

CHAPTER 3

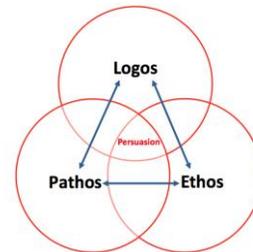
Neuroscience

*Of the modes of persuasion furnished by the spoken word there are three.
The first depends on the personal character of the speaker;
the second on putting the audience into a certain frame of mind;
the third on the proof, or apparent proof, provided by the words spoken.*

Aristotle, *Rhetorica* treatise – Book 1 Chapter 2

Negotiation is the art of persuasion. Just below the surface sits a complex web of unexpressed, often latent forces and factors that persuaders need to understand, as they may have the power to achieve or kill the outcome. The neuroscience behind every negotiation easily escapes attention, but a basic appreciation of it can vastly improve the effectiveness of our persuasive abilities and enable us to achieve better results.

We should begin with Aristotle’s treatise *Rhetorica*, written in the 4th Century BC. Aristotle developed the simple and brilliant idea of three inter-related modes of persuasion - ethos, pathos and logos. The ethos mode is an appeal to the audience’s character such as their sense of integrity and authority; pathos is directed to their mindset and emotions and logos is targeted at their reasoning and logic.



Neuroscientists at the Centre for Affective Sciences (CISA) in Switzerland conduct research to understand how emotions and social patterns of behaviour may be affecting decision-making when people are in situations of stress or conflict. A CISA group under Professor David Sander and Dr. Olga Klimecki, which includes two dispute resolution professionals, François Bogacz and Jeremy Lack, have developed a model known as “Tri-O/S” to help non-scientists understand the patterns of behaviour that may lead to conflict escalation if they are not identified and managed. The model includes dispute resolution tools and techniques. From this Tri O/S Model, which echoes Aristotle’s ethos, pathos, logos model, we can see how our choice of negotiation behaviour can itself impact on human behaviour and possible outcomes.

For example, there is empirical researchⁱ, reported by Judge Andrew Wistrich and Professor Jeffrey Rachlinski in *How Lawyers' Intuitions Prolong Litigation* that suggests that many people, in particular lawyers, are prone to making cognitive errors rejecting offers that, in hindsight, should have been accepted and about when and whether to settle, resulting in delaying settlement negotiations until late in a dispute's life cycle.

In order to appreciate how this works, we need to understand the brain, and how the prospect of disagreement, deadlock and conflict typically affects thought patterns in negotiation.

The brain's three operating systems

Oxygen and glucose are limited resources in the brain. Our brain receives a maximum of 20% of the body's total oxygen and glucose at all times, and it has to be efficient in how it allocates and uses these limited resources. Many things are related to how oxygen and glucose are consumed throughout the brain at different times, including our behaviour and therefore our negotiation performance.

Computers, which require electricity, are a perfect analogy. Like computers, we each have our "hardware" - our brain and its extensions. We also have three different operating "software" systems. They are the emotional operating system ("O/S 1"), the social operating system ("O/S 2") and the rational operating system ("O/S 3"). We know when we try to run two different computer operating systems simultaneously, such as Apple and Microsoft, on the same piece of hardware, that the electricity flows in different ways, and that the computer is likely to develop glitches and malfunctions. Our brains work that way too.

Our three operating systems run in parallel, but the emotional and social systems (O/S 1 and O/S 2) often limit our third system (O/S 3), which is our ability to be rational or cognitive. These three operating systems tend to behave in limited ways when faced with the stress of negotiating, particularly where conflict is a possibility or the stakes are high, and they can consequently restrict or expand the range of solutions we visualize.

Let's first consider each of these three operating systems to see how they can affect our judgement and decision-making abilities in stressful situations.

Then we can assess how they combine and how we may be able to control them more effectively and become more effective negotiators and persuaders.

The emotional operating system (O/S 1)

A key purpose of emotions in the human brain seems to be to allow us to do very rapid relevance detection, or what emergency room physicians call “triage” when managing an emergency situation. Before we think consciously, O/S 1 decides where in the brain to allocate oxygen and glucose, and to prepare for situations of fear or reward. When faced with a new stimulus, do you need to allocate your resources be in “fight”, “flight” or “freeze” mode? What do you need to be ready for? O/S 1 rapidly prepares us for action or inaction, fight or flight, mobilizing the rest of our body’s resources according to what it emotionally deems to be a potential risk or reward. All this happens in milliseconds.

This triage by the brain is “subconscious” or “pre-conscious”. It is not something we are aware of. It explains why we are often startled by unconscious stimuli, jumping at something that we have not consciously seen. A person can self-regulate and consciously manage this behaviour, but only after becoming aware of their emotions. This will usually happen several hundred milliseconds after the first emotions were “felt”.

Imagine walking into a negotiation and, to your surprise, the other party's external counsel, an intimidating dinosaur of a litigator, immediately goes on the offensive: *"Your behaviour has been outrageously duplicitous and downright dishonest. The right word is racketeering. We see no point in continuing. You are nothing but a bunch of no-good sleazebags. We are going to sue"*. His face is red as he throws a sheaf of papers articulating a claim across the table, clumsily spilling his coffee in the process.

O/S1 kicks in before the tirade is over. You are likely to have an instantaneous emotional reaction. Your first thought may be to respond with equal or greater invective, or get up, walk out and slam the door.

As much as we may want to believe to the contrary, there is no such thing as not having an emotional response in a negotiation situation. If we look at a linear time scale for reacting to a stimulus, we have two basic responses: an “away mode” for avoiding or confronting risks and danger (fear), and a

“towards mode” attracted to pleasures (reward). Whether we realize it or not, this first phase operates within 0 to 350 milliseconds, and our emotional system is already filtering and influencing all our sensory perceptions before we are capable of conscious thought.

This extraordinary activity takes place in our brain's limbic systems, and in particular in the amygdala, two small almond-shaped areas in the centre of our brain. They are responsible for rapid relevance detection, and have almost instantaneous connections to the rest of the brain. They not only assess fear, but also reward. The amygdala are involved in more than just emotional responses. They are responsible for triggering, literally at lightning speed, a pre-conscious flow of oxygen and glucose. Consciousness, and our ability to re-orientate that energy flow, only happens in the 400+ millisecond range, well after the stimulus was first experienced and unconsciously diagnosed by our amygdala.

Our brains filter everything through emotions, even if this is unconscious. Most of the time we are simply unaware of it. Only when we have a sufficiently high level of emotional arousal do we become aware of our feelings. It is only when we gain this awareness that we can attempt to “self-regulate” our feelings, and this involves O/S 3. Self-regulation takes time, patience and practice, all of which in turn consumes a lot of glucose and oxygen.

Back to our example. If you recognise that your brain has just performed a fight, freeze or flight triage, you are well-positioned to self-regulate your reaction. For example, you might burst into laughter, though that might inflame things. Or you may think about how to reconnect emotionally, socially or cognitively with the other party's aggressive external counsel by taking a napkin to mop up his coffee, and say in a non-confrontational tone: *Thank you for reminding us of why we are here and what the parties' alternative is if we fail to reach an agreement. Perhaps we could start by exploring what we might all achieve together if we begin by focusing on the potential market opportunities that brought us here today? And then we can certainly get into the legal issues later.*

To understand how self-regulation works, think of a pilot who is learning to fly a plane. Flight simulators train pilots not to panic when things go wrong. Their natural reflexes in cases of an aircraft spinning out of control, or a sudden drop in altitude, are at first like those of any other human being. But

after spending enough hours in simulators, where they are put through extreme positions of stress, they no longer panic or freeze like the rest of us. They are able to continue to function rationally, using checklists they have been taught to go through in crisis situations. Long exposure to simulator training enables pilots to self-regulate and stay focused, going through their checklists and protocols even while a plane may be experiencing potential disaster conditions. Oxygen and glucose continue to be allocated to, and consumed by, parts of their brains that function more rationally than emotionally. This demonstrates our brain's wonderful plasticity. It proves that our patterns of behaviour can be changed or controlled. With enough practice, we can generate new patterns of thinking and self-regulate better in moments of high emotion, stress or crisis.

There is also a less appealing aspect. We tend to cruise in “autopilot” mode, responding emotionally to some stimuli and discarding others, while being unaware of them. We tend to lack insights into our behaviour, and reject the notion that emotions may be influencing our ability to think rationally. The fact is, to be human is to be emotional, and to be emotional is to be human: “*I feel, therefore I am and I am, therefore I feel*”, to misquote Descartes. Emotions will always create biases and cloud our rational capacities pre-consciously. Once O/S 1 is activated, an “away” or “fear” mode is likely to be more dominant, last longer, and take greater precedence over a “towards” or “reward” stimulus.

The social operating system (O/S 2)

Like meercats, elephants, dolphins, gorillas and most other members of the animal kingdom, we humans are unusually social and gregarious, even if some of us appear not to be. O/S 2 is another rapid and pre-conscious triage system that is also modulated by the amygdalae. Just as in O/S 1, we have the “away mode” for fear and the “towards mode” for reward. However, we have also evolved with two fundamental patterns of social behaviour that are pre-consciously managed by O/S2 and drive “pro-social” or “anti-social” behaviour, as well as seeking comfortable status levels. These modes subconsciously diagnose whether, at any moment, we are in an “in-group” or an “out-of-group” environment, and what our status are within our group or in a given set of circumstances.

When we meet people, we behave differently based on whether we unconsciously perceive them as belonging to our clique or tribe, or to

another. This suggests an uncomfortable propensity for humans to discriminate unconsciously based purely on first impressions, which can be unconsciously influenced by previous exposure to certain cultures, or to the stereotypes we may have of them.

If our “in-group” mode has been triggered, we have an intuitive ability to understand one-another’s feelings without words. The non-verbal behaviour of another person in our group does not require much, or any, explanation. We pick up on one-another’s emotions intuitively, like sadness, joy and excitement, without need for words. We even tend to *mirror* them. There is an automatic system of empathy that is triggered whenever we feel “in-group”.

When we feel “out-of-group”, this empathy system in the brain is switched off or is less active. We tend to stop resonating with others, become indifferent to their emotions and suffering, are intuitively less inclined to address their needs and more likely to develop a negative bias.

An example of how O/S 2 is distinct from O/S 1 relates to how we reflect one-another’s behaviour when “in-group” but not when “out-of-group”. When we are in “in-group” mode, shared neural networks, sometimes called *mirror neurons*, which have been identified in animals though not yet in humans, are believed to be activated. These cause us to mimic behaviour that we see in others without realizing it. If you yawn, then I am likely to yawn too, assuming we are both “in-group”. This can trigger a contagious effect throughout a room. We have this ability to connect to one another unconsciously and to experience one-another’s sensations when we activate our “in-group” scripts of social behaviour.

Oxytocin is a chemical social modulator that is part of the O/S 2 system. It is a primitive neuropeptide that we secrete and is sometimes, though misleadingly, called the “trust hormone”. Oxytocin does create trust but augments either an “in-group” script (which leads to confidence and comfort) or an “out-of-group” script (which can result in aggression and caution). Pregnant women secrete high levels of oxytocin. In fact, oxytocin can even induce labour. The mother’s oxytocin is usually passed onto her infant, when it suckles. The baby ingests oxytocin through its mother’s milk, creating a strong neurochemically-induced bond between mother and infant.

We can increase our oxytocin levels (in controlled experiments) using nasal sprays. When people are primed to think of one-another as “similar” or “in-group” in social experiments, inhaling oxytocin leads to more cooperative and pro-social behaviour. But when people are primed to think of one-another as “dissimilar”, or as belonging to opposing or competing teams, sniffing oxytocin leads to more aggressive and competitive behaviour. So oxytocin is not simply a trust hormone - it can also be an aggression hormone. It seems to enhance basic patterns of “in-group” (pro-social) or “out-of-group” (anti-social) behaviour, depending on the circumstances.

Many things can also influence our oxytocin levels. Chocolate and dopamine are examples. Touching or hugging induces oxytocin release, with pro-social effects when coming from a welcome and “in-group” source, but can also induce an “out-of-group” script when unwelcome.

In a 2007 study reported by Californian researchers Paul Zak, Angela Stanton and Sheila Ahmadi, people were each given an amount of money, asked to sniff a substance and encouraged to invest the money with a stranger. Those who sniffed a placebo placed up to a third of the money with the stranger. Participants who inhaled a little oxytocin invested around 80% with the strangerⁱⁱ.

It is possible to create pro-social feelings and in-group bonding in negotiations by triggering common social patterns within a group of people, for example by sharing a meal. Australian dispute resolver Joanna Kalowski, makes a point of serving freshly-baked pastries at the start of her sessions. Ken Cloke, Director of the Center for Dispute Resolution in Santa Monica, is among many leading conflict management practitioners who encourage mirroring of body language as a way of promoting collaborative behaviourⁱⁱⁱ.

The words and terms we use can have a similar effect. Referring to the other party as “the other side” or “opponents” may unconsciously trigger “out-of-group” behavioural scripts. On the other hand, referring to them, and thinking of them conceptually, as “negotiation partners” in a joint process can unconsciously trigger “in-group” scripts. These are unconscious patterns of social plasticity, and participants’ abilities to empathize with one-another are things that we can influence by activating or deactivating these patterns. They are important concepts to bear in mind when negotiating.

The danger of both “in-group” and “out-of-group” programming is that whichever has been unconsciously activated through O/S2 can affect our cognitive abilities and how O/S 3 will function.

If an “in-group” or “similar person” pattern in our brain was first activated when we met someone, we are likely to unconsciously assume that this person is similar to us, and project our own biases and preferences onto them. We are more likely to assume or envisage that whatever works for us will work for them. On the other hand, when we meet a person who has unconsciously been labelled by our brains as “out-of-group” or “dissimilar”, we do not naturally project our own preferences onto them. We are likely instead to stereotype the “other”. This all happens pre-consciously, whether “in-group” or “out-of-group”, based on what we have been told by others or read in the media.

Whether we perceive one-another as “similar” or “dissimilar” is because our brains will make rapid social triage judgments and perceive everything through stereotypes. It is human nature to do so and it is one of the dangers of how our brains function. To be human is to be biased. The good news is that, thanks to the brain’s plasticity, we can consciously act to minimize these sub-conscious reactions if we choose to do so, and re-trigger “in-group” patterns of pro-social behaviour.

Labelling, and dividing people into “in-group” and “out-group” is something negotiators can control in the interests of securing an optimal conversation. A better and more sustainable outcome can be reached through joint dialogue, focusing on interests, rather than positional rhetoric and trying to impose outcomes. This underscores the importance of early relationship-building in any negotiation. The journey can lead to a better destination.

The rational or cognitive operating system (O/S 3)

Daniel Kahneman's *Thinking Fast and Slow* (2011) describes many issues with respect to O/S 3, the system we use when thinking rationally. He compares our brains to the engine of a hybrid vehicle. Our brains function most efficiently when using as little oxygen and glucose as possible, conserving resources we may need later. O/S 3 is slower and prefers to take mental shortcuts and follow rapid pathways of pre-defined thinking to conserve whatever limited oxygen and glucose resources are left in our brains after our emotional and social systems have kicked in. Much of our

thinking is what Kahneman refers to as “system one” or “fast” thinking. Matthew Lieberman, a professor in the Psychology Department at University of California Los Angeles, refers to this as the “X mode” of rational thinking. He means reflexive or reactive rational thought processes, not those that are emotional or social, both of which are pre-conscious but unconsciously stored patterns of rational thinking (such as when we speak in our mother tongue and use semantic memory to find words).

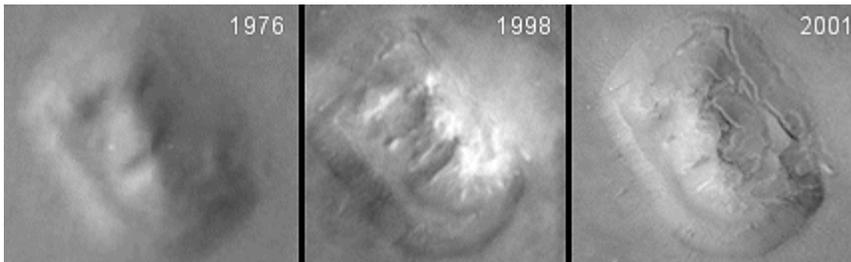
Our brains want to connect the dots, even when we are not conscious of them doing so. For example, when we try to interpret the phrase: "*I can actually understand this sentence*" our brains can immediately read: "*I can actually understand this sentence*", despite the jumbled letters. This happens because our rational brain does not try to read the whole word, but skims onto the first and last letter in each word, assuming the rest. The brain conserves energy by not needing to read all the letters in between. The words make sense to us so long as the first and last letters are in the right place. That is an example of Lieberman’s X system or Kahneman’s rapid system one.

The power of the brain in connecting dots has its limitations. The brain fills gaps where it thinks they should be filled, but this can often mean that perceptions will be enhanced, modified or expanded beyond all recognition of the initial event, or people will see and perceive things that do not exist, a phenomenon is called pareidolia. Benjamin Disraeli was making a profound point that negotiators do well to remember when he remarked that: *Like all great travellers, I have seen more than I remember and remember more than I have seen.*

Take, for example, the famous “Man’s Face on Mars” that some claimed was evidence of civilization on the Red Planet:



NASA has repeatedly explained to the public that the “face” is just a rock formation. But this is pure pareidolia. The brain has a natural desire to see a recognizable pattern, and one type of pattern it is always seeking is facial recognition. The brain will interpret rocks to look like something it knows well, if it can. To reassure that there really is no mountain carved like a human face on Mars, pictures taken of the same object from different NASA spacecraft between 1976 and 2001 with increasingly higher definition resolution show that the facial pattern dissolves as resolution increases, and the brain is no longer fooled.



http://science.nasa.gov/science-news/science-at-nasa/2001/ast24may_1/

There are analogies to pareidolia in negotiating. In any debate or dialogue, we automatically seek familiar patterns. We do so through the prism of our own backgrounds, training and inclinations. If we trust someone, we are likely to look for reasons to trust those with whom they are associated. If we can develop mutual levels of trust during a discussion, the negotiation is likely to be more successful. So where there are multiple issues, some of which are easier to agree than others, it can help to encourage not only trust, but also Kahneman's rational thinking habit *system one* or Lieberman's *X-mode*, when it comes to the tougher points if the parties have already covered the easier issues and agreed on them. That is why focusing on "low-hanging fruit" is one of the techniques covered in Chapter 10.

The other system is what Lieberman calls the C system and Kahneman calls “system two” or “slow thinking”. The “C” denotes what Lieberman called “reflective” as opposed to “reflexive” thinking. It is generally more demanding in terms of oxygen and glucose consumption, so our brain tries to avoid using it when thinking rationally by unconsciously adopting the rapid “X mode” instead. The C system is what we need to use when we want to think deeply and optimally.

In negotiations, we need to be reflective and not reflexive. It is better to understand which rational thought processes we are using when reaching a

decision, especially in situations of stress and conflict. For example, try calculating in your head “24 x 17” without using an aid like a pencil, paper or calculator. Mathematicians apart, most of us find this simple multiplication hard to do. Breaking it down into steps, using rapid patterns of thinking (heuristics) that are familiar from using a piece of paper and a pencil, makes solving the equation easier. We immediately pull faces as we try to concentrate, visualizing the carry-forward of numbers from one column to another. Thinking cognitively or rationally in this way is tiring. We crave a piece of paper and pen or calculator because it is so difficult to keep numbers in our heads and while also keeping a mental track of columns.

We prefer to use quick and easy practical but not necessarily technically accurate, ways - heuristics - to connect dots instead of deep or slow thinking because it is a lot easier than starting on a blank page. We unconsciously store and use a series of rapid heuristics when we think rationally and problem-solve, often finding that we have skipped over major pieces of data when reaching our decisions. This is one of the reasons why confirmation bias is common in negotiation; we tend to perceive and retain whatever is consistent with our heuristics.

On the other hand, some situations are so complex that we cannot consciously keep track of all the different lines and columns of data that need to be computed in order to make the right decision. In highly complex situations where large amounts of information may need to be analysed, our intuitive X system of thinking may be better than our deeper C system, but it is important in either case to know which thinking system has been used, and to evaluate it in a number of ways.

So, when making decisions, we unconsciously prefer to use our X system rather than our C system. It is an unpleasant reality we have to face, especially in high impact negotiations or when important decisions need to be taken. Even judges and lawyers, it seems, have a tendency to use rapid heuristics and mental shortcuts when identifying relevant facts and passing judgment on people.

Professor Shai Danziger at the Tel Aviv University School of Management showed in a 2011 paper in the Proceedings of the US National Academy of Sciences how judges tend to think in X mode as opposed to C mode. Listening to complex legal reasoning is likely to drain cognitive resources,

which in turn can have a significant impact on the interpretation of evidence and pleadings.

Attention span was identified as being the most important unconscious variant for eight Israeli judges while conducting over 1,000 prisoner parole hearings. One might speculate on the factors that might have the greatest influence on whether an Israeli judge would grant parole to a prisoner: such as whether the crime was minor or serious. Or personal biases of the judges based on whether the prisoner was young or old, Arab or Jewish or male or female. Remarkably, the answer was none of the above. Danziger's research indicated that the depressing factor influencing whether a prisoner was granted parole was: *time of day*.

When the judges had last eaten or taken a break was more likely to affect their willingness to grant parole. The proportion of favourable decisions seemed to increase and fall, depending on meals and breaks, rather than on the legal or cognitive merits, attributes or specific circumstances of each prisoner's individual case. There were three peak periods during the day when paroles were being granted. They coincided with times when the glucose levels of each judge's brain was at its highest (although the paper does not mention glucose as the principal reason for these variances). Their abilities to concentrate and think deeply, however, were depleted more rapidly after each peak, as the day wore on. Prisoners who were heard long after the ingestion of food (late in the morning, in the middle of the afternoon or at the end of the day) were less likely to be granted parole. A glucose-depleted judge would seem to favour the *status quo* and not grant release at other times. If asked, however, it is likely that each judge would be convinced they were making the same rational quality of decisions at all times of the day.

Unlike our muscles, our brains may not let us know when they are tired. When we exercise, our muscles build up lactic acid and become sore, so we know when to give them a rest. Our brains receive no such signals. We often do not know when our brains are less able to process complex issues, as we will have moved into X mode. We do this constantly, when reading, writing or listening to other people.

Understanding sleep patterns, what and when people last ate and when they took a break may have a major impact on negotiations, in addition to how stressed they are, or whether they feel "in-group" or "out-of-group".

An example

Years ago, new in my job in London, my phone rang. It was an external counsel in New York City. He introduced himself and explained he had been representing us in a case that had been dragging through the courts for over 10 years. We had apparently terminated a distributor, allegedly without cause, and the distributor had claimed millions in damages. The case was due to go to trial the following month. The lawyers for both sides had met at a social event at the Yale Club and agreed the time was right for a settlement negotiation. *Was I up for it?* I was asked.

I'm always up for a negotiation, was my reply - even though I was completely unaware of the situation, having joined my employer just a few weeks earlier. I was told to stand by for a call from a mediator that the two lawyers were recommending and that the other party had already agreed. I decided not to second-guess my own lawyer. I had never met him, or even heard of him, before his call. Instinct told me to trust him, and so did practicality - I had too many other things to do at that moment. After all, he was "in-group".

My phone rang the next day, this time it was the mediator on the line. He exuded a pleasant but authoritative air. He said something along the following lines: *OK, I've been appointed your mediator. Are you willing to come to New York on the 14th of next month to resolve this? And I mean come with authority to sign if you reach agreement? The other side will be represented by their President and you seem to be some way down the pecking order in your outfit, so I need to know that you come able to bind your people. Can that be arranged?*

I told him that so far I had only flipped through the file a few hours earlier but that the answers were affirmative - yes, I'd come to New York and ,yes, come with my employer's authority to settle.

The next bit surprised me at the time: *Good. Now listen up. The way I deal with warriors is always the same. I want you and the guy on the other side, and one representative of your lawyers, to meet me for dinner on the evening before. I'll book a fancy restaurant. Each of you will pay 50%, including my meal ticket and my fee. OK? But there's a condition. We don't talk business*

over dinner. Not a word. I want you two to get to know one another. We'll talk business the next day. OK?

I thought it a good idea and agreed. I spoke to my external counsel and made an appointment to see him the day before the negotiation in order to prepare, and we would then go along to the dinner together.

The dinner was in a private room. The President of the distribution company, whose name was Gene, was already there, a tanned, elegant Italian-American, impeccably dressed man in his 60s with strong laughter lines radiating from his eyes.

He didn't wait to be introduced. *Hiya Michael, great to meet you* he said, advancing to meet me in the doorway. His attorney was noticeably less affable, but didn't seem to be a Rottweiler. The mediator was not what I imagined; more engaging, not as bossy as his telephone manner.

We had a drink standing up, then sat down to eat. The conversation jumped around, from our families and backgrounds, through culture, the Presidential election, political events in South Africa and the city crime wave. The dialogue was mainly, I realised, between Gene and me.

We got to the mains plate, still talking, often joking. Gene looked straight at me: *I like you, Michael, I really do. You know something, I'll be damned if we can't do business together tomorrow, you and me. Huh?* It was a rhetorical question. I looked at the mediator, remembering his prohibition on talking shop. He looked at me with a kindly expression but the only signal I think I saw was a very slight shrug of the shoulders. I could have imagined it. I turned to Gene. *Well, I like you too, Gene. And like you I have come to try and do a deal.*

Gene nodded, paused, then frowned: *There are a few things that have been blocking progress, you know. Like difficulties. Know what I mean?*

Obviously, Gene wanted to talk. You could have heard a pin drop on the plush carpet. The lawyers exchanged glances, but said nothing. The mediator didn't move and I glanced at him as if to say - *is this permitted?* but still no signal whatsoever. I turned to Gene. *Which difficulties, Gene?*

He drew breath to answer but the mediator intervened and cut him off. *Guys (we were all men), if you want to discuss this now, that's OK with me, but let me propose a few little ground rules.* He went on to explain the rules of confidentiality, that nothing said should be used in litigation and that we could continue tomorrow where we left off tonight. *I apologise for interrupting, Gene. Go ahead,* he said.

We settled the case that evening. The mediator applied a very light touch. The attorneys, who knew one another well, were brilliant settlement enablers. They made proposals to embellish the core discussion. They moved places to sit together. As Gene and I talked, they constructed a memorandum of understanding that we signed as the restaurant was closing for the night.

Back at my hotel, I pinched myself, wondering if I had been dreaming. Thinking it over, the change drivers were the meal, the convivial atmosphere, the steering of the mediator, and the proactivity of the attorneys as merchants of mutual gain. And the attitude of the principals.

I had not heard of oxytocin at the time, nor any neuroscience principles. The experience reflected the words of Philip K. Howard, author of *The Death of Common Sense: How law is suffocating America* (1994):

We should stop looking to law to provide the final answer.... Law cannot save us from ourselves.... We have to go out and try to accomplish our goals and resolve disagreements by doing what we think is right....Let judgment and personal conviction be important again.

Connecting the three operating systems: the Tri-O/S model

CISA in Geneva and the consultancy Neuroawareness are researching methods for how the three operating systems can be managed to design negotiation processes and improve cognitive outcomes. This is work-in-progress at the time of writing (2016) but the researchers are hoping to show that it is possible to design and combine optimal negotiation processes, particularly in tense and stressed situations.

Recent research indicates that the same parts of the brain seem to be involved in different ways in all three systems. So when one operating system is activated, it impacts on the others. Networks of the brain or neural

patterns of thinking that are consuming more oxygen and glucose at any given time are likely be more active in influencing decisions than others that are comparatively deprived of oxygen and glucose at that moment. Switching between them is not easy.

There is a certain logic to this. Think of a very angry person. If you ask them to “be logical,” or “be rational”, or even to "calm down", they are likely become even angrier. This is because the emotional network that is currently active and dominant is that of anger, so asking them in effect to reallocate glucose to other parts of their brain, and switch on rational cognitive thinking, is something they find practically impossible to achieve at that specific moment. Getting oxygen and glucose to be redistributed and consumed in different neural networks in the brain will take time.

The best thing to do, when that happens in a negotiation, is to take a break, change the subject or try a "soft re-boot" to activate a strong heuristic that is often available and accessible. In *Getting Past No: Negotiating with difficult people* (1991) William Ury talks about *going to the balcony*, by which he means resisting impulsive reactions, detaching yourself from the heat of the moment, and re-evaluating before re-engaging. In many ways, this is mindfulness. Trying to become aware of our emotional, social and rational ways of thinking at a particular moment in time is what Bogacz and Lack call "*Neuroawareness*".

Like the Israeli judges, we tend to overlook the fact that fatigue, glucose and oxygen levels of all participants really seem to matter. Yet we tend not to focus on this. Are the participants tired or rested? Have they slept enough? What did they eat? Did they get proper food or were they rushed? What is their mood? Have they just had an argument with a friend or colleague? Did they have a pleasant or positive experience that morning, walking through nature or seeing a sunrise? Such apparently trivial details may have the greatest impact on the patterns that will be active when people meet one another to negotiate. These may well be things that are outside your control, and it may not be fruitful to try, but simply being aware of them can prove useful to understand why certain techniques work better are some times than others.

First impressions may occur in seconds, but can have long-lasting and unconscious influences and consequences. How often, when organizing a negotiation, do we concern ourselves with the pro-social impacts we should

trigger when we first meet? It may seem silly to focus on such details, but they can impact on a negotiation's outcome as much as the quality of the arguments raised. Gene's warm and friendly behaviour when we first met in my New York mediation clearly affected me. Was it manipulation? I did not think so at the time. It needs to be appropriate and authentic. It is easy to detect fake or artificial behaviour, which can have precisely the opposite effect of building up anti-social rather than pro-social patterns.

During negotiations to resolve the student takeover of Columbia University's Hamilton Hall in 1996, mediators Carol Liebman and Carlton Long ordered Deli refreshments. While negotiating, normal eating schedules ceased for all of the participants. Liebman and Long reported^{iv} that when negotiators had not eaten for a long time, their morale dropped, they became pessimistic, and it was difficult to consider new options. After experiencing the surge of energy provided by food, they made progress, before going downhill again. There are benefits for all parties to eat at the same time or together, and to do so regularly. Whether they should eat in separate rooms or together is something that has not been given much attention.

People often come to negotiations quite stressed and anxious to achieve specific outcomes or goals. They can all be under a lot of pressure to perform. Their O/S 1 and O/S 2 systems are likely to kick in first and establish the patterns by which any glucose and oxygen left in their brains can be allocated to their O/S 3 system. The rational system is always last in line; picking up whatever limited brain resources, crumbs or patterns of thought that O/S 1 and O/S 2 have left available. Like Danziger's judges, their minds may be stuck on the status quo of the solutions they envisaged prior to the negotiation, rather than opening up to optimal outcomes based on the interests of all of the parties involved using flexible and creative new thought patterns.

One challenge facing negotiators is that our O/S1 is fuelled by selective perception – that is, our bias towards facts and arguments that we see as supporting our interests and goals. This is often called confirmation bias. Even though it may be rationally inappropriate, we develop strong attachments to our positions, and devalue the other party's positions and arguments, unconsciously causing us to stick to those positions. The way this works is quite dramatically illustrated in an article by Michael McIlwrath of GE in a 2004 article entitled *Dealing with Selective Perception and Bad Faith Allegations in Commercial Settlement Discussions*, reporting

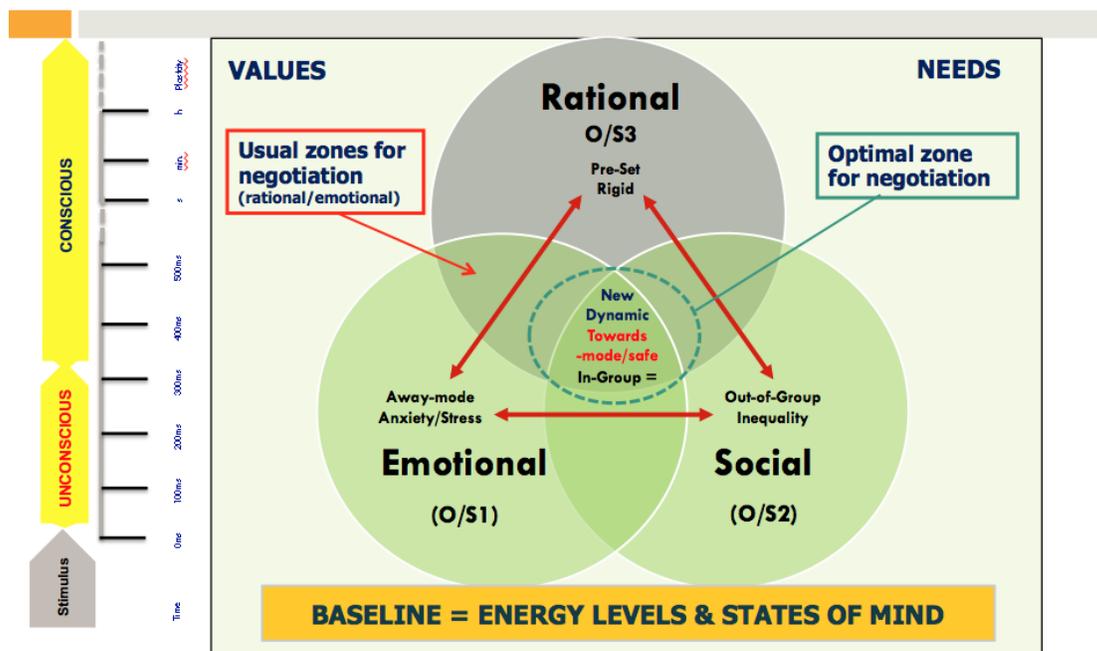
on the results of a GE internal negotiation course. This article is reproduced with permission in Appendix 3.

The three operating systems are like cogs in a clock. Intersections and polarities seem to exist. O/S 1 comprises two polarities: the “*away*” mode when people are under stress, fear or anxiety, and the “*towards*” mode, when people feel safe or perceive a reward. They are at different ends of a spectrum.

O/S 2 also consists of two polarities: “in-group” and “out-of-group” scripts, and notions of status (whether another person is likely to be dominant or trustworthy).

O/S 3 can also be perceived as containing two polarities: rigid, pre-set patterns of cognitive thinking (for example the X mode heuristics, which are easier to access) and dynamic, new creative patterns of rational thinking that require deeper thought (such as the C mode, which may be more difficult to access or inaccessible if the other social systems are already too active).

A zone of intersection can be identified as an optimal area that negotiators may want to target for interest-based negotiations:



How Tri-O/S can be used to improve negotiation skills

The three operating systems appear to converge at a point where people can feel safe, motivated by possible rewards, being “in-group”, feeling comfortable with their status, and where they can more easily think differently. But this optimal state will not necessarily be activated if the participants are feeling tired, stressed or “out-of-group”. Creativity, for example, draws greater oxygen and glucose to certain parts of the cortex, but it is unlikely that participants can get these resources to the right place to enable them to co-create new solutions if they are tired, stressed, poorly fed and distrustful of one-another, which of course is a common starting situation in many important negotiations.

Practical steps to achieve the zone of convergence

There are many practical things you can do when approaching a negotiation to improve dialogue quality by easing the parties into the space where “in-group” patterns of social behaviour, co-creation and the ability to consider all interests as a basis for moving forwards:

Process design: Process can easily be part of the problem confronting negotiators. Conventional methods of negotiating should gradually be replaced by more creative options that naturally guide the participants into the concentric target zone of collaborative problem-solving. But seasoned professionals who have developed their preferred, if not entrenched, dialogue and persuasion styles can find this a difficult concept to accept. Conventional negotiation styles demand that the parties not only to negotiate the substance, but also to manage the process through which their communication and dialogue is conducted. They are unlikely to think about the emotional and anti-social patterns they might activate. This can greatly exacerbate an already difficult negotiation and unnecessarily turn it into adversarial experience.

In the New York negotiation with Gene related a few pages back, a very simple process entailing a mediator in the room with the parties and their lawyers, all sharing a meal before negotiating, worked wonders. The process was convened by the mediator. But Gene and I and our respective external counsel were able to allow our natural personalities to predominate, which enabled us to concentrate on the negotiation and how to reach a mutually

beneficial outcome, encouraged, even enabled, by the mediator (it was he, after all, who insisted that we eat first and talk later).

We tend to be unimaginative when considering negotiation process design options, even if they cross our mind. Most of us simply show up and rely on our self-inflated view of our leverage and powers of persuasion. But where negotiations are likely to be positional, tense, difficult or unpredictable, we need to maximize chances of starting off in the Tri O/S Target Zone. Chapter 7 covers negotiation process design in more detail and presents widely tried and tested ways to approach negotiation from a process perspective by focusing on the Tri-OS target zone of convergence to achieve more successful outcomes.

Formalities: In the preparation phase explored in Chapter 2, consider who should attend the negotiation, where or how it should take place, and what the environment should be. How do we prepare participants socially for a first meeting? Should the meeting happen in an office or off-site location? If we cannot meet physically, what electronic communication medium should we use? If meeting face-to-face, our turf or theirs? Should there be a dress code? Casual or formal? What about food: will meals be eaten together or separately? Should we discuss the menu or at least enquire about dietary preference? Should we stay over at the same venue or only meet there? What proactive steps can be taken when we first meet in person? How can we encourage optimal listening, that activates beneficial emotions and motivates positive relationships? How can we best avoid reactive devaluation where we reject offers purely based on who made them? How do we encourage joint "ownership" of the outcome?

Language: Nomenclature and labels are important. They trigger positive, if unconscious behaviour. Often in negotiations, especially where a conflict has arisen or the prospect is hovering over the parties, the negotiators are likely to allocate responsibility or blame to one-another. We frequently negotiate in a triangular pattern, where people are stressed, fearful, distrusting and primed through language not to empathize. Thinking and speaking using terms, like "sides", "us vs. them", "plaintiff", "claimant", "defendant" or "respondent", primes "out-of-group" and anti-social behaviour. Referring to the participants or their advisors as "our opponents" or "opposing counsel" does not encourage "in-group" behaviour. Asking for a "position paper" is hardly likely to prompt discussion on interests. Lawyers who think they are entering a positional process are more likely to interrupt,

fence and point score. While they focus on past facts, claimed rights and applicable laws (which is where their strengths lie), the participants' interests, emotions, relationships, social patterns and cognitive states of mind tend to be sidelined, even consigned to irrelevancy.

Words matter. In 2006, Dr Benedetto De Martino at the University of Cambridge conducted a now famous experiment where people were put into fMRI brain-scanning machines and told they had been given a fifty-pound note. One group was informed they could “keep £20” or that they could gamble, at low odds, to keep the £50. The other group was told they could “lose £30” or gamble, with equally low odds, to keep the £50. The only rational difference between these two groups were the words “keep £20”, and “lose £30” as the two propositions are mathematically identical. If the rational O/S 3 thinking system were to guide decision-making in both groups, the decisions should be the same in both groups. However, the behaviours exhibited by each group were very different, and the results showed that the decision was in fact pre-determined by the O/S 2 system. Since “keep” is a safe word, there is no triggering of fear but of safety, and the brain's pre-frontal cortex is enabled and activated upon hearing the word “keep”. Oxygen and glucose can be detected as being consumed in this area within a few milliseconds, before cognitive O/S 3 thinking kicks in. It is a pre-conscious, rapid way of thinking. Most people in this group did not gamble. With the other group, because “lose” is a fear word, the fMRI scans showed that the amygdala in the participants' O/S 2 systems were first activated. The activation of these amygdalae lead to a different cascade of networks in this group's way of thinking, one that was more willing to take risks. The result was that most people in this second group chose to gamble. All because of a single word, and how it triggered pre-conscious thought that, in a way, “hijacked” the O/S 3 system before it could be aware of how these words had unconsciously affected their cognitive abilities to think rationally.

This simple experiment helps us consider how to frame negotiation offers. Is an offer more likely to be accepted if expressed as a “keep” or as a “lose” proposition? In the statement: “*Here is my fantastic offer, take it or leave it*” the last five words negate the perception of autonomy or choice, and the possible true benefits of the offer, no matter how good it may actually be. It simply increases pressure and distrust. This is because fear, a sense of unfairness, social exclusion or being potentially deprived of autonomy, are sentiments that are likely to dominate and prevent a proper assessment of the

substantive merits of the offer. Who also carries the offer may sometimes have far greater impact than the substance of the offer itself.

Using appropriate language, such as "negotiation partners" rather than the "other side", or "we" as opposed to "they", may seem trivial, but choice of language and process can make an enormous difference.

In a Nutshell

- Understanding the basics of the Tri O/S model, the role of glucose and oxygen and how the brain's software operates is useful for dealing with the pressures of negotiating.
- Consider aiming for the notional zone of convergence between the three O/S systems, where people can feel safe, motivated by possible rewards, "in-group" and with comfortable status levels, and where they can think dynamically, cooperatively and seek options for mutual gain.
- There are numerous, practical, everyday things that negotiators can do to achieve this zone of convergence.
- Focus on setting up the negotiation process around the people and circumstances, rather than, as usually happens, forcing the negotiators to implement a conventional, default process.

ⁱ <http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=2027&context=facpub>

ⁱⁱ <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0001128>

ⁱⁱⁱ <http://www.mediate.com/articles/cloke8.cfm>

^{iv} "Stories Mediators Tell", (Eds. Eric R. Galton and Lela. P. Love), American Bar Association, 2012, p. 257