I. INTRODUCTION

I wish to start by expressing my appreciation to the HKIAC and King & Wood Mallesons for sponsoring this lecture, to all of you for attending, and especially to Neil Kaplan.

I am honored to be invited to give this year’s Kaplan Lecture, especially so soon after I have relocated to Hong Kong. I am most appreciative of the warmth and hospitality I have received here.

The topic of my lecture tonight is how individuals make decisions; and most importantly to us, how arbitrators make decisions. I will not speak only about theory, but also about practicalities – how and why we as counsel can do better in putting our cases before arbitrators for decision.

An admission upfront: I do not like suspense. (My husband refuses to go to many movies with me because I cover my eyes at every suspenseful moment.) So let me answer the question in the title of this lecture right now – arbitral decision-making is all three: art, science and sport. I will explain my answer, I promise. But for now, you are the ones in suspense.

The title is a three-part question. And the lecture is a two-part lecture – really, two lectures, as I could not choose between two related topics very much on my mind.

First, I will describe recent research and scholarship on the process of decision-making in international arbitration, which borrows from and adapts the studies of decision-making by juries, judges and other professionals. Several colleagues are researching, writing and speaking on this: Jose Astigarraga at the IBA in Vancouver in 2011, Doak Bishop at the ITA Workshop in Dallas in June 2012, among others. I find this research extremely interesting, and I predict you will as well. But I am not going to focus, at least directly – on how to use this research to get into the heads of arbitrators or to select arbitrators, from an amateur psychologist vantage point. For tonight, I will not venture into psychology and certainly not into “pop psychology.”

Instead, in the second part of the lecture, I will focus on something more pragmatic. That is the need – crucial in certain types of cases – for counsel in international arbitration to focus not so much on what may go on in an arbitrator’s head but more on how much can fit in an arbitrator’s head.

* Partner and head of the global Freshfields international arbitration group, based in Hong Kong. The lecturer would also like to thank Freshfields New York associate, James Freda, who contributed so much to the research and preparation of this lecture.
Let’s be truthful: we too often let ourselves become slaves of modern information technology rather than its masters. We too often build mountainous evidentiary and legal cases because we can – unlike the days (which some of us remember) when we could not, the days before laptop computers, electronic filing, videoconferencing, Livenote, Google, even fax machines, even FedEx and DHL couriers. But that we can construct such mountains does not mean we should.

Speaking of couriers, let me tell you a story. As you all know, every good opening statement in an arbitration hearing involves a good story. So does, in my view, arbitration training. I have two stories I regularly share with my associates. The first is the Mozart Ratner story.

My first position as a lawyer was as law clerk to a US federal trial judge, the Honorable Barrington D. Parker. One case in front of Judge Parker involved a challenge by the US Postal Service to a private company that was delivering business mail in competition with the Postal Service and, allegedly, in violation of the US Constitution Article I, Section 8(7), which gives the federal government sole authority “[t]o establish post offices and post roads.”¹ The company and the Postal Service filled extensive written submissions and evidence, and spoke at length in the hearing. The postal workers union, represented by one Mozart Ratner, entered the case as amicus. Mozart Ratner filed, in my memory, a 10-page brief that elegantly framed the Constitutional arguments. Mozart Ratner spoke at most for a few minutes at the hearing. The end of the story? His presentations effectively became Judge Parker’s opinion in favor of the Postal Service.

You will surmise that I am a fan of the Mozart Ratner approach to pleading.

II.  **ART AND SCIENCE: INTUITION AND DEDUCTION, HEURISTICS AND COGNITIVE BIASES**

Speaking of Mozart, let me get to the first two parts of the question in my title: art and science. Or really, for present purposes, intuition versus deduction/logical thinking. Intuition is subconscious; deduction is conscious. Intuition is fast; deduction is slow, and hard.

Much has been written about which is better for decision-making. Obviously, both are good – if each is balanced with the other. Either can lead you astray, if you do not call on the other. It is a good thing to know that about yourself and about arbitrators. Though I have some sobering news for the students and young lawyers here tonight: the intuition of your elders is far better than yours. But only because of lessons learned the hard way.

At heart, the art of arbitral decision-making lies in intuining whether and when witnesses are telling the truth, in perceiving the human stories underlying a business dispute, in

¹ U.S. Constitution, Article I, Section 8(7).
crafting an award with the right reasoning and the right amount of reasoning. The science of arbitral decision-making lies in rigorously assessing the evidence, methodically finding the relevant material facts, identifying the governing law, applying that law to the facts, and – to foreshadow what I am about to discuss – steadfastly resisting the preconceptions and premature judgments to which we are all prone.

To repeat, common sense tells us that the decision-making process involves both intuition and deliberation – both art and science – and that each is valuable. Yet we must be aware of the heuristics and cognitive biases that shape our decisions. An heuristic is, as one group of academics describes it, a “mental shortcut” that the human brain automatically and subconsciously uses “to make complex decisions.” Indeed the word heuristic derives from the Greek word “to find” or “discover, meaning experienced-based problem-solving.” Faced with a tricky question, the brain substitutes an easier question and then provides a fast answer. These “mental shortcuts” are usually surprisingly accurate. Indeed, they allow us to function in a world bombarding us with information and decisions to make. But they can also lead to errors that are termed “cognitive biases,” which result in “erroneous judgments.” To be clear, heuristics are not themselves biases, but they can lead to mistakes of bias.

Let me illustrate with an example question, which Professor Shane Frederick of the Yale School of Management uses in his well-known “Cognitive Reflection Test.” The question is:

A bat and a ball costs $1.10 in total. The bat costs $1.00 more than the ball. How much does the ball cost? I will give you a very brief moment to think, and you can keep your answer to yourself. If you decided the ball costs ten cents, you are wrong. If the ball costs ten cents and the bat is worth one dollar more, then the total for both is $1.20 – ten cents plus $1.10. The correct answer is that the ball costs five cents – five cents plus $1.05 equals the $1.10.

The question is not hard, if you are given time to deliberate. Yet your intuition – by a mental shortcut – pushes you in the wrong direction. (I will come back to the importance of time.) But don’t worry, you are in good company. When this question (with four similar ones) was posed to some 250 Florida state judges, almost 75% of them got the answer wrong – which corresponds to the figure for all educated adults. Out of the

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3 Id.
6 Id. at 15.
judges who guessed wrong, nearly 90% chose the intuitive answer of ten cents. And those who chose the wrong answer were more likely to describe the question as an easy question. This is one example of how mental shortcuts can lead us astray and, in the absence of feedback, we would not have the slightest idea that we went wrong.

If you want to learn more about this in general, I suggest you read the best-seller *Thinking Fast and Slow* by Nobel Laureate Daniel Kahneman, and perhaps Malcolm Gladwell’s *Blink: The Power of Thinking Without Thinking*. And, for an excellent psychologist-lawyer point of view, I recommend the work of Professor Shari Seidman Diamond, including her paper on *Psychological Aspects of Dispute Resolution: Issues for International Arbitration* presented at the 2002 ICCA Congress.

So, what then are some cognitive biases that might affect arbitral decision-making? Most of the academic commentary on these issues so far relates to US judges and juries, but much applies analogously to international arbitrators. I will describe a few of the most relevant ones.

**II.1 Anchoring Effect**

First, the anchoring effect. Arbitrators regularly have to make decisions on the quantum of damages, which is a ripe area for a cognitive bias called “anchoring.” As Professor Christopher Drahozal of the University of Kansas Law School explains:

“[i]n estimating a numerical amount, people tend to start with some initial value—an ‘anchor’—and then come up with a final estimate by making adjustments to the anchor. If the anchor provides useful information about the underlying value (such as the list price), and if people make reasonable adjustments, this ‘anchor and adjustment’ heuristic can be a useful decision-making [sic] approach. But anchoring can be problematic if people start with an irrelevant anchor or fail to make adjustments to the initial value.”

How does anchoring lead to erroneous judgments? Take this absurd example. In an experiment, a control group was asked to guess the average temperature of San Francisco. The anchor group, however, was first asked whether the average temperature of San

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7 *Id.* at 16.
8 *Id.*
9 Daniel Kahneman, *Thinking Fast and Slow* (Farrar Straus & Giroux 2011).
Francisco was higher or lower than 558°F, or 292°C. Yes, 292 degrees. Only after answering this question – all presumably said “lower” – was the anchor group asked to give a number estimating San Francisco’s average temperature. Despite the absurdity of the initial question, the anchor group provided higher estimates of average temperature than the control group. The anchor group thus had latched onto the initial high, yet irrelevant, figure of 292°C.

Even experienced judges are susceptible to anchoring, as demonstrated in a study of over 165 US federal magistrate judges conducted by Professor Chris Guthrie, the Dean of Vanderbilt Law School; professor and psychologist Jeffery Rachlinski of Cornell Law School; and US Federal Magistrate Andrew Wistrich. As part of the study, they gave 106 judges a tort (personal injury) fact pattern where the judge was asked to award damages for negligence to compensate the plaintiff for loss of use of a leg. In the fact pattern, the plaintiff did not request any specific amount of damages.

As a control, 66 judges were provided the fact pattern without an anchor. The 50 anchor judges received almost the same fact pattern, where the plaintiff did not specify damages, but with the addition of the fact that the defendant had moved to dismiss on the grounds that the plaintiff’s damages would fall below the US$ 75,000 minimum to access US federal court jurisdiction.

So the “anchor” was US$ 75,000 for loss of a limb. The 66 control judges awarded the plaintiff an average of US$ 1,249,000 in damages. The anchor judges awarded an average of only US$ 882,000, nearly 1/3 less. So a defendant’s motion with a frivolously low damages figure nonetheless had a statistically significant impact in reducing the amount of damages a judge would award a plaintiff.

A lesson for us? Counsel must think carefully about the numbers used in estimating damages in initial requests for arbitration.

II.2 Hindsight Bias

The second heuristic is hindsight bias. In any legal proceeding, the decision-maker has the benefit of hindsight; decision-makers know what happened by the time they get a case. This may lead to its own bias, because an event may seem inevitable ex post when it was not at all inevitable ex ante. This is particularly important in cases involving, for example, negligence or the ability to foresee a contractual contingency.

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14 Id. at 790–91.

15 Id at 791.

As Guthrie, Rachlinski and Wistrich describe: “[p]eople overstate their own ability to have predicted the past and believe that others should have been able to predict events better than was possible.”\(^\text{17}\) Here is a concrete example. In one experiment, the subjects were told that a city has a drawbridge that operates only from spring to autumn, for recreational boat use. Subjects “were asked to determine whether the risk of flood was such that the city should hire a bridge operator during winter months when the drawbridge was not used.”\(^\text{18}\) Some subjects were given the historical fact that “hiring a bridge operator could have prevented debris from becoming lodged under the bridge and causing a flood.”\(^\text{19}\) Out of these subjects, which had the benefit of hindsight, 57% stated that the city should hire the bridge operator off-season – and, by the way, that the city should be liable when it did not.\(^\text{20}\) Only 24% of the subjects asked to rely only on foresight considered the city responsible to hire a bridge operator off-season.\(^\text{21}\)

The inherent nature of the decision-making process means that hindsight bias can never be fully eliminated. However, the legal profession has its tools – most importantly, rules of evidence – to mitigate the effects of hindsight bias. Yet we must be cognizant in the arbitration context, which has especially flexible rules of evidence, that arbitrators may be especially susceptible to hindsight effects.\(^\text{22}\)

A lesson for us: arbitrators should proactively use their authority as evidentiary gatekeepers, and resist the temptation of hindsight, especially on causation issues.

II.3 Egocentric Bias

The third heuristic is *egocentric bias*. In my experience, arbitrators have healthy egos, just like the advocates who appear before them. In many cases, this self-confidence is exactly what the parties want – an individual prepared to make tough decisions. Yet this presupposes that those decisions are correct ones, and we mortals are known to overrate our own performance in certain settings. This is not sinister; it is a survival instinct. But it is important for decision-makers to recognize this cognitive bias.

Let me give you a few examples of egocentric bias in both the legal and non-legal fields:

- When married couples are asked to estimate the percentage of household chores each is responsible for, their typical combined estimate exceeds 100%;\(^\text{23}\)


\(^{19}\) Id.

\(^{20}\) Id.

\(^{21}\) Id.

\(^{22}\) Id. at 130.

● When newlywed couples are asked to estimate their potential of getting a divorce, they rate their chances at 0%, despite knowing the divorce rate is 50%.\(^{24}\)

● In the US federal magistrate judge study mentioned above, almost 90% of the judges surveyed said they were less likely to have their opinions overturned on appeal than the average judge;\(^{25}\)

● In a study of university faculty, 94% of those questioned said they were above-average teachers.\(^{26}\)

Now to our own experiment: How many of you are drivers? How many of you consider yourself above-average safe drivers? More than 50%, I expect.

More seriously, the problem of egocentric bias in the arbitral decision-making context is that an arbitrator may rely on his or her own preconceptions and give undue weight to or even seek out evidence to support those preconceptions, rather than be fully open to the parties’ arguments. Moreover, an arbitrator who may have made a mistake during a proceeding – whether substantive or procedural – may be reluctant to revise his or her approach.

A lesson for us: this confirms that the quality and self-awareness of the arbitrator, and particularly the presiding arbitrator, is extremely important.

II.4 Cultural Effects

Fourth, how about cultural cognitive biases? International arbitration differs from the US judicial processes studied, because members of the tribunal are likely to have different cultures, languages and legal backgrounds. There has been very little study of whether arbitrators from different cultures make different decisions in similar cases, and if statistically significant conclusions can be drawn from such decisions.

One study on the question, dating from 2006 and published in the Journal of Applied Psychology, compared Chinese and US arbitrators. The central question of this short study was the following: in a case where an organization breaches a contract (under several hypothetical scenarios), who is likely to impose more severe penalties, a Chinese or a US arbitrator? The answer, the paper finds, is the Chinese arbitrator, though the societal reasons the article posits for this are speculative.\(^{27}\)

I offer no lesson here: this is precarious ground, and it is early days in study.

\(^{24}\) Id. at n. 163.

\(^{25}\) Id at 818.

\(^{26}\) Id. at 818.

II.5 Extremeness Aversion

My fifth and last heuristic is the cognitive bias known as *extremeness aversion*. In short, individuals are averse to extremes and so tend to compromise between extremes, even when the extremes are irrelevant.

To illustrate this bias, in a way familiar to anyone who shops for electronics, Professor Drahozal described one study that compared the prices of cameras. In that study:

> “subjects who had been asked to choose between two cameras, one costing $169.99 and one costing $239.99, were evenly split between the two. A third option was then added: a camera costing $469.99. With the camera costing $239.99 now the intermediate option, the percentage of subjects choosing it increased, even though there was an additional choice available.”

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In the arbitral context, we are all familiar with the criticism that arbitrators “split the baby” in assessing damages, which would be a form of extremeness aversion. However, the results of a 2001 study conducted by Richard Naimark and Stephanie Keer of 54 international awards in American Arbitration Association cases cast this criticism into serious doubt. Naimark and Keer looked at the percentage of the total amount of damages claimed that the tribunals actually awarded. The results are striking – especially when graphed:

![Results of Keer & Naimark Study on Percentage of Claim Awarded in 54 International Arbitrations – Central Tendency](image)

The mean or average of the percentage of the claimed amount actually awarded was 50.53% and the median was 46.66% – suggesting a near perfectly split baby.

However, the actual distribution of the awards was bimodal: 31% of the claimants recovered zero, 35% recovered the full amount claimed, and the remaining 34% received a range of damages. The results in an unpublished study of over 4,400 AAA awards, to which Naimark and Keer had access, were similar.

These findings confirm that international arbitrators are disciplined in applying law to fact, and less susceptible to extremeness aversion in decision-making than laymen suppose. Why? One reason likely is the discipline of writing reasoned awards.

II.6 Conclusion to Part II

Well, what have we learned?

We know that humans – and international arbitrators are human – rely on intuition and heuristics to process complex information quickly. In international arbitration, self-confidence to make decisions based on available information is essential.

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29 Id. at 115 (citing Richard W Naimark and Stephanie E Keer, Arbitrators Do Not “Split the Baby”– Empirical Evidence from International Business Arbitration, 18 J. Int’l Arb 573 (2001)).

30 Id. at 115–16.

31 Id. at n. 54.
Yet we also know that in experimental settings even highly experienced adjudicators are subject to cognitive biases that can alter results, for irrational reasons. International arbitrators are as susceptible as others to anchoring, hindsight and egocentric biases. These can lead to flawed decisions precisely because they are shortcuts.

III. SOME SOLUTIONS AND OTHER SPORT

I promised at the start of the lecture to address some pragmatic points. Now we are here.

To be clear, I am not arguing against the use of intuition – art – in arbitral decision-making. I do argue that intuition must be constantly tested – science. Several papers on heuristics and adjudication suggest that one of the simplest solutions to cognitive bias in decision-making is simply having enough time to think. Like in the mathematical problem of the bat and ball, allowing oneself to deliberate on a question for an appropriate length of time increases the likelihood of a correct answer.

There is, however, contrary pressure on arbitrators. Increasingly, parties are demanding more efficiency – really, speed – in arbitration, largely in response to some rather glaring examples of delay in investor-state arbitration. With coveted arbitrators already having impossible schedules, will demands for faster results increase their reliance on intuition and heuristics, leading to flawed awards?

I think not. I think this is a false conflict. In my experience and perhaps counterintuitively, more time invested in preparation and deliberations improves speed in issuing awards and overall efficiency. But how to achieve this?

Now, finally, recalling the bat and ball test, I get to the third part of the question in my lecture title – sport.

I do not mean sport as in a game, without serious consequences. I mean sport as a discipline, requiring not just natural ability but also focus and practice and economy of effort. I propose to approach arbitral decision-making as sport from two directions, both involving practical suggestions to counsel, of different sorts.

III.1 The Reed Schedule/Retreat

The first suggestion involves an indirect role for counsel. As I said, sport as discipline requires time and attention. In specific, time and attention to your case. As if the arbitrators were Olympic athletes, you want them training and practicing together on your case. You should expect it, encourage it, authorize it – and pay for it.

I suspect Neil Kaplan knows where I am going with this. In other fora, I have proposed something I have termed, with egocentric bias, the “Reed Schedule” – if Alan Redfern has a schedule for posterity, I would like one as well. A more accurate, but still egocentric, name would be the “Reed Retreat.”

The idea is that, in complex disputes, time be scheduled in the procedural timetable for the tribunal to meet in person to study the file, with the goal of arriving together at targeted directions to the parties for the hearing. On such a retreat, away from the demands and distractions of their offices, the arbitrators could concentrate on the case, brainstorm and test their intuition about the facts, the witnesses and the law with each other. Rather than waiting until the day before the hearing – or, in some notorious cases, the morning of the hearing – the tribunal could (bravely) agree on questions to pose to counsel, and indicate what issues they would like to see further developed and which witnesses they would most like to hear. This must, of course, be without prejudice to the parties to present their cases as they see fit.

III.2 The Strategic Path

So the Reed Retreat is a suggestion about how counsel can indirectly help the tribunal to devote more time and attention, early on, to mastering the record to make ultimate decision-making more efficient. But what about the efficiency of the record itself?

This takes me to my second suggestion. Here is where counsel as sportsmen and women come in. We know that the best athletes are those who are the most spare and elegant in motion. They are the ones who run the straightest route, ski closest to the slalom poles, pass the ball to the most open teammate.

For no good reason, let us take the sport of mountaineering. The climber faces a massive mountain, but he or she has to focus and find the most efficient trail up. It might be straight; it might not be.

Now, for reasons that I hope become clear, I get to my second arbitration training story – the Dale Martin story. Dale Martin was my co-counsel in several arbitrations in the 1990s. He was a US construction litigator, new to international arbitration and not at all enamored of it. We did an ICC case together for a claimant mining company in South America. It was memorable because we, the claimant, took the view that there was no ICC jurisdiction, but our political risk insurer took the view that they wanted to hear this from the ICC tribunal.

The case was most memorable for me because I learned from Dale Martin how to diagram overall case strategy on one piece of paper. And I have done that in every case since then – no matter how big and complicated, and teach my associates to do the same.

With a one-pager clear in mind – the best trail map up the mountain for the climber, you can draft your opening statement, field any tribunal question, adjust a cross-examination mid-answer. You can do this naturally and instinctively in ways aimed automatically at
telling your story, winning your case. Without it, you risk going off the trail and into the weeds; into a crevasse. And you risk taking the tribunal with you.

I will push the sport and mountaineering analogy a bit to make a point. It may be the most important point of the lecture.

In too many cases, counsel are presenting too much material to the tribunal. With flexible rules and no page limits in international arbitration, plus the (I think, irrational) fear of leaving something important out, we see records with 500-page memorials, scores of witness statements and expert reports, and thousands of exhibits. How can we expect the arbitrators to find a trail up such a mountain of a record? Most important, how can we expect them to find our trail, to our client’s win?

Think about the life of a complex contract dispute. You get a call. The in-house counsel tells you the basic story. You get a copy of the contract, and then the amendments, the drafts, the emails, the correspondence, the more emails. You meet a few good witnesses, then another, then another. You find strong legal precedents, and then you let loose your trainees to find more and more. The story gets longer. The record gets bigger – until you have a mountain. But is the story also clearer?

We can put the whole mountain in the record for the tribunal, because we have built it. But, if the memorials exceed War and Peace (far less artistically written), what information will the arbitrators take away? Might they not start relying on heuristics and short cuts; falling back on preconceptions and biases? How much more likely are the arbitrators to “anchor” on irrelevant damages numbers, if they have to read for days before even getting to the damages section of your memorial?

My advice to counsel: if you take the “put it all in” approach, you better hope for a presiding arbitrator who will exercise egocentric bias and set firm limits.

But why not take charge ourselves? Even in those complex cases where a large record is indeed necessary, we owe the tribunal – we owe our client – a clear trail map to the summit. We should guide the tribunal through the record, emphasizing the important pieces of information, avoiding the weeds and certainly the crevasses.

If you will indulge me in reverting from sport back to art, we could be talking about the process of sculpture. The sculptor starts with a block of marble or granite, from which he or she makes the figure. Or reveals the figure already at the core; you may be familiar with Michelangelo’s sculptures of slaves and prisoners at the Accademia in Florence who look as if they are emerging from the marble.

There is a lesson here. After we have collected and constructed our huge record, I suggest we think about sculpting the core story back out from of all those binders, all those DVDs. Help it emerge for the arbitrators.
I need to pause and emphasize something here. Sculpting the case, or mapping the trail of
the case for the tribunal, does not mean “dumbing it down.” Our legal analysis must be
first-rate and the record must support it. In complex cases, the memorials must be long
and the record must be large. But quantity still is not the measure of quality. We do our
clients a disservice by putting all the available evidence and law into the record, just
because we have it.

You will not win a case by the weight of the binders, the number of kilobytes, the number
of pages. Remember Mozart Ratner. The best oral argument is not the one with the most
slides, but instead the one with the most helpful slides. How about a slide of your trail
map? Be daring – no, confident – and put it up as the first slide and the last slide, and
perhaps a few times in between. Remember Dale Martin.

Neil Kaplan himself has shared a purposefully provocative idea in this respect. In an
interview in the December 2012 Hong Kong Lawyer, he says:

“We certainly have people, usually the experienced ones, who are efficient with
their submission of documents, and who can see the wood for the trees. Many
others however – perhaps because lawyers can now be made liable for negligence
for acts done or omitted in litigation or arbitration – take it to the extreme to cover
themselves and submit (to arbitrators) thousands of pieces of paper, when the
essence covers perhaps just a tenth (of all that information). In the end, this
essence gets lost in an avalanche of documents.

I remember a conference in Amsterdam in 1982, when the speaker was heralding
the dawn of a ‘paperless’ office system but now, there is more paper in my office
than in 1982! Perhaps one way to solve this is to adopt the idea of a colleague
who suggested that arbitrators should charge say US$20 per (document) page.
… We certainly need to tackle what can be termed overlawyering.”33

I submit to Neil that even US$1 per page will make him a rich man, if he has cases like
some I have experienced lately.

It is worth remembering our heuristics lessons. Arbitrators facing thousands of
documents have two choices: one, take shortcuts, at the expense of proper decision-
making; or two, take the time to find their own way through the evidence, at the expense
of sheer expense, to the parties.

Returning to quality versus quantity, it is much harder to present a sculpted case to a
tribunal than a massive raw block of marble, to present a clear trail map rather than the
raw face of the mountain. It takes the discipline of sport – the economy and elegance of
effort – to present a compellingly simple case, with fewer rather than more pages.

33 Vince Choong, The Father of Hong Kong Arbitration, The Hong Kong Lawyer (December 2012), 15,
17-18.
In addition to a master trail map, tribunals generally welcome the assistance of demonstratives to organize the record: time lines, *dramatis personae*, flow charts. One thing we see in heuristics studies is the value of checklists. Checklists help even experienced professionals – for example, pilots and surgeons – to slow down and take account of all relevant factors. The Schumpeter column in the *Economist* of 7 July 2012 highlighted this, with a reference to Atul Gawande’s new book *The Checklist Manifesto*.\(^{34}\) That Schumpeter column, by the way, was called “No rush. In praise of procrastination.” Recall my comments about the value of having more time to think.

Again risking egotistical bias, I prepared just such a checklist with Laurent Levy for the 2006 ICCA Congress in Montreal: “Notes on Organizing Fact Testimony in Advance of Evidentiary Hearing.”\(^{35}\) The ICC Terms of Reference are a form of checklist, although the parties and arbitrators typically opt out of listing the issues for determination at the beginning of the case. How useful it would be for the tribunal, later, before closing the record, to ask each side for a checklist – no doubt, competing checklists – of all the factual and legal issues perceived as material for decision in the award.

I am also a proponent of page limits for submissions in international arbitration, and skeleton or outline formats. But not because it is easier to work within those limits. It is trite to quote Churchill – really, Pascal – about how much easier it is write a long letter than a short letter. I prefer a different version: I once asked a prominent professor of international law, apologetically, to give a presentation limited to five minutes. He responded: “The Lord’s Prayer is 66 words, Lincoln’s Gettysburg address is 286 words, five minutes is 600 words.”

I appreciate that my references to Churchill, the Lord’s Prayer and President Lincoln are (more-or-less) Western and we are in Hong Kong. To close with some cultural balance, and to echo my introductory words about balancing intuition and deduction – art and science – in the *sport* of decision-making in international arbitration, I offer these spare four words from Book IV of the *Analects of Confucius*: “The cautious seldom err.” Sometimes, yes – but seldom.

Thank you for your kind attention and special appreciation again to Neil Kaplan.

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