

COGNITIVE BIASES IN COMMERCIAL ARBITRATION

Ditė Elzbergaitė, Julija Jakutyte

Vilniaus universiteto Teisės fakulteto

4-o kurso Teisės studentės

Saulėtekio al. 9, I rūmai, LT-10222 Vilnius

El. paštas: dite.elzbergaitė@tf.stud.vu.lt; julija.jakutyte@tf.stud.vu.lt

Mokslinio straipsnio akademinis kuratorius dr. Jurgis Bartkus

El. paštas: jurgis.bartkus@tf.vu.lt

This article analyses the impact of cognitive biases on arbitrators' decisions in commercial arbitration proceedings. Strategies are outlined that can help to reduce the impact of cognitive biases, ensuring greater objectivity in arbitration.

Keywords: cognitive bias, commercial arbitration, impartiality, decision-making, bias mitigation.

Straipsnyje analizuojama kognityvinių šališkumų įtaka arbitrų sprendimams komercinio arbitražo procese. Pateikiamos strategijos, galinčios padėti sumažinti šių šališkumų įtaką ir užtikrinti objektyvesnį arbitražo procesą.

Pagrindiniai žodžiai: kognityviniai šališkumai, komercinis arbitražas, nešališkumas, sprendimų priėmimas, šališkumų valdymas.

Introduction

There is an ever-persistent idea that cognitive biases are flaws within otherwise rational and measured arbitrators' decision-making process. Commercial arbitration (hereafter arbitration) rules emphasize impartiality, with clauses on arbitrator's neutrality found in both institutional rules¹ and ad hoc rules². While bias in this context is typically understood as prejudice for or against a party, cognitive bias is a normative concept that refers to situations where an individual's reasoning consistently deviates from an established standard of rational thinking³. These deviations are not

¹ ICC Arbitration Rules (2021), Art. 11(1).

² UNCITRAL Arbitration Rules (2021), Art. 11.

³ COLE, Tony; ORTOLANI, Pietro and WRIGHT, Sean (2020). Arbitration in its psychological context: A contextual behavioural account of arbitral decision-making. *The Oxford Handbook of International Arbitration*. Oxford: Oxford Academic, p. 939.

tied to specific beliefs or ideas but rather arise from inherent and unavoidable patterns in the way the human mind processes decisions⁴. Hence, cognitive biases cause predictable errors intrinsic to all human reasoning.

Cognitive bias indicates that an arbitrator's reasoning may be partial, as it remains susceptible to subconscious influences. This is why a well-intentioned advice to young arbitrators, such as leaving all biases, both conscious and unconscious, before entering the hearing room, fails to recognize cognitive biases for what they are⁵: common artifacts of human reasoning to which all arbitrators are subject⁶. This inherent aspect of human cognition emphasizes the importance of properly addressing the impact cognitive biases have in arbitration.

The influence of cognitive biases on decision-makers has been subject of extensive research producing insights in both psychology and legal studies. Currently, there is no dispute in academia that cognitive biases impact judges and arbitrators alike⁷. Thus, this article's **originality** stems from the fact that the degree of investigation on how biases manifest in arbitration remains relatively limited, particularly regarding how they affect arbitrators in specific stages of arbitration, so the article addresses this gap by examining how cognitive biases influence decision-making at different stages of arbitration.

The primary **aim** of this article is to assess the impact of cognitive biases on arbitrators' decision-making and to develop individual mitigation strategies to improve fairness in arbitration. The arbitration process is divided into three stages: the preliminary review of the case, the hearings and the drafting of the final award. These stages simplify the intricate arbitration process into manageable segments, thus making it easier to find peculiarities of how specific biases manifest and propose appropriate mitigation strategies.

The object of this article is the decision-making processes of arbitrators, with a focus on the role of selected cognitive biases, such as confirmation bias, overconfidence bias, anchoring, framing, and coherence bias across the stages. The article sets out the following **objectives**: to identify cognitive biases most relevant to each stage

⁴ MARIAN, Cornel and WRIGHT, Sean P. (2017). Separate Awards for the Advance on Costs: Psychological Phenomena That Account for Biased Risk Assessment Generated by Early Victories and Identify Methods for Legal Counsel to De-Bias Risk Assessment. In: COLE, Tony (ed.), *The Roles of Psychology in International Arbitration*. International Arbitration Law Library, Volume 40. Alphen aan den Rijn: Kluwer Law International, p. 236.

⁵ GICQUELLO, Myriam (2022). Biased or not biased? Arbitral decision-making and arbitrators' preferences. *Journal of International Dispute Settlement*, 13(3), p. 358.

⁶ COLE, Tony; ORTOLANI, Pietro and WRIGHT, Sean (2020). Arbitration in its psychological context: A contextual behavioural account of arbitral decision-making. In: SCHULTZ, Thomas and ORTINO, Federico (eds), *The Oxford Handbook of International Arbitration*. Oxford: Oxford Academic, p. 944.

⁷ FRANCK, Susan D. et al. (2017). Inside the arbitrator's mind. *Emory Law Journal*, 66, p. 1137.

of arbitration, to analyze how these biases influence the decision-making of arbitrators, and to suggest mitigation strategies to enhance the quality and fairness of the arbitration process.

The methods are based on a comprehensive literature review, utilizing cross-disciplinary sources from psychology, law, and behavioral economics. This integrative approach enables a thorough examination of the topic by combining insights from various fields. The literature reviewed includes empirical studies, theoretical analyses, experimental research, qualitative studies, and case-law. **Key sources** offer foundational-theoretical background into cognitive biases and detailed conceptualizations of their mechanisms, also providing for empirical and experimental evidence on their effects on arbitrators. The analysis is grounded in the procedural frameworks of widely recognized arbitration rules, such as the institutional ICC Rules and ad hoc UNCITRAL Rules, both of which were chosen for their global reputation, broad applicability, and role in promoting fairness and consistency in decision-making. This combination of perspectives ensures a nuanced understanding of the interplay between cognitive biases and arbitrators' decision-making.

The Impact of Cognitive Biases Throughout the Arbitration Process

Cognitive biases affect arbitrators differently across the various stages of arbitration, with certain biases playing a more prominent role during specific phases. During preliminary review, confirmation bias and overconfidence bias shape initial assessments; during hearings, anchoring and framing dominate; and in drafting the award, arbitrators are most affected by the coherence bias.

Biases in the Preliminary Review of the Case

The preliminary review serves as an initial assessment by the arbitrator to determine whether the dispute is appropriate for resolution through the pertinent arbitration.

Conflict of interest check is a crucial part of the preliminary review. Arbitrators' conflicts of interest usually fall into one of two categories: lack of independence and lack of impartiality⁸. Practically, as stated in ICC rules, a prospective arbitrator shall sign a statement of impartiality and independence before an appointment or confirmation⁹.

The impartiality and independence evaluation may be precarious because in international commercial arbitration primarily it is under the discretion of the arbitrators

⁸ PARK, William W. (2015). Arbitrator Bias. *Transnational Dispute Management*, 12, p. 6.

⁹ ICC Arbitration Rules (2021), Art. 11(1).

to decide on their own case (the challenge)¹⁰. Hence, the arbitrator assesses their subjective relation with the participants in the proceedings, which is a highly subjective process.

This is problematic as impartiality and independence are both determined based on the standard of reasonable doubt. Despite that some regulations, for example the IBA Guidelines on Conflicts of Interest in International Arbitration 2014 (hereinafter IBA Guidelines), confronting such potential issues with the compromise of providing practical examples of conflicts of interest, the assessment always shall include the commercial and legal context within which, and the arbitration agreement pursuant to which, any particular arbitrator acts¹¹. Additionally, application lists cover many of the varied situations that commonly arise in practice, but they do not purport to be exhaustive, nor could they be¹². Assessing self-neutrality is a highly subjective process as relationships or dependence cannot be concretely evaluated or calculated¹³. Therefore, the potential arbitrator is to solve a subjective matter mainly based on a standard, while lacking practical and concrete guidelines.

When making decisions under uncertainty, individuals tend to rely on biases as they are fast and easy. However, this reliance on quick judgement is prone to biases, particularly in cases when clear and practical guidance is not available¹⁴.

Confirmation bias, the predominant bias at this stage, refers to the tendency to seek, remember, and interpret information that confirms pre-existing beliefs, while disregarding contradicting evidence. This bias can lead one to focus on data that supports one's views and downplay conflicting information¹⁵. In the context of self-assessment, arbitrators may unconsciously seek out information that supports their belief of being neutral. For instance, if an arbitrator has a strong belief about being impartial due to experience or impeccable reputation, they could selectively focus on occurrences where their neutrality has been confirmed, overlooking evidence of subtle biases or conflicts of interest. Similarly, research has revealed that nearly all dissents authored by party-appointed arbitrators favor of the party who appointed them, or at least never against the appointing party¹⁶. Hence, conformation bias can falsify the arbitrator's sense of neutrality, leading them to erroneously state that they meet the standard of impartiality and independence.

¹⁰ PAP, Kristof (2020). *Impartiality and Independence in International Commercial Arbitration*, p. 21.

¹¹ Born, Gary, (2009). *International Commercial Arbitration*. Kluwer Law International, p.1929.

¹² IBA Guidelines on Conflicts of Interest in International Arbitration (2014), Art. 7.

¹³ YU, Hong-Lin and SHORE, Laurence (2003). Independence, impartiality, and immunity of arbitrators: US and English perspectives. *International and Comparative Law Quarterly*, 52, p. 936.

¹⁴ KAHNEMAN, Daniel (2011). *Thinking, Fast and Slow*. London: Farrar, Straus and Giroux, p. 80.

¹⁵ KAHNEMAN, Daniel; SIBONY, Olivier and SUNSTEIN, Cass R. (2021). *Noise: A Flaw in Human Judgment*. New York: Little, Brown and Company, p. 203.

¹⁶ BERG, A.J., 2011. Dissenting opinions by party-appointed arbitrators in investment arbitration. Leiden: Martinus Nijhoff Publishers, p. 824.

Overconfidence bias refers to the tendency to overestimate one's knowledge, often forming an unwarranted certainty about their decisions. An arbitrator's trust in their experience and career is closely tied to this bias, which may lead to premature conclusions and insufficient consideration of alternative possibilities, thus decreasing judgement accuracy¹⁷. Overconfidence manifests when individuals heavily rely on past successes, assuming that future results will align without properly evaluating new or contradictory evidence. Gradually, arbitrators may develop a strong belief in their ability to remain neutral, reinforced by their experience of successful unbiased decisions. However, this bias may cause them to downplay signs of possible conflicts of interest, relying on their established reputation as proof of their impartiality. While it may be mentally rewarding, overestimation of their own neutrality compromises the ability to identify conflicts of interest, thereby undermining the integrity of arbitration. Essentially, overconfidence can be summarized as follows: the more confident one feels in their judgements, the less receptive they tend to become to information that challenges their beliefs¹⁸.

From the perspective of the parties involved in arbitration, the issue of an arbitrator's neutrality is challenging, as proving bias is often difficult, if not impossible. Unless an arbitrator explicitly announces their partiality or is overheard making a private admission, it is difficult to imagine how "proof" of bias would be obtained¹⁹. Due to these complexities, a practice has emerged whereby an arbitrator might voluntarily step down to alleviate one side's discomfort and promote trust in the arbitral process²⁰.

It might seem that the most straightforward solution to mitigating cognitive biases is the arbitrator's withdrawal. However, it has been argued that by doing so solely based on the appearance of bias would automatically disqualify the most informed and competent arbitrators²¹. The obstacle is that removing such arbitrators could deprive the arbitration process of professionals who are best equipped to render decisions. Consequently, it becomes evident that the mere existence of a relationship does not necessarily imply a conflict of interest in every case.

¹⁷ ARKES, Hal R. et al. (1988). Eliminating the hindsight bias. *Journal of Applied Psychology*, 73(2), p. 307.

¹⁸ KAHNEMAN, Daniel (2011). *Thinking, Fast and Slow*. London: Farrar, Straus and Giroux, p. 86.

¹⁹ United States Court of Appeals for the Second Circuit, 7 November 1984, *Morelite Construction Co. v. New York City District Council Carpenters Benefit Funds*, Case No. 748 F.2d 79.

²⁰ PARK, William W. (2015). Arbitrator Bias. *Transnational Dispute Management*, 12, p. 2.

²¹ United States Court of Appeals for the Second Circuit, 3 February 1981, *Produce, Inc. v. A/S Rosshavet*, Case No. 638 F.2d 548.

Biases During Hearings

As various arbitration rules state, hearings are not mandatory but may be requested either by the parties or at the discretion of the arbitral tribunal²². Most hearings feature opening statements from both the claimant and the respondent, witness and expert testimonies, and their examination and cross-examination. Until the hearings, the arbitral tribunals rely on the written statements of claim and defense. Therefore, it is the first opportunity for the tribunal to engage with live arguments and evidence, creating a dynamic medium where anchoring and framing biases come into play.

Anchoring is a cognitive bias that affects reasoning by creating reliance on the initial estimate, otherwise known as the anchor²³. Anchors can be both numerical and non-numerical and are most often used by the parties in the beginning of the hearing in order to harness the power of the first impression²⁴. Two cognitive effects further illustrate how anchors shape arbitrators' decision-making: primacy and recency. Primacy refers to the phenomenon where information presented first has an advantage over information presented later²⁵ and explains arbitrators' tendency to stick to initial opinions and fit in the new information to already formed impressions²⁶. In contrast, recency leads arbitrators to prioritize the most recent information, as it is more easily recalled²⁷. While no consensus exists on which effect is stronger²⁸, strategically introducing anchors in opening statements and reinforcing them in closing arguments allows counsel to shape arbitral decision-making.

Anchoring bias is associated with numerical estimates. One may argue that due to arbitration's commercial nature, the figure of damages is backed by substantial evidence leaving little room for discretionary assessment. Such assessment is often prevalent in judicial adjudication where the judges are tasked to evaluate the dam-

²² ICC Arbitration Rules (2021), Art. 26; UNCITRAL Arbitration Rules (2021), Art. 28.

²³ DRAHOZAL, Christopher R. (2004). A behavioral analysis of private judging. *Law and Contemporary Problems*, 67(1/2), p. 110.

²⁴ CYMROT, Mark A. and LEVINE, Paul (2017). Going first makes a difference: Decision-making dynamics in arbitration. In: COLE, Tony (ed.), *The Roles of Psychology in International Arbitration*. International Arbitration Law Library, Volume 40. Alphen aan den Rijn: Kluwer Law International, p. 179.

²⁵ CYMROT, Mark A. and LEVINE, Paul (2017). Going first makes a difference: Decision-making dynamics in arbitration. In: COLE, Tony (ed.), *The Roles of Psychology in International Arbitration*. International Arbitration Law Library, Volume 40. Alphen aan den Rijn: Kluwer Law International, p. 179.

²⁶ CYMROT, Mark A. and LEVINE, Paul (2017). Going first makes a difference: Decision-making dynamics in arbitration. In: COLE, Tony (ed.), *The Roles of Psychology in International Arbitration*. International Arbitration Law Library, Volume 40. Alphen aan den Rijn: Kluwer Law International, p. 180.

²⁷ CYMROT, Mark A. and LEVINE, Paul (2017). Going first makes a difference: Decision-making dynamics in arbitration. In: COLE, Tony (ed.), *The Roles of Psychology in International Arbitration*. International Arbitration Law Library, Volume 40. Alphen aan den Rijn: Kluwer Law International, p. 180.

²⁸ VOSS, Jansen (2005). The science of persuasion: An exploration of advocacy and the science behind the art of persuasion in the courtroom. *Law and Psychology Review*, 29, p. 311.

ages based on subjective evaluation of suffering, pain and other non-measurable elements²⁹. However, even well-justified figures of damages can act as anchors and subtly skew the subsequent judgements.

Anchors are usually presented during parties' opening statements or witness testimonies, when a precise numerical value relevant to the proceedings is introduced. For example, a claimant might state that the case concerns a damages claim of specific amount from the outset. This figure then serves as an anchor and disproportionally influences the arbitral tribunal's judgement and potentially biases their final decision toward that initially presented figure³⁰. Following this reasoning, the amount of damages awarded will either be higher or lower compared to the anchor³¹. Scholars have observed that the anchor might not even be reasonable or directly connected with the case for the anchoring bias to occur³². Moreover, assuming that more than one numerical value is introduced, it is difficult to determine which one will dominate as the anchor.

This leads to issues caused by multiple anchors presented during a hearing. Cross-examination of witnesses is an opportunity for the opposing counsel to challenge the initial anchors by raising doubts about their justification. This is done by asking questions that would induce uncertainty and expose inconsistencies as to the justification of the amount claimed. Thus, cross-examination might encourage the arbitral tribunal to reassess their initial judgements based on the anchor.

Second prominent cognitive bias during the hearings stage is the framing bias. While the anchoring bias, primacy and recency effects concern the power of the first impression, the framing bias addresses how that impression is put before the arbitrators³³. It is first important to distinguish between framing and framing bias. Framing is a choice on how to present information. In the context of a hearing, this would entail manner and style of presentation³⁴. Framing bias, however, refers to the sub-conscious response to the framing resulting in a possible deviation from the rational

²⁹ SUSSMAN, Edna (2017). Biases and heuristics in arbitrator decision-making: Reflections on how to counteract or play to them. In: COLE, Tony (ed.), *The Roles of Psychology in International Arbitration*. International Arbitration Law Library, Volume 40. Alphen aan den Rijn: Kluwer Law International, p. 55.

³⁰ FURNHAM, Adrian and BOO, Hua Chu (2011). A literature review of the anchoring effect. *The Journal of Socio-Economics*, 40(1), p. 35.

³¹ BYSTRANOWSKI, Piotr; JANIĆ, Bartosz and PRÓCHNICKI, Maciej (eds.) (2022). *Judicial Decision-Making: Integrating Empirical and Theoretical Perspectives*. Cham: Springer, p. 81.

³² FRANCK, Susan D. et al. (2017). Inside the arbitrator's mind. *Emory Law Journal*, 66, p. 1142.

³³ CYMROT, Mark A. and LEVINE, Paul (2017). Going first makes a difference: Decision-making dynamics in arbitration. In: COLE, Tony (ed.), *The Roles of Psychology in International Arbitration*. International Arbitration Law Library, Volume 40. Alphen aan den Rijn: Kluwer Law International, p. 183.

³⁴ SUSSMAN, Edna (2017). Biases and heuristics in arbitrator decision-making: Reflections on how to counteract or play to them. In: COLE, Tony (ed.), *The Roles of Psychology in International Arbitration*. International Arbitration Law Library, Volume 40. Alphen aan den Rijn: Kluwer Law International, p. 56.

choice³⁵. Both processes are interlinked as framing leads to bias, though the distinction is important considering that not all framing might influence the decision-making of the arbitrators.

Framing is more commonly known as advocacy or persuasion, one of the primary tools arbitration counsel employ to effectively convince the tribunal as it has been proven that arbitrators are susceptible to the framing bias³⁶. This can take the form of choosing the right words to express the story, emphasizing certain parts of that story, selecting the manner and order in which the story is told³⁷. All of these choices are employed deliver a well-crafted presentation that even a seasoned arbitrator would believe. Framing lacks a precise definition but commonly involves non-verbal communication, repetition, and the contrast effect.

Since non-verbal communication accounts for 65-70% of the total communication between humans³⁸, arbitrators naturally observe counsel's and witnesses' body language, eye contact and vocal cues. Elements like tone, pitch, gestures, and facial expressions enhance persuasiveness, as does repetition of chosen information, which reinforces the key points³⁹.

The contrast effect influences decision-making in two ways. First, arbitrators tend to avoid losses more than they seek, making loss-framing an effective tool for justifying higher damages⁴⁰. Second, decision-making can be skewed by misleading comparisons⁴¹, such as introducing an unreasonably high damages claim or experts with vastly different qualifications to advice on the same issue.

Biases in Drafting the Award

The content of the final award is determined independently by the arbitrator or, in case of the tribunal, by a majority decision⁴², with the presiding arbitrator solely is-

³⁵ BERATŠOVÁ, Adriana et al. (2016). Framing and bias: A literature review of recent findings. *Central European Journal of Management*, 3(2), p. 28.

³⁶ FRANCK, Susan D. et al. (2017). Inside the arbitrator's mind. *Emory Law Journal*, 66, p. 1160.

³⁷ SUSSMAN, Edna (2013). Arbitrator decision making: Unconscious psychological influences and what you can do about them. *The American Review of International Arbitration*, 24(3), p. 498.

³⁸ VOSS, Jansen (2005). The science of persuasion: An exploration of advocacy and the science behind the art of persuasion in the courtroom. *Law and Psychology Review*, 29, p. 316.

³⁹ VOSS, Jansen (2005). The science of persuasion: An exploration of advocacy and the science behind the art of persuasion in the courtroom. *Law and Psychology Review*, 29, p. 314.

⁴⁰ CYMROT, Mark A. and LEVINE, Paul (2017). Going first makes a difference: Decision-making dynamics in arbitration. In: COLE, Tony (ed.), *The Roles of Psychology in International Arbitration*. International Arbitration Law Library, Volume 40. Alphen aan den Rijn: Kluwer Law International, p. 183.

⁴¹ RACHLINSKI, Jeffrey J.; WISTRICH, Andrew J. and GUTHRIE, Chris (2013). Altering attention in adjudication. *UCLA Law Review*, 60(1586), p. 1597.

⁴² ICC Arbitration Rules (2021), Art. 32; UNCITRAL Arbitration Rules (2021), Art. 33.

suing the award shall no majority be reached. Depending on the distribution of tasks within the tribunal, all arbitrators deliberate together and then work both individually and collectively to produce a coherent and argumentative decision. While the earlier stages of arbitration focus on analyzing the information presented by the parties, drafting the award regards decision-making, hence, the arbitrators are to synthesize the information, make decisions and provide clear justifications for their conclusions. At this stage arbitrators are particularly influenced by individual cognitive biases such as the coherence bias.

The coherence bias arises as a natural response to avoid cognitive dissonance, a distressing state that most individuals seek to minimize or eliminate entirely⁴³. Cognitive dissonance inevitably occurs in complex decision making⁴⁴, when there is an incompatibility within conflicting views, arguments or other pieces of information. Coherence, as a decision-making model, is theoretically neutral when the information processed is neutral⁴⁵. However, considering the adversarial nature of arbitration, the information presented to arbitrators is inherently biased. Such bias disrupts neutrality and leads to arbitrators unconsciously favoring certain arguments over others. The aim to achieve coherence applies to ensuring internal consistency of the award and to align with the wider legal context, including relevant precedents and doctrine.

The final award is a result of analyzing arguments to reach justified conclusions, ultimately forming the decision. Certainly, parties provide conflicting evidence as they seek to support their positions. It is known that arbitrators are not immune to the urge to interpret such evidence in a way that would help achieve a coherent solution⁴⁶, even if that entails overlooking certain facts or circumstances. While evaluating the evidence, certain facts may be given greater importance than others. Thus, evidence can be interpreted both by devaluating and ignoring certain parts of that information altogether⁴⁷.

The same principle applies to the evaluation of parties' arguments. During the process of decision-making, arbitrators' perspectives gradually shift towards the state

⁴³ GICQUELLO, Myriam (2022). Biased or not biased? Arbitral decision-making and arbitrators' preferences. *Journal of International Dispute Settlement*, 13(3), p. 354.

⁴⁴ MISCHKOWSKI, Dorothee; GLÖCKNER, Andreas and LEWISCH, Peter (2021). Information search, coherence effects, and their interplay in legal decision making. *Journal of Economic Psychology*, 87(3), p. 1.

⁴⁵ SIMON, Dan and READ, Stephen J. (2023). Toward a general framework of biased reasoning: Coherence-based reasoning. *Perspectives on Psychological Science*, 20(3), p. 4.

⁴⁶ GICQUELLO, Myriam (2022). Biased or not biased? Arbitral decision-making and arbitrators' preferences. *Journal of International Dispute Settlement*, 13(3), p. 351.

⁴⁷ MISCHKOWSKI, Dorothee; GLÖCKNER, Andreas and LEWISCH, Peter (2021). Information search, coherence effects, and their interplay in legal decision making. *Journal of Economic Psychology*, 87(3), p. 1.

of coherence, endorsing arguments that support the winning position and rejecting those that oppose it⁴⁸. This tendency is often reflected in the final award: by seeking to reach the state of coherence arbitrators may unintentionally overlook inconsistencies to their reasoning. Thus, the conclusions may not correspond to an objectively accurate resolution of the dispute.

Additionally, the arbitrators are not immune to the external influences. Educational and professional backgrounds shape their decisions, which affect how they search for information to ensure the quality of awards. Their legal backgrounds play a major role as well: common law practitioners emphasize the substance of the contract, while civil law practitioners prioritize compliance with statutory law. These different perspectives affect procedural decisions in arbitration proceedings and shape how arbitrators evaluate and integrate information into their reasoning⁴⁹. Information search is one of the most influential ways that maximizes the coherence bias. Arbitrators may search for and accept only information that supports the arguments they are building or seek out opposing information solely to refute it⁵⁰. Similar to how they evaluate information presented by the parties, arbitrators often search for sources that would support their arguments as this way arbitrators can enhance coherence while maintaining an appearance of rationality⁵¹. Moreover, allegedly neutral information is particularly influenced by the overall assessment of the case⁵², highlighting the powerful role of coherence bias for arbitrators when crafting a consistent argument.

Mitigating the Influence of Cognitive Biases in Arbitration

As biases are an inherent feature of human cognition, their impact on arbitrators varies with cognitive abilities. While legally-trained arbitrators are generally less susceptible to biases due to their expertise, additional measures, such as education on

⁴⁸ SUSSMAN, Edna (2017). Biases and heuristics in arbitrator decision-making: Reflections on how to counteract or play to them. In: COLE, Tony (ed.), *The Roles of Psychology in International Arbitration*. International Arbitration Law Library, Volume 40. Alphen aan den Rijn: Kluwer Law International, p. 58.

⁴⁹ GICQUELLO, Myriam (2022). Biased or not biased? Arbitral decision-making and arbitrators' preferences. *Journal of International Dispute Settlement*, 13(3), p. 359.

⁵⁰ MISCHKOWSKI, Dorothee; GLÖCKNER, Andreas and LEWISCH, Peter (2021). Information search, coherence effects, and their interplay in legal decision making. *Journal of Economic Psychology*, 87(3), p. 1.

⁵¹ MISCHKOWSKI, Dorothee; GLÖCKNER, Andreas and LEWISCH, Peter (2021). Information search, coherence effects, and their interplay in legal decision making. *Journal of Economic Psychology*, 87(3), p. 2.

⁵² MISCHKOWSKI, Dorothee; GLÖCKNER, Andreas and LEWISCH, Peter (2021). Information search, coherence effects, and their interplay in legal decision making. *Journal of Economic Psychology*, 87(3), p. 6.

cognitive biases and deliberate mitigation strategies, can further enhance their ability to decision-making.

Understanding the existence of cognitive biases is a critical first step toward reducing susceptibility to them. Only arbitrators who recognize the extent and nature of their personal susceptibility to cognitive biases will proactively prevent these biases from affecting their decisions⁵³. Beyond identifying potentially distorting influences, arbitrators must also understand their direction and magnitude⁵⁴. Considering the lack of formal requirements for arbitrators to be knowledgeable about cognitive biases, the discretion to pursue such understanding lies entirely with the arbitrators themselves.

Awareness of cognitive biases, combined with general advice to remain cautious, is unlikely to be sufficient. A more effective approach involves complementing this awareness with training methods that reduce subjectivity⁵⁵. Structuring decision-making processes by delaying premature intuitions and minimizing the influence of irrelevant information is especially important⁵⁶. This can be achieved by slowing down the deliberations. Furthermore, increasing cognitive load, for example by using a foreign language, has been shown to enhance systematic and rational thinking, thus reducing cognitive biases⁵⁷.

Mitigating Biases in the Preliminary Review of the Case

Having established that confirmation and overconfidence biases influence arbitrator's assessment of their own neutrality during the preliminary review stage, provided are the suggested mitigation strategies.

Previously discussed method to enhance an arbitrator's neutrality is the creation of checklists that identify potential conflicts of interest. While checklists align with Kahneman's debiasing approach and have a proven history of improving objective decision-making⁵⁸, IBA Guidelines note their limitations, as they cannot circumscribe

⁵³ COLE, Tony; ORTOLANI, Pietro and WRIGHT, Sean (2020). Arbitration in its psychological context: A contextual behavioural account of arbitral decision-making. *The Oxford Handbook of International Arbitration*. Oxford: Oxford Academic, p. 944.

⁵⁴ GALINSKY, Adam D. and MUSSWEILER, Thomas (2001). First offers as anchors: The role of perspective-taking and negotiator focus. *Journal of Personality and Social Psychology*, 81(6), p. 666.

⁵⁵ COLE, Tony; ORTOLANI, Pietro and WRIGHT, Sean (2020). Arbitration in its psychological context: A contextual behavioural account of arbitral decision-making. *The Oxford Handbook of International Arbitration*. Oxford: Oxford Academic, p. 946.

⁵⁶ CHARLOTIN, Damien; DÍAZ-CÓRDOVA, Leonor and GREENWOOD, Lucy (2022). *Noises off: Towards greater consistency in international arbitration awards*. *Journal of International Arbitration*, 39(2), p. 230.

⁵⁷ KEYSAR, Boaz; HAYAKAWA, Sayuri L. and AN, Sun Gyu (2012). The foreign-language effect: Thinking in a foreign tongue reduces decision biases. *Psychological Science*, 23(6), p. 666.

⁵⁸ KAHNEMAN, Daniel; SIBONY, Olivier and SUNSTEIN, Cass R. (2021). *Noise: A Flaw in Human Judgment*. New York: Little, Brown and Company, p. 196.

all possible conflict of interest scenarios. Consequently, IBA Guidelines continue to assess the practical application of these guidelines to improve their effectiveness⁵⁹.

A useful debiasing technique is the “consider-the-opposite” approach. Confirmation bias often leads an arbitrator to unconsciously base their judgement on self-serving information, such as past neutrality. To mitigate confirmation bias, the arbitrator should consciously question the facts that could indicate their subjectivity, rather than only seek evidence that supports their neutrality. A recent study has shown that participants actively considering the opposite (of their own) view showed a significantly less biased and more open-minded evaluation of the evidence compared to the motivation-focused group⁶⁰. Whilst this study was conducted in the context of criminal investigation, its findings are applicable to the evaluation of an arbitrator’s self-neutrality.

Sequencing information technique significantly improves decision strategy⁶¹. Arbitrators should document their judgement of neutrality at each step: the initial case review (first impression), when they acquire more information on the participants of the proceedings in the pre-arbitration stage, and when signing the statement of neutrality. This kind of sequencing information helps to avoid the risk that they see only what they are looking for⁶².

Functionally, the current neutrality statements are considered as standardized and insufficiently comprehensive. The ICC statement, for example, merely requires the arbitrator to select either “yes” or “no” in response to a question regarding neutrality. If “yes” is selected, they are only required to disclose any facts or circumstances that could be considered subjective in nature.

To enhance the statement form, it is recommended to incorporate the consideration of the opposite perspective, such as “Please disclose any prior interactions with the participants of the proceedings that could influence your neutrality”. Additionally, the form should foster self-assessment by including questions like, “Please revisit your decision on your neutrality after further review of case materials and reflection. Has your assessment changed?”. These opposite perspective questions serve as a debiasing technique by prompting the arbitrator to consider factors that may challenge their initial judgement, influenced by cognitive bias. The self-assessment questions encourage the arbitrator to reflect on their judgement process over time, thereby reducing the influence of cognitive biases.

⁵⁹ IBA Guidelines on Conflicts of Interest in International Arbitration (2014), p. 5.

⁶⁰ FAHSING, Ivar; RACHLEW, Asbjørn and MAY, Lennart (2023). *Have you considered the opposite? A debiasing strategy for judgment in criminal investigation. The Police Journal*, 96(1), p. 49.

⁶¹ KAHNEMAN, Daniel; SIBONY, Olivier and SUNSTEIN, Cass R. (2021). *Noise: A Flaw in Human Judgment*. New York: Little, Brown and Company, p. 206.

⁶² KAHNEMAN, Daniel; SIBONY, Olivier and SUNSTEIN, Cass R. (2021). *Noise: A Flaw in Human Judgment*. New York: Little, Brown and Company, p. 206.

Mitigating Biases During Hearings

During hearings arbitrators are affected by anchoring and framing biases, influenced by how parties present information. Anchoring skews judgment by giving undue weight to initial information, while framing emphasizes certain elements over others to shape perception.

Anchoring bias is particularly deceptive as awareness alone does not eliminate its effects⁶³. When a certain value, whether numerical or non-numerical, is introduced by one of the parties, the arbitrator should actively seek additional information about the anchor. Depending on the context of arbitration, this could involve asking questions to justify the anchor's relevance, explain its composition, detail the methodology used to calculate it, etc.

To overcome framing bias is to understand the broader context beyond how parties frame an argument. One of the most effective ways to mitigate this bias is through the arbitrator's prior knowledge or experience in the subject matter presented by the parties⁶⁴. Being familiar with the topic enables the arbitrator to recognize and counter framing tactics.

Even in cases where arbitrators lack subject-specific expertise, the adversarial nature of arbitration itself can effectively combat framing bias⁶⁵. By requiring both parties to present, often mirroring the same facts, the process inherently counteracts framing bias. Moreover, arbitrators are encouraged to adopt a proactive approach by asking targeted questions, critically engaging with evidence and challenging the arguments presented. The combination of adversarialism and active arbitrator involvement ensures a more impartial decision-making process.

Mitigating Biases in Drafting the Award

Coherence bias arises during the drafting of the award, stemming from the arbitrator's individual perception of information, independent of party interference. This bias is linked to arbitrator's natural drive to seek coherence in conflicting arguments.

Coherence bias reflects the shift from conflict to closure⁶⁶, a cognitive response to the discomfort of managing conflicting narratives. The arbitrator's focus is direct-

⁶³ BYSTRANOWSKI, Piotr; JANIK, Bartosz and PRÓCHNICKI, Maciej (eds.) (2022). *Judicial Decision-Making: Integrating Empirical and Theoretical Perspectives*. Cham: Springer, p. 89.

⁶⁴ BERATŠOVÁ, Adriana et al. (2016). Framing and bias: A literature review of recent findings. *Central European Journal of Management*, 3(2), p. 29.

⁶⁵ POSNER, Richard A. (1999). An economic approach to the law of evidence. *Stanford Law Review*, 51, p. 1494.

⁶⁶ SUSSMAN, Edna (2017). Biases and heuristics in arbitrator decision-making: Reflections on how to counteract or play to them. In: COLE, Tony (ed.), *The Roles of Psychology in International Arbitration*. International Arbitration Law Library, Volume 40. Alphen aan den Rijn: Kluwer Law International, p. 58.

ed toward producing a coherent final award, which instinctively amplifies the desire for cohesion. This instinct risks oversimplifying the complexities of the proceedings. Research highlights that shifting the attention back to the decision-making process rather than fixating solely on the outcome can help counteract coherence bias⁶⁷. By prioritizing a methodological and slow deliberation, the arbitrator avoids premature decisions and coherence at the expense of accuracy⁶⁸.

One effective mitigation method is the mentioned practice of “considering-the-opposite”. This practice encourages the arbitrator to consider information that is inconsistent with one’s initial beliefs⁶⁹. Additionally, actively reflecting on the weaknesses on one’s arguments or reasoning⁷⁰ can challenge the tendency to create a narrative that avoids cognitive dissonance, even if it compromises rationality. Another approach is to break down the narrative into smaller segments to avoid excessive coherence⁷¹ (Charlotin et al., 2022, p. 230). Rather than aligning all arguments into one seamless narrative, arbitrators should evaluate each argument individually and critically reassess the final decision to ensure no arguments were overlooked.

Conclusions

1. Arbitrators are susceptible to cognitive biases that can impact their decision-making throughout the arbitration process. During the preliminary review of a case, arbitrators are subject to confirmation bias and overconfidence bias, which may affect their initial self-assessment of neutrality. To mitigate these biases, the application of the “consider the opposite” approach and the sequencing information method is suggested. These techniques can be effectively integrated into the arbitrator’s statement of impartiality and independence by including standard-form questions that prompt consideration of opposing perspectives and self-assessment over time. This reflective approach facilitates a more objective evaluation, reducing the impact of cognitive biases on the arbitrator’s self-assessment.
2. During the hearing stage, arbitrators are susceptible to anchoring and framing biases, which arise from the way information is presented by the parties and can

⁶⁷ GICQUELLO, Myriam (2022). Biased or not biased? Arbitral decision-making and arbitrators’ preferences. *Journal of International Dispute Settlement*, 13(3), p. 356.

⁶⁸ GUTHRIE, Chris; RACHLINSKI, Jeffrey J. and WISTRICH, Andrew J. (2007). *Blinking on the bench: How judges decide cases*. Cornell Law Review, 93, 1-43, p. 33.

⁶⁹ GALINSKY, Adam D. and MUSSWEILER, Thomas (2001). First offers as anchors: The role of perspective-taking and negotiator focus. *Journal of Personality and Social Psychology*, 81(6), p. 659.

⁷⁰ SPAMANN, Holger (2020). Extension: Lawyers’ role-induced bias arises fast and persists despite intervention. *The Journal of Legal Studies*, 49(2), p. 484.

⁷¹ CHARLOTIN, Damien; DÍAZ-CÓRDOVA, Leonor and GREENWOOD, Lucy (2022). *Noises off: Towards greater consistency in international arbitration awards*. *Journal of International Arbitration*, 39(2), p. 230.

distort judgement. To mitigate these biases, arbitrators should actively engage with the information presented, seek additional evidence, question the relevance of initial anchors, and introduce competing anchors. To counter framing bias, arbitrators should critically evaluate evidence and consider the alternative, thus making more objective decisions, resulting in fairer and more balanced outcomes.

3. Coherence bias can significantly affect the objectivity of the final award. Coherence bias may result in premature judgements that favor consistency over accuracy. To mitigate this bias, arbitrators should actively consider weaknesses of one's arguments or breaks down statements into smaller segments. This encourages openness to alternative interpretations and reduces reliance on initial thoughts. By consciously challenging the coherence bias, arbitrators can ensure that the decisions are based on a comprehensive and balanced evaluation, promoting fairer outcomes.

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COGNITIVE BIASES IN COMMERCIAL ARBITRATION

SUMMARY

Cognitive biases can significantly impact arbitrators' decision-making. To mitigate confirmation and overconfidence biases in arbitrators' self-assessments of neutrality, techniques such as the "consider-the-opposite" approach and the sequencing information method may be incorporated into the arbitrator's statement of impartiality and independence. To reduce the impact of anchoring and framing biases, arbitrators should question anchors and use prior knowledge to challenge framing tactics. In the award drafting stage, a methodical, reflective approach, combined with subject-matter expertise, can help mitigate the coherence bias.

KOGNITYVINIAI ŠALIŠKUMAI KOMERCINIAME ARBITRAŽE

SANTRAUKA

Kognityviniai šališkumai gali reikšmingai paveikti arbitro sprendimų priėmimą. Siekiant sumažinti patvirtinimo šališkumo ir per didelio pasitikėjimo šališkumo įtaką arbitrai vertinant savo neutralumą, technikos, tokios kaip priešingo požiūrio vertinimas bei informacijos sekos metodas, turėtų būti įtrauktos į arbitro nepriklausomumo ir nešališkumo deklaraciją. Norint sumažinti inkaro ir pateikimo šališkumų poveikį, arbitrai turėtų abejoti pateikta informacija ir pritaikyti savo jau turimas žinias. Sprendimo rengimo etape nuoseklus, reflektyvus požiūris turėtų būti derinamas su tematinėmis žiniomis, kad galėtų padėti sušvelninti nuoseklumo šališkumą.