



Besaiso, Haytham, Fenn, Peter and Emsley, Margaret (2017) International construction arbitration: a need for decoding the black box of decision making. *International Construction Law Review*, 34 (3). pp. 288-308.

Downloaded from: <http://insight.cumbria.ac.uk/id/eprint/5182/>

Usage of any items from the University of Cumbria's institutional repository 'Insight' must conform to the following fair usage guidelines.

Any item and its associated metadata held in the University of Cumbria's institutional repository Insight (unless stated otherwise on the metadata record) may be copied, displayed or performed, and stored in line with the JISC fair dealing guidelines (available [here](#)) for educational and not-for-profit activities

provided that

- the authors, title and full bibliographic details of the item are cited clearly when any part of the work is referred to verbally or in the written form
- a hyperlink/URL to the original Insight record of that item is included in any citations of the work
- the content is not changed in any way
- all files required for usage of the item are kept together with the main item file.

You may not

- sell any part of an item
- refer to any part of an item without citation
- amend any item or contextualise it in a way that will impugn the creator's reputation
- remove or alter the copyright statement on an item.

The full policy can be found [here](#).

Alternatively contact the University of Cumbria Repository Editor by emailing insight@cumbria.ac.uk.

INTERNATIONAL CONSTRUCTION ARBITRATION: A NEED FOR DECODING THE BLACK BOX OF DECISION MAKING

HAYTHAM BESAISO

*(PhD Candidate, School of Mechanical, Aerospace,
and Civil Engineering, University of Manchester.
haytham.besaISO@manchester.ac.uk)*

PETER FENN

*(Reader, School of Mechanical, Aerospace,
and Civil Engineering, University of Manchester.
peter.fenn@manchester.ac.uk)*

MARGARET EMSLEY

*(Reader, School of Mechanical, Aerospace,
and Civil Engineering,
University of Manchester.
margaret.emsley@manchester.ac.uk)*

ABSTRACT

This review paper is the first synthesis of both theoretical literature and empirical research related to construction arbitration decision making. It reveals a lack of theoretical consensus on the underlying ideology that should guide arbitrators in rendering awards. It demonstrates that the available thin empirical research provides mixed evidence. While there is a reason to tentatively believe that there is a growing trend to follow the “legal model” in rendering arbitral awards, the results of the existing studies are far from conclusive and much more remains to be done. Therefore, this paper argues that there is a pressing need for further empirical research to unlock the black-box of arbitral decision making. To do so, this paper calls scholars to steer away from the positivistic paradigm and move closer to the grassroots level by endorsing more interpretivist qualitative research.

Keywords: International construction arbitration – Decision making – Legal reasoning – Commercial reasoning.

1. INTRODUCTION

The boom in international construction projects¹ and the rise of international construction arbitrations² appear to have a causal loop relationship. Large-scale petrodollar international construction projects of the 1970s and 1980s in the Arab world led to a series of high-profile arbitrations. After years of suspicion and mistrust, the success of these gigantic arbitrations laid the foundation for the acceptance of international commercial arbitration as an international private justice system.³ Since then, arbitration has been fuelling the growth of international construction projects.⁴ This growth is probably a result of the assurance arbitration offers for the multi-national construction companies that their disputes will be decided in a neutral forum that delivers an enforceable award. The neutrality of the forum for dispute resolution and the enforceability of the award make arbitration the fundamental and preferred dispute resolution technique for cross-border disputes in the construction industry.⁵

As international construction arbitration expands, the parties have become more concerned about the standards arbitrators apply to decide on those mega construction disputes.⁶ To ensure the sustainability and growth of international construction projects and international construction arbitration, it is necessary to understand how arbitrators decide. This understanding helps in the realisation of a justice system that produces predictable outcomes. Predictability of arbitration outcomes is fundamental to the performance of this significant cross-border economic activity and to the survival of arbitration itself. It also assists the parties in contract negotiation and drafting, enables advocates to provide credible legal advice to make the arbitrate/no arbitrate decision, helps the parties to settle their disputes to the predictable outcome and maintain their business relationship.⁷ In other words, the predictability of arbitration outcomes is expected to minimise the transaction cost.

However, this intellectual area of arbitral decision making has hitherto received scant attention by scholars. Access to this knowledge is blocked by the doctrine of confidentiality in international commercial/construction arbitration; most awards are not published and hence little is known about

¹ Venoit, *International construction law: a guide for cross-border transactions and legal disputes*, (American Bar Association, 2009).

² Sarcevic, *Essays on international commercial arbitration*, (Brill, 1989).

³ Dezalay and Garth, *Dealing in virtue: International commercial arbitration and the construction of a transnational legal order* (University of Chicago Press, 1998).

⁴ Venoit, [cited] above, fn 1.

⁵ Queen Mary, University of London School of International Arbitration, *International Arbitration Survey: Improvements and Innovations in International Arbitration* (London, 2015).

⁶ Brekoulakis, "Systemic bias and the institution of international arbitration: a new approach to arbitral decision-making" (2013) *Journal of International Dispute Settlement*.

⁷ Park, "The Predictability Paradox-Arbitrators and Applicable Law" (2015) *Transnational Dispute Management* 12(6); Karton, *Culture of international arbitration and the evolution of contract law* (2011), PhD Thesis, University of Cambridge.

the decisions of international arbitrators on the merits and substance of disputes.⁸ In addition, the lack of knowledge on construction arbitration decision making is a result of the scarcity of empirical research. This vacuum has allowed random theorising, often resulting from anecdotes, to pass unchallenged and to become a received wisdom. There is little structured empirical evidence available to justify the theorems presented.

Therefore, this article aims to synthesise empirical literature as well as theoretical literature to capture the full spectrum of intellectual endeavour on international construction arbitration decision making.

This article is organised in five main parts. In the first part (Section 2.1), we synthesise the theoretical literature discussing how arbitrators “should decide”. In the second part (Section 2.2), we examine the literature on how arbitrators are “required to decide”. In the third part (Section 2.3), we critically review the available empirical research on construction arbitration decision making in order to provide some insight into how arbitrators “decide”. We also highlight the main attempts to collect or analyse international construction/commercial arbitration awards that assist our understanding on how arbitrators “decide”. In the fourth part (Section 3), we discuss what the commercial judgement, as opposed to the legal judgement, entails. In the fifth part (Section 4), we conclude the review by suggesting directions for future research.

2. CONSTRUCTION ARBITRATION DECISION-MAKING

“Most studies of arbitration are devoted to discussions about the applicable law or the various procedural rules. It seems far more important to try to analyse how and why arbitrators make up their minds.” – Robert Coulson, President, American Arbitration Association⁹

This literature search shows that this statement still holds true. Arbitral decision making seems to lack a solid theoretical as well as empirical foundation as will be shown in this article.

The lack of a solid theoretical foundation, we assert, results from the lack of consensus within the scholastic community on the “appropriate” philosophy that should underpin the reasoning of arbitrators and guide them to the “right” solution.

The lack of a solid empirical foundation seems to result from the inherent privacy and confidentiality of arbitration proceedings and awards. Unlike court judgments, the resolution of construction disputes via arbitration means there is a shortage of reported opinions in the form of published or accessible or reasoned awards in order to provide guidance on how

⁸ Karton, “International Commercial Arbitrators’ Approaches to Contractual Interpretation” (2012), *International Business Law Review*, 383.

⁹ Coulson, “The Decision-making Process in Arbitration” (1990) *Arbitration Journal* 45(3), p 1.

these private judges, the arbitrators, make their decisions. This makes the development of arbitration scholarship notoriously difficult and hence hinders consistency in arbitral decision making.¹⁰

This paper is primarily a synthesis of the extant knowledge on construction arbitration decision making. To better analyse and evaluate the arguments presented, it is important to make a distinction between the available knowledge in accordance with epistemological foundations. We propose a taxonomy of arbitration decision-making scholarship that is useful in informing the analysis in this paper. The taxonomy of the scholarship divides the literature into theoretical and empirical research. The theoretical literature examines decisions from normative (asking how decisions ought to be made according to a value position) and prescriptive (asking how better decisions might be made) accounts. The empirical research seeks to provide informative, descriptive (asking how decisions are made) and explanatory (asking why decisions are made in a particular way) accounts.

2.1. How should arbitrators decide construction disputes?

The extant literature offers theoretical prescriptive and normative accounts of “how” arbitrators “ought to” decide commercial or construction disputes. These arguments are conflicting because the values that are proposed to guide the decision making can be inconsistent. The absence of a certain common philosophical ground is problematic for the construction parties and their legal advisors as it paves the way for inconsistency in and unpredictability of arbitral decision making. In particular, it appears that there is no consensus in the arbitration jurisprudence on whether arbitrators should follow the law while deciding on the substance of disputes. The debate on the legal vis-à-vis commercial standards to govern the arbitral reasoning and judgement has been ongoing throughout centuries.

The traditional notion in US construction arbitration is manifested in the old textbook *Wright on Building Arbitrations* that was published in 1894 and then in a second edition in 1913. Wright asserted that technical arbitrators, not obstructed by law, are to render awards based on the evidence and using their own common-sense, technical knowledge, and commercial practice.¹¹ He rejected early arguments to legalise arbitration through appointing attorneys as arbitrators and putting emphasis on legal procedure. He fiercely argued that “no class of men, probably, are more competent on the whole and technically to act as an arbitrator in the building and engineering disputes than the experienced architect,

¹⁰ Moloo and King, “International Arbitrators as Lawmakers” (2014) *New York University Journal of International Law and Politics* 46(3); Weidemaier, “Toward a Theory of Precedent in Arbitration” (2010) *William and Mary Law Review* 51, 1895.

¹¹ Wright, *Wright on building arbitrations; a manual for architects, students, contractors and construction engineers* (San Francisco: Wale Printing Co, 1913).

contractor or engineer”. His arguments for the identity of an arbitrator and the philosophy for arbitration decision-making rested on the grounds that most questions that frequently came up before arbitration tribunals were not questions of law, but questions of fact. These factual controversies involved matters related to construction techniques, drawings, trade customs, value of works etc. which the technical arbitrator usually has at his fingers’ ends. Hence, the construction professional, as an arbitrator, can decide the normative question “What is right and proper to be done under certain conditions and circumstances?”.

A century after Wright’s book, the same debate is ongoing. The proponents of the “commercial model” in arbitral decision-making suggest, more or less candidly, that the arbitral justice as a private justice system is different from the court justice as a national justice system. Arbitral justice is closer to commerce.¹² As such, they consider that the “commercial reasoning” employed by arbitrators is superior to “private law reasoning” employed by courts. The rationale is that the former is concerned with the parties’ expectations that are grounded in their business relationships while the latter is concerned with the letter of the law that is entrenched in a parochial legal analysis.¹³ The arbitrators’ concern to deliver an award that will be considered fair and just in a particular business community make them seek a “business interpretation”. To do so, when framing a legal solution, arbitrators are more inclined to acknowledge the commercial practice as a legitimate “legal source”.¹⁴ Hermann¹⁵ considers arbitration to be a more common-sense method of resolving business disputes according to commercial practice. He argues that parties choose arbitration because they seek an arbitrator knowledgeable about their business and capable to resolve disputes according to sound business sense rather than a literal legal analysis of the text.

Other scholars¹⁶ are less subtle or probably more daring in asserting that one of the unique hallmarks of arbitration, whether domestic or international, is that arbitrators do not have to follow the law. This is because the principle of arbitration is to determine the facts and render a fair settlement. In order to do this, arbitrators have discretion to base their decisions upon technical, commercial or legal grounds less restricted by the applicable legal authorities. By the same token, a US court affirmed that arbitrators as a general rule are unlearned in law and therefore “*they are expected to decide the matters in dispute*”

¹² Landolt, “Arbitrators’ Initiatives to Obtain Factual and Legal Evidence” (2012) *Arbitration International* 28(2), 173 to 224.

¹³ Collins, 1999 cited in Karton, [cited] above, fn 7.

¹⁴ Vogenauer, “Sources of Law and Legal Method in Comparative Law” in Mathias Reimann and Reinhard Zimmerman (eds), *The Oxford Handbook of Comparative Law* (OUP 2006) 879.

¹⁵ Hermann, *Judges, Law and Businessmen* (Kluwer Law and Taxation Publishers, 1983).

¹⁶ DiMatteo, “Soft law and the principle of fair and equitable decision making in international contract arbitration” (2013) *The Chinese Journal of Comparative Law*; Jannadia, Assaf, Bubshait, and Naji “Contractual methods for dispute avoidance and resolution” (2000) *International Journal of Project Management* 18(1), 41 to 49; Thomson, “Arbitration Theory and Practice: A Survey of AAA Construction Arbitrators” (1994) *Hofstra Law Review* 23, 137.

according to those principles of equity and good conscience which, in their opinion, will do justice between the parties, untrammelled by the niceties of the law".¹⁷

Karton¹⁸ asserts that "many" international arbitrators consider the greater attention given to commercial practices over legal rules to be an important comparative advantage for arbitration over litigation. They consider that business people prefer judgments in accordance with the standards of their industries, and not in accordance to a set of rigid rules of contract law imposed upon them by a legal system. Similarly, Ossman argues,¹⁹ based on personal experience in US construction arbitration, that business people tend to prefer resolutions based on commercial norms rather than legal standards. Notwithstanding their preference, he states that they are frequently disappointed by the actual process that is contrary to their expectations.

Nonetheless, not everyone in the arbitration community considers failure to follow the established law as a benefit of arbitration. Several commentators on international commercial arbitration²⁰ and US commercial arbitration²¹ consider that the arbitrators' failure to follow the law or the terms of the parties' contract to be frustrating to the parties' expectations. The parties appear to prefer the application of known legal principles ensuring, to a certain extent, certainty and predictability of a dispute outcome if it went to arbitration. The certainty and predictability of a dispute outcome make it easier for them to quantify risks and to price their contracts *ex ante* and assist them to negotiate a compromise once a dispute arises *ex post*.²² The main reason for choosing arbitration is because parties from different nationalities do not wish their rights and obligations to be determined by the courts of the other party's state of nationality.²³

While apparently, the aforementioned authors speak on behalf of the users of arbitration, this literature search finds no study soliciting the actual preferences and expectations of the parties themselves. It is desirable to undertake a study to better understand the standards the parties expect tribunals to apply while making their decisions.

¹⁷ Thomson, [cited] above, fn 16.

¹⁸ Karton, "The Arbitral Role in Contractual Interpretation" (2015) *Journal of International Dispute Settlement*.

¹⁹ Ossman III, *Consistency and Reliability of Construction Arbitration Decisions: Empirical Study*, (2003) MSc, Pepperdine University.

²⁰ See, e.g., Webster and Buhler, *Handbook of ICC arbitration: commentary, precedents, materials* (Sweet & Maxwell, 2014); Mitchell, "Must Arbitrators Follow the Law?" in *JAMS newsletter*, Spring 2012.

²¹ See, e.g., Stipanowich and Lamare, "Living with 'ADR': Evolving Perceptions and Use of Mediation, Arbitration and Conflict Management in Fortune 1,000 Corporations" (2013) *Arbitration and Conflict Management in Fortune* 1; Stipanowich and Ulrich, "Arbitration in Evolution: Current Practices and Perspectives of Experienced Commercial Arbitrators" (2014) *Columbia American Review of International Arbitration* 25; Thomson, [cited] above, fn 16.

²² Karton, "A Conflict of Interests: Seeking a Way Forward on Publication of International Arbitral Awards" (2012) *Arbitration International* 28(3), 447 to 486.

²³ Drahozal and Naimark, *Towards a science of international arbitration: collected empirical research* (Kluwer Law International, 2005); Dezalay and Garth, [cited] above, fn 3.

2.2. How arbitrators are “required” to decide construction disputes?

Mitchell²⁴ re-examined the old-age question on whether arbitrators are “required” to follow the law in the context of international arbitration. He started his article stating:

“A shocking string of emails circulated within a very credible Listserv disclosed that a number of full-time arbitrators took the position that arbitrators need not follow the law in drafting awards. The author strongly disagrees.”

He examined international institutional arbitration rules (e.g. AAA, ICC, LCIA), the UNCITRAL Model Law (the UNCITRAL Model Law on International Commercial Arbitration) and the New York Convention (the 1958 Convention on the Recognition and Enforcement of Foreign Arbitral Awards) and concluded that arbitrators are required to follow the law and the terms of the parties’ contract. Therefore, arbitrators should meet the parties’ expectations of a proper adherence to the law. This is the law the parties bargained for when they negotiated and entered into the contract.²⁵ Likewise, Webster and Buhler²⁶ assert that arbitrators are expected and required to apply the law because, even though courts will probably not review the arbitrators’ interpretation of law, a failure to apply the law can result in the annulment of the award.

However, the reality is much more complex, and there is disagreement with this conclusion. In fact, and unlike court litigation, there is little opportunity to appeal or challenge an arbitral award on substantive grounds i.e. on the basis that the arbitral tribunal made a mistake of law. The arbitration statutes of many countries and most institutional arbitration rules, reflecting the policy of the New York Convention and the Model Law, do not provide for appeal based on erroneous legal conclusions or factual findings. The available grounds for challenge/nullification/setting aside of awards at the place of arbitration or for non-enforcement of awards at the place of enforcement (the state in which enforcement is sought, which will be a state where the losing party has recoverable assets) are limited and narrow and almost entirely procedural or jurisdictional.²⁷ In annulment or recognition and enforcement proceedings, the courts’ focus is on procedural matters and hence judges will probably not set aside an award or refuse enforcement on meritorious grounds that the arbitrators made a wrong decision based on an error of law, or contract interpretation or fact.²⁸ For instance, in 2013, the High Court of Australia refused to overturn an arbitration award “due to an error of law on the face of the award”.

²⁴ Mitchell, [cited] above, fn 20.

²⁵ *Ibid.*

²⁶ Webster and Buhler, [cited] above, fn 20.

²⁷ Redfern and Hunter, *Redfern and Hunter on International Arbitration* (Sixth Edition), (2015); Kaufmann-Kohler, “The arbitrator and the law: does he/she know it? Apply it? How? And a few more questions” (2005) *Arbitration International* 21(4), 631 to 638.

²⁸ Karton, [cited] above, fn 7.

The court noted that Article 28 of the UNCITRAL Model Law does not require an arbitral award to be correct in law. The court also stated that the instructions of both the UNCITRAL Model Law and the New York Convention are to enforce foreign arbitral awards and not to review such awards for errors in the application of the law.²⁹ In addition, the “Guide to the UNCITRAL Model Law on International Commercial Arbitration” notes that, under Article 28 of the UNCITRAL Model Law, an arbitral tribunal is not required to apply the law chosen by the parties in a manner that a competent court would have applied the law.³⁰ This probably implies a more relaxed approach in applying the law which permits a deviation from the legal principles or accommodation of commercial considerations.

This state of affairs; the opposition of national arbitration laws and institutional arbitration rules to appeal based on merit or substance of the case,³¹ tends to vest arbitrators with a broad and virtually unreviewable decision-making power. Even obvious legal mistakes in arbitration awards are virtually immune from appellate review.³² The absence of formal constraints on the arbitrators’ ability to err in finding the facts, determining the content of the law, or applying the law to the fact may pave the way for inconsistent and unpredictable arbitration awards. DiMatteo³³ similarly suggests that the flexibility of arbitral reasoning based on both hard law and soft law – i.e. legal arguments and commercial arguments – flows naturally from the protection and immunity granted by the narrow grounds for appealing an arbitration award.

This disconnection between the arbitration rules requiring arbitrators to follow the law in rendering arbitral awards and the national arbitration laws, the UNCITRAL Model Law and the New York Convention providing no grounds for setting aside or for non-enforcement of arbitral awards in cases where arbitrators did not follow the law reveals a mysterious gap in the arbitral decision-making system. The vacuum left by the absence of a mechanism to ensure compliance with the requirement to apply the law in making decisions casts some doubt on the seriousness of this requirement or at least indicates a defect in the international arbitration system. This defect is probably a natural outcome of trying to reconcile genuinely irreconcilable goals; getting it right (correctness) and getting it done (finality).

2.3. How do arbitrators decide construction disputes?

“Much of our understanding of what happens in arbitration proceedings is based on anecdotal sources of information such as reported court cases, published arbitral

²⁹ DiMatteo, [cited] above, fn 16.

³⁰ *Ibid.*

³¹ Jenkins and Stebbings, *International construction arbitration law (Vol 1)* (Kluwer Law International, 2006); McConaughay, “The Risks and Virtues of Lawlessness: A ‘Second Look’ at International Commercial Arbitration” (1999) *Northwestern University Law Review* 93, 453.

³² Rogers, *Fit and Function in Legal Ethics: Developing a Code of Conduct for International Arbitration* (2002).

³³ DiMatteo, [cited] above, fn.16.

awards, and attorney ‘war stories’. The problem with anecdotes, of course, is that it is difficult to evaluate whether the event described is typical or atypical, frequent or infrequent, ordinary or extreme.”³⁴

In an epistemological revolution on the longstanding paradigm in our knowledge of the arbitral decision-making process, few empiricists went beyond theoretical debate or anecdotal evidence. The empirical research seeks empirical evidence i.e. seeks an answer based on what arbitrators actually do or what arbitrators think they do. This literature review finds four empirical attempts to challenge the frontier of existing knowledge in the domains of domestic construction arbitration.³⁵ To provide a state-of-the-art review, these studies are supplemented by two relevant empirical studies in international commercial arbitration.³⁶

2.3.1. Socio-legal empirical research

Empiricists have sought to answer whether arbitrators follow the law³⁷ and whether arbitrators render consistent and predictable awards.³⁸ These studies contribute to our empirical understanding and they are summarised hereunder.

The first experimental study³⁹ involves a hypothetical construction delay dispute scenario summarised in two pages and distributed to a pool of construction professionals in the US, amongst which 429 responded. The dispute included uncontested facts, but was not an either-or, dichotomous, situation with short and simple facts. The respondents were asked to decide on liability and damages. Although facts were uncontested, the arbitrators rendered inconsistent awards including different apportionment of liability and quantification of damages.

The second study, the Chartered Institute of Arbitrators’ empirical study,⁴⁰ involves a hypothetical multi-claim construction dispute scenario distributed to five distinguished arbitrators in England. The five arbitrators reached different findings of facts and conclusions of law including variant determinations of liability and quantification of damages.

³⁴ Drahozal, “Of Rabbits and Rhinoceri: A Survey of Empirical Research on International Commercial Arbitration” (2003) *Journal of International Arbitration* 20, 23.

³⁵ Stipanowich and Ulrich, [cited] above, fn 21; Ossman III, [cited] above, fn 19; Bartlett, “A complete and unabridged facsimile of papers as seen by the honourable and illustrious arbitrator in the frequently perplexing and oft-times diverting case of *Meadowsweet v Bindweed*” (2000) *Arbitration* 83–163; Thomson, [cited] above, fn 16.

³⁶ Karton, “International Arbitration Culture and Global Governance” in Walter Mattli and Thomas Dietz (eds), *International Arbitration and Global Governance: Contending Theories and Evidence* (Oxford University Press, 2014); Karton, [cited] above, fn 8.

³⁷ Stipanowich and Ulrich, [cited] above, fn 21; Thomson, [cited] above, fn 16.

³⁸ Ossman III, [cited] above, fn 19; Bartlett, [cited] above, fn 35.

³⁹ Ossman III, Bayraktar and Cui, “Consistency and Reliability of Construction Arbitration Decisions: Empirical Study” (2009) *Journal of Management in Engineering* 26(2), 56 to 64.

⁴⁰ Bartlett, [cited] above, fn 35.

The third study includes a large-scale quantitative survey done by the American Arbitration Association (AAA) in 1994 seeking empirical evidence as to how arbitrators think they decide.⁴¹ The study was prompted by a prevailing concern amongst many users of US construction arbitration on the arbitrators' non-adherence to legal standards and their tendency to engage in unjustifiable compromise decisions.⁴² So, the study asked an empirical question; "Do arbitrators follow the law?" This question is different from the theoretical questions posed earlier in this paper; "Should arbitrators follow the law?" and "Are arbitrators required to follow the law?". The survey finds that 20% of construction arbitrators do not follow the law in formulating arbitral awards while 72% of construction arbitrators do. If arbitrators have no obligation to follow the substantive law when rendering an award, then they are not necessarily bound to follow the terms of the parties' contract as the law might normally require. In this regard, the survey finds that 25% of construction arbitrators do not enforce the parties' contract according to its terms in formulating arbitral awards while 67% of construction arbitrators apply it. In this case, what is the point of having the contract at the first place? The "formalist" arbitrators who mechanically enforce the contract consider this as part of their obligation. The "realist" arbitrators argue that contracts are often incomplete, silent on the matters of the dispute, ambiguous or unfair and hence would lead to an inequitable outcome.⁴³ Although arbitration is one of the preferred dispute resolution techniques, the study concludes that arbitration users are discontented with arbitration that is not only expensive and lengthy but also producing awards not based on facts, contract and law. In this case, what good is it to opt for arbitration when it is not only more expensive and time-consuming but also more uncertain and unpredictable than recourse to litigation? The finding that some arbitrators do not follow the law or the parties' contract in rendering their awards is alarming. When the contract or the arbitration agreement specifies the substantive law applicable to the dispute, the arbitrators would be exceeding their authority if they rendered an award to the contrary. The paradox here is that appeal, whether domestically or internationally, is generally possible on the grounds of arbitrators exceeding their authority (*ultra petita*) but not on the grounds of a substantive error as a result of ignoring the contract or law.⁴⁴

In addition to this study, recent empirical studies⁴⁵ on US commercial arbitration indicate that the same users' concerns, that will ultimately be a barrier to arbitration use, still linger. The main concerns still revolve

⁴¹ Thomson, [cited] above, fn 16.

⁴² Stipanowich, "Preliminary Analysis of Responses to the Questionnaire on Construction Industry Arbitration" (1987) *The Construction Lawyer* 7, 17.

⁴³ Thomson, [cited] above, fn 16.

⁴⁴ da Silveira and Lévy, "Transgression of the Arbitrators' Authority: Article V(1)(C) of the New York Convention" in Gaillard, E & Di Pietro, D (eds) *Enforcement of Arbitration Agreements and International Arbitral Awards: The New York Convention 1958 in Practice* (Cameron May, 2007).

⁴⁵ Stipanowich and Lamare, [cited] above, fn 21; Stipanowich and Ulrich, [cited] above, fn 21.

around the possibility that arbitrators will not follow the applicable legal standards in rendering awards, the perceived tendency of arbitrators to indulge in inappropriate compromises in award-making, and the difficulty of successfully appealing arbitration awards based on those two concerns.

However, it is unclear to what extent these concerns are relics of past decades, when the environment of construction arbitration was different. At the present day, the environment of construction arbitration has changed since the AAA's 1994 survey and much changed since Wright's books of 1891 and 1913. One key change relates to the configuration of construction arbitration tribunals. Construction professionals or multidisciplinary panels have long been used in the arbitration of construction disputes in the US. The recent evidence⁴⁶ suggests that these panels are diminishing as there is increasing emphasis on appointing arbitrators with legal backgrounds instead of construction professional arbitrators. The construction arbitration "drift" towards a litigation model flows from the increasing intrusion by legal professionals sitting in the tribunal or representing the parties. In turn, this change will probably transform the landscape of construction arbitral decision making, as the applicable standards might be different.

In order to assess the extent to which these concerns are justified, Pepperdine's Straus Institute for Dispute Resolution in cooperation with the College of Commercial Arbitrators (CCA) undertook a recent survey on Arbitration Practice in 2013.⁴⁷ The survey targeted the most experienced arbitrators in the US who have arbitrated domestic and international disputes. However, the survey questions made no distinction between domestic and international arbitration. Almost half of the respondents arbitrated construction cases. The survey responses indicate, contrary to the users' perceptions and concerns, that nearly all of the experienced arbitrators tend to be meticulous in paying heed to legal arguments and that they do whatever they can to ascertain and follow the law in rendering an award. The greater consideration given to legal authority in arbitral decision making could be explained by the legal background and orientation of the respondents as all of them claimed a legal or judicial background.⁴⁸ By analogy, as the change in the position of legal standards in decision making between the two surveys⁴⁹ could be attributed to the background of respondents/arbitrators, the same probably applies to real-life. In other words, the increased emphasis on appointing arbitrators with legal backgrounds and the commensurate de-emphasis on appointing arbitrators with construction backgrounds will probably elevate the status of legal standards in construction arbitral decision-making.

⁴⁶ Stipanowich, "Managing Construction Conflict: Unfinished Revolution, Continuing Evolution" (2014) *The Construction Lawyer* 34; Stipanowich and Ulrich, [cited] above, fn 21.

⁴⁷ Stipanowich and Ulrich, [cited] above, fn 21.

⁴⁸ *Ibid.*

⁴⁹ Thomson, [cited] above, fn 16; Stipanowich and Ulrich, [cited] above, fn 21.

However, the responses on the survey also add a puzzling caveat which does not provide a definitive answer to this question. A quarter of the respondents said that at least “sometimes” they feel “free to follow their own sense of equity and fairness in rendering an award even if the result would be contrary to applicable law”.⁵⁰ This statement blurs our understanding for two reasons. First, the semantic ambiguity inherent in words such as “sometimes” makes it uncertain in meaning. It has different meanings to different individuals. People have different interpretations of the same numeric frequency depending on the context and the general expectation connected with the phenomenon.⁵¹ Second, it remains unclear how those arbitrators interpret their mandate or conceptualise their role. In some situations arbitrators may believe that to achieve fairness they are left with no choice but to refuse to apply the law. The arbitrators’ choice to ignore the law in favour of their own brand of personal justice combined with the broad leeway given by courts to arbitral awards may be problematic because this may be contrary to the parties’ expectations. Therefore, the fact that arbitral awards are almost entirely immune to annulment on substantive grounds should not be exploited by arbitrators to bring their own brand of personal justice. From here, arbitrators should be mindful of their “ethical obligation” to ensure that they are acting in accordance with the parties’ expectations.⁵² This argument proposes that the benchmark for measuring the effectiveness of arbitral award should be the parties’ expectations, whether grounded in the legal model or the commercial model or something else. In other words, there is no universal “right” approach to render arbitral awards. It depends on the parties’ choices, thus reflecting the principle of “party autonomy”.

The previous studies examine the construction/commercial arbitral decision making in the domestic contexts of the UK and the US. Unfortunately, this literature search finds no empirical study attempting to explore international construction arbitration decision-making. Hence, to supplement this shortage, we borrow the relevant empirical research on domestic construction arbitration decision-making and international commercial arbitration decision-making.

Therefore, readers who want to assess the transferability of the findings of these empirical studies need to be mindful of the possible contextual variations. For instance, the environment of the international construction/commercial arbitration seems to be dominated by the legal profession. The arbitrators tend to be law professors, senior barristers, Queen’s Counsels, senior partners in law firms or retired judges.⁵³ Second, the available evidence suggests that the construction parties do not go for international

⁵⁰ Stipanowich, [cited] above, fn 46.

⁵¹ Bühring-Uhle, Drahozal and Naimark, *A survey on arbitration and settlement in international business disputes* (Kluwer Law International, the Hague, 2005).

⁵² Stipanowich, [cited] above, fn 46.

⁵³ Dezalay and Garth, [cited] above, fn 3.

arbitration to avoid legal determinations for their disputes. Rather, they are keen to get their disputes decided on legal grounds. The main reason for choosing international arbitration is because the parties from different nationalities do not wish their rights and obligations to be determined by the courts of the other party's state of nationality.⁵⁴

Hence, the application of the law and other standards in decision making could have a more serious treatment in international arbitration than in domestic arbitration. The following section discusses the findings of the main study,⁵⁵ that this literature search identifies as relevant, which examines how international commercial arbitrators decide and whether they follow the law in the interpretation of contracts.

2.3.2. Doctrinal Analysis of Published Awards

The publication of arbitral awards would permit insight into the secretive and mysterious process of arbitral decision making. However, unfortunately, the arbitration system fails in bringing to light the arbitrators' decisions. Unlike construction litigation case-law supplied by national courts that is available and accessible, construction arbitration awards are often neither published nor accessible.⁵⁶ The current established arbitral regime prevents to a large extent the publication of arbitral awards because of the doctrine of confidentiality of arbitration. The proportion of published international commercial arbitral awards remains tremendously small but even those awards that manage to "see the light" are only available in extract or sanitised form most of the time.⁵⁷ This restricts the doctrinal research that is characterised by the study of legal texts or, in this context, arbitration awards, in order to reveal the rules and principles that govern the decision making on the merits of the case, or at least used to justify the awards.

Despite this black-box policy, this literature search identifies three sources for international construction arbitral awards. Two eminent scholars, Christopher Seppälä⁵⁸ and Mohi-Eldin Alam-Eldin⁵⁹ managed to collect and publish a number of international construction arbitration awards. The four

⁵⁴ *Ibid.*

⁵⁵ Karton, [cited] above, fn 36.

⁵⁶ Karton, [cited] above, fn 22; Weidemaier, [cited] above, fn 10.

⁵⁷ Moloo and King, [cited] above, fn 10.

⁵⁸ Christopher Seppälä (1998; 2008; 2012; 2013): "International Construction Contract Disputes: Commentary on ICC Awards Dealing with the FIDIC International Conditions of Contract" *ICC International Court of Arbitration Bulletin* – Vol 9/No 2 (1998); "International Construction Contract Disputes: Second Commentary on ICC Awards Dealing Primarily with FIDIC Contracts" *ICC International Court of Arbitration Bulletin* – Vol 19/No 2 (2008); "International Construction Contract Disputes: Third Commentary on ICC Awards Dealing Primarily with FIDIC Contracts" *ICC International Court of Arbitration Bulletin* – Vol 23/No 2 (2012); "International Construction Contract Disputes: Fourth Commentary on ICC Awards Dealing Primarily with FIDIC Contracts" *ICC International Court of Arbitration Bulletin* – Vol 24/No 2 (2013).

⁵⁹ Mohi-Eldin Alam-Eldin (2000; 2003; 2010; 2014): Alam Eldin, *Arbitral Awards of the Cairo Regional Centre for International Commercial Arbitration I* (Kluwer Law International, 2000); Alam Eldin, *Arbitral Awards of the Cairo Regional Centre for International Commercial Arbitration II* (Kluwer Law International,

publications of Seppälä examine ICC construction arbitral awards dealing primarily with FIDIC contracts. The four books of Alam-Eldin include a collection of international construction arbitral awards rendered under the auspices of CRCICA. The third source is the International Council for Commercial Arbitration (ICCA) Yearbook Commercial Arbitration (1976 – to date) published by Kluwer Law International. In spite of the insight these cases offer in light of the paucity of empirical evidence, they are short excerpts in most instances and they cover both procedural decisions and substantive decisions. The substantive part is primarily a re-telling of the facts of the dispute and the reasoned awards, with a minor commentary by the editors. The analysis of these international construction arbitral awards can probably be suitable for future research and publication.

One of the few studies that aims to provide evidence on what arbitrators actually do is that of Karton.⁶⁰ Given the small sample size of the examined arbitration cases, Karton provides tentative conclusions on the arbitrators' treatment of customs and usages as well as the arbitrators' approach in contractual interpretation.

Although, like almost all other scholars, Karton⁶¹ has not defined “commercial judgement”, he suggests that its main practical manifestation is rooted in the privileged status the arbitrators give to arguments based on business customs, trade usage, and commercial practice to render fair and reasonable awards. He supported his argument by evidence from ICC arbitration cases. He finds that arbitrators may unilaterally invoke general principles of international commercial practice and business norms to govern the parties' rights and obligations even if the parties have neither raised them nor are actually aware of them. For instance, they may apply these customs and usages to interpret terms of the contract and to examine their “commercial reasonableness”. In other words, they apply a commercial reasonableness test to examine if the terms are consistent with the prevailing commercial practice in order to survive (e.g. ICC Case No 9443 where the tribunal disregarded the literal plain meaning of the term the parties agreed to and applied the customary practice). Further, what sounds to be unthinkable for the commercial parties is that arbitrators may also use trade usages to override an express term in the contract or to take precedence over a legal provision in the code or precedents (e.g. ICC Case No 7063, ICC Case No 3820). One of the forms of invoking trade usages is by applying *lex mercatoria*. There is evidence that, sometimes, arbitrators may unilaterally apply these principles even if the parties have not authorised

2003); Alam Eldin, *Construction Arbitral Awards Rendered Under the Auspices of CRCICA* (Lambert Academic Publishing, 2010); Alam Eldin, *Arbitral Awards of the Cairo Regional Centre for International Commercial Arbitration IV* (Kluwer Law International, 2014).

⁶⁰ Karton, [cited] above, fn 8.

⁶¹ Karton, [cited] above, fn 36.

them to do so and even if they objected to its application (e.g. ICC Case No 8873 of 1997).⁶²

The disregard of law and overriding its provisions by the usage and custom will probably be contrary to the judiciary practice in applying the law. The disregard of express terms in the contract and replacing them with the usage and custom defeats the principle of *pacta sunt servanda* (freedom of contract). Probably, those arbitrators assume that the parties had intended to be bound by the industry's norms and commercial practice. Therefore, they tend to open the door for contextual evidence (including evidence on prevailing customs and usages) and follow a subjective interpretation of the contract regardless of the express terms of the contract. This piece of the puzzle leads us to the need to understand the arbitrators' approach in contract interpretation.

Karton⁶³ analysed 53 international commercial arbitration awards to examine the international arbitrators' approach in contract interpretation and whether they follow the interpretive methods dictated by the governing law or follow the interpretive methods they prefer. Karton finds that there is a civil law bias in contract interpretation. In other words, the international arbitrators tend to interpret the contract in a subjective way to determine the true subjective common intention of the parties by admitting extrinsic evidence. In some cases, where the law governing the contract interpretation and performance is that of a common law jurisdiction that seeks objective interpretation, the tribunal admitted some extrinsic evidence of the parties' subjective intent. Hence, in general, international arbitrators are likely to consider all materials that may help to reveal the subjective understandings of the parties, even if the substantive law is that of a common law jurisdiction.⁶⁴ This is different from the way judges would act and is probably a failure to apply the law in the correct manner i.e. similar to the national courts.

To supplement and corroborate his findings from these cases, Karton interviewed 20 international commercial arbitrators to understand their approach in contractual interpretation. He finds that a "commercial mentality exists alongside a legal mentality in the minds of arbitrators" and that they would try, if at all possible, to bring commercial reasoning to the decision making toolbox. One international arbitrator reflects this mindset by affirming that contractual interpretation has only two rules; common sense and commercial sense. Karton's findings are compatible with a statement made by Derains: "*The interpretation of contracts is one of the areas in which international commercial arbitrators are most inclined to disengage from national laws in order to resort to general principles of law.*"⁶⁵ In the same vein,

⁶² *Ibid.*

⁶³ *Ibid.*

⁶⁴ *Ibid.*

⁶⁵ Karton, [cited] above fn 8.

Webster and Buhler⁶⁶ state that arbitrators, in some awards, appear to avoid relying on the principles of interpretation set out in the substantive law. They criticised this approach in the interpretation of contract provisions as they cannot be interpreted in a legal vacuum; they may have special meanings according to the applicable law. In contrast, DiMatteo⁶⁷ argues that the optimal approach in contract interpretation in international commercial arbitration is “contextualism” because contextual evidence (customs, trade usage, practice, prior dealings) helps arbitrators to understand the nature of the transaction, to ascertain the parties intent and to examine whether a party acted in good faith.

Hence, the available evidence suggests that at least some arbitrators tend to prefer a commercial construction of a contract, a subjective interpretation of a contract, and contextual evidence on the parties intent drawn from trade usages and customs. Why do arbitrators do so and what is the link between those concepts? To understand how arbitrators decide, it is necessary to understand the ultimate goal that guides them.

DiMatteo⁶⁸ argues that the primary goal of most commercial arbitrators is to render fair and just decisions. To achieve this, it is imperative to achieve a commercially reasonable construction of a contract (interpretation of meaning, filling a gap or implying a term into the contract). To construct such a “hypothetical contract”, the arbitrators need to ascertain the “hypothetical intent” of a “hypothetical entity” called a “reasonable commercial person”. As a benchmark guiding the arbitrators, this commercial person has the background commercial knowledge (informed by customs and usages etc.), which would reasonably have been available to the parties, at the time of the contract. The understanding of this person should be the same as the understanding of the parties, and hence they should have formed the same intent. This is the intent that should govern the contractual interpretation as it is likely to give effect to the true intention of the parties who act in good faith.⁶⁹

3. THE COMMERCIAL MODEL OF ARBITRAL JUDGEMENT: WHAT IS IT ALL ABOUT?

This literature review demonstrates the lack of consensus on the fundamental basis of the arbitral decision making. The division is between two schools of thoughts; the commercial school and the legal school. Both sides assert that they meet the parties’ expectation; an assertion that this review finds no empirical evidence to support. The proponents of the legal model assert

⁶⁶ Webster and Buhler, [cited] above, fn 20.

⁶⁷ DiMatteo, [cited] above fn 16.

⁶⁸ *Ibid.*

⁶⁹ *Ibid.*

that the parties expect arbitrators to adhere to the law because this is an assurance for predictability of dispute outcome and hence stability in the commercial and business dealings. Further, they argue that this is what the arbitrators are instructed to do in the arbitration rules and statutes. On the other hand, the proponents of the commercial model assert that the parties expect the arbitrators to be more attentive to the commercial practice and to follow their business common-sense. In this respect, it is worthwhile to understand what all that commercial judgement or commercial reasoning actually mean.

It is surprising that almost all scholars arguing for or against this concept do so without trying to define it. However, the literature provides implicit and probably imprecise notion of what this concept entails. Some scholars implicitly linked the concept of commercial reasonableness to the commercial practice, industry's norms, trade usages and customs. As the role of law in international commercial arbitration is still a matter of controversy, the scholars have reached no consensus on the role of usages and customs.

As a starting point, the very existence of the notion of *lex mercatoria* (uncodified general principles of international commerce) indicates a long-lasting consensus between the arbitrators and merchants or business people on the primacy of usages and customs in the arbitration of disputes.

In addition, the stance adopted by the international institutional arbitration rules and national arbitration laws is partly a manifestation of arbitrators' preference to apply the customs.⁷⁰ Most international arbitration rules and national arbitration laws require that arbitrators shall take into account the relevant trade usages, along with the substantive rules applicable to the merits of the dispute.⁷¹ Based on this requirement, Drahozal reached impressionistic conclusion that arbitrators "in fact" do rely on trade usages.

Actually, most national laws acknowledge the role of the customs, in contractual interpretation or gap filling, but they confer them with different effects.⁷² The civil law school deems the trade usages to be a "secondary sources of law" that may be taken into consideration in the determination of the rights and obligations of the parties. The common law school deems trade usages, that are known or ought to be known by the parties, to be "a part of the contract" i.e. incorporated to the contract under the "implied terms" doctrine.⁷³ So, what does the requirement to "take trade usages into account" actually mean and how can it add an extra value for the usages in the arbitral decision making? Does that imply arbitrators will give more

⁷⁰ Karton, [cited] above, fn 36.

⁷¹ Drahozal, "Commercial norms, commercial codes, and international commercial arbitration" (2000) *Vanderbilt Journal of Transnational Law* 33, 79.

⁷² Ayo lu, "Application of Trade Usages in International Institutional Arbitration—Some Reflections" (2012) *ASA Bulletin* 30(3), 539 to 547.

⁷³ *Ibid.*

weight to arguments based on customary commercial practice by reshuffling the hierarchies of authorities and placing it above the legal rule? In other words, will arbitrators give greater weight to commercial arguments than legal arguments? Does that mean the parties are deemed to incorporate these usages into their contract, notwithstanding the effect conferred to them by the applicable law?

There is an opinion that the express requirement by arbitration laws and arbitration rules to consider trade usages probably confers on them a more significant role compared to that available under national legal systems.⁷⁴ Hence, customs and usages of the particular trade or industry or any international instrument relevant to the dispute should be given more weight than and be applied in preference to the rules of national law.⁷⁵ Webster and Buhler⁷⁶ assert that Article 21 (2) of the 2012 ICC Rules appears to place “trade usages” on the same level as the contract. This is because the parties’ agreement on this article means that relevant trade usages have become part of their contract by incorporation of the rules. Nevertheless, they maintain that the available evidence, obtained from parties’ pleadings and awards reasons, indicates that arbitrators tend to rely on the terms of the contract rather than trade usages.

In a more subtle way, some authors⁷⁷ suggest that arbitrators may and should view sources of law in a less hierarchical way. This means arbitrators should not be constrained by the approach of most legal systems that recognise a strict hierarchy of sources of law, in which higher sources take precedence over lower sources. They argue that the interpretation of the phrase “to take into account” is consistent with their position. This phrase does not mean an obligation to apply the usages but merely requires taking them into consideration. In other words, it grants arbitrators discretion and flexibility in the interplay between rules of law and usages in order to provide a just outcome considering the circumstances of each case.⁷⁸

On the other end of the spectrum, some scholars⁷⁹ maintain that trade usages shall not be given any privileged status in arbitration settings. They disagree with the argument raised above suggesting that the parties’ intention from referring to institutional rules is to incorporate trade usages into their contract. Their counterargument is that such a reference is a procedural choice and certainly not a choice to imply or supplement additional substantial terms into their contract. Therefore, they assert that trade usages shall be applied in accordance to the status conferred to them by the substantive law chosen by the parties to govern their contract, no more or less. This means

⁷⁴ *Ibid.*

⁷⁵ DiMatteo, [cited] above, fn 16; Lew, Mistelis and Kröll, *Comparative international commercial arbitration* (Kluwer Law International, 2003).

⁷⁶ Webster and Buhler, [cited] above, fn 20.

⁷⁷ DiMatteo, [cited] above, fn 16; Drahozal, [cited] above, fn 71.

⁷⁸ *Ibid.*

⁷⁹ Ayo lu, [cited] above, fn 72; Lew, Mistelis and Kröll [cited] above, fn 75.

that arbitrators shall determine the legal effect of trade usages pursuant to the hierarchy of sources as valid in the substantive law.

Even if arbitrators are not obliged to apply trade usages, Karton⁸⁰ argues that they have preference to apply them. This preference reflects the arbitrators' belief or perception that trade usages are what the parties expect to govern their relationship. Karton proposes a theorem on the evolution of a commercial culture in international commercial arbitration as a result of an informal interaction between different social actors in the field. The social actors involves the parties themselves and their "real" or "perceived" preferences and expectations, the decision makers themselves i.e. arbitrators, the arbitration institutions and their rules, and the states and their arbitration laws.⁸¹

Diametrically opposed to Karton's evolution theorem, Landolt⁸² proposes another theorem on the evolution of international arbitration decision making. He argues that the genesis of international arbitration used to be in the informal application of the law by arbitrators acquainted with commerce but unschooled in law. In his analysis of the traces of the evolution of international commercial arbitration decision making, Landolt suggests that Article 17(2) of the 1998 ICC Rules is fossil evidence from that era. The article provides that "[in all cases] the Arbitral Tribunal shall take account of the provisions of the contract and the relevant trade usages." In line with the modern view of international commercial arbitration, the 2012 ICC Rules require in Article 21(2): "the arbitral tribunal shall take account of the provisions of the contract, if any, between the parties and of any relevant trade usages". The actual practical effect of this change in the wording of ICC rules on the arbitrators' decision making remains unknown.

Gluck⁸³ agrees with Landolt's chronology. He suggests that during most of the 20th century, international arbitration was mainly concerned with the resolution of simple commercial or technical disputes by technocrats. The commercial parties understood how the dispute would be resolved and there was an implicit common understanding of the rules of the game between the disputants and the arbitrators. In the 21st century, arbitration has entered a new era. Today's disputes often involve complex legal and factual controversies with hundreds of millions of dollars at stake.

In his evolution theorem, Landolt suggests that the evolution in the field leads to "differentiation" between different species of international commercial arbitration. This differentiation is important because some divisions, such as commodities arbitrations, are still more concerned about the commercial practice and trade usages. Yet, in most other divisions,

⁸⁰ Karton, [cited] above, fn 36.

⁸¹ *Ibid.*

⁸² Landolt, "Arbitrators' Initiatives to Obtain Factual and Legal Evidence" (2012) *Arbitration International* 28(2), 173 to 224.

⁸³ Gluck, "Great Expectations: Meeting the Challenge of a New Arbitration Paradigm" (2012) *The American Review of International Arbitration* 23(2), 231.

international commercial arbitration decision-making has evolved towards a position more favourable of the application of the law within the limits of the role of arbitrators.⁸⁴ The internal variations within international commercial arbitration fields make it a worthwhile exercise to examine the particularities of decision making in particular industries especially the construction industry that has the largest representation and the longest experience in commercial arbitration.⁸⁵

4. CONCLUSION

The extant literature provides an inconclusive answer to the basics of construction arbitration decision making. The “blurred picture” we have on how construction arbitrators make their decisions is a result of the dearth of published and accessible construction arbitration cases, the lack of consensus on the underlying value that should guide the arbitral decision making, and the shortage of empirical research on construction arbitration decision making.

Those empirical studies have hitherto merely scraped the surface and failed to develop an understanding of the realities of arbitral decision making at the grassroots level. The reductionist approach associated with the positivistic tradition (exemplified by questionnaire surveys and experiments), which most empirical studies follow, offers a narrow and atomistic perspective and supplies mixed evidence on arbitral decision making.

This review reveals some of the salient features of arbitral decision making. It shows that some arbitrators may not follow or apply the law as judges would do, and even they might disregard it for the sake of their own version of fairness. It also demonstrates the tendency some arbitrators have to bring a commercial mindset to the reasoning process and to go beyond the four corners of the contract.

However, on balance and with due regard to the **temporal and spatial variations to the arbitration setting**, the available evidence suggests an increasing adherence to the law but, at the same time, a tendency to engage in commercial reasoning. Due to the positivistic nature of most empirical studies, it is difficult to determine the extent to which the commercial reasonableness influences decision making. Hence all inferences are tentative.

Therefore, to seek a plausible answer to international construction arbitration decision making, this review illustrates a need to move beyond prescriptive and normative theoretical accounts of construction arbitration

⁸⁴ Landolt, [cited] above fn 82.

⁸⁵ Blankenship, “Isomorphism of construction arbitration: The key to its prevention and reversal” (2010) *Dispute Resolution Journal* 65(2/3), 114.



decision making. It also calls for a move from the positivistic paradigm to a deeper and more engaged interpretivistic form of scholarship to uncover the prisoned truth of how arbitrators actually decide disputes. We have been locked for a long time in Plato's cave where the best we can do is to guess the standards of arbitral decision making from scattered scholastic texts and indirect evidence from the institutional structure of the field. It is the time to get behind the closed doors of the private arbitration.