**SOAR Annual Conference: Toronto - November 7, 2013**

**Session Summary: Concurrent Session 1 – Sound Decision-Making: Into the Mind of the Decision-Maker**

Speakers: **Sam Laredo,** SJTO-Landlord and Tenant Board **; Dr. Lilian Ma**, SJTO-Landlord and Tenant Board

*The session examined how humans make decisions and what neuroscientists and psychologists have taught us about learning as well as rational and intuitive thinking. It then explored the role of intuitive thinking in tribunal adjudications and the pitfalls associated with it.*

**Dr. Lilian Ma**

Dr. Ma gave an overview of how our brains work when thinking and making decisions.

Principle #1:

The data are never wrong but our attention controls what we see and what is allowed to reach our brain. Sometimes we miss obvious cues and details. However, our brains are associative machines, and they link incoming data with prior knowledge and memory. This was illustrated by the Gorilla and the Ball video.

Principle #2:

The brain is highly associative. Data allowed in from sensory information at the instant + associated prior knowledge = our perception. Our perceptions determine our finding of facts. Our memories are made up of retained prior knowledge. Memories are learned, and stored in synapses.

Important Features of the Neocortex:  
1) The basic operation of the neocortex is the same, irrespective of where the sensory input originates – Mountcastle 1978.  
2) The wiring of the neurons is plastic; it can change and rewire itself given what input flows through them, or just fade over time. Neurons firing together build or strengthen the bond between them. Also rewiring can also occur when some neurons become non-functional.   
3) The hierarchy of the connections leading to memory result in our prediction framework. In other words: Input + Memory (prior knowledge) = Prediction. That is what gives us human intelligence.

Learning  
Learning is enhanced by:   
1) repetition,   
2) being in the mood   
3) frequent revision.   
  
Deciding  
Adjudicative Decision consists of a) having an impartial and unbiased disposition, b) examining evidence presented at the hearing and weighing it, c) determining the facts based on weighted evidence, and d) applying the law and making rational decisions. This all assumes we are logical machines, but it does not take into account how the human brain works.

Fast and Slow Thinking – Two-System Model according to Dr. Daniel Kahneman

Dr. Kahneman has explained in his book *Fast and Slow Thinking* our thinking process by reducing it to two systems, although these two systems, in reality, do not actually exist. However, he used this model to explain our thinking and deciding activities in a poignant fashion. The first system, “fast” thinking, involves intuitive and emotional responses. It drives us to rely on first impressions and gut-feelings, and jump to conclusions. Fast thinking is the mode that we use prior knowledge in a routine way that would give us the efficiency for daily living and is necessary for survival.

The second system, “slow” thinking, involves deliberation and rational thinking. The two systems compete for our “brain power”. For example you can drive and chit chat with your passenger at the time if you are an experienced driver on a traffic-free road. However, when you have to make a left turn on a busy street in North America, you have to stop chit chatting and pay attention to the traffic in order to make a decision on when to actually make the required left turn.

When we are making important decisions, slow thinking allows us to resolve ambiguity and reach the correct conclusion by avoiding the treacherous “purely associative” mode.

It also allows us time to become aware of personal bias, to get past the stereotypical “hidden evidence” and keep an open mind and thereby ensure parties get a fair and impartial hearing.

Slow thinking further allows us to avoid making purely emotional decisions. Fast thinking is facilitated by high emotional states which can suppress our slow thinking. If we are in a flustered state, resorting to slow thinking in a deliberate way will allow us to stop and take the time to think before reaching a decision.

Moreover, slow thinking allows us to tackle difficult questions. The challenge is to ensure that fast thinking does not take over in these situations when we need to do some hard work. For example, we have a difficult problem in front of us and we feel it is hard to make the proper analysis to come up with a proper compensation in a remedial situation. We may give in and just “anchor” our decision on whatever is suggested to us by a party to make that difficult decision.

Lastly, slow thinking has to be deployed deliberately when we are in a fatigue or hungry state. We may give in to the depletion effect which can drive us into fast thinking mode. There has been interesting empirical studies substantiating these hypotheses reported in the National Academy of Sciences in Israel on parole judges.

As we work in institutional settings, our opinions can be moulded by the way we are trained. We should be aware of that. We should not just blindly apply institutional guidelines and should be aware if there are factual situations distinguishing the case. Slow thinking may help us to do the job properly.

**Sam Laredo**

Mr. Laredo examined how the concepts of fast and slow thinking coined by Daniel Kahneman in his book *Thinking Fast and Slow* might apply to the kind of thinking and decision-making done by tribunal adjudicators.

Dr. Kahneman’s reference to slow thinking is the deliberate, rational thinking that we, as adjudicators, engage in when we come to a decision. Our judgments and decisions are usually sound, simply because, ideally, they are based on a comprehensive and balanced assessment of the evidence, and because they are reasoned, following a logical pattern of inquiry—this is what Dr. Kahneman and other psychologists have termed the slower, more deliberative form of thinking.

The other form of thinking, labelled by Dr. Kahneman as ‘fast thinking’, draws from the intuitive and emotional resources we all have and it has both positive and negative implications. For example, when a chess master looks at a complex position, the intuitive solution that may come to her is likely to be both quick and correct. However, can we as adjudicators rely with the same confidence on our intuition? What do we do with our impressions, feelings, intuitive beliefs and preferences, particularly when we know that they may often influence, if not guide the way we hear the evidence and make our decisions?

The idea that our minds are susceptible to systematic biases, or intuitive preferences that violate the rules of rational choice is now by and large supported by the research in this area. So how do we improve our ability to identify and understand potential errors of judgment and choice? The short answer is that little can be achieved without a considerable investment of effort. We can however improve in our ability to recognize situations in which errors are likely. The way to block errors that originate in our intuitive self is to recognize the signs that we are in a cognitive minefield, slow down, and ask for reinforcement from our rational self.

Mr. Laredo suggested a number of tips that might be usefully derived from the research done in this area, when hearing evidence and coming to a decision.

Hearing and Weighing the Evidence

* When hearing the evidence, focus on the forest, not the trees
* Be aware of your natural bias to believe what you hear
* Question your first impressions of a witness and how that may affect what you hear
* Be conscious of the ‘halo effect’
* Recognize the emotional impact evoked by a witness’ choice of words
* Know that you are not immune to the phrasing of ideas, e.g. relative vs. abstract
* Recognize the emotional impact evoked by the juxtaposition of words and the associations triggered by those words
* Be aware of the emotional impact of these associations on your judicial demeanour
* Do not be surprised if the apparent truth is merely a familiar falsehood
* Ensure that prospective witnesses do not have the opportunity to influence each other
* Question the frequency or level of danger inherent in reported incidents—dramatic front-page news may appear to prevail in the human mind
* Be systematic in your credibility assessments—not all stories that are simple, concrete, and make sense, are true.
* Remember the witness may think she is telling the truth—although humans have a strange tendency to reconstruct the past based on the present
* Trust the intuition of an expert witness, but filter it through rational analysis.
* Keep in mind that the witness may be giving priority to bad news
* Ascertain that the witness is not confusing her experience with her memory of it

Coming to a Decision

* Be aware of the general influence of emotion in your decisions
* Be mindful that you can be easily tempted away from a demanding rational task such as drafting a logical, comprehensive and sound decision
* Be wary of superficial or ‘lazy’ thinking
* When in a good mood, watch out for logical errors
* Tend to your hunger and fatigue, before making important decisions
* Question the emotional tail that wags your rational dog
* Make sure you follow a rigorous decision-making template—lest you choose arguments that merely support your beliefs
* Ask yourself whether you are seeing causality where none exists
* Ask yourself whether you are seeing patterns where none exist
* Do not be satisfied with mere consistency—make sure the evidence is not only coherent but balanced and comprehensive in its discussion of the issue at hand
* Avoid jumping to conclusions
* Do not underestimate the impact of the form and look of your decision
* If you are part of a three-member decision-making panel, be mindful of the effect of those who speak early and assertively
* Be fully conscious of ‘the anchoring effect’ when estimating costs, damages or terms for detention release, for example
* Know the intensity of your feelings when you make decisions, such as awarding monetary awards
* When assessing probabilities, look to the evidence, not your beliefs
* Beware of overconfidence in predicting the future based on your understanding of the past
* Make sure you have a reliable checklist or decision-making tree when your decision calls for largely intuitive assessments such as credibility or an exercise of discretion
* Be mindful of the parties’ ‘loss aversion’ when mediating a dispute
* Be mindful of the parties’ ‘risk aversion’ when mediating a dispute