

‘If Everyone Is Thinking Alike, Then No One Is Thinking’: The Importance of Cognitive Diversity in Arbitral Tribunals to Enhance the Quality of Arbitral Decision Making

Nathalie ALLEN^{*}, Leonor DÍAZ CÓRDOVA^{**} & Natalie HALL^{***}

The popularity and longevity of international arbitration depends heavily on the quality of arbitral awards, the arbitral process, and the tribunals appointed by practitioners and institutions. In this article, the authors argue that practitioners and institutions need to consider a more diverse range of candidates for arbitrator appointments, to enlarge and diversify the pool of arbitrators. Not only does diversity make sense from an ethical standpoint, but research has also shown that increased cognitive diversity is required to reduce the risk of biased decision making and improve the quality of awards. More cognitively diverse arbitral tribunals are therefore necessary to preserve the continued legitimacy and success of international arbitration.

Keywords: diversity, cognitive diversity, arbitrator appointment, groupthink, biases, attitudinal bias, confirmation bias, anchoring bias, egocentricity bias, Halliburton

1 INTRODUCTION

There is increased discussion of the need for greater diversity in international arbitration. As ArbitralWomen explains:

[a]s parties using arbitration become more diverse, arbitral institutions are recognising the need for broader representation of geographical, ethnic, religious and cultural stakeholders. Now is the time to create a community of arbitrators that can respond to the diverse interests and expectations of arbitration users.¹

In recent years, the Equal Representation in Arbitration Pledge and ArbitralWomen, amongst others, have helped to draw attention to the alarming

^{*} Legal Director in Addleshaw Goddard’s International Arbitration Group.
Email: Nathalie.Allen@addleshawgoddard.com.

^{**} Group Director of Legal Services at international consultancy C|T Group.
Email: ldiazcordova@ctgroup.com.

^{***} A former international arbitration lawyer and a behavioural science consultant, specializing in organizational behaviour. Email: hall.natalielouise@gmail.com.

¹ See, www.arbitralwomen.org/diversity-toolkit/ (accessed 7 Feb. 2021).

under-representation of women at arbitrator level. The Cross-Institutional Task Force on Gender Diversity, published in 2020, revealed that whilst progress has been made, in 2019, only 13.9% of party-appointments were female arbitrators.² Following global events in 2020, there has been an increased focus on the importance of ethnic diversity in international arbitration, and the end of 2020 saw the launch of Racial Equality for Arbitration Lawyers, an initiative which aims to address the issue and redress the balance.³ In relation to age diversity, there is currently little analysis of the problem.

As the 2021 *International Arbitration Survey: Adapting Arbitration to Changing World* (the ‘2021 International Arbitration Survey’) reports:

[m]ore than half of respondents agree that progress has been made in terms of gender diversity on arbitral tribunals over the past three years. However, less than a third of respondents believe there has been progress in respect of geographic, age, cultural and, particularly, ethnic diversity.⁴

Aside from the clear ethical concerns over the lack of diversity in international arbitration, there is another disturbing problem which has – up until now – been largely overlooked by the international arbitration community: a lack of diversity in arbitration tribunals impacts the quality of arbitral awards. On the topic of whether there is a connection between diversity and the quality of decision making, the 2018 *International Arbitration Survey: The Evolution of International Arbitration* (the ‘2018 International Arbitration Survey’) found the following:

[r]espondents were unsure whether there is any causal connection between the diversity across a panel of arbitrators and the quality of its decision-making, or even whether this is a relevant enquiry to make [because they consider diversity to be inherently valuable in and of itself].⁵

In this article, we seek to show that there is indeed a strong connection between cognitive diversity, greater collective intelligence and an enhanced decision-making process, which increases the quality of awards. Drawing from a number of psychological research studies, we explain how arbitrator decision making can be affected by cognitive biases.⁶ While there are certain safeguards against arbitrator bias in law and guidelines, they simply cannot go far enough without compromising legal certainty. This article explains how increasing the cognitive

² ICCA Reports No. 8: Report of the Cross-Institutional Task Force on Gender Diversity in Arbitral Appointments and Proceedings.

³ See, www.arbitralwomen.org/launch-of-racial-equality-for-arbitration-lawyers-real/ (accessed 7 Feb. 2021).

⁴ 2021 International Arbitration Survey: Adapting Arbitration to a Changing World, 15.

⁵ 2018 International Arbitration Survey: The Evolution of International Arbitration, 16.

⁶ Most of the studies cited are from the United States, given the majority of the research in this area has been carried out on juries in the United States.

diversity of tribunals can play a critical role in combatting unconscious bias. Specifically, we explain how arbitrators with different backgrounds and perspectives approach legal problem solving in different ways, each offering different viewpoints to the case in hand. They also tend to challenge each other's analysis more rigorously, effectively weeding out the influence of some of the cognitive biases inevitably at play.

We argue that the key to unlocking greater cognitive diversity must be in the appointment process. As explained by Professor Catherine Rogers:

[t]his topic is uniquely important for those interested in dispute resolution ... This is obviously a critical moment in arbitration and goes to the heart of fairness in the process.⁷

Unfortunately, it does not appear that the arbitrator appointment process has kept pace with the rapid development of international arbitration. Anachronistically, appointments are still frequently made on the back of personal experiences or untested recommendations, resulting in a narrow pool of trusted names, largely from a particular demographic. We urge those responsible for appointing arbitrators to search beyond the household names of arbitration and consider a diverse range of candidates in making their selection and provide some practical suggestions for how this may be achieved. This is imperative not just for moral and ethical reasons (including to reflect increasing corporate values of diversity and inclusion), but also to ensure the continued trust and confidence in arbitration to deliver high quality awards.

2 CURRENT APPROACH TO APPOINTING A TRIBUNAL

Almost all international arbitrations are comprised of a sole arbitrator (with or without a tribunal secretary) or a three-person tribunal (again, with or without a tribunal secretary). The choice between one or three arbitrators is often made in the arbitration agreement itself – in particular, where parties opt for a sole arbitrator – or is otherwise left for agreement between the parties (or for decision by an arbitral institution or appointing authority) once the dispute has arisen.

A sole arbitrator is usually considered to be a more cost-efficient option, both because of the savings in arbitrators' fees and because he or she can usually conduct the proceedings more quickly, without the need to coordinate with two other busy professionals. However, appointing a sole arbitrator to determine a dispute evidently increases the risk that the individual may make a mistake of fact or law,

⁷ Catherine Rogers, 'A Window Into the Soul of International Arbitration: Arbitrator Selection, Transparency and Stakeholder Interests', Victoria U. Wellington L. Rev 1179–1180 (2015).

or be influenced by implicit bias, which then impacts the quality of the arbitral award.

The exchanges and interplay among the arbitrators in a three-person tribunal are intended to ensure that parties' arguments are tested more thoroughly and rigorously than with a sole arbitrator, hopefully acting as an effective antidote to mistakes and bias, although, as discussed in more detail, this is less likely to be the case than we might imagine.

To appoint an arbitrator, lawyers will normally work with their client to try and identify individuals who they hope are most likely to be in tune with the client's case. As part of that process, lawyers will often draw up a list of potential candidates who those lawyers know, have appeared in front of, or have heard of. From that list, those lawyers will usually consider each candidate's: (1) familiarity with the governing law, place of arbitration, language, and the applicable arbitration rules; (2) professional background in terms of legal experience, as well as experience in the relevant industry or similar industries; (3) published articles and presentations, and past decisions/awards to the extent known or available; (4) general reputation, which is often ascertained through general discussion with other experts within the field of international arbitration; and (5) ability to influence the selection of the presiding arbitrator and the likelihood that the candidate's views will carry weight with the other arbitrators during deliberations.

Upon first reading, the above list appears eminently reasonable, considered, and thorough. However, in reality, much of the selection process boils down to the personal experience and knowledge of potential arbitrator candidates of the lawyer or individual at the arbitral institution who is nominating the candidate. The findings recorded in the 2018 International Arbitration Survey appear to confirm this point:

70% of respondents stated that they have access to enough information to make an informed choice about the appointment of arbitrators. The most used sources of information about arbitrators include "word of mouth", "internal colleagues" and "publicly available information".⁸

This assessment alone raises concerns, indicating that word of mouth, internal colleagues, and publicly available information are sufficient to make an informed choice. These elements are valuable, but given the importance of the decision, it is troubling that the arbitrator selection process is so heavily reliant on personal experience and subjective preference, with their obvious limitations. As explained by Professor Rogers:

⁸ 2018 International Arbitration Survey: The Evolution of International Arbitration, 2.

[e]ven if basic biographical information about arbitrators is readily available, more detailed information about how arbitrators usually decide cases is not. Arbitration awards typically are not publicly available (or if they are made public, the names of the arbitrators have most often been removed). Moreover, information about the case management skills and experience of arbitrators is usually obtained only through ad hoc individualized person-to-person inquiries. Given the stakes, it is a surprisingly low tech process with an inherently hit-or-miss quality.⁹

Perhaps owing to a combination of the lack of objective information and the high-stakes involved, the selection of arbitrators has become a risk-averse process, favouring trusted names with similar backgrounds, education, and perspectives. After all, how would a lawyer explain to their client, when faced with a negative award, that they nominated an arbitrator that they did not know? Consequently, 'household names' are repeatedly appointed, making it harder for new candidates to be considered. This, in turn, results in the pool of selected arbitrators being small and unsurprisingly lacking in diversity.

Is this also the case when the arbitrator is chosen by an institution? If there is no party nomination of an arbitrator, and the proceedings are administered by an arbitral institution, it is common practice that the institution will either select a candidate or suggest a list of potential candidates to the parties. Institutions take into consideration the nature of the dispute, its value, and the characteristics of the parties (such as nationality, language, and location), as well as any specific selection criteria agreed by the parties. Institutions are better positioned to push for, and implement, diverse tribunals as they are not answerable to clients in the same way as lawyers.

All the main arbitral institutions have expressed their commitment to foster diversity. The London Court of International Arbitration (LCIA), for example, draws from an internal 'database of neutrals', though it is not restricted by it. Anybody who wishes to be included in such a database need only complete a form that may be downloaded from the LCIA website. The internal procedure for the appointment of arbitrators is explained in detail in the LCIA's Note for Parties.¹⁰

In terms of ensuring a balanced tribunal, the LCIA specifically states that it will seek to guarantee the right balance of experience, qualifications, and seniority, as well as the qualities the presiding arbitrator should have to complement those of the co-arbitrators, and will be mindful of any national or cultural characteristics to which it should be sensitive 'so as to minimise conflict'.¹¹ It also explains that it 'strives to maintain strong diversity (in all its guises) among the candidates selected.

⁹ Rogers, *supra* n. 7, at 1180.

¹⁰ LCIA Notes for Parties, s. 8, Point 46.

¹¹ *Ibid.*, s. 8, Point 49.

This includes, wherever possible and where appropriate in the particular case, widening the pool of arbitrators through first time appointments'.¹²

The Stockholm Chamber of Commerce (SCC) has a policy on appointment of arbitrators. Tribunal balance is one of its general principles, understood as a balance of 'expertise, legal qualifications, seniority, language and other relevant circumstances, taking into account all members of the Arbitral Tribunal'.¹³ One of the special considerations of the policy is diversity, with the SCC stating it 'seeks to foster diversity in all appointments. This includes but is not limited to acting in the spirit of its commitment as a signatory to the Equal Representation in Arbitration Pledge'.¹⁴

Other institutions have been less public about their internal steps and considerations for selection and appointment of arbitrators. The International Chamber of Commerce (ICC) Rules state that '[w]here the Court is to appoint an arbitrator, it shall make the appointment upon proposal of an ICC National Committee or Group that it considers to be appropriate'.¹⁵ These committees and groups have discretion to draw up their lists but are encouraged to favour gender diversity in their proposals and to put forward 'new and/or young' candidates in less complex or lower value cases.¹⁶

In Singapore International Arbitration Centre (SIAC) commercial proceedings, the President enjoys full discretion to appoint arbitrators, from or outside the SIAC panel of arbitrators.¹⁷ In SIAC investment cases, a list-procedure applies through which parties are provided a list of five candidates for them to rank or strike out.¹⁸ The institution does not offer any insight as to the procedure or any specific diversity considerations.

In International Centre for Settlement of Investment Disputes (ICSID) proceedings, appointments not made by parties are made by the Chairman of the Administrative Council. According to Article 40 of the ICSID Convention, the arbitrators must in that case be chosen from its panel of arbitrators, designated by Member States.¹⁹ The qualifications for the panels do not currently include any specific diversity requirements, although, through its very nature, ICSID is a truly international institution.

¹² *Ibid.*, s. 8, Point 50.

¹³ SCC Policy – Appointment of Arbitrators, I(3).

¹⁴ *Ibid.*, II(6).

¹⁵ ICC Rules of Arbitration 2021, Art. 13.3.

¹⁶ ICC Note to National Committees and Groups of the ICC on the Proposal of Arbitrators, Point 38.

¹⁷ SIAC Practice Note, Administered Cases, On Appointment of Arbitrators, Arbitrators' Fees & Financial Management.

¹⁸ SIAC Investment Rules, Rule 8.

¹⁹ ICSID Rules of Procedure for Arbitration Proceedings, Art. 40.

The international arbitration community is aware of some of the diversity challenges which it faces and there is some evidence that its members are seeking to address these issues, although for moral and ethical reasons. For example, there has been, in recent years, a welcome increased focus on gender diversity. Starting with the Equal Representation in Arbitration Pledge, institutions and practitioners have become more alive and more vocal about the under-representation of women at the arbitrator level. In 2020, the Cross-Institutional Task Force on Gender Diversity (the ‘Task Force Report’) revealed just how much the issue of under-representation of women in international arbitration remains a problem.

The statistics published in the Task Force Report do show that, since 2015, the proportion of female arbitrators has increased. In 2015, an average of 12.2% of arbitrator appointees were female. By 2017, in line with the work of the Equal Representation in Arbitration Pledge and other initiatives, that figure had increased to 16.3%. By 2019, the proportion had risen to 21.3%.²⁰

The Task Force Report identified that the proportion of female institutional appointees exceeds the proportion of female co-arbitrator or party appointments. Thus, over the past four years, approximately one-third of all institutional appointees have been female. Tellingly, the proportion of female party-appointments has increased at a slower pace – from 8.5% in 2015 to 13.9% in 2019. Evidently, there remains significant room for improvement in relation to gender diversity in arbitral appointments.

There is also a significant lack of ethnic diversity within arbitrator appointments. This is apparent in both the investment treaty arbitration context and the international commercial arbitration context. A study of 289 ICSID cases between 1972 to 2015 for which both arbitrators’ and parties’ nationalities were available, revealed that: (1) 45% of tribunals were comprised of all Anglo-European arbitrators; (2) 84% of tribunals were comprised of two Anglo-European arbitrators; and (3) 4% of tribunals were comprised of entirely non Anglo-European arbitrators.²¹ These statistics are all the more striking when one considers that on average 22% of ICSID cases involve African states, 23% of ICSID cases involve South American states, and only 8% of cases involved Western European states, and 4% of cases involved North American states.

The situation with regard to international commercial arbitration is not much better. The ICC’s 2019 statistics reflect that from the eighty-nine different jurisdictions represented in arbitrator appointments, arbitrators from North and West

²⁰ ICCA Reports No. 8: Report of the Cross-Institutional Task Force on Gender Diversity in Arbitral Appointments and Proceedings.

²¹ Berwin Leighton Paisner, *International Arbitration Survey: Diversity on Arbitral Tribunals: Are We Finally Getting There?*, www.bclplaw.com/images/content/1/4/v2/147241/BLP-International-Arbitration-Survey-2016.pdf (accessed 7 Feb. 2021).

Europe represent 56.4% of all arbitrators in ICC cases. The top six nationalities of arbitrators acting in ICC arbitrations, as in previous years, are British (17.5%), Swiss (10%), French (7.9%), American (7.3%), German (5.9%), and Brazilian (4.2%).²² The top six nationalities of arbitrators appointed by parties in the Hong Kong International Arbitration Centre (HKIAC) in 2020 were British (21.5%), Hong Kong (16.3%), Mainland China (11.9%), American (9.6%), Austrian (7.4%), and Australian (4.4%).²³ We are witnessing the emergence of a number of initiatives to address this imbalance. For example, the African Promise aims to promote diversity and inclusivity in international arbitration through improving the representation of African arbitrators and increasing their appointments. Similarly, the Racial Equality for Arbitration Lawyers initiative strives to achieve racial equality within the sphere of arbitration practitioners, championing under-represented ethnic groups within the international arbitration community.²⁴

There is also little evidence relating to age diversity in arbitrator appointments. The ICC's 2019 figures show an average age of 56.7 for arbitrators, with only 34% being below fifty. Tellingly, arbitrators appointed by the ICC Court are generally, on average, five years younger than those appointed by the parties or co-arbitrators. The average age of women acting as arbitrators was 50.5 years, with the average age of women appointed by the ICC Court being approximately five years younger.²⁵

Aside from the moral and reputational concerns regarding the lack of diversity in international arbitration tribunals, there is little to no discussion on the effect of a lack of diversity on the quality of an arbitrator's decision-making process. As we will explore in the remainder of this article, human judgment is inescapably clouded by cognitive biases, and the arbitration community does not, as a general rule, consider this when appointing arbitrators or when promoting arbitrator candidates. When a group of decision makers is not sufficiently diverse, there is a greater risk that they will all share similar perspectives and therefore fail to spot where a decision might have been influenced by bias. Further, a lack of diversity can also foster 'group think' where group members not only fail to correct each other's errors but can also amplify them. Before explaining how a lack of diversity can lead to this sub-optimal situation, we will explain how an arbitrator's decision-making process can be affected by bias.

²² ICC Dispute Resolution 2019 Statistics, 24.

²³ HKIAC Arbitrator Appointments and Confirmations, www.hkiac.org/arbitration/arbitrators/arbitrator-appointments-and-confirmations-0 (accessed 9 Feb. 2021).

²⁴ See, www.arbitralwomen.org/launch-of-racial-equality-for-arbitration-lawyers-real/ (accessed 7 Feb. 2021).

²⁵ ICC Dispute Resolution 2019 Statistics, 14.

3 THREAT TO QUALITY OF DECISION MAKING

The study of neuroscience supports that the human brain has a dual process capability – intuitive and deliberate processing components.²⁶ Daniel Kahneman has popularized the explanation that humans have two ways of thinking: System 1, which is fast, intuitive, high capacity, and low effort; and System 2, which is slower, more deliberate, more logical, low capacity, and high effort.²⁷

Neither system is universally preferential, rather both systems are required to work in tandem in order to make effective decisions, depending on the circumstances. System 1 controls the instinctive skills and reactions which we share with others. It allows us to detect hostility in a voice, drive a car on an empty road, and understand simple sentences.²⁸ System 2, on the other hand, allows us to perform actions which require more conscious thought, such as monitoring the appropriateness of our behaviour in a social situation, filling out a tax form, or checking the validity of a complex logical argument.²⁹

Not all decisions are made using System 2, because this process is too costly – it is too slow and requires too much energy to be used as the primary decision-making tool. Therefore, most of our decisions are made using System 1, and System 2 is used to check and modify our intuitive System 1 response. Ordinarily, this division of labour is highly efficient: it minimizes effort and optimizes performance.³⁰ Our dual system of thinking enables individuals to react and make decisions (sometimes even complex ones) easily and quickly, enabling us to find shortcuts that help us to navigate through different situations in life and reserving mental energy for more taxing problems.

However, there are circumstances where this system can backfire. One drawback of our System 1 is that it is automatic and cannot be turned off. In certain situations, our System 1 will be misled and make errors which our System 2 may fail to cross-check, resulting in a cognitive error or bias, usually without the individual being aware of this failure. When this occurs, an individual will create, unconsciously, their own subjective reality from their perception of the input, and it is this subjective reality which directs that individual's behaviour.

There are various entertaining examples which demonstrate the relative ease of making a cognitive error, and which will hopefully highlight how we are universally susceptible to the pitfalls of System 1 and System 2. A frequently cited illustration is the bat and ball question:

²⁶ Edna Sussman, *Arbitrator Decision-Making: Unconscious Psychological Influences and What You Can Do About Them*, 24(3) *Am. Rev. Int'l Arb.* 487–488 (2013).

²⁷ Daniel Kahneman, *Thinking Fast and Slow*, Penguin Books 20–21 (2011).

²⁸ *Ibid.*, at 21.

²⁹ *Ibid.*, at 22.

³⁰ *Ibid.*, at 25.

A bat and a ball cost US\$1.10 in total. The bat costs \$1.00 more than the ball. How much does the ball cost?³¹

The intuitive, but wrong answer is USD 0.10 cents. The correct answer is USD 0.05 cents – the bat costs USD 1.05 and the ball costs USD 0.05. The calculation is straightforward, but to reach the right answer, we must engage our System 2 thinking to overcome the more intuitive response.

Similarly:

All roses are flowers.
Some flowers fade quickly.
Therefore some roses fade quickly.³²

Most people would agree with this. And yet, this syllogism is flawed, as it is possible that there are no roses amongst the flowers that fade quickly. Most individuals do not stop to think about this and do not go back to question their own conclusion.

Of course, most arbitrators are highly qualified and experienced lawyers who have been taught to stop and think of each detail, and to resist some of the pitfalls of System 1. However, research shows that arbitrators and judges – like all humans – are prone to make psychological shortcuts in their decision making.³³ This is, or should be, of serious concern in the arbitration context as it can lead to the distortion of information, inaccurate judgment, or illogical interpretation of facts or the law, which is all the more concerning when considering the highly limited grounds for appeal or setting aside of arbitral awards. A study involving various legal groups – including arbitrators – asked three questions like the bat and ball example above. On average, almost 80% of the arbitrators failed to answer all three questions asked correctly.³⁴ Of course, that is not to say that the majority of arbitrator decision making is flawed by cognitive error, but rather to illustrate that arbitrators are not immune to cognitive error. In fact, research has shown that arbitrators frequently outperform other individuals on cognitive reasoning tests.

There is plenty of scope for extra-judicial considerations to influence an arbitrator's decision making, especially considering that in a recent survey only 27% of arbitrators felt certain that they had reached the correct decision at the time

³¹ *Ibid.*, at 44.

³² *Ibid.*, at 45.

³³ Research has shown that the intuitive System 1 thinking plays a significant role in judicial decision making. See Anna Ronkainen *Dual Process Cognition and Legal Reasoning*, in *Argumentation 2011: International Conference on Alternative Methods of Argumentation in Law* (2011). Also see Chris Guthrie, Jeffrey Rachlinski & Andrew Wistrich, *Blinking on the Bench: How Judges Decide Cases*, 93 *Cornell L. Rev.* 1 (2007); Rebecca Helm, Andrew Wistrich & Jeffrey Rachlinski, *Are Arbitrators Human?*, 13(4) *J. Empirical Legal Stud.* 666–692 (2019).

³⁴ Chris Guthrie & Jeffrey Rachlinski, *Inside the Arbitrator's Mind*, 66 *Emory L. J.* 1115, 1137 (2017).

of writing the final award.³⁵ This is not an encouraging statistic. Arbitrators are also at risk of biased procedural decisions because arbitration practice is heavily reliant on what is described as soft law, i.e., non-legislative instruments such as arbitration rules and guidelines. These soft laws govern important aspects of arbitration such as issues of conflict of interest, evidence and discovery, and party representation. The flexible nature of arbitration introduces an increased opportunity for arbitrators to determine issues with intuitive reasoning. As established arbitrator, Professor William Park described: ‘its malleable character might in some instances serve as a judicial fig leaf to cover an arbitrator’s personal preference’.³⁶

Having explained why arbitral tribunals are at risk of making cognitive errors, the next part of this article will discuss four principal ways in which this can occur in arbitrator decision making, namely through: (1) attitudinal bias; (2) confirmation bias; (3) anchoring bias; and (4) egocentricity bias. Each is discussed in turn below.

3.1 ATTITUDINAL BIAS

It is widely accepted that decision makers are influenced by their cultural backgrounds, prior experiences, and personal associations in judging behaviour and reaching decisions.³⁷ For example, an individual’s views and perspectives are often shaped by their national cultural norms. Geert Hofstede theorizes that global cultural differences can be broken down into six dimensions: (1) individualism; (2) power distance; (3) masculinity; (4) uncertainty avoidance; (5) long-term orientation; and (6) indulgence.³⁸ Broadly speaking, Hofstede’s research shows that most national cultures adopt a different position on each of these fundamental issues.³⁹

For example, in relation to individualism, Richard Nisbett and Takahiko Masuda conducted a study involving American and Japanese participants and asked them to describe an underwater scene. The Americans described what the individual fish looked like, whereas the Japanese participants recalled different

³⁵ Edna Sussman, *The Arbitrator Survey – Practices, Preferences and Changes on the Horizon*, 26(4) *Am. Rev. Int’l Arb.* 534 (2015).

³⁶ William Park, *Rules and Reliability: How Arbitrators Decide Cases*, in *The Roles of Psychology in International Arbitration* 4 (Tony Cole ed., 2017).

³⁷ Shari Diamond, *Psychological Aspects of Dispute Resolution Issues for International Arbitration*, in *International Commercial Arbitration: Important Contemporary Questions* 11, 336–337 (Albert Jan Van den Berg ed., ICCA Congress Series).

³⁸ Individualism is defined as the extent to which people feel independent, as opposed to being interdependent as members of larger wholes; power distance is defined as the extent to which the less powerful members of organizations and institutions accept and expect that power is distributed unequally; masculinity is defined as the extent to which the use of force is endorsed socially; uncertainty avoidance is defined as society’s tolerance for uncertainty and ambiguity; long-term orientation addresses change; and indulgence is defined as the good things in life.

³⁹ See, <https://geerthofstede.com/culture-geert-hofstede-gert-jan-hofstede/6d-model-of-national-culture/> (accessed 7 Feb. 2021).

detail, focussing instead on the area where the fish were swimming. In the next part of the experiment, the subjects were shown a different underwater scene with some of the same objects from the first. The Japanese subjects found it difficult to recognize the objects they had already seen before, whereas the American subjects experienced a different problem – they found it difficult to see the changes in the context.⁴⁰ The two cultures had a different frame of reference – on the whole, the Americans had a more individualistic frame, whilst the Japanese had a more contextual one.⁴¹

As cross-cultural expert Richard Lewis explains, people of different cultures usually share basic concepts but view them from different angles and perspectives. His research led to the Lewis Model which identified three cultural mindsets:

1. linear-active, comprising the English-speaking world (North America, Great Britain, Australia, and New Zealand) and Northern Europe (in particular, Scandinavia, Germany, and Austria);
2. reactive, comprising all major countries in Asia (with the exception of the Indian sub-continent, which is hybrid); and
3. multi-actives, comprising Southern Europe, Mediterranean countries, South America, Sub-Saharan Africa, Arab and other cultures in the Middle East, Pakistan and India, as well as numerous former USSR states.

Lewis found that whilst these cultures are obviously diverse, geographically, in their religions and belief systems, behaviourally, they follow the same pattern in relation to, inter alia, emotion, rhetoric, persuasion, body language, situational truth, nepotism, changeability, sense of history, and unease with strict discipline. Whilst the three types are distinctive, each possesses behavioural elements from the other two categories, to varying degrees.

Each group will gather information in a different way: the first relying primarily on data, the second on personal experience, and the third group combining both approaches. They will also approach negotiation and decision making from different viewpoints.⁴² The Lewis Model was created to apply in international business but can be easily transposed to international arbitration.

Naturally, arbitrators sitting on a tribunal will also have their own frame of reference, defined by their culture, background, academic training, and prior experiences, which will guide their interactions with one another and how they individually and collectively decide the dispute. If these natural and subconscious predispositions are left unchecked, the net result can be that one party will be

⁴⁰ Matthew Syed, *Rebel Ideas* 16–17 (John Murray Publishers 2019).

⁴¹ *Ibid.*, at 17.

⁴² Richard Lewis, *When Cultures Collide* 24–43 (John Murray Publishers 2018).

unfairly advantaged over another – an arbitrator may be subconsciously inclined to view one party's case more favourably or to view a witness with a particular background as more credible than a witness from a different background.⁴³

To demonstrate this phenomenon, Ernest Haggard and Soia Mentschikoff conducted an experiment involving twenty different panels of arbitrators from the American Arbitration Association – half brokers and half manufacturers. All the arbitrators listened to the same contractual dispute concerning whether the broker defendant had the right to cancel a sale and goods contract with a manufacturer. A comparison between the decisions showed that the arbitrators from the broker background were far more likely to favour the broker defendant than the manufacturers. Commentators have remarked that this shows how bias can emerge from the 'natural alignment of interests based on shared experience'.⁴⁴

In another study, James Brodney, Sarah Schiavoni, and Deborah Merritt analysed unfair labour practice claims in the US courts over a seven-year period. They found that the judges' decisions were influenced by their cultural experiences; for example, whether they attended an elite college and whether they had previously represented management in employment claims had a significant effect on their reasoning.⁴⁵ A further study carried out by Michael Waibel and Yanhui Wu showed how ICSID arbitrator's decisions were often influenced by the arbitrator's policy preferences.⁴⁶ Indeed, certain arbitrators receive repeat nominations in part because of their well-known policy preferences.

Study after study has demonstrated that attitudinal bias is a fundamental characteristic of human behaviour. As such, its influence is inescapable, even for arbitrators. It must be recognized that to a greater or lesser extent, it will pervade much arbitrator reasoning, often unbeknown to the individual.

3.2 CONFIRMATION BIAS

Confirmation bias occurs when a person forms an initial view on an issue – perhaps shaped by another bias or preconception – and interprets subsequent information and evidence to support this pre-formed view.⁴⁷ Equally, decision makers are more

⁴³ Diamond, *supra* n. 37, at 11, 327, 336.

⁴⁴ *Ibid.*, at 327, 336.

⁴⁵ James Brodney, Sara Schiavoni & Deborah Merritt, *Judicial Hostility Toward Labor Unions? Applying the Social Background Model to a Celebrated Concern*, 60 Ohio St. L. J. 1675 (1999).

⁴⁶ Michael Waibel & Yanhui Wu, *Are Arbitrators Political? Evidence from International Investment Arbitration* (2017), www.yanhuiwu.com/documents/arbitrator.pdf (accessed 7 Feb. 2021).

⁴⁷ *An ICJ Judge on Bias In International Adjudication*, <https://globalarbitrationreview.com/article/1196307/an-icj-judge-on-bias-in-international-adjudication> (accessed 7 Feb. 2021), which describes Judge Joan Donoghue of the International Court of Justice's description of bias in international arbitration. Judge Donoghue describes it as an 'intuitive-override' model of judging, where the adjudicator forms an

likely to reject information that is inconsistent with their beliefs and preferences.⁴⁸ In other words, confirmation bias has the capacity to entrench other biases, as people generally can find it difficult to move away from their initial assessment.

In one classic study, a group of individuals who were for and against capital punishment were given information about two studies that used different methodologies, one of which supported, and one of which opposed the finding that capital punishment was an effective deterrent for further crime. The participants were more critical of the research methods used in the study which was different to their initial opinion compared to the study that confirmed their pre-formed view.⁴⁹

Experienced professionals are not immune from confirmation bias. The more experience a professional has, the more likely that professional is to form early expectations or predictions. Most of the time, this is a valuable aspect of an individual's expertise. However, if the early prediction is false, the professional may find it difficult to detect the error, as the individual is likely to interpret further information and evidence to support their initial view.

This was seen in a study of experienced scientists, who mostly held Ph.Ds and were very adept at analysing scientific research. The scientists were asked to rate the quality of the research reports on a controversial subject. Even though the reports were completely identical – apart from the reported findings – the scientists judged the reports which supported their prior beliefs as higher quality than those which opposed them.⁵⁰ A further study involved a group of UK physicians who were presented with a sequence of information concerning a medical diagnosis. Their interpretation of the later information was distorted to support a diagnosis favoured by the early evidence.⁵¹

Arbitrators, like any other professional, are susceptible to confirmation bias. Many arbitrators have years of experience as tribunal members and counsel, have often sat with some of the other arbitrators on numerous occasions, and have probably decided many cases with similar fact patterns and legal issues.

initial conclusion on an issue (perhaps shaped by nationality and cognitive biases) and then tests that initial conclusion by scrutinizing the relevant materials in detail.

⁴⁸ Diamond, *supra* n. 37, at 327, 336.

⁴⁹ Genviève Helleringer & Peter Ayton, *Chapter 2: Bias, Vested Interests and Self-Deception in Judgment and Decision-Making: Challenges to Arbitrator Impartiality*, in *The Roles of Psychology in International Arbitration* 40, 21–44, 39 (Tony Cole ed., International Arbitration Law Library), citing Charles Lord, Lee Ross & Mark Lepper *Biased Assimilation and Attitude Polarization: The Effects of Prior Theories on Subsequently Considered Evidence*, 37 *J. Personality & Soc. Psychology* 2098–2109 (1979) and Jonathan Koehler *The Influence of Prior Beliefs on Scientific Judgments of Evidence Quality*, 56 *Org. Behavior & Hum. Decision Processes* 28–55 (1993).

⁵⁰ Diamond, *supra* n. 37, at 327, 336, citing Koehler, *supra* n. 49, at 28.

⁵¹ Helleringer & Ayton, *supra* n. 49, at 21–44, citing Olga Kostopoulou, *Information Distortion in Physicians' Diagnostic Judgments*, in 32(6) *Medical Decision Making* 831–839 (2012).

Consequently – and as supported by research – many arbitrators form an initial early assessment of a case, against which the rest of the arbitration is pitted. In an arbitration survey, nearly 88% of arbitrators admitted that they sometimes reach a preliminary view after reading the prehearing submissions.⁵² In many situations, this ability is laudable – it can allow an arbitrator to quickly decipher the pivotal issues and provides an initial decision framework against which the remainder of the submissions and evidence can be interpreted and cross-checked.

However, if this early assessment is wrong or incomplete, it may be difficult for an arbitrator to change their view as they are more likely to engage with the submissions and evidence which supports their initial conclusions and less likely to pay attention to the material which does not. Tellingly, almost 70% of surveyed arbitrators said that they did not always review the evidentiary record of the party that they preliminarily assessed to be the losing side.⁵³ Generally, decision makers are unaware that they have displayed confirmation bias and will report that they have made sound decisions, even during the process of making a biased one.⁵⁴

3.3 ANCHORING BIAS

When individuals are asked to make numerical assessments, they will often be heavily influenced by the first number presented to them. The initial figure provides an ‘anchor’ from which subjects will base their assessment, even if that number is completely unrelated to the numerical estimate they have been asked to give, and even if decision makers are fully aware of its meaninglessness.⁵⁵ Furthermore, anchors can also influence the way in which people process further information. They can cause people to focus on information which is consistent with the initial anchor and disregard information which would lead to a greater adjustment from it.⁵⁶

One of the most well-known studies demonstrating this phenomenon was conducted by Kahneman and Tversky in which they asked a group of people to

⁵² Sussman, *supra* n. 35, at 524. 3.5% of arbitrators said they always reached a preliminary view, 14.1% said they usually did (i.e., 75% of the time), 19.3% said that they often did (i.e., around 50% of the time) and 50.8% said that they sometimes did (i.e., around 25% of the time).

⁵³ *Ibid.*, at 528. 31.5% of arbitrators said they always reviewed the evidence, 22.6% said they usually did (i.e., 75% of the time), 21% said that they often did (i.e., around 50% of the time) 19.2% said that they sometimes did (i.e., around 25% of the time) and 5.7% said that they never did .

⁵⁴ Helleringer & Ayton, *supra* n. 49, at 21–44.

⁵⁵ Amos Tversky & Daniel Kahneman, *Judgment Under Uncertainty: Heuristics and Biases*, 185 *Sci.* 1124–1131 (1974); and Birte Englich, Thomas Mussweiler, & Fritz Strack, *Playing Dice with Criminal Sentences: The Influence of Irrelevant Anchors on Experts' Judicial Decision Making*, in 32 *Personality & Soc. Psychology Bull.* 188–200 (2006).

⁵⁶ Doron Teichman & Eyal Zamir, *Judicial Decision Making: A Behavioural Perspective*, in *Oxford Handbook Behavioral Econ. & L.* 15 (2014).

spin a wheel of fortune to generate a seemingly random number. However, the wheel had been rigged so that 50% of the participants received the number 10 and 50% the number sixty-five. After this, the group was asked to estimate whether the number of African nations who were members of the United Nations was higher or lower than the number they had received from the wheel of fortune and to estimate the correct percentage of African countries who were members of the United Nations.⁵⁷

Remarkably, there was a dramatic difference in the group's responses, depending on whether the participants had received a higher or lower anchor. The participants who had received the number ten averaged 25%, while the group that received the number sixty-five, estimated an average of 65%. Furthermore, although the subjects were clearly influenced by the anchors, they all denied that they had been influenced at all.⁵⁸

The effect of the anchoring bias on a specific decision will depend on the circumstances. When a certain problem has one correct answer, being knowledgeable about the issue will reduce or even eliminate the anchoring effect.⁵⁹ By the same token, the more uncertainty there is about a decision, the greater the scope for the anchoring effect to distort the outcome.

Anchoring bias is particularly pertinent to the arbitral decision-making process, where arbitrators are frequently asked to determine damages which can be very difficult to quantify. Before reaching a decision, a tribunal might have to navigate many uncertain and complex issues. The tribunal may have to assess valuations and projections into the future, decide which is the most convincing alternative of the 'but-for' world, determine which discount rate should be applied and the correct multiple to use. The tribunal members may have to wade through 1,000s of pages of expert evidence and oral testimony, with each party's expert relying on complex calculations and computer models to support its expert assessments.⁶⁰ Even among quantum experts, there is often significant room for differences of opinion on the correct quantum figure and it is not unusual for opposing experts to present assessments which are millions of dollars apart.

It is therefore not surprising that when asked, nearly 44% of arbitrators admitted that they found the quantification of damages more difficult than determining liability.⁶¹ The inherent complexity and ambiguity means that, in many cases, the door is wide open for damages assessments to be influenced by anchors,

⁵⁷ Kahneman, *supra* n. 27, at 119.

⁵⁸ *Ibid.*, at 119.

⁵⁹ Timothy Wilson, Christopher Houston, Kathryn Etling & Nancy Breeke, *A New Look at Anchoring Effects: Basic Anchoring and Its Antecedents*, in 125 *J. Experimental Psychology: General* 387–402 (1996).

⁶⁰ Sussman, *supra* n. 35, at 521.

⁶¹ Sussman, *supra* n. 26, at 487, 496. Only 19% of arbitrators found liability more difficult to determine, the rest found both liability and quantification of damages equally difficult.

which can affect even the most highly trained arbitrators. The following examples may be illustrative.

In one study, a group of arbitrators was asked to determine the amount of damages which should be awarded to a developer as a result of the state passing legislation which prevented the developer from enjoying beneficial use of a newly developed property. The arbitrators were asked to determine the 'fair market value' or 'what a willing buyer would pay a willing seller for the best use of the property'. Half of the arbitrators were told that the developer had claimed damages of USD 10 million and the other half were told that the claim was USD 50 million. The difference between the two groups was significant. The arbitrators who were given the high anchor rendered much larger awards – an average of nearly USD 25 million, whereas the arbitrators in the low anchor group awarded on average USD 6 million.⁶²

In another study, arbitrators were asked to assess the amount of damages which should be awarded to an international law firm which had suffered unfair and inequitable treatment when it was raided by government forces, resulting in the destruction of irreplaceable items, incarceration of employees, and the deportation of foreign lawyers, adverse publicity, and reputational damage. All the arbitrators were told about an unconnected case in which a US court had found Sudan liable in tort to individuals injured by the bombing of a ship in Yemen. The control group received no information about the damages awarded in that case, but three experimental groups (A, B, and C), were given different evaluations of the amount of damages awarded in the unconnected Sudan bombing case – Group A was told USD 1 million, Group B was told USD 5 million, and Group C USD 30 million. These irrelevant anchors seemingly had a significant influence on the amounts the arbitrators awarded to compensate for the government raid. Group A awarded an average of USD 5 million, Group B an average of USD 5.5 million, and Group C an average of USD 16.3 million. In contrast, the control group awarded an average of USD 10 million.⁶³

A further example involved a group of US judges who were asked to determine the amount of damages which should be awarded to a victim who had lost an arm in a car accident. The same facts were presented to all the judges, but half of them heard a demand for USD 10 million in a settlement conference, whereas the control group heard a demand for 'a lot of money'. The judges who had heard the USD 10 million figure awarded on average USD 2,210,000, whereas the control group awarded an average of USD 808,000.⁶⁴

⁶² Susan Franck, Anne van Aaken, James Freda, Chris Guthrie & Jeffrey Rachlinski, *Inside the Arbitrator's Mind*, 66 Emory L. J. 1115–1174, 1143 (2017).

⁶³ *Ibid.*, at 1147–1148.

⁶⁴ Andrew Wistrich, Chris Guthrie & Jeffrey Rachlinski, *Can Judges Ignore Inadmissible Information? The Difficulty of Deliberately Disregarding*, 153 U PA. L. Rev 1251, 1288–1291.

Other research has shown that damage awards can be reduced when one party asserts that a claim should be struck out for failing to meet a required threshold, even if that motion has no merit. US judges were asked to assess the amount of damages to be awarded in a personal injury case where the plaintiff had lost the use of his legs due to the defendant's negligence. The control group was provided with no numerical anchor, whereas the other group was told that there was a motion to dismiss the case on the basis that the plaintiff had not met the USD 750,000 threshold required to bring his case to court. Almost 98% of the judges regarded the motion as frivolous and dismissed it. However, it still affected judicial reasoning. The control group awarded an average of USD 1,249,000, while the judges with the low anchor awarded USD 882,000.⁶⁵

Unfortunately, it cannot be assumed that two parties' quantum submissions would negate the influence of an anchoring bias, as reflected in an experiment which concerned a criminal trial where the judges were presented with two prosecutors' demands – a high demand of thirty-four months or a low demand of twelve months, together with the defendant's demand. The results showed that for both high and low anchors, it was the prosecutor's demand (the first anchor) that had a greater influence on the judges than the defendant's demand (the second anchor).⁶⁶

3.4 EGOCENTRICITY BIAS

The majority of individuals are completely unaware that they have been influenced by biases and, in some circumstances, will deny that they have reached a biased decision even when presented with evidence to show that they have.

This phenomenon may be caused by 'egocentricity bias', where an individual is prone to over-estimate their own ability. In doing so, they may look for evidence to confirm their views or simply remember their actions as being superior to others. An individual displaying egocentricity bias is unlikely to be aware of their own limitations and recognize their errors. This is relevant in the arbitration context as research has shown that arbitrators are particularly confident in assessing their decision-making capabilities. When asked to rank themselves compared to a room of other arbitrators at an elite conference in their ability to make accurate and impartial decisions, nearly 85% of arbitrators said that they would be better than the average arbitrator in the room.⁶⁷

⁶⁵ Chris Guthrie, Jeffrey Rachlinski & Andrew Wistrich, *Inside the Judicial Mind*, 86 Cornell L Rev 777, 780, 791 (2001).

⁶⁶ Sussman, *supra* n. 26, at 487, 502.

⁶⁷ Guthrie, Rachlinski, & Wistrich, *supra* n. 65, at 1165.

The prevalence of egocentricity bias makes it harder for an individual to self-diagnose other biases. As such, it is evident that merely relying on a self-checking mechanism to detect bias is unlikely to be effective. This further reinforces the need for cognitive diversity within an arbitral tribunal.

The next part of this article will address the safeguards in the legal framework which are designed to help counter bias, before addressing the critical role of diversity in the group decision-making process.

4 SAFEGUARDS IN THE LEGAL FRAMEWORK

The international arbitration community has acknowledged the critical importance of protecting against the appointment of biased arbitrators. In response, arbitral institutions have included protective measures in their rules, which generally use arbitrator independence and impartiality as the touchstone. An arbitrator can be challenged and dismissed if there are justified doubts as to their impartiality and independence. To establish this, an arbitrator is usually required to sign a declaration that they are able to act independently and impartially and are under a continuing duty to disclose any relationships or circumstances which might raise justifiable doubts over their ability to act as such.

National legislation and courts have also followed a similar approach. For example, the English Arbitration Act 1996 provides that an arbitrator can be dismissed if ‘circumstances exist that give rise to justifiable doubts as to his impartiality’ and an award can be challenged if the tribunal has not failed to act ‘fairly and impartially’.⁶⁸

The U.K. Supreme Court judgment in *Halliburton Company (Appellant) v. Chubb Bermuda Insurance Ltd.*⁶⁹ is the leading English law case on arbitrator bias. The Supreme Court impressed the importance of an arbitrator’s impartiality, referring to it as a ‘cardinal duty’⁷⁰ and recognized that the guarantee of neutrality and impartiality was one of the main reasons why parties choose to arbitrate in England.⁷¹ The court clarified that the correct legal test is ‘whether the fair-minded and informed observer, having considered the facts, would conclude that there was a real possibility that the tribunal was biased’.⁷² In applying this test, the Supreme Court stated that the distinctive features of arbitration must be taken into account. This includes a consideration of the private nature of arbitration, and the

⁶⁸ English Arbitration Act 1996, ss. 24(1)(a), 33(1)(a), 68(1) and (2)(a).

⁶⁹ *Halliburton Co. (Appellant) v. Chubb Bermuda Insurance Ltd.* [2020] UKSC 48.

⁷⁰ *Ibid.*, at 49.

⁷¹ *Ibid.*, at 63.

⁷² *Ibid.*, at 52.

very limited rights of appeal. The Supreme Court also had regard to the range of understandings in relation to the role and duties of party-appointed arbitrators, recognizing that some parties may expect party-nominated arbitrators to be pre-disposed towards their nominating parties, while the chair has a particular role to play in ensuring the tribunal acts fairly. While taking these differing perspectives into account, the duty of impartiality applied in the same way to every member of the tribunal and ‘the party-appointed arbitrator in English law is expected to come up to precisely the same high standards of fairness and impartiality as the person chairing the tribunal’.⁷³

In the United States, there are varying standards of bias applied by the different courts. The Second Circuit requires arbitrators to show ‘evident partiality’, whereas the Ninth Circuit requires ‘an impression of possible bias’. Finally, the test applied in courts in civil law jurisdictions is whether there are ‘justifiable doubts’ of bias.⁷⁴

The IBA Guidelines on Conflicts of Interest in International Arbitration (the ‘IBA Guidelines’) address the growing number of problems caused by conflicts of interest in international arbitration and present standards which are now almost ubiquitously applied in international arbitration. They aim to harmonize the standard of independence and impartiality in international arbitration, and set out general standards expressing the principles that should guide arbitrators, parties, and arbitral institutions when deliberating over possible bias. The IBA Guidelines also set out a list of specific situations meant to give practical guidance, with a list divided into three parts:

1. a red list, which describes situations in which an arbitrator should not accept appointment, or withdraw if already appointed, with certain situations described in the red list as non-waivable, such as when there is an identity between a party and the arbitrator, or the arbitrator has a significant financial interest in one of the parties or the outcome of the case;
2. an orange list, which sets out a non-exhaustive list of specific situations, which, in the eyes of the parties may give rise to justifiable doubts as to the arbitrator’s impartiality or independence; and
3. a green list, which describes situations in which the guidelines do not recommend disclosure, let alone withdrawal by the arbitrator.

⁷³ *Ibid.*, at 63.

⁷⁴ Stavros Brekoulakis, *Systematic Bias and the Institution of International Arbitration: A New Approach to Arbitral Decision-Making*, in *The Roles of Psychology in International Arbitration* 40, 339–374, 345–346 (Tony Cole ed., International Arbitration Law Library 2017).

Importantly, arbitration practitioners, national legislature, and guidelines have taken a restrictive approach as to whether or not an arbitrator has been influenced by unconscious bias from a psychological perspective. As one English court put it: ‘the law does not countenance the questioning of a judge about extraneous influences affecting his [or her] mind’.⁷⁵ Whilst the Supreme Court in *Halliburton* recognized that unconscious bias could be part of the objective assessment of impartiality, it acknowledged the difficulty of identifying it:

[t]he possibility of unconscious bias on the part of the decision-maker is known, but its occurrence in a particular case is not. The allegation, which is advanced in this case, of apparent unconscious bias is difficult to establish and to refute.⁷⁶

It further warned:

we are [not] required to “make windows into men’s souls” in search of an animus against a party or any other actual bias, whether conscious or unconscious ... we are only concerned with how things appear objectively.⁷⁷

Of course, there is a natural limit to which the law can intervene in instances of unconscious bias and a balancing act must be performed between guaranteeing arbitrator impartiality and legal certainty.

It is therefore imperative that the international arbitration community looks for other solutions to guard against the influence of biases and improve the quality of arbitration awards. The next section of this article will explore one solution – increasing the cognitive diversity of arbitration tribunals.

5 IMPORTANCE OF COGNITIVE DIVERSITY IN IMPROVING THE QUALITY OF ARBITRATION AWARDS

Professor Irving Janis was one of the early academics to study collective decision making. Through his research he observed a phenomenon called ‘groupthink’, which he described as follows:

[a] mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members’ striving for unanimity overrides their motivation to realistically appraise alternative courses of actions.⁷⁸

Janis’ research into groupthink was inspired by the Bay of Pigs fiasco. He was interested in how the same group of individuals exercised much better decision-making capabilities a year later when they helped avert the Cuban Missile Crisis. In

⁷⁵ *Locabail v. Bayfield Properties* [2000] Q.B. 451, at 471.

⁷⁶ *Halliburton Co. v. Chubb*, supra n. 69, at 70.

⁷⁷ *Ibid.*, at 52.

⁷⁸ Irving Janis, *Victims of Groupthink* 78 (Houghton Mifflin Company, 1978).

Janis' opinion, the reason for the difference was that the earlier decision was affected by groupthink. It was not the fixed attributes of the individuals which caused the faulty decision, rather there were factors present during their deliberations which reduced their decision-making capability.⁷⁹

Research has shown that teams of homogenous decision makers are particularly vulnerable to the perils of groupthink and ineffective collective decision making.⁸⁰ Similarities among decision makers often leads to higher levels of social cohesion and produces pressures to conform to the majority view.⁸¹ This may be one reason why in a study of small groups of domestic judges, the pressure of a majority had a significant effect on the group's ability to answer factual and legal questions.⁸²

In fact, we know that groups are only better at making decisions if they enlarge the pool of information and arguments than would be available to an individual decision maker and are effective at challenging each other's errors.⁸³ If a team of decision makers is not diverse (for example, in their demographic characteristics, cultural identities and ethnicity, and training and expertise), they are also more likely to lack cognitive diversity. In other words, a homogenous group may have a lower 'collective intelligence' than a more diverse group.⁸⁴ It is well established that cognitively diverse groups commonly outperform homogenous groups of equal ability.⁸⁵ It has also been shown that cognitively diverse groups will typically outperform the better individuals, provided the individuals in the group are nearly as able as the individual.⁸⁶ Perhaps more interestingly, a study conducted by Lu Hong and Scott Page showed that less able but more diverse groups outperformed groups of higher ability problem solvers.⁸⁷ In a series of experiments, they found that a random collection of diverse and limited-ability individuals drawn from a large sample population typically outperformed a collection of the very best less diverse individuals from the same population.

⁷⁹ Irving Janis, *Groupthink: Psychological Studies of Policy Decisions and Fiascoes* 158 (2d ed, rev. 1982).

⁸⁰ C Fernandez, *Creating Thought Diversity: The Antidote to Group Think, the Management Moment*, in 13 J. Pub. Health Mgmt. & Practice 670 (2013).

⁸¹ Toyah Miller & Carmen del Triana, *Demographic Diversity in the Boardroom: Mediators of the Board Diversity-Firm Performance Relationship*, 46 J. Mgmt. Stud. 755-786, 766 (2009).

⁸² Phillipp Gunther, *Groupthink Bias in International Arbitration*, 11 J. Int'l Dispute Settlement 91-126, at 94 (2020), citing Jonathan Kestel, *Panel Composition and Voting on the U.S. Courts of Appeals Over Time*, 64 Pol. Res. Q. 377 (2011).

⁸³ Cass Sunstein, *The Law of Group Polarization*, in John M Olin Program in Law and Economics Working Paper No 91 1999, 30.

⁸⁴ Allen Amason, *Distinguishing the Effects of Functional and Dysfunctional Conflict on Strategic Decision Making: Resolving a Paradox for Top Management Teams*, in 39 Academy Mgmt. J. 123-148, 124 (1996).

⁸⁵ Bernardo Huberman, *The Performance of Cooperative Processes*, in 42(1-3) Physica D: Nonlinear Phenomena 38-47 (1990); Miller & del Triana, *supra* n. 81, at 755-786, 766-767.

⁸⁶ Huberman, *supra* n. 85.

⁸⁷ Lu Hong & Scott Page, *Groups of Diverse Problem Solvers Can Outperform Groups of High-Ability Problem Solvers* 101(46) Proc Natl Acad Sci US (2004).

Of course, the analysis of a legal problem is a complex task, which would not be performed as adequately by a random group of individuals. However, the point still holds that an equally able diverse tribunal would bring different perspectives and approaches, which can be very useful to reach the optimal legal solution.

A homogenous group's decision-making ability is also impaired by many other factors. For example, we know that when members of a group identify strongly with other members, they are likely to replicate each other's cognitive errors. Groups of like-minded individuals are more likely to share similar perspectives and therefore share similar blind spots to biases and mistakes which – as established above – are replete within human decision making.

Cognitive errors are also amplified when an individual observes the same error being made by other members of the group. In response, the individual might think that if most people have reached the same conclusion, maybe there is no error at all, or not stop to question whether there is an error. Further, if most group members have made an error, others might decide not to challenge them, simply to not seem disagreeable or foolish. On the other hand, if groups can benefit from diverse views, its members may quickly learn that their own position is not universally held, reducing the prevalence of biases and mistakes.⁸⁸

Similarly, social cohesion within groups can lead to cascades where individuals influence each other so much that participants ignore their private knowledge and rely instead on the publicly stated judgments of others.⁸⁹ There are two types of cascade: informational and reputational. In the former, people withhold opinions or information in deference to the information conveyed by others, and in the latter, people silence themselves to avoid the criticism of others. Either way, when cascading occurs, decisions do not reflect the overall knowledge of the people in the group.

Finally, groups of homogenous thinkers are also prone to polarization, whereby group members end up adopting a more extreme version of the position they leaned towards before the deliberations began.⁹⁰ Cass Sunstein and Reid Hastie have observed the likely effect of group polarization among the US judiciary. They comment that both Democratic and Republican appointees show far more ideological voting patterns when sitting with judges appointed by a President of the same political party.⁹¹

The pitfalls of collective decision making highlighted above may also be observed in arbitral tribunals. If the appointment process favours the repeat instruction of a relatively small pool of individuals with similar profiles, we risk

⁸⁸ Cass Sunstein & Reid Hastie, *Wiser Getting Beyond Groupthink to Make Groups Smarter*, in Harv. Bus. Rev. Press 54–55 (2015).

⁸⁹ *Ibid.*, at 63.

⁹⁰ Roger Brown, *Social Psychology* 206–207 (New York: Free Press 1986).

⁹¹ Sunstein & Hastie, *supra* n. 88, at 80.

handing over decision-making authority to a collection of homogenous and like-minded thinkers, with all the negative consequences that can bring. Rather worryingly for international arbitration, research shows that collegiality between group members usually peaks at three or four members. Significantly, we also know that the repeated presence of individuals in decision-making groups increases the incentive to act collegially. Individuals who have been members of a group for a long time typically resist change, and do not rock the proverbial boat. In the context of international arbitration, this is concerning. Furthermore, it is widely accepted that having a group member who plays 'devil's advocate' can be an effective antidote to groupthink.⁹² Therefore, the lack of dissent in international commercial arbitration may exacerbate the social cohesion amongst tribunals. As Catherine Rogers has observed: 'the ideological cohesion [among arbitrators] remains sufficiently robust to make the potential for groupthink real'.⁹³

It becomes clear that cognitively diverse tribunals are more likely to break up the negative patterns observed in collective decision making. Cognitively diverse decision makers typically possess a greater range of skills, knowledge, and abilities than homogenous ones which the group can draw from in decision making.⁹⁴ This broader collective intelligence can facilitate the better understanding of complex issues.⁹⁵ Further, the differing approaches and perspectives within the tribunal can also break up the social cohesion which characterizes groupthink. Instead, the tribunal is more likely to benefit from 'cognitive conflict', which, provided the conflict is focussed on a specific task and concerns differences about how to best achieve a common objective, is likely to increase the analytical rigour and quality applied to the award.⁹⁶ When 'cognitive conflict' occurs, decisions are debated and dissenting opinions may be voiced, resulting in a better chance of a higher quality arbitration award.

6 HOW TO INCREASE COGNITIVE DIVERSITY

The previous section of this article has established that one effective antidote to the influence of biases is to have a truly 'collective brain', made up of cognitively diverse individuals.⁹⁷ This collective brain will have fewer blind spots than an

⁹² Irving Janis, *Groupthink*, Reprinted from Psychology Today Magazine (1971).

⁹³ Solomon Asch, 'Opinions and Social Pressure', in 193 Scientific Am. 31, 35 (1955).

⁹⁴ Miller & del Triana, *supra* n. 81, at 755–786, 766.

⁹⁵ Amason, *supra* n. 84, at 123–148, 127.

⁹⁶ *Ibid.*, at 126.

⁹⁷ The concept of the collective brain was developed in the fields of anthropology and evolutionary theory, to explain how progress and innovation is not the work of a selected few individuals with innate intelligence, but rather the product of a collective brain formed by our societies and social networks. See e.g., Joseph Henrich, *The Secret of Our Success: How Culture Is Driving Human Evolution, Domesticating Our Species, and Making Us Smarter* (Princeton University Press 2016) or Michael Muthukrishna & Joseph

individual one, with different perspectives and thought processes helping to challenge cognitive errors and biases. Applying this to international arbitration would achieve two results:

1. a more diverse pool of potential arbitrators; and
2. an enhanced decision-making process within tribunal panels, limiting the perils of 'groupthink' by aiming instead for a true collective intelligence stemming from cognitive diversity.

This is one of the strong reasons why diversity matters. Not only does it make sense ethically and morally, it also makes sense commercially. Diversity in all its guises is one of the best proxies we have for cognitive diversity, which results in better decision making.

While all actors in international arbitration play a role in increasing diversity, it is important to bear in mind that arbitration is a party driven process and, as such, parties cannot merely rely on arbitral institutions to lead the way in upholding diversity policies. We have referred to the different initiatives taken by arbitral institutions to make the pool of arbitrators a more diverse one, but as these institutions recognize, until practitioners selecting arbitrators pull their weight, a long stretch of the road towards a truly diverse community of arbitrators will remain ahead.

The arbitrator selection process occurs at two stages: (1) when drafting the arbitration agreement; and (2) when drawing up a shortlist of potential arbitrators.

At the point of drafting the arbitration agreement, parties could agree to include diversity wording, for example, to ensure demographic and gender diversity in the appointment process. Parties could agree that the chair should be a national of a different continent (and not just a different nationality to the other arbitrators or parties), or that the chair should be female if both co-arbitrators are male. This would go some way towards establishing some diversity, which is likely to result in greater cognitive diversity on a three-person tribunal. The arbitration agreement could also provide for some of the tribunal members to have a non-legal background: someone with expertise in the relevant sector who, while not being a lawyer, understands international arbitration procedure.

Further, the Task Force Report on gender diversity offers a useful checklist of tools, to assess some of one's own biases and attempt to diminish their impact, during the appointment process.⁹⁸ One of the easiest and less time-consuming

Henrich, *Innovation in the Collective Brain*, in *Philosophical Transactions of the Royal Society B* (2016) <https://royalsocietypublishing.org/doi/10.1098/rstb.2015.0192> (accessed 7 Feb. 2021).

⁹⁸ ICCA Reports No. 8: Report of the Cross-Institutional Task Force on Gender Diversity in Arbitral Appointments and Proceedings, ICCA Reports Series, Volume 8, 212. The report also contains advice to assist different stakeholders in the arbitration process to achieve more gender equality.

suggestions is to take one of Harvard's Implicit Association Tests,⁹⁹ a useful tool to gain insight of where some of our biases might lie when appointing an arbitrator. Another worthwhile option is the one-day training program offered by ArbitralWomen.¹⁰⁰

Another solution is to conceal the name, gender, or race of an arbitrator on their CV. This could be an effective tool because studies have shown that blind appointments are particularly effective at reducing bias in the selection process.¹⁰¹ For example, Claudia Goldin and Cecilia Rouse conducted a study where they used a screen to conceal the gender of musicians auditioning for symphony orchestras. They found that the screen significantly increased the probability that a woman would be hired and increased the proportion of women in symphony orchestras.¹⁰² However, the ability to select an individual arbitrator is widely recognized as an indispensable feature of arbitration and such an approach would require practitioners to become comfortable with the idea of radically altering the appointment practices which they currently adopt. Furthermore, even if blind CVs were used, many parties could deduce the identity of the arbitrator and would conceivably only appoint an arbitrator if they were confident of their identity (which could reduce the pool of selected arbitrators even further). Therefore, blind CVs could probably only be feasibly adopted by arbitral institutions, who can undertake the arbitral selection process from a more objective standpoint.

Finally, there is an increasing array of tools from the field of 'litigation science' to assist parties to make a more informed choice when selecting an arbitrator. Broadly speaking litigation science applies the principles of behavioural science to dispute resolution to determine how decision makers operate and what persuades them. It is hoped that by utilizing these tools, parties can adopt a more sophisticated appointment process, giving them the confidence to select the most suitable candidate, even if they have no personal experience of the arbitrator or the potential candidate is not a well-known name.

Significant progress has been made in this area in recent years. As an example, C|T Group's team of sociologists, psychologists, and statisticians:

1. Offer guidance through the selection process assessing the tribunal member's individual backgrounds, attitudes, and predispositions, as well as insights into how the group dynamics within a tribunal will impact the decision-making process. For example:

⁹⁹ See, <https://implicit.harvard.edu/implicit/takeatest.html> (accessed 7 Feb. 2021).

¹⁰⁰ See, www.arbitralwomen.org/diversity-toolkit/ (accessed 7 Feb. 2021).

¹⁰¹ See e.g., C Golding & C Rouse, *Orchestrating Impartiality: The Impact of 'Blind' Auditions on Female Musicians*, in *Am. Econ. Rev.* (Sept. 2000), www.aeaweb.org/articles?id=10.1257/aer.90.4.715.

¹⁰² See e.g., *ibid.*

How does an arbitrator's cultural background and approach to conflict influence their communications and deliberations with their fellow co-arbitrators? Will it make a dissenting opinion more likely?

2. Conduct empirical research on the psychology of perception to assess how to present a case, its evidence, and damages in the most persuasive way possible. For example:

Is the arbitral tribunal made up of linear thinkers ($A+B=C$), which will be wary of reaching any conclusions until they have established the right path of reasoning? Or is it made up of non-linear thinkers (C is the right result, and will inform what A and B must be), that will respond better to being offered the bigger picture, and will then go through a process of reverse engineering to back up their findings?

Furthermore, practitioners should consult data science methods and tools, such as the GAR Arbitrator Research Tool or the Arbitration Intelligence Reports. These tools contain data and feedback about arbitrators and arbitrations, which can be used to select the most appropriate arbitrator for the dispute.¹⁰³

These insights could allow parties to improve the quality of the selection process, giving them the information to make a more meritocratic choice rather than just opting for the 'household name'. It is hoped that this will provide parties the comfort that a less ordinary choice is still the best one, even without a personal recommendation, and may also contribute to improved case strategy. This would lead to a wider selection of arbitrators who are appointed to tribunals, bringing different cultures, backgrounds, perspectives, race, religion, and gender to the decision-making process, and thereby increasing the collective intelligence of tribunals and increasing the quality of awards.

Finally, it should be noted that many arbitrators are practising (or formerly practising) counsel. It is incumbent upon practitioners to help diversify the pool of arbitrators by ensuring that diverse candidates are recruited into firms and given the opportunity to raise their external profile and given the exposure necessary to gain experience and sit as arbitrators during their career. As the 2021 International Arbitration Survey points out:

[b]uilding visibility is particularly important, because users tend to prefer arbitrator candidates about whom they have some knowledge or with whom they have previous experience.¹⁰⁴

¹⁰³ See, <https://globalarbitrationreview.com/arbitrator-research-tool> (accessed 7 Feb. 2021), <https://arbitratorintelligence.com/reports/> (accessed 7 Feb. 2021).

¹⁰⁴ 2021 International Arbitration Survey: Adapting Arbitration to a Changing World, 19.

This would contribute to and enrich the melting pot of arbitrators, resulting in greater choice and greater cognitive diversity.

7 CONCLUSION

In conclusion, it is widely recognized that there is a lack of diversity in arbitrator appointments. While this gives rise to serious moral and ethical concerns, this article has discussed another compelling reason to change the status quo – increased diversity will increase the quality of arbitration awards by helping to guard against the biases which permeate all human decision making. When tribunals are not diverse, their deliberations are more likely to be affected by groupthink, where their similarities lead to social cohesion and pressure to conform to the majority view. As a result, decision makers cascade information and analysis and replicate each other's cognitive errors, rather than voicing alternative viewpoints. The risk of social cohesion is particularly relevant in international arbitration, given the fact that collegiality peaks at precisely the number of arbitrators who typically form a tribunal, the repeated appointments of arbitrators (meaning it is quite common for members of the tribunal to have sat together in previous cases), and the tradition of no dissenting opinions. Furthermore, more diverse tribunals are likely to outperform homogenous ones as their diversity of thought and perspectives leads to more rigorous analysis of issues and they are more able to identify and challenge cognitive errors.

Over the last couple of years, a number of commendable initiatives have been introduced to try and increase the diversity of arbitration tribunals, in particular in relation to gender and ethnicity. This article has argued that more needs to be done to increase the numbers of diverse candidates who enter the legal profession and to ensure that they receive the requisite experience and exposure to secure an arbitrator appointment. Furthermore, efforts must be made to modernize the archaic process of arbitrator appointments. Specifically, parties should consider including wording in the arbitration agreements to ensure that the tribunal is diverse and those responsible for arbitrator appointments need to consider a more diverse list of candidates. They should, if necessary, draw upon a growing number of resources to give them the confidence to do so, safe in the knowledge that this will increase the quality of arbitration awards because, as Benjamin Franklin famously said: 'if everyone is thinking alike, no one is thinking'.