrics 553.

¹⁸ Anne-Wil Harzing (2007) Publish or Perish, available from http://www.harzing.com/pop.htm.

inclusiveness of Web of Science. But the parts it does map, it maps very precisely, and we take these parts of the field to be representative of the whole. More precisely with regard to the method, we employ a number of keywords and search expressions designed to capture records relating to both international commercial and investment arbitration, processing them with the VOSViewer software by Nees Jan van Eck and Ludo Waltman.¹⁹

Finally, we should point out that our dataset suffers from an almost inevitable limitation, which has to do with language diversity. Indeed, it is almost impossible to gather data relating to sources published in languages other than English. Although the assumption that the literature not published in English is simply irrelevant seems of course too much of a stretch²⁰ (it may be telling that names of French cities sometimes function as shorthand for entire schools of thought in arbitration)²¹ there seems to be enough anecdotal evidence to suggests that the status of English as the *lingua franca* of scientific communication may make the limitation a little more tolerable.²² These inevitable shortcomings notwithstanding, we submit that the data we present maintains its overall illustrative value. Ultimately, Korzybski's general caveat is worth recalling: *the map is not the territory*—but it resembles it closely, it can still be useful to navigate it.²³

¹⁹ Nees Jan van Eck and Ludo Waltman, 'Visualizing Bibliometric Networks', *Measuring Scholarly Impact* (Springer, Cham 2014) https://link.springer.com/chapter/10.1007/978-3-319-10377-8_13 accessed 27 April 2018. The software (free, but not Open Source) can be downloaded from http://www.vosviewer.com.

²⁰ With reference to the making of European Law scholarship, see Bruno de Witte, 'European Union Law: A Unified Academic Discipline?' in Antoine Vauchez and Bruno de Witte, *Lawyering Europe: European Law as a Transnational Social Field* (Bloomsbury Publishing 2013).

²¹ Thomas Schultz, Transnational Legality: Stateless Law and International Arbitration (OUP 2014) 153 ff.

²² See in general C Tardy, 'The Role of English in Scientific Communication: Lingua Franca or Tyrannosaurus Rex?' (2004) 3 Journal of English for Academic Purposes 247.

²³ Alfred Korzybski, Science and Sanity: An Introduction to Non-Aristotelian Systems and General Semantics (Institute of GS 1958) 58.

Table 1. The most cited works overall

Cite	Authors	Title	Year	ECC	CitesPerYea	CitesPerAutho	AuthorCoun	Age
1394	Y Dezalay, BG Garth	Dealing in virtue: International commercial arbitration and the construction of a transnational legal order	1996	1394	60.61	697	2	23
1080	A Redfern, M Hunter	Law and practice of international commercial arbitration	2004	1080	72	540	2	15
871	G Born	International commercial arbitration	2009	871	87.1	871	1	10
867	SD Franck	The Legitimacy Crisis in Investment Treaty Arbitration: Privatizing Publlic International Law through Inconsistent Decisions	2004	867	57.8	867	1	15
797	B O'Neill	A problem of rights arbitration from the Talmud	1982	797	21.54	797	1	37
762	MS Miller, ED Tribble, N Hardy, CT Hibbert	Diverse goods arbitration system and method for allocating resources in a distributed computer system	1997	762	34.64	191	4	22
759	JDM Lew, LA Mistelis, SM Kröll, S Kröll	Comparative international commercial arbitration	2003	759	47.44	190	4	16
676	H Lauterpacht	Private law sources and analogies of international law: with special reference to international arbitration	2002	676	39.76	676	1	17
675	F Elkouri, EA Elkouri, EP Goggin, MM Volz	How arbitration works	1985	675	19.85	169	4	34
510	JR Sternlight	Panacea or Corporate ToolDebunking the Supreme Court's Preference for Binding Arbitration	1996	510	22.17	510	1	23
497	A Cox	Reflections upon labor arbitration	1958	497	8.15	497	1	61

491	P Fouchard, B Goldman	Fouchard, Gaillard, Goldman on international commercial arbitration	1999	491	24.55	246	2	20
479	N Blackaby, C Partasides	Redfern and Hunter on international arbitration	2009	479	47.9	240	2	10
448	S Mentschikoff	Commercial arbitration	1961	448	7.72	448	1	58
439	DS Schwartz	Enforcing Small Print to Protect Big Business: Employee and Consumer Rights Claims in an Age of Compelled Arbitration	1997	439	19.95	439	1	22
380	G Van Harten	Investment treaty arbitration and public law	2007	380	31.67	380	1	12
372	SJ Brams	Negotiation Games: Applying game theory to bargaining and arbitration	2003	372	23.25	372	1	16
370	JR Sternlight	Creeping mandatory arbitration: Is it just	2004	370	24.67	370	1	15
357	KVW Stone	Mandatory arbitration of individual employment rights: the yellow dog contract of the 1990s	1995	357	14.88	357	1	24
348	IR Macneil, RE Speidel, TJ Stipanowich	Federal arbitration law: agreements, awards, and remedies under the Federal Arbitration Act	1994	348	13.92	116	3	25

Table 2. The most cited works 2008-2018

Cite	Authors	Title	Year	ECC	CitesPerYear	CitesPerAuthor	AuthorCount	Age
S								
871	G Born	International commercial arbitration	2009	871	87.1	871	1	10
479	N Blackaby, C Partasides	Redfern and Hunter on international arbitration	2009	479	47.9	240	2	10
308	C McLachlan, L Shore, M Weiniger	International investment arbitration: substantive principles	2017	308	154	103	3	2
303	ML Moses	The principles and practice of international commercial arbitration	2017	303	151.5	303	1	2

219	C Dugan, D Wallace, N Rubins, B Sabahi	Investor-state arbitration	2011	219	27.38	55	4	8
219	TJ Stipanowich	Arbitration: The New Litigation	2010	219	24.33	219	1	9
217	L Reed, J Paulsson, N Blackaby	Guide to ICSID arbitration	2011	217	27.13	72	3	8
215	CN Brower, SW Schill	Is arbitration a threat or a boom to the legitimacy of international investment law	2008	215	19.55	108	2	11
214	M Goltsman, J Hörner, G Pavlov, F Squintani	Mediation, arbitration and negotiation	2009	214	21.4	54	4	10
212	J Resnik	Diffusing Disputes: The Public in the Private of Arbitration, the Private in Courts, and the Erasure of Rights	2014	212	42.4	212	1	5
211	SD Franck	Development and outcomes of investment treaty arbitration	2009	211	21.1	211	1	10
188	SMJ Mustill, SC Boyd	The law and practice of commercial arbitration in England	2009	188	18.8	94	2	10
174	M Rubino- Sammartano	International arbitration law and practice	2014	174	34.8	174	1	5
165	B Simma	Foreign Investment Arbitration: A Place for Human Rights?	2011	165	20.63	165	1	8
164	G Born	International arbitration: law and practice	2012	164	23.43	82	2	7
149	TH Oehmke	Oehmke Commercial Arbitration	2008	149	13.55	149	1	11
143	AJS Colvin	An empirical study of employment arbitration: Case outcomes and processes	2011	143	17.88	143	1	8
142	AAP Bruhl	The Unconscionability Game: Strategic Judging and the Evolution of Federal Arbitration Law	2008	142	12.91	142	1	11
137	G Van Harten	Arbitrator behaviour in asymmetrical adjudication: an empirical study of investment treaty arbitration	2012	137	19.57	137	1	7
135	DS Schwartz	Mandatory arbitration and fairness	2008	135	12.27	135	1	11

C. Reconnaissance

The classic literature on citations and precedents focuses on the reasons for citing and the reasons for citing one specific person or authority. These are interesting questions. But they are not quite ours. Our question, investigated through a scientometric analysis, rather focuses on who is cited together. The reasons for this outlook should be intuitive: as scholars in the field we know who the players are, but it is only by thinking three-dimensionally, as it were, that we may place them on the checkerboard and better understand their game. (Or as good gossipers would put it, and they have a good grasp of what is intuitively interesting: who does what with whom?)

Consider, for example, the question of who the main authorities are in the field—or rather we should say, already at the level of hypothesis, based on the discussion above, who the main specific authorities are for the specific sub-fields in the literature.

By employing a simple clustering algorithm, we can group together authors who tend to be cited together often. And notice (Figure 2) how the groups form, how the clusters are distributed: seasoned practitioners are more likely to be cited alongside seasoned practitioners,²⁴ and theorists of the legitimacy crisis of investment arbitration alongside, and by, their counterparts north of a border.²⁵

No surprise here: these are different communities with different interests and different purposes in their contributions to the social construct that is the arbitration literature (as we will discuss in the second part of this chapter). They seek to construct distinct things and for these distinct constructions enlist distinct co-workers.

But beyond that, we can see that clustering also occurs around books and articles made to serve as 'authorities',²⁶ as so many referencing totems, connecting together either paradigm adherents or those who attempt to rethink paradigms.²⁷

There is more, too: a co-citation network allows us to discern patterns of institutional and mentorship bonds. (From co-workers we have moved here to sidekicks, one might brutally put this.) By unpacking these invisible colleges,²⁸ one can then identify social factors driving the development and direction of the arbitration literature. To be sure, this is a question that is best addressed with a sociological approach,²⁹ but it is worth mentioning in the current discussion too because of the sheer importance of informal networks emerging in the field.³⁰

²⁴ For example, Gabrielle Kaufmann-Kohler, David Caron, Emmanuel Gaillard, Yas Banifatemi, Michael Reisman, and Gary Born, to name a few, are all likely to be cited together.

²⁵ Susan D Franck, 'The Legitimacy Crisis in Investment Treaty Arbitration: Privatizing Public International Law through Inconsistent Decisions' (2005) 73 Fordham Law Review 1521.

²⁶ Christoph H Schreuer and International Centre for Settlement of Investment Disputes, *The ICSID Convention: A Commentary* (Cambridge University Press 2001); Zachary Douglas, *The International Law of Investment Claims* (Cambridge University Press 2009); Rudolf Dolzer and Christoph Schreuer, *Principles of International Investment Law* (Second edition, Oxford University Press 2012).

²⁷ Stephan W Schill, *The Multilateralization of International Investment Law* (Cambridge University Press 2009); Stephan W Schill (ed), *International Investment Law and Comparative Public Law* (Oxford University Press 2010); Anthea Roberts, 'Clash of Paradigms: Actors and Analogies Shaping the Investment Treaty System' (2013) 107 The American Journal of International Law 45.

²⁸ Crane (n 13); Schachter (n 13).

²⁹ See in this Handbook Moshe Hirsch, 'The Sociological Dimension of International Arbitration: The Investment Arbitration Culture' (Social Science Research Network 2017) SSRN Scholarly Paper ID 2999259 https://papers.ssrn.com/abstract=2999259 accessed 28 April 2018.

³⁰ Consider the fact that an authority such as Redfern and Hunter's commentary specifically mentions the practice of circulating awards on mailing lists. See Nigel Blackaby and others, *Redfern and Hunter on International Arbitration* (Oxford University Press 2015) 568.

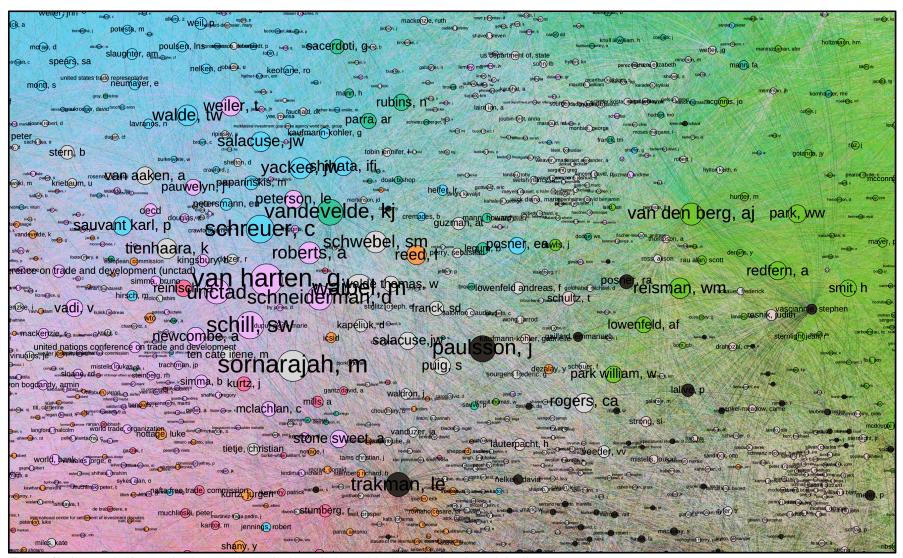


Figure 1: Citation network. The connections between nodes are, simply put, citations and describe a 'who cites whom' relationship.

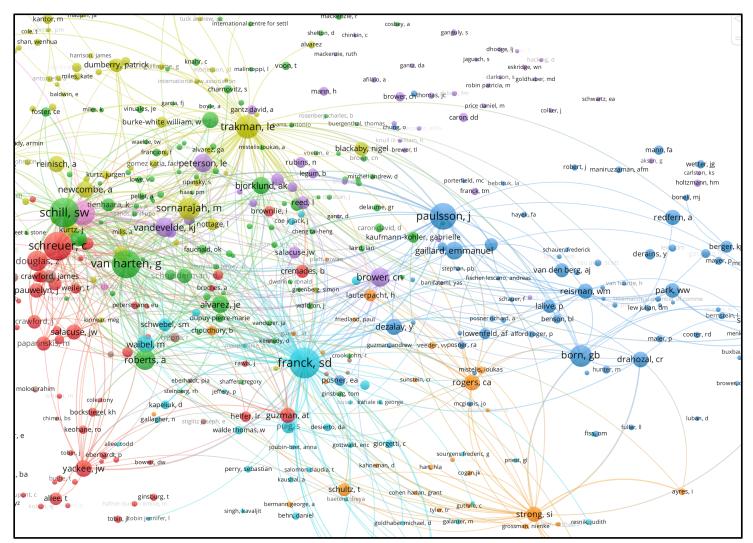


Figure 2: Co-citation network. Here, authors are connected to each other if they are cited together. In both cases clusters are formed by authors who are more connected to each other—with these two types of relationships—than to the rest of the network.

But let us now zoom out. A bird's-eye look at the scientific landscape provides an empirical confirmation of one of our simple assumptions: the arbitration literature is very much the product of a multiplicity of actors, who thus all appear to contribute to its advancement. To be sure, as Figure 3 shows, the affiliations of the producers of the arbitration literature are quite variegated. They do tend, however, to be ultimately limited to a specific set of professional and academic institutions. In this respect, the arbitration literature, a bit like a Möbius band, both reflects and constitutes the field it describes and animates.

Let us explain. Arbitration, as a field, is made in a varied selection of places at the same time. Law schools may still be the chief vehicle of delivery of information about it (yes, 'vehicle of delivery', not necessarily place of production: universities give university authority to the information that transits through them, but they do not necessarily guarantee that the information was produced by university members working with university methods and university objectives). But affiliations with law firms and other institutions of practice are not radically less likely. Now to the important point: the co-citation-based connection with practice seems barely escapable. What Figure 3 shows in this regard is the connectedness between academic and professional affiliations (consider the precise composition of the [grey-scale/coloured] clusters to see the point, literally). In other words, it makes it quite clear that scholarly works in the discipline tend to combine influences from both camps—to the point, and hence the metaphor we promised to explain, that it is as difficult to distinguish them as it is to distinguish the two sides of a Möbius band (a band with only one side, with the mathematical property of being unorientable: if you were to walk along the full length of the band, you would come back to your starting point after having walked both sides without ever crossing an edge).

The other meaningful point that emerges from Figure 3 is that, to the chagrin of many, no one specific institution is really more central than the others, despite the fact, for instance, that some have a longer-standing tradition in the field.

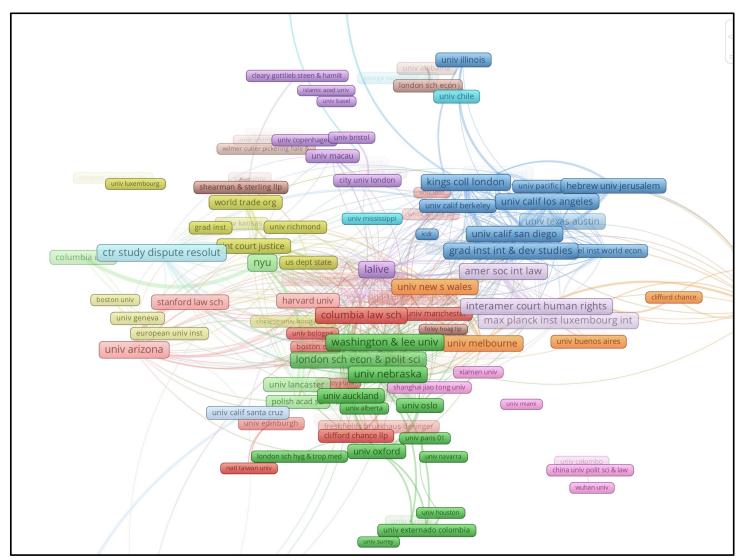


Figure 3: A co-citation network showing the affiliations of authors commonly cited together

Co-citation analysis also allows us to make a point about the sources that are more influential in the world of the arbitration literature. As Figure 4 shows, the increased focus on questions relating to arbitration under investment treaties makes references to public international law sources far more common. The emerging picture is not, of course, one that suggests isolation of the worlds of investment arbitration on one side and commercial arbitration on the other. Interaction between the two communities is evident. But one may observe differences in citation patterns. For example, the field of investment arbitration shows closer connections with general-purpose law journals and reviews than commercial arbitration does. One thing this means is that investment arbitration is of greater relevance beyond its own specialism than commercial arbitration is; or to take this one step further, its broader societal relevance is more readily recognised.

Yes, this is all quite in line with the intuitive understanding of those who know the field, but here the data shows this to be in fact the case and suggests the degree to which this is the case.

The co-citation data also highlights a general divide between law journals on one or the other end of the Atlantic—a tendency that can by the way be observed in a number of other disciplines.³¹

³¹ We do not address here the important question of whether citation patterns are related to the need to address a specific community or another. Guglielmo Verdirame, "The Divided West': International Lawyers in Europe and America' (2007) 18 European Journal of International Law 553.

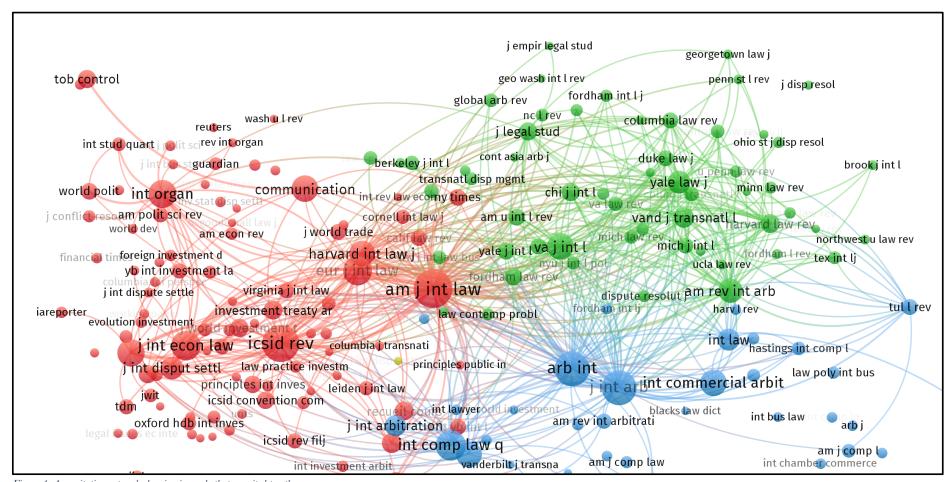


Figure 4: A co-citation network showing journals that are cited together.

From the perspective of network importance, works on international investment arbitration clearly dominate the landscape. There can be many explanations for this, but the following ones may provide a starting point. First, investment arbitration attracts a wider range of practitioners and academics versed in fields other than commercial arbitration, such as international lawyers. They have found themselves in a position to comment on a larger jurisprudential output, and may have incentives to do so to find a way into the club of those who are regularly appointed. Further, investment awards tend to be public, thus inherently attracting commentary. Finally—for our purposes—investment arbitration is at the centre of broader debates about questions relating to the emergence of transnational legal orders, the nature of international adjudication, the status of the very notion of sovereignty, the rethinking of dispute settlement institutions, and so much more: in short, the societal relevance from above.

As to what gets cited, it is not surprising to find higher citation scores for textbooks, reference works, and commentaries. But even then, distinctions can be made: obviously, citing *Redfern & Hunter*,³² or even *The International Law of Investment Claims*³³ may be not quite the same thing, serving not quite the same objective, as citing Sornarajah's *The International Law on Foreign Investment*.³⁴ Although singling out the most political of the lot may be a harder question than what would appear at first sight, it is clear that these three works serve very different purposes and audiences.

Consider, for example, the referencing patterns of (and before) investment tribunals. There it is to be expected that an invocation of scholarship will be an invocation of incontrovertible authority—thus, it is not surprising to discover that Schreuer's *Commentary* has been cited so many times.³⁵

In a sense then, the important, if obvious, point is this: different actors will rely on different sources, which better match their arguments.³⁶ And this is true when submitting an argument to a tribunal as it is true when making 'objective' statements about arbitration. So much then for the idea that knowledge, about arbitration here at least, can be truly objective, can be anything else than socially constructed. So much, also, for those who think of themselves as being at the centre of the discipline: if 'the discipline' can be likened to the knowledge, to the literature, then it does not have much of a centre.

Let us briefly return to the Möbius band, to insist on a central argument that runs through this chapter. Although there are obvious differences in these uses of scholarship, they all are deeply intertwined. This is so because the scholarly community and that of arbitration practitioners, which already overlap to a significant degree, interact with each other in a continuous feedback loop guided by incentives of various nature. There is no real distinction between commentators, the readership, and the object of study—all of it is one and the same. Thus, an arbitrator handing down a decision will be mindful of the criticism—sometimes ferocious—that it may encounter, and mindful that future tribunals will have full recollection of

³⁴ M Sornarajah, *The International Law on Foreign Investment* (Cambridge University Press 2004) http://public.eblib.com/choice/publicfullrecord.aspx?p=266634 accessed 21 July 2016; M Sornarajah, *The International Law on Foreign Investment* (3rd ed, Cambridge University Press 2010).

³² Blackaby and others (n 29).

³³ Douglas (n 25).

³⁵ At the time of writing, Schreuer's commentary had been cited by 161 majority decisions. Schreuer and Disputes (n 25); Christoph H Schreuer, *The ICSID Convention: A Commentary* (Cambridge University Press 2009).

³⁶ See, for example, CC/Devas (Mauritius) Ltd., Devas Employees Mauritius Private Limited and Telecom Devas Mauritius Limited v. India, PCA Case No. 2013-09, Award on Jurisdiction and Merits, para. 436, summarising India's reliance on Gus Van Harten's work (Gus van Harten, *Investment Treaty Arbitration and Public Law* (Oxford University Press 2007).) as critical authority against 'attempts to expand the FET concept beyond the minimum standard of treatment provided by customary international law in the absence of evidence evincing such intention of the Contracting Parties'.

it.³⁷ Often—and the examples are really too many to necessitate examples—arguments made in awards will be rehashed, almost verbatim, in an article or book chapter. On the other side of the barricade—assuming, again, that there is one—linger the same anxieties, as a commentator seeking appointment knows any possibility of appointment to a tribunal may have to survive the intensive vetting of one's scholarly production by a team of law firm associates tasked with identifying biases, and may be put into question by a proposal for disqualification at a later stage.³⁸

III. A framework on international arbitration literature

Having examined the types of works that tend to be influential, can we infer anything more and further catalogue the types of literature that deal with international arbitration? The sections that follow attempt to provide a general framework to classify these types of scholarly production.

A. Types of legal literature

It is generally said that the purpose of mostly any academic discipline, be it within hard sciences, social sciences, or humanities, is to articulate propositions.³⁹ These propositions together form a system of thought,⁴⁰ which in turn creates knowledge that is eventually susceptible, if not of verification and falsification,⁴¹ at least of rational assent, of rational approval.⁴² In other words, it ultimately seeks to improve our understanding of what has happened and what is likely to happen.⁴³

Systems of thought are generally organised around a paradigm,⁴⁴ a central idea, a central understanding. The whole purpose of law as a scientific discipline can for instance be described as a 'cognitive activity seeking to provide a representation of the legal phenomenon in conformity with the scientific paradigm that was endorsed'.⁴⁵ A central paradigm, and often a number of smaller secondary paradigms, structure and validate the thinking in the field. Such paradigms could for instance be a central understanding of what arbitration itself is, or a central

³⁷ Waguih Elie George Siag & Clorinda Vecchi v. Arab Republic of Egypt, ICSID Case No. ARB 05 15, Award, 1 June 2009, paras. 498-499 ('The Loewen decision has been the subject of intense scrutiny and criticism by international law scholars and investment arbitration practitioners... Commentators have also stigmatised the Tribunal's application of a rule developed in one particular context... Finally, academics and practitioners have questioned the relevance of the Loewen Tribunal's conclusions'.).

³⁸ Urbaser S.A. and Consorcio de Aguas Bilbao Bizkaia, Bilbao Biskaia Ur Partzuergoa v. The Argentine Republic, ICSID Case No. ARB/07/26, Decision on Claimants' Proposal to Disqualify Professor Campbell McLachlan, 12 August 2010. See the interesting reflections on such matters and the potential 'chilling effect' on academic writing made in Schill, 'Editorial' (2014) 15 The Journal of World Investment & Trade 1.

³⁹ This is of course such a general statement that much of the philosophy of science could be referred to. For useful starting points, see, on law, François Ost, *Science da droit* 540, in André- Jean Arnaud (ed), *Dictionnaire encyclopédique de théorie et de sociologie du droit*, (LGDJ 1998), and more generally on scientific work, see Isabelle Stengers, *Cosmopolitiques - tome 1: la guerre des sciences* (La Découverte and Les Empêcheurs de penser en rond 1996); B. Latour, *How to Talk About the Body i The Normative Dimension of Science Studies*, 10 Body & Society 205 (2004); Bruno Latour, *Pandora's Hope: Essays on the Reality of Science Studies*, (Harvard University Press 1999).

⁴⁰ Imre Lakatos, Falsification and the Methodology of Scientific Research Programmes 130, in Imre Lakatos and Alan Musgrave (eds.), Criticism and the Growth of Knowledge, Proceedings of the International Colloquium in the Philosophy of Science, (CUP 1970).

⁴¹ Karl R Popper, Conjectures and Refutations, (Routledge 1963).

⁴² David Hartley, *Observations on Man: His Frame, His Duty and His Expectations* 324 (Richardson 1749): 'rational assent... to any proposition may be defined as readiness to affirm it to be true, proceeding from a close association of the ideas suggested by the proposition, with the idea or internal feeling belonging to the word truth; or of the terms of the proposition with the word truth.'

⁴³ See Karl R Popper, *Conjectures and Refutations*, (Routledge 1963).

⁴⁴ Thomas Kuhn, *The Structure of Scientific Revolutions* (2d ed., University of Chicago Press 1970).

⁴⁵ François Ost, Science du droit 540, in André-Jean Arnaud (ed), Dictionnaire encyclopédique de théorie et de sociologie du droit, (LGDJ 1998).

understanding of core ideas in arbitration, such as consent, or public policy,⁴⁶ or competence-competence, or that investment arbitration protects investors, or that investment arbitration multilateralises bilateral treaties.⁴⁷ From this central idea, or ideas, follow rules of truth shared by members of the discipline: inferences from the paradigm about what is legally valid and what is not, what is an accurate explanation of reality and what is not.

It is certain that, after a while, anomalies start to appear that the orthodox paradigms cannot explain. As this happens more and more frequently, the validity of the old paradigm is questioned, and new candidate ideas line up to become the next. Though the old paradigm in place resists for a time, due to various stakes involved and the beliefs and values that undergird this particular paradigm, it eventually resigns, allowing a new one to emerge and determine what is true and what is false in the field, what can be and what cannot, what is legally valid and what is not.⁴⁸ In other words, when the system of thought in place no longer provides the best explanation, among competing explanations, of reality, then the system of thought changes, taking us somewhat nearer (when all goes well) to an accurate representation of an observer-independent reality (what philosophers call 'truth').⁴⁹ And so our understanding progresses through research. This, in essence, is the scientific theory of law as a scientific discipline.

1. Persuasion

Of course, in law generally, much of what is published in law reviews or in law books does not really try to produce knowledge filtered by critical thinking. It has rather tries to produce opinion, approximating religion more than social sciences or the humanities (notice the connotation of the word 'doctrine'). In these cases, what counts is our ability persuade. This type of literature finds inspiration in the art of persuasion.⁵⁰ It also may well find *aspiration* in powerful ideological systems, at its most dramatic even espousing logophobia, in the sense of 'a sceptical doctrine about rationality ... [where] rationality cannot be an objective constraint on us but is just whatever we make it, and what we make it depends on what we value'.⁵¹ Logophobics, to take it to an extreme, 'have developed an arsenal of strategist obfuscate clear thinking, which they deploy whenever pressed by a sceptic'.⁵² When only persuasion counts, logical fallacies are not merely condoned. They are practiced, refined, admired if they carry the audience. We take into the law review and the law book the craft developed by advocates for courts—developed for their most mesmerising feats in court, rather than logical conclusiveness. The law reviews and the law books then dispense the labels of 'literature' or 'scholarship'.

Hence a parallel with religions, which prevail not because they provide a better account of reality, but merely because they become stronger, more powerful. The Crusaders certainly seemed to think so. The same happens to legal thinking, which changes not only like paradigms, but also like like religion. Central ideas in a field can also be imposed by brute force. our central

⁴⁶ Gus Van Harten, 'Investment Treaty Arbitration, Procedural Fairness, and the Rule of Law' in Stephan W Schill (ed), International Investment Law and Comparative Public Law (Oxford University Press 2010) http://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780199589104.001.0001/acprof-

⁹⁷⁸⁰¹⁹⁹⁵⁸⁹¹⁰⁴⁻chapter-20> accessed 26 July 2016; Gus Van Harten, Sovereign Choices and Sovereign Constraints: Judicial Restraint in Investment Treaty Arbitration (OUP 2013).

⁴⁷ Schill, The Multilateralization of International Investment Law (n 26).

⁴⁸ Thomas Kuhn, *The Structure of Scientific Revolutions*, (2d ed., University of Chicago Press 1970).

for instance Andrea Bianchi, Reflexive Butterfly Catching: Insights from a Situated Catcher 200, in Joost Pauwelyn et al. (eds.), Informal International Lawmaking, (Oxford University Press 2012).

⁵⁰ See for instance James Boyd White, *The Legal Imagination*, (University of Chicago Press 1985), and Austin Sarat, Matthew Anderson, Cathrine 0. Frank, *Introduction: On the Origins and Prospects of the Humanistic Study of Law* 1, in Austin Sarat, Matthew Anderson, Cathrine 0. Frank (eds.), *Law and the Humanities, An Introduction* (Cambridge University Press 2010)

⁵¹ N. Shackel, *The Vacuity of Postmodernist Methodology*, 36 Metaphilosophy 295 (2005).

⁵² M. Pigliucci, *Logophobia*, 33 Skeptical Inquirer 24 (2009).

idea is better than yours because I am stronger. I can push it by inundating thee field with publications by our gang mates, organizing conferences around our central idea, launching journals that take our approach, by telling our students (in a broad sense) that mine is the only correct way of thinking, exclusively marks the proprieties. our school eventually prevails over yours.

By way of example, today much bombast and invective and displays of raw lobbying power mark much of the thinking about the question whether, in the context of the Transatlantic Trade and Investment Partnership (TTIP), EU-US investment disputes should be solved by arbitral tribunals or a permanent international investment court. Much less attention is devoted to, for instance, finding evidence, historical parallels, developing theories that help us understand the difference, and try to predict what would likely happen.

2. Scholarly review

Other forms of legal literature have other sources of inspiration. To see the point, let us first say that we seem to have a general issue with role models when we write on law. That role models often determine, or at least influence, the way we think, the type of thinking we believe is appropriate, is no more than a truism. Then again, the implication of the truism is that, as scholars, it would make sense for us to have as role models exceptional scholars (exceptional as in 'exceptionally good', not as in 'exceptionally famous'), be they in our field or in a neighbouring discipline. Should we not dream of being the person who brought down a central paradigm in our field, or who came up with a new key idea in our discipline? Or at least contribute a small but significant piece to either of these enterprises?

As it happens, much of legal literature seems to identify itself with the work of an appellate court, chastising or complimenting the lower court, engaging in an 'imitation of judicial idioms, tasks, gestures, professional anxieties, and the like.'53 Why, really, when we look for a role model for our scholarly activities do we look to individuals who are precisely not scholars, but judges individuals who are neither more nor less admirable but have a very different social role and whose work is structured by very different constraints and incentives than ours? They—the judges—have the practical task of providing a satisfactory judicial solution to the case at hand and to think of its broader repercussions.⁵⁴ As Pierre Schlag puts it, '[t]heir words... visit legal acts on ... parties, and third parties'.55 We have the intellectual task of providing a satisfactory scholarly treatment of a question that relates to law. They provide decisions; we provide ideas (or just information). The difference matters, be it only because the degree of intellectual sophistication most appropriate to handle these tasks, the suitable ideational toolboxes, are significantly different. Pierre Schlag again, pace the judicial profession: 'Judicial discourse is not intellectually edifying. It is not designed to be.'56 A legal decision may be intellectually hogwash, but socially genius, and thus a good decision. Whether the same is true for legal scholarship is entirely more questionable.

3. Initiative

Another role model is possibly even more representative of the psychological workings of legal literature. Indeed at other times legal scholars seem to identify themselves with members of

⁵³ P. Schlag, Spam Jurisprudence, Air Law, and the Rank Anxiety of Nothing Happening (a Report on the State of the Art), 97 Georgetown Law Journal 803, 812 (2009).

⁵⁴ P. Schlag, *Anti-Intellectualism*, 16 Cardozo Law Review 1111 (1995).

⁵⁵ P. Schlag, *Jurisprudence Noire*, 101 Columbia Law Review 1733, 1739 (2001).

⁵⁶ P. Schlag, Spam Jurisprudence, Air Law, and the Rank Anxiety of Nothing Happening (a Report on the State of the Art), 97 Georgetown Law Journal 803, 813 (2009) (the emphasis is mine).

parliament, giving the thumbs up to someone's proposal, ridiculing another, taking sides in a project of 'norm-advocacy'. Norm-advocacy is the practice of choosing some norm (a *norm*, not a concept) and doing whatever it takes to have it adopted—adopted by an official body or by a community of other individuals who likewise 'vote' on such norms, which again could be the community of legal scholars. To be clear, we are not arguing that this sort of literature is not useful. It tries to be part of the substance of the law, to shape doctrines, to offer solutions to judges, arbitrators, and legislators, to influence them. That may well be part of our role as *citizens*, here as special citizens because of our specialized knowledge in certain legal areas. But is this our role as scholars? Schlag once more: 'adoption ... is oddly treated as a sign of good scholarship as opposed to what it is (or might be)—namely, a sign of good service.'58

4. Reporting on the law and on oneself

Yet another role model that seems to influence our thinking as legal scholars is that of the journalist. We are in the realm of what we could call reporting or, indeed, 'case-law journalism'⁵⁹ or legislative journalism: describing cases and legislative amendments, without really using them to form an overarching system of thought, without really trying to rationalise what is being studied. This approach is not necessarily too far away from that of those who focus on the idea that law is not only a theoretical corpus, but a social practice, too. The way law is actually practiced shapes the real-world contents of the law (law on the books is shaped into law in action by practice, as the customary terminology would put it). Thus, the literature sometimes tries to lead the law somewhere by influencing how it is practiced. This leads to a type of literature in arbitration that deals with, for instance, how witnesses are and *should* be cross-examined.

Note, however, that writings of this kind may be, in actual fact, reporting on *oneself*. Their purpose is not so much to advance our knowledge of law as a theoretical corpus or as a social practice, and not even to form opinion about a legal matter, as it is to advance our knowledge of the author of the writings: if you need to hire a lawyer who is good at a certain set of legal question, then we am your man. Let us write something that demonstrates how good we master these questions. It is bit like playing the violin in a masterclass. Undoubtedly beautiful to observe. But to be taken for what it is.

B. Consequences for the arbitration literature

Much of what we have described so far are points that apply to legal literature generally. Let us turn more specifically to arbitration.

First of all, it bears noting that arbitration has grown socially: there are quite more people who write on arbitration today than there were 30 years ago. There are more journals too, and more books. So there is more of it. But is it better?

Certainly, the arbitration literature is more diversified. Although this, too, is an oversimplification, but where there used to be mainly doctrinal work and case-law journalism, there is now, in addition to that, conceptual work, epistemological work, sociological work, sociological studies, critical systemic work, and much more. The methods are more diverse (think of the growth of empirical studies, for instance). There are more diverse political discourses about arbitration, discourses about the social values that arbitration sustains, and whether the sustainment of these values is socially, economically, politically, a good idea or not. There is more interdisciplinary work, trying to bring into arbitration theoretical developments happening

⁵⁷ P. Schlag, A Comment on Thomas Schultz's Editorial, 5 Journal of International Dispute Settlement 235, 236 (2014).

⁵⁸ P. Schlag, *The Faculty Workshop*, 60 Buffalo Law Review 807, 813 (2012).

⁵⁹ P. Schlag, Spam Jurisprudence, Air Law, and the Rank Anxiety of Nothing Happening (a Report on the State of the Art), 97 Georgetown Law Journal 803, 821ff (2009).

elsewhere, reaching out further into neighbouring fields (political science, economics, philosophy, psychology, literature). This would signal that we have more choices now when we engage in arbitration research. The field has become more ecumenical. Further, there seem to be more people who write on arbitration whose socio-professional recognition does not depend, or depends to a lesser degree, on their *practice* of arbitration. This is of import because our socio-professional interests, inevitably, shape our epistemology, they influence what we consider valid, interesting, admissible research.

Quite clearly indeed, one's epistemology, what one is ready to recognise as true, valid knowledge, is influenced by one's interests. (In technical philosophical language: theory acceptance is driven by reasons-for-action as much, if not more so, as it is by epistemic reasons.)⁶⁰ Again: one's epistemology is influenced by one's interests. Think of a government lawyer, or a former government lawyer, who has interests (psychological or more tangible ones) in promoting or sustaining the power of governments. Such a person, because of his or her interests, is likely to have an epistemology that prevents him from recognising, possibly even in his or her most candid moments, that non-state actors can create norms of, say, customary international law.⁶¹ If one's interest is that governments stay strong, one's epistemology is likely to be such that only governments can create law, can create norms of international law.

A similar observation can be made about the epistemic community of arbitration—that is, the community of so-called experts that shapes the episteme of arbitration. The community, in other words, that shapes the knowledge we have of the field, the way in which we come to apprehend it theoretically, to use it practically and to explain its operation. That community has become much more diversified, much more fragmented into sub-communities, including for instance the commercial lawyers, the trade lawyers, the public lawyers, and the public international lawyers. These are parallel, juxtaposed communities of individuals who think about international arbitration. These are parallel, juxtaposed drawings of the contours of international arbitration law and practice. They are parallel, juxtaposed epistemic fields. Each sub-community has a somewhat different understanding of arbitration, and they do not necessarily really talk to one another. The stars of one sub-community may have a very different standing in another sub-community—if they are known there at all.

As a result, there are more diverse discourses in arbitration today than there were 30 years ago. This matters because it means more experimentation with new ideas, and thus a greater likelihood that something really new emerges: unconscious thought structures ('epistemological obstacles', in Gaston Bachelard's terminology)⁶³ become diluted as individuals with more diverse backgrounds join the discussion, and thus stand less in the way of change. There may be less of a 'centre' and a 'periphery' of the discipline than there used to be—something that is reflected in our empirical study, too. Or rather there are a number of centres which all see some of the rest as periphery—but with more caution, it is contended, than ever before. And, indeed, given the

⁶⁰ Joseph Raz, From Normativity to Responsibility 36-37, (Oxford University Press 2011): 'Reasons for action, I will assume, are facts which constitute a case for (or against) the performance of an action. Epistemic reasons are reasons for believing in a proposition through being facts which are part of a case for (belief in) its truth (call such considerations 'truth-related'). ... theory acceptance is ... acceptance of theories, not belief in them.... accepting a proposition is conducting oneself in accord with the belief that there is sufficient reason to act on the assumption that the proposition is true: acceptance of the proposition that P entails belief, but not belief that P. Rather it entails belief that it is justified to act as if P. Thus acceptance combines epistemic and practical reasons, though its target is action rather than belief. Acceptance dominates many areas of practical thought. '

⁶¹ Michael Wood, Second Report on Identification of Customary International Law, International Law Commission, A/CN.4/672, 2014.

⁶² A. Roberts, Clash of Paradigms: Actors and Analogies Shaping the Investment Treaty System, 107 American Journal of International Law 45 (2013).

⁶³ Gaston Bachelard, The Formation of the Scientific Mind: A Contribution to a Psychoanalysis of Objective Knowledge (Philosophy of Science), (Clinamen 2007).

communal and ideational connections between these centres (they are not watertight, they communicate, exchange ideas), meaningful ideas developed in each of these then have the potential to become a candidate for paradigm also in another centre—what in the language of the day we often call cross-fertilisation. Epistemological breaks (again Bachelard's terminology⁶⁴) may ensue, as unconscious thought structures become conscious and are abandoned, in the light of the conscious examination now possible, because of their insufficient analytical purchase. A new candidate for paradigm may fare better and take over. These are what we need to make the field progress. These are what is generally considered to make for a healthy scientific discipline.⁶⁵

The bottom line is this: We are probably still far behind other legal fields, such as international law, which clearly is no longer the intellectual wasteland that it was said to be 20 years ago. 66 Arbitration is following a similar route, thanks in part, precisely, to the fact that international lawyers, but also political scientists, economists, and even militant NGOs, have joined the fray.

1. Determinants Of Literature

So what is it that produces the landscape of literature we have described so far? What drives its evolution? Why are some of the aspects of literature we described more present in arbitration, and others less? Why are there things we never do, never say, even though they intuitively seem to be worthwhile pursuits? What are the possible determinants of our scholarly activity in the field of arbitration?

Most things we do in life (or perhaps actually all of them) is governed by incentives and constraints. We want to do certain things and shirk or oppose others. We can do certain things and cannot do certain others. Incentives and constraints determine what we do. It is undisputed that this is a truism, but it is one that has proven remarkably interesting in understanding law itself. The simple idea that there are determinants that make us do what we do is at worst mildly informative and at best illuminating in understanding the behaviour of judges—why do they decide the way they do? Why do they interpret the law the way they do? This is the core of law & economics approaches and of legal realism. It works to understand arbitrator behaviour too.⁶⁷ our claim is that it is at least also a quizzical heuristic to understand our own behaviour when we write on arbitration.

To be sure, the ways to account for the different determinants of our behaviour are numerous. We rely on a very general distinction—one uncommon in legal literature, but popular among philosophers: prudential vs moral reasons-for-action.⁶⁸ Prudential reasons-for-action relate to the pursuit of an actor's own interests. People act in a certain way for prudential reasons if they believe it is in their interest to do so, that they would be better off if they act in that way. Put differently, prudential reasons-for-action are reasons potentially or actually influencing someone's behaviour which 'are focused exclusively or primarily on his own interests and only derivatively if at all on the interests of other people. '69 Behaviour informed by moral reasons-

⁶⁴ Gaston Bachelard, The Formation of the Scientific Mind: A Contribution to a Psychoanalysis of Objective Knowledge (Philosophy of Science), (Clinamen 2007).

⁶⁵ François Ost, Science du droit 540, in André-Jean Arnaud (ed), Dictionnaire encyclopédique de théorie et de sociologie du droit, (LGDJ 1998).

⁶⁶ B.S. Chimni, International Law and World Order: A Critique of Contemporary Approaches 15, (Sage 1993). See also Mariti Koskenniemi, From Apology to Utopia: The Structure of International Legal Argument xiii, (Lakimiesliiton Kustannus 1989); Arthur Nussbaum, A Concise History of the Law of Nations 293, (Macmillan 1947). 67 T. Schultz, Arbitral Decision-Making: Legal Realism and Law & Economics, 6 Journal of International Dispute Settlement 231 (2015); Bruce L. Benson, Arbitration 159, in Boudewijn Bouck- aert and Gerrit De Geest (eds.), Encyclopedia of Law and Economics, Volume V. The Economics of Crime and Litigation, (Edward Elgar 2000).

⁶⁸ See for instance Immanuel Kant, *Groundwork for the Metaphysics of Morals* 199, (Oxford University Press 2002, first published 1785).

⁶⁹ M. H. Kramer, On the Moral Status of the Rule of Law, 63 Cambridge Law Journal 65, 66 (2003).

for-action, instead, relies on the belief that it is 'morally' good to act in such a way. Morality is a question of interests, and pursuing it merely means to pursue the advancement of the interests of others. Moral reasons-for-action, then, are reasons potentially or actually influencing someone's behaviour which 'are focused exclusively or primarily on other people's interests and only derivatively if at all on his own interests.'70

In other words, we may do something because we believe it is in our own interest to do so (a prudential reason-for-action), because we believe what we do is good for someone else (a moral reason-for-action). And so we may be torn between two courses of action, one advancing our interests but harming someone else's interests, the other advancing someone else's interests but harming our own. But to be clear, while these two types of reasons-for-action may pull in different directions, as the dilemma we just mentioned illustrates, they need not. They need not conflict, and they are not necessarily mutually exclusive; it is not necessarily one *or* the other. We can also do something because we believe it is good for both us *and* someone else.

Here our endeavour is to develop a heuristic through abstract reasoning, rather than a sociological project. A clarification is thus in order: just as others have used the phrase 'reasonsfor-action' elsewhere, here too it refers 'not only to factors that actually do motivate people, but also to factors that would motivate them if they were to understand the serviceability of those factors for the furtherance of their general objectives.'71 In other words, the prevalence of these factors in the actual determinants of actual literature is not a question we investigate, or even could investigate through abstract reasoning: this is an empirical point which would require a lot of social-scientific research, which would lead to a contribution to the sociology of professions. Interesting as this may be, this is not what we do or probably even could do: the research would be shrouded in complications and would require a great number of qualifications, since the actual determinants of concrete pieces of arbitration literature are 'a matter that will hinge on contingent features of human psychology and sociocultural influences." In plain English: the interests, incentives and constraints we identify below are interests, incentives and constraints regardless whether they are actually understood or not, whether they are actually acted upon or not, whether they actually make a difference to the literature or not. Scholars may not be aware of them when they write or may not be influenced by them in any meaningful fashion for any other reason, our point is that these reasons are serviceable for certain objectives, not that they are indeed followed.

Let us reiterate our set of questions without the jargon (yet the precisions from above of course still apply): What can the literature on international arbitration be good for? What advances other people's interests when we write on arbitration, and what are these interests? And what advances our own interests when we write on arbitration, and, again, what are these interests? There are things we write that we believe are good for us—us as authors as we write—and there are things we believe are good for other people, for groups that do not include us as a major stakeholder. What are these things? we will review these interests (which are as many determinants of arbitration literature) according to the distinction we just introduced, addressing in turn moral and prudential reasons-for-action.

2. Pursuing Other People's Interests

Probably the most obvious reason-for-action we have when we produce arbitration literature is to advance knowledge and the understanding of arbitration. There is a great array of ways to do this: they range from the simplest reporting of information on minute legal points (the crudest

71 Ibid.

⁷⁰ Ibid.

⁷² Ibid.

forms of case-law journalism and legislative journalism) to the most daring constructions of systems of thought meant to account for the entire system of arbitration (the most large-scale attempts to bring forward a new candidate for paradigm), and include: offering more or less sophisticated compilations of cases, statutes, and rules; adducing quantitative and qualitative empirical findings; imagining heuristic devices; telling happy anecdotes, and sad ones; whistleblowing about structural imperfections and professional misconduct; trumpeting major breakthroughs and successes; crafting plain or more rococo and labyrinthine doctrinal accounts; doing actual journalism; and many more. The ways to contribute to our knowledge and understanding of arbitration are variegated to extremes. Some, of course, are more serviceable than others.

Strictly speaking, this is a moral reason-for-action: we try to advance other people's knowledge and understanding, not our own. We are thus focused primarily on other people's interests, or else we would not publish what we found. (It is true, though, that sometimes the literature in the area reads like a note to self, as if the author wanted primarily to clarify things for himself—or perhaps for one particular client—and then might as well publish it. But let us keep away from this diversion.) So this moral reason-for-action pushes us (if we think in the terms we sketched above) in the direction of articulating propositions, forming systems of thought, and engaging with central ideas, or paradigms, in the field. This may seem all quite plain, and in many ways it is, but it needed reminding, just as the scientific theory of law as a scientific discipline needed reminding above, in order to base the coinage.

Now of course we do not mean that this is the only reason-for-action that makes us publish whatever we believe advances knowledge and understanding, or else we may as well not identify ourselves as the author. As we said above, reasons-for-action are not necessarily mutually exclusive. Several are typical coexistent, and may but need not conflict. This coexistence and conflict is precisely what undergirds our discussion here.

Then there is another quite evident moral reason-for-action we have in our scholarly gymnastics, as we move from the theory/knowledge-oriented to the practice- oriented: we may choose to 'free-lance for the state', to borrow from Pierre Schlag's lexicon.⁷³ This is an incentive to write, and to write certain things. Our reason here to produce research is to help the state. We try to help the state in its judicial function, by spoon-feeding the courts, clarifying the law for them, presenting it in a way that makes it more expedient to use, pointing out a real or hypothetical decision's consequences and ripple effects we think the court did not or would not see. We try to help the state in its legislative function by canvassing the terrain they may or should move into, by offering solutions, by presenting certain options in a favourable light and others as dramatic mistakes.

All of this of course also applies to arbitration, beyond the state: we may freelance for arbitrators and counsel in arbitration, suggesting (sometimes quite directly by sending through uninvited email attachments or SSRN links) possible arguments to rely on (with or without the hope that they will cite us in return); summarising entire areas of the law; offering footnote fodder; redesigning processes to makes them faster, easier, more user-friendly—'iPhoning' arbitration, as we suggested elsewhere.⁷⁴

Some of these activities are axiologically neutral. But more often than not they are not: clarifying the law for the courts and arbitral tribunals and parliaments is rarely a neutral operation (not that the articulation of propositions, systems of thought, and paradigms is really

⁷³ P. Schlag, Spam Jurisprudence, Air Law, and the Rank Anxiety of Nothing Happening (a Report on the State of the Art), 97 Georgetown Law Journal 803, 808 (2009).

⁷⁴ T. Schultz, *Arbitration as an iPhone, or Why Conduct Academic Research in Arbitration*?, 2 Journal of International Dispute Settlement 279 (2011).

neutral either, but there is a difference in degree). When we do this we really respond to (or our behaviour just happens to be aligned with) the promotion of certain values within the state or within the ecosystem of arbitration. Norm-advocacy projects, as we suggested above, are more or less overt, more or less straightforward political projects.

In international arbitration, and in particular in investment arbitration, many scholarly outputs are quite strongly and directly political: 'the world needs a strong hand to protect investors and investment arbitration is that hand' nicely converts into specific legal norms to be advanced in scholarly fashion; 'investment arbitration overly undermines the policy space of states to advance worthy social projects' translates just as well. You get the point.

And so, much of the backlash-against-arbitration story is an ideational political debate, in the sense that what really fuels the debate is antagonism about the political values that investment arbitration should pursue, our appreciation of its socio-political legitimacy, not a massive exercise of the 'exit strategy' that the various actors could opt for. In other words, what is happening is that (political) norm-advocacy projects are being pursued in the literature, projects that growl at the current output of investment arbitration as a political system, much more than treaties are being renegotiated in a way that effectively lashes back at investment arbitration.

These political projects constitute moral reasons-for-action. Whether these are good or bad projects is itself a political (or just possibly economic) question. Whether it is good or bad that the arbitration literature takes such political positions is a more intricate question and probably a barely avoidable fact. What is avoidable is the presentation of such norm- and value-advocacy as being purely technical, neutral, stating the law, clarifying it for the sake of clarity. Granted, the boundaries are not watertight between, on the one hand, neutral technical efficiency and clarification and, on the other hand, other axiological projects; between, on the one hand, descriptive statements and, on the other, normative statements. But too much confusion is just too much.

3. Pursuing Our Own Interests

As we already mentioned, it would be an awkward representation of human psychology that our actions, even when we write scholarly work, are not influenced by a pursuit of self-interest—prudential reasons-for-action in the language used above. There is nothing wrong in this in the abstract—in the sense of morally wrong. The more intriguing question, of course, is to understand what these interests in the furthering of the self may be and, if taken all together and against the background of any other interests and constraints, assess whether they result in situations that would call for an adjustment, by one means or another, of the overall resultant of all these determinants. In plain English: does the inevitable pursuit of self-interest in the production of literature on international arbitration lead to a situation that we think is better unchanged than changed? The purpose of our reflections, as we also said above (repeatedly, the mark the point) is not an assessment of that resulting situation. They more modestly focus on the identification of the possible interests that we pursue for ourselves when we produce arbitration literature.

I will leave aside the most trivial prudential interests, whose examination yields the least heuristically advancement. These include factors such as the simple pleasure of formulating ideas, of being read by others, of being cited; the prestige that sometimes follows from quantitatively and qualitatively significant scholarly outputs; the deference and authority that may follow from such prestige; the satisfaction derived from advancing our own conception of... almost anything; the interest one may have in advancing the school of thought to which one belongs; the satisfaction derived from exhibiting analytical capacity or other skills valued by those who care about thinking and ideas; the need for faculty members and aspiring faculty members and grant

holders to just write something; the need for practicing lawyers to market themselves through visible publications, and thus to also just write something; and the pursuit of leisure itself (which is not an incentive to engage in scholarly activity, but to engage in it in a certain way, favouring more efficient, lighter, work). A dissection of the workings of these determinants of the arbitration literature is unlikely to teach us much—except for the fact that there is much that is being written that likely is superfluous, but that already is conventional wisdom. Then again, is it really superfluous? Superfluous means more than enough. But enough for what purposes? Perhaps—undoubtedly in fact—for the purposes of the advancement of knowledge and understanding, but that is a problem regarding moral reasons-for-action. Is what is being produced more than enough for the purposes of our own prudential interests?

Let us introduce here a distinction between two types of prudential reasons-for- action: collective and individual. The former relate to actions that advance directly the interests of a group of which we are, or believe to be, or hope to be, a member, and thus advance indirectly our own interest. The boundaries of the group need not be defined very clearly but it must be smaller than the group of all parties affected in any way by the arbitration literature, or else we are back within the ambit of moral reasons for action. Individual prudential reasons-for-action are those that relate to actions that seek to advance directly our own, individual, interests.

Collective prudential reasons-for-action we may have when we produce literature on arbitration may include, first of all, the protection of the industry of arbitration. If one entertains some form of hope to derive some form of income (or prestige, or visibility, which may be currencies in themselves or may be factors of actual income), sometime, from arbitration practice, as arbitrator, as counsel, as expert, as advisor to any of the preceding, then one has an incentive to write about arbitration, and to write certain things about it.

At its most extreme, this may take the form of attempts to prevent arbitration from disappearing as a business, to prevent it from being replaced by a dispute resolution mechanism designed in such a way as to deny us any possible or meaningful business. To put it simply, it is serviceable for arbitration business to preserve its existence as just that, a business. Now of course, if we are realistic, its disappearance is extraordinarily unlikely to occur anytime soon anyway. It seems to be a safe bet to say that arbitration as a business will not fold within the lifetime of even the youngest person who reads the current text. But of course the scale of the business is a matter that obtains by degrees.

A much more meaningful threat is that the system of arbitration is altered in such a way as to redistribute the resources, in a way that harms, from a business perspective, those who now benefit the most from it. One may think about it as one would think about electric cars replacing gasoline cars, and what incentives this creates for the leading makers of gasoline motors, or significantly different regulations for the banking industry and what incentives this creates for today's leading financial institutions. This creates an incentive to produce studies that do not protect the auto industry per se, but more precisely the auto industry in its current form, that do not protect the banking industry per se, but more precisely the leading financial institutions, that do not protect the arbitration industry per se, but more precisely the arbitration industry in its current form. This incentive may be more of a problem. Insisting on cars running on nothing else than gasoline for the next decades, on banks remaining regulated the way they are (or were a few years ago) may be a quite damaging stance to take for the industry as a whole in the long term.

So this incentive is a reason to produce literature that is not only protective of arbitration as an institution, but also of the current setup and workings of arbitration. We are unaware of a study that has exhaustively surveyed the sources of critical studies of arbitration, and the respective importance of these sources and the robustness of the criticism, but let us note that

much of the most robust criticism of the way arbitration works *today* seems to come steadily from sources outside those who (usually) produce arbitration literature—they come from NGOs, international organisations, governments, journalists. The reaction of those who usually produce arbitration literature to such criticism, in particular to the strongest forms of criticism, seems to lack serious engagement with it, and on a number of occasions withdraws to argumentative fallacies, including ad hominem attacks ('These *people* are not credible.'); black or white fallacies ('Either you are in favour of arbitration and you protect it, or you are against it and you want to kill it. If you criticise it, it means you are not in favour of it.'); and the use of straw men (misrepresenting the criticism to more easily counter it). Flat out denials, or at least nearly flat out ones, abound.

Such argumentative gymnastics might just be an appropriate response to the incentives we have mentioned heretofore, but this is more likely so in the short than in the long run. It is not an unlikely proposition that the 'backlash' against arbitration, which at some stage may well have real business consequences, is due as much if not more to the (internal) categorical denials of problems than to an (external) oversensitivity or misunderstanding of them. As John Stuart Mill put it, argument and dissent are of great import, because it is in the collision of half-truths, which is what most of our opinions are, that real truths might emerge⁷⁵—but that requires real collision, in the form of critical thinking.

To be sure, the opposite reason-for-action also exists. If one believes one has no chance of getting any 'job' (in the broadest sense of that word) in the current setup of the system but would ideally wish to obtain one, then one has a reason, an incentive, to change it. A new setup means new opportunities. New cards mean a new game. The more individuals there are who write on arbitration and who do not believe to be able to get a job out of it in the current system, the higher the chance that there will be a higher number of suggestions to change the system.

As we said above, the scale of the business of arbitration is a matter that obtains by degrees. This first means that the more arbitrations there are, the more business there is. If we again focus on our hypothetical individual who entertains hope to derive income (or prestige or visibility) from arbitration practice, this individual has an incentive to produce a certain type of literature on arbitration—a type of literature that increases the number of arbitrations. Increasing the size of the pie means to increase the chance of obtaining a bigger slice of it, or to obtain just some slice. A serviceable response to this incentive may be a scholarly defence of doctrines or opinions resulting in the lowering of jurisdictional standards; or in the firming up of mechanisms that create new avenues to file claims (think of MFN clauses, for instance); or in allowing new types of disputes to be brought to arbitration (think of mass claims, for instance). All of this is good for business—at least in the short run, at least until the last straw breaks the camel's back.

This account is of course a simplification. Indeed the serviceability for business of certain arguments meant to increase the number of arbitrations is more nuanced. Consider the proposals for a Multilateral Investment Court: disparaging reform attempts may well only be useful (from the business perspective we focus on here) if one hopes to obtain appointments as an arbitrator in disputes covered by the new system. If, however, one's hope is to source work more generally

⁷⁵ John Stuart Mill, *On Liberty* 43-44, 50, (Batoche Books, Kitchener ON 2001, first published 1859): 'The received opinion may be false ... or the received opinion being true, a conflict with the opposite error is essential to a clear apprehension and deep feeling of its truth. But there is a commoner case than either of these; when the conflicting doctrines, instead of one being true and the other false, share the truth between them; and the nonconforming opinion [the one not endorsed by the authorities] is needed to supply the remainder of the truth. ... First, if any opinion is compelled to silence, that opinion may, for aught we can certainly know, be true. To deny this is to assume our own infallibility. Secondly, though the silenced opinion be an error, it may, and very commonly does, contain a portion of truth; and since the general or prevailing opinion on any subject is rarely or never the whole truth, it is only by the collision of adverse opinions that the remainder of the truth has any chance of being supplied.'

in arbitration practice, including as counsel, expert, or consultant in investor-state dispute settlement (ISDS, here in the sense of arbitration and other adjudicative proceedings), this may create a reason to advance the opposite argument. A calculation of interests and likelihood may indeed lead one to the belief that it is a better bet to replace arbitration with a permanent court, because it increases system's chances of survival in the long term—because, for example, a permanent court be perceived as more legitimate than arbitration, which may mean less interference from states, and possibly even their assistance, in its expansion. Brutally simplified, a permanent court decreases the opportunities of becoming an arbitrator (there are simply fewer jobs as arbitrators/judges on the investment court), but it may increase the number of cases and thus the opportunities of deriving income from the system as counsel or expert or consultant.

Increasing the pie of arbitration business is also an incentive to produce another type of literature (beyond, then, arguments that focus on the legal and political hurdles to the existence of arbitrations): literature that relates to what happens during an arbitration. If one hopes to derive income (or prestige, or visibility) from arbitration practice, one has a reason to produce literature that contributes to making arbitrations run more smoothly, more efficiently, to the greater satisfaction of the parties. The point is simple: if the procedures leave the parties more satisfied, they are more inclined and likely to use arbitration again.

But efficiency is a two-edged sword. Efficiency means the quality of being able to deliver a certain result with minimal expenses. Now, the more financial resources are spent by the parties on arbitration, the more there is to be redistributed among the various actors who hope or do derive income from it. More expenses mean a greater pie. If a person's objective (even if it is one among several objectives) is to increase the likelihood to derive income from arbitral practice, then that person has a reason (which may be one among several reasons, possibly pulling in different directions) to produce literature which, on the one hand, contributes to making arbitration sufficiently efficient for the parties to want to use it as often as possible, and, on the other hand, as inefficient as possible in order to maximise expenses.

A simple way out of this tension is to move the goal posts. If, again, efficiency means the quality of being able to deliver a certain result with minimal expenses, then moving the goal posts means to change the result we want delivered. It means to remodel the objective, the purpose, the role of arbitration. The purpose of arbitration is not simply to settle a business dispute and allow the parties to get back to business. It is (at least) to settle it in an acceptable way. 'Acceptable' means, in the words of William Park for instance, who includes but goes beyond efficiency, to resolve the dispute in an accurate manner (he sometimes calls it 'adjudicatory truth-seeking'),76 ensuring due process or fairness ('intelligent litigants usually craft their rules with deference to the adage that one person's delay is another's due process'),⁷⁷ resulting in a justified, enforceable award.⁷⁸ Probably everyone who is involved with arbitration would agree with Park, mostly quite straightforwardly—including the parties. They indeed, and that is the point, most likely adhere to this idea.

The point is that these objectives—at least accuracy and due process—obtain by degrees. When we write on arbitration and hope to derive an income from arbitral practice, one of the incentives we have, one of the prudential reasons-for-action we have to produce a certain type of literature, is to maximise the expected (thus, in several ways, required) level of accuracy and due process. We have a reason to progressively alter the social norms in the profession, if not the legal

⁷⁶ W. W. Park, Arbitrators and Accuracy, 1 Journal of International Dispute Settlement 25, 27 (2010).

⁷⁸ W. W. Park, Arbitration in Autumn, 2 Journal of International Dispute Settlement 287 (2010); W. W. Park, The Four Musketeers of Arbitral Duty: Neither One-for-All nor All-for-One, 8 Dossiers of the International Chamber of Commerce Institute of World Business Law 25 (2011).

norms, both of which shape the expectations of the parties and thus their willingness to incur costs, so that ever more accuracy and due process is required. (To avoid any misunderstanding: our argument here entails no criticism of Park's position. We explain why just a bit later.)

From a slightly—and really just slightly—different perspective, we have an incentive to produce literature that progressively leads arbitration down the avenue described by Alec Stone Sweet and Florian Grisel: from the initial contractual model of arbitration, in which arbitrators 'resolve discreet dyadic disputes',79 are the agents of the parties, and are accountable to them only; to the judicial model of arbitration, in which the arbitrators reach beyond the interests of the contracting parties to include 'wider social interests' and become agents of 'the wider stakeholder community',81 which means the stakeholders of the regime itself including future disputants, arbitration institutions, probably law firms (as distinguished from the parties), etc.; to the constitutional model of arbitration, in which arbitrators become agents of a yet 'wider international legal order'82 and play a role in international governance itself, jumping out of the arbitral regime as it were to take into consideration high-level exogenous norms, typically heavily loaded axiologically, from trade, human rights, the protection of the environment, etc. The point for us here is that this evolution from one model to the next entails more 'organizational complexity',83 more rules and factors and interests to take into consideration, which tends to require more work, and more sophisticated work, thus more nuance, more arguments, more witness evidence, more expert witness evidence—just more. Thus more expenses, and ultimately a greater pie.

Now, to be clear, the fact that we have a prudential reason-for-action to favour certain expectations from arbitral proceedings by no means implies that we may not also have both an epistemic reason for such a position (a reason to genuinely believe it) and a moral reason-for-action for such a position (we defend such a position in scholarly fashion because we mean to advance the interests of the parties or those of a wider community of stakeholders). We do not argue that this sophistication of arbitration is not *also* a moral reason-for-action, that the pursuit of accuracy and due process, or the inclusion of wide social interests and high-level value-charged norms, may not also be good for the parties and beyond. Our arguments in the previous main section of this chapter in fact recognise just as much. Our argument here is simply that this is a reason-for-action we *do* have if one of our purposes is to benefit financially from arbitration practice.

Let us close this section with a light parallel: If the intended result is to drive from London to the Scottish Highlands, a 15-year-old Toyota will do just fine. If the intended result is to drive from London to the Scottish Highlands *comfortably*, then this may lead to the need for a Porsche Cayenne. If we are a car salesman, we have a reason to stress comfort, to enthuse about the evolution towards ever more sophisticated vehicles—in scholarly fashion if we must and can. In a scholarly fashion that may (as we believe it is in the examples we used) but also may not proceed from a neutral stance on the question whether the Porsche is really needed.

⁷⁹ Alec Stone Sweet and Florian Grisel, The Evolution of International Arbitration: Delegation, Judicialization, Governance 23, in Walter Mattli & Thomas Dietz (eds.), International Arbitration and Global Governance: Contending Theories and Evidence, (Oxford University Press 2014).

⁸⁰ *Ibid.* 32. 81 *Ibid.* 34.

⁸² Ibid. 34.

⁸³ Ibid. 23.

IV. Conclusion

There are probably few vexations of arbitration that cannot be fixed. And fixing them can certainly be one of the purposes that authors of the literature in the field can set for themselves. From the point of view of most, this would likely constitute a useful, legitimate purpose, which can be served by a great variety of forms of literature alike—from the grandest ideas to the finest fine-tuning. A different question is whether the literature will be able to fix these vexations before they cause serious annoyance—harm to certain parties, to society more generally, to arbitration business itself? Has some such harm not already occurred? It was man's ability to invent which has made human society what it is. And what is indeed already reasonably palpable is the shift in the forms of literature we produce, and in the reasons that make us produce literature in general and certain types of literature in particular. This shift is likely to produce a greater diversity of ideas, knowledge, and opinion. More ways to invent more futures. That, surely, is good news.