

3d Simulation for Transformational Leadership Communication **By Dr. Carlos A. Raimundo**

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Abstract

Research into what makes leaders effective continues to affirm the significance of self-knowledge and empathy Goleman and Boyatzis (2008). Similarly Raimundo (2002) argues that while knowing oneself and being able to empathise with others is essential , it is not sufficient. It is only when empathy is a *two-way process* wherein each person in a relationship is able to identify with the feelings of the other, that you have a strong foundation for leadership-followship attunement, behavioural change and conflict resolution. Moreno (1978) calls this double action, “Tele”. This paper describes the mentoring process of a Leader and her Finance Manager wherein the 3d simulation technology the Play of Life[®] is used to fast track *Tele*. The Play of Life[®] created Dr. Carlos A. Raimundo more than 20 years ago, is a practical, visual and experiential technology designed to promote insight, visualisation and simulation. Not being language dependent and employing a tactile means of representing issues, the method accelerates insight into one’s own behaviour, into the behaviour of the “other” and the interface between the two. It is used in the areas of psychotherapy, education and leadership for translating head knowledge into practical action. The author links what plays out during the mentoring process to what may be happening in the brain in terms of the stimulation of cortical and sub-cortical processes to maximise embodied simulation (Gallese 2009)

Understanding “Tele”

“If we want to survive, we must understand the actions of others”.

Rizzolatti, G. and L. Craighero

Humans are biologically programmed from birth to self protect. It is vital to be able to rapidly assess whether an encounter with another is safe or dangerous (Squire 2009, Damasio 2000). Like the humble Mollusc which retreats into its shell when it perceives danger, humans learn very quickly when to withdraw and when to attack in self-defence. Unlike molluscs which can live independently from its species from the moment of birth, humans must be linked to another mammalian source of food, shelter and nurturing in order to continue to live (Lewis 2001). As mammals, humans are biologically programmed to connect with others (Lorenz 1963, Dawkins 1976; Morris 1976). This innate sense of dependence on others helps humans to comprehend, through conscious and non-conscious processes, that one needs to understand the actions of others (Argyris, 1966,1071; Martin, 1993; Lieberman 2008, Rock 2008) and to moderate one’s own action in response, in order to survive and thrive.

Our brains, and those of other primates, appear to have developed a basic functional mechanism, embodied simulation, which gives us an experiential insight of other minds. The shareability of the phenomenal content of the intentional relations of others, by means of the shared neural underpinnings, produces intentional attunement. Intentional attunement, in turn, by collapsing the others' intentions into the observer's ones, produces the peculiar quality of familiarity we entertain with other individuals.

Gallese2009

The ability to effectively connect one with another appropriately within the context of any situation is deemed to be of such vital importance that society generally considers those on the disconnected end of the spectrum to be in “deficit”; to have a mental “disease”.

“The ability to understand the intentions associated with the actions of others is a fundamental component of social behaviour, and its deficit is typically associated with socially isolating mental diseases such as autism”.

Icoboni, (2000)

Icoboni’s statement points to the fact that society generally measures mental fitness by one’s ability to engage appropriately with another within a given context. What Gallese (2009) calls *Intentional attunement* parallels what Goleman (2002) cites as *Emotional Intelligence* and what most of us know as *empathy*. Moreno (1955, 1974; Stenberg and Garcia 1989, Martin 1093) define empathy as the “identification with, and understanding of another's situation, feelings, and motives”. Moreno also maintains that when empathy is a *two-way* process wherein each person interfacing has insight into the other’s feelings and behaviours, there is a strong capacity for flexibility, creativity and the spontaneity necessary for conflict resolution. This double action he calls “Tele”, an empathy of *double action*. Gallese (2009) calls the process of shared neural circuits acting as a common function *embodied simulation*. Embodied simulation mediates our capacity to share the meaning of actions, feelings, and emotions with others thus grounding our identification with and connectedness to others.

The discovery of oscillators, spindle cells and mirror neurons provided a neuro-physiological understanding of how consciousness of our own actions, the actions of others and “Tele” has relevance and effect on individual and social behavioural development. Their discoveries gave weight to the fact that being “in tune” with someone is not just a philosophical concept, it is a physical experience.

When two people are “in tune”, *oscillators* are firing; coordinating and regulating when and how their bodies move together. Annie McKee, as cited in Goleman and Boyatzis (2008) and Lewis (2001) calls this *resonance*. A good example of resonance is a couple seamlessly waltzing around the dance floor as if they were one entity or when several instruments play together in perfect time and harmony. *Spindle cells* affect resonance because they fire with information about how we feel about a person. They help people to assess whether someone is safe, reliable, authentic, competent, judgemental, and so on (Fajardo 2008; Von Economo & Koskinas, 1929). When an environment is deemed unsafe, the person responds with a reflex arc, involving sub cortical processes in an automatic and non-conscious way (Lewis 2001). In a split second, people can decide whether or not they want to even attempt to be “in tune” with another person. *Mirror neurons* are also key in the process of attunement and connectedness. As the name suggests they mirror and mimic the actions of others allowing us to put ourselves “in the shoes” of another person. They are the neurological mechanism that makes empathy possible. (Rizzolatti and Craighero 2004; Ramachandran and Hirstein 1999).

*Mirror neurons have particular importance in organisations
because leaders' emotions and actions prompt followers to mirror those feelings and deeds.
Goleman and Boyatzis*

The Relevance to Leadership

*“We believe that great leaders are those whose behaviour powerfully leverages the system of brain interconnectedness.”
Goleman & Boyatzis*

Applying neuro-physiological discoveries to leadership and followship, Goleman and Boyatzis (2008), Ringleb and Rock (2008) discuss what makes a good leader in terms of levels of *Social Intelligence*. Goleman and Boyatzis define Social Intelligence as a set of interpersonal competencies built on specific neural circuits and endocrine systems that inspire others to be effective. This means that when leaders exhibit empathy and become attuned to others it literally affects their own brain chemistry (Bowden et al, 2005; Ohlsson, et.al, 1984) and that of their followers. Lewis (2001) describes this as *Limbic Resonance*; two individual minds operate as if one system. The defining word here is “two”. Moreno, Buber, Mead (1964) and Levinas (1985) believe that the concept of “Self” is not an independent reality. It is a relational inter-dependent dynamic from which we cannot be divorced. Any intent therefore to study human behaviour in isolation is no more than a laboratory exercise (Moreno 1978). In other words, people don't become better leaders simply by becoming more self aware, more self disciplined and

more knowledgeable about the latest formulas for effective leadership. A leader may have a clear vision, a good sense of humour, be extremely articulate, and have an exceptional knowledge of systems and procedures and still not have Tele with followship. Transformation happens when leadership consistently interacts appropriately with followship for a period of time (Ruthven 2009). Furthermore in the course of those interactions, the power is managed so that the leader's influence happens in the context of respect for followship's individual and collective attitudes, values, and beliefs (Burns, 1978; Yukl, 1981; Kohs, 1960).

So, how do people translate head knowledge from a "What Great Leaders Do List" into practical action, without those actions feeling forced or fake, and without being perceived by followers as being unauthentic or even manipulative? (Clayton 1993, Rojas-Bermudez 1979) How do new leadership roles and behaviours become fully incorporated and sustained? C.A. Raimundo supports Moreno's belief that this can only be done through personalised and systematic role development. "Role" in this context does not refer to "playing a role" per se, as in "Leader", "Mother", "Friend", "Mentor". The term "Role" in this instance is what and how one person is doing in relation to another person at a particular place and time. According to Rojas- Bermudez (1979) the only way to relate to another is through a role and constructive relationships are formed through the consistent playing out of complementary constructive roles. The meaning of *constructive* refers to the appropriateness of the roles played out one with the other (Clayton 1992,3,4). E.g. When a manager plays the role of an *Encouraging Visionary* and the employee plays the role of *Inspired Facilitator*, both feel respected and common goals are likely to be achieved. Both roles are constructive, complementary and appropriate for the situation and context. Should the employee begin playing the role of a *Needy Child*, however, the roles are no longer complementary, nor constructive; reducing the chance of desired outcomes being met. Similarly, if the manager starts playing the role of a *Protective Father* in response to the *Needy Child*, the roles (in spite of being complementary) are not appropriate. For roles to be constructive they must be complementary and appropriate for the situation and context.

The exchange of appropriate roles forms "common ground"; a link (Rojas- Bermudez 1979). The link formed by the relationship of two complementary roles, is the channel (the locus) through which the interaction flows, enabling the role to grow stronger. Every time we relate through that link, constructive roles develop and mature. In turn, mature roles, consistently played, enable the relationship to succeed in more complex, challenging and demanding situations.

*The effectiveness of any relationship is in the link between the roles.
The "power" is between us!
Dr. Carlos A. Raimundo, Relationship Capital 2002*

Being aware of and purposeful in playing constructive roles at any given time is key to being a transformational leader. This doesn't always come naturally since we humans are influenced by cognitive bias (Croskerry, 2002 Schwenk 1988; Gordon 2008). We tend to play roles in an automatic and non-conscious way. We default to roles and behaviours that are known and familiar (Friedman, 1985, Rugg and Yonelinas 2003). Furthermore, the mental constructs we create to block feelings and justify our actions, make behavioural insights difficult to access. Even the

constructive roles leaders identify as being ones they would aspire to play, may not be well developed or may never have been played by them before. The good news is, poorly developed roles can be grown and new roles can be created (Rojas-Bermudez 1978). The following is a practical example of Leadership Transformation through the use of the 3D simulation method, The Play of Life®

Mentoring Lorraine

Lorraine is the head of Marketing in a global organisation. The elite team that reports directly to her is small so every relationship counts. She is recognised as a pro-active person who against all odds will make things happen; a trait highly valued and supported by her superiors. At the same time, Lorraine is feared by both team members and superiors. They see her as abrupt and insensitive. Behind her back, she has been given the nickname “Terminator”. Referring to Lorraine, one of her ex-employees was quoted as saying, “I’ve never seen anyone so well equipped as Lorraine is to reduce someone to ashes in seconds.” No one dares to confront her. People take sick leave to recover from one of her assaults or they leave altogether. In spite of the high staff turnover in Lorraine’s department, senior executives have chosen not to address it head on, mainly because the performance of the department remains strong; bottom line results are consistently good.

Lorraine has recently come under pressure to do things differently for other reasons. Her Finance Manager, Jack, is overtly unsupportive of her and at times deliberately evasive. Under normal circumstances she would let him go (or pressure him to resign) but as she has fired three of Jack’s predecessors in the last six months, she’s running out of options. As Finance Manager, Jack is fully competent in what he does. Lorraine’s department works on a very tight budget, so fine-tuned financial management is integral to her success. Lorraine decides to hire the services of a mentor to work on Jack’s “communication skills”. She briefs the Mentor on the situation as she sees it:

“Jack is efficient in his role but he is evasive and withholds important information from me. For example, he completes reports on time but doesn’t hand them over immediately. I see him communicating well with others and people find him very approachable but with me he is deliberately distant and non communicative. I can’t talk to him. I don’t want to lose him but if he continues like this he has to go.”

When the mentor meets with Jack, he discovers that Jack is happy with his role and the company as a whole, but he can’t tolerate the way Lorraine treats him and the other team members. He’s considering resignation. He tells the mentor that he has tried on two occasions to discuss his level of uneasiness with Lorraine regarding her management style but was abruptly cut off each time.

In the Mentor’s proceeding meeting with Lorraine, it is apparent she is not aware of how she is perceived by others nor of the extent of the effect this is having on her team members. She is acutely aware that the turnover in her department is very high but tends to blame the other person: “People are inept, jealous of me, or a combination of the two,” she explains. This is what is called her “cognitive bias”, the brain’s way of coping with not feeling it has control over a situation. To consider that she may be the culprit is too difficult for Lorraine at this point in time.

Lorraine is in fact a focused and dedicated leader, motivated to staying informed about what constitutes effective leadership and management. She downloads the latest podcasts on the subject and meditates for 20 minutes a day to “stay centred”. She describes this as a “sacred space” for her, at which time everyone in the team knows she’s totally unavailable. She regularly meets with a leadership support group where she says she enjoys sharing her experience and advice with peers.

During the same discussion with the mentor, Lorraine mentions her heartfelt desire to help both people and animals in need. She shows the mentor the photos on her desk of the children she sponsors in third world countries and there is a small poster on the wall campaigning against cruelty to animals. Lorraine also proudly displays a framed photo of her two adolescent sons. Clearly this person has a soft heart and good intentions for treating people well but there is a kind of social disconnect when it comes to empathising and interacting appropriately with others in the workplace. She’s totally unable to “walk the talk” and is not conscious of not being able to do so. We can assume based on Lorraine’s story that her hunger for knowledge about leadership feeds her cognition but does not contribute insight into her own behaviour. She also does not accurately read others’ responses to that behaviour. Lorraine’s qualities and capacity for leadership is helpful but not sufficient. She is reaching expected outcomes at the expense of her Talent who are operating under high stress and low motivation. Lorraine demonstrates poor Social Intelligence.

Lorraine has been gingerly approached several times by HR and other consultants regarding her management style but any attempts to engage Lorraine verbally were unproductive. She believes her way of working is the only way to achieve targets and satisfy stakeholders. When she was debriefed on her personality profiles regarding her aggressive, protective and controlling behaviours, her response was: “I like this- you can’t be wishy-washy and get the job done.” End of discussion. Weighing up which approach to take in this situation, the mentor proposes a meeting with both Lorraine and Jack wherein a 3d simulation method called *The Play of Life*[®] will be used. The aim of the method is to stimulate motor neurons in order to access sub-cortical functions and to bypass strong cognitive biases which often surface as cortical verbal rationalisations. The method looks simple but is not simplistic. The process is designed to be respectful, engaging and insightful; guiding “players” through a process designed to leverage brain interconnectedness.

Fairly quickly into the session, without encouraging too much talk beforehand, the mentor asks Lorraine and Jack to visually represent, simultaneously, how they see the current situation using three-dimensional figures and props. Each person positions the figures on an A4 sized template displaying two distinct squares; one in which to depict the “Present” work situation and in the other, an “Ideal” working relationship. The mentor is using a technique called, “Panning for Gold”. As the name suggests, this is a technique to use in situations of animosity or mistrust to assist people find some common ground. Lorraine and Jack work independently, following the mentor’s directions. Lorraine appears restless; unwilling to give her full attention to the exercise. She manipulates the figures with one hand only, while casting side glances at Jack’s 3d representation and checking for the mentor’s reactions. The

mentor asks her to use her two hands to manipulate the figures. This helps her to relax and to focus her full attention on her representation of what is happening between her and Jack.

When both the “Present” and the “Ideal” representations are complete, Lorraine and Jack are asked to share what they have depicted. Lorraine volunteers to go first. In her depiction of the “Present” situation, Lorraine has placed herself in the middle of the square (Fig 1.1) with one hand raised and the other one extended towards Jack. She has placed Jack in the corner facing away. There is no one else on the stage. She identifies that the picture represents her frustrated, hurried state desperately telling Jack to produce a report. Lorraine gets an immediate insight-



“This is me!” she says, “Wow, not a very nice person to be with!”

She describes the role she is playing as *Desperate, Frustrated Achiever*. The mentor asks for some clarification- “What is the figure representing you, *literally* doing?” he asks. Lorraine thinks for a moment and says:

“This person is *demanding a response*.”

“What role is this person playing?” asks the mentor.

“This person is playing the role of *Desperate, Frustrated Demander*.”

Lorraine describes the other person’s role (Jack’s) as a *Dismissive Avoider*.

After a deep breath and now noticeably beginning to speak more calmly, Lorraine describes her “Ideal” picture which she has entitled, “Life to Hope For”. In this depiction, she has represented herself as sitting down (Fig 1.2, Fig 1.2a), facing Jack. The team is also represented as part of the picture now. She comments that her figure is feeling “peaceful, not hurried and connected” and describes her role in the “Ideal” as being a *Peaceful, Not Hurried Connector*. The other person is described as an *Engaged Colleague*.



“I like this!” she says, “I wish I could live like this but I can’t - not even on holidays. If I did, nothing would be achieved.” This is another of her cognitive biases; a disempowering belief (Ellis 1951; Morrison et. al 1997; Porte 1997).

Lorraine is then invited to consider what in the “Present” picture needs to change, in order for the present scene to resemble more closely what is represented in her “Ideal”. She quickly turns the figure of Jack around to face her

figure. “I need Jack to communicate with me!” she says. The mentor then asks her if she believes that this may happen spontaneously or in the near future.

“No,” she replies. Looking at the figure that represents her with one arm raised and the other extended towards Jack she adds, “Especially if I continue like this.”

The mentor asks Lorraine to project herself into the person she has turned around and to describe what that person would see.

“A demanding figure,” she says. “Actually, seeing that would make me want to turn around again.”

This insight of Lorraine’s would be very difficult to achieve by means of verbal communication alone. The use of 3d simulation fast tracks the process of “Role Reversal” which Moreno refers to as empathy; the process of stepping into someone else’s shoes (Ringleb and Rock 2008). Lorraine has now been able to empathise with Jack.

A meeting of two: eye to eye, face to face. And when you are near I will tear your eyes out and place them instead of mine, and you will tear my eyes out and will place them instead of yours then I will look at you with your eyes and you will look at me with mine.
J.L. Moreno

The mentor then invites Lorraine to return the figure representing Jack to its original position and to consider what the figure representing *her* can do to make the “Present” picture more closely resemble her “Ideal”.

“What small first step can *you* make?” the mentor asks. Lorraine lowers her figure’s arms.

“This is difficult,” she says.

The mentor asks her what *putting the hands down* means in real life. Lorraine ponders for a moment and then says, “It’s about trusting. It’s trusting that Jack will do his job.” The mentor asks Lorraine to repeat her figure’s “First Step” a few times to simulate and potentially incorporate the new desired behaviour. The repetition of the movement prompts Lorraine to add, “You know, I think I can do this.” The Play of Life often reveals that actions perceived to be difficult are in fact surprisingly possible to execute, especially if done repetitively, consistently and for a period of time.

Jack has been watching Lorraine in amazement. He tells the mentor later, it was like being with somebody he didn’t know. He was moved by Lorraine’s sincerity. It’s his turn to share what he depicted three dimensionally. In the “Present”, he has placed a figure representing Lorraine (Fig 2.1) on a small block with her hands lifted. He has chosen the figure of a child to represent himself in this situation. Other children are also in the picture representing the team. He describes himself as feeling “diminished, unable to develop his skills and unable to be himself”. At that moment, Lorraine interrupts:



“You feel like my child?” She makes eye contact with Jack, “That’s not good, is it?”

The mentor asks Jack what roles are being played out. Jack describes the figure representing himself as a *Resentful Shrunk Reactor* relating to an *Overpowering Crusher*.



Jack entitles his “Ideal” picture as “Supportive Partners”. He is standing up (Fig 2.2, 2.2a) with Lorraine beside him. There are other adult figures representing the team in unity. In this position Jack says he feels “present, able and relaxed”. He describes his role as an *Effective Associate* relating to a *Supportive Partner*. Lorraine interrupts again:

“This is what I want!”

The mentor then asks Jack what in the “Present” picture needs to change, in order for the scene to become closer to what was represented in his “Ideal”. Jack admits, his first thought is to make the figure representing Lorraine come down off the block with her hands down but he now knows that, playing by the rules of this game, he needs to come up with a “First Step” of his own. He chooses an adult figure from the Play of Life kit and replaces the child figure he first chose to represent himself with the adult figure. “I need to just be me”, he says. He considers that this might not be too difficult to do.



Understanding the Process

The physical manipulation of the figures seems to have stimulated mirror motor neurons (Rizzolatti, Fadiga, Fogassi and Gallese, 1999) and oscillators (Goldman and Boyatzis 2008; Penttonen and Buzsaki 2003) in both Lorraine and Jack. As previously mentioned, mirror neurons and oscillators coordinate people physically and are capable of generating rhythmic activity. They create a synchronicity. During the session Lorraine indicated that she suddenly had a picture of how her behaviour was affecting Jack. She also created a visual picture of how she might do it differently. Hence, these are not imposed roles and behaviours, they are those she and Jack created in their “Ideal” representations. Lorraine has created, as she described, “A New Life to Hope For”. In response, Jack has identified and simulated the role of “Effective Associate” as one he would like to play. Both have responded to 3d Simulation technology, fast-tracked insight and empathy and thus improved their Tele. This is the cornerstone from which to continue the process of sustainable behavioural modification. For this to occur, a person needs insight, visualisation and opportunities for simulation (Liebermann 2007, Gordon 2007) of new behaviours until they are incorporated. Furthermore, all of this needs to be in a personalised context (Gordon 2008). Lorraine and Jack, in a short period of time have:

1. Gained personalised insight into their current behaviours:

Lorraine: "I'm playing the role of *Desperate, Frustrated Demander*... You feel like my child! That's not good, is it?"

Jack: "I'm playing the role of a *Resentful Shrunken Reactor*"

2. Made an on-line visual picture from an off-line visual image (already existing in the brain) of the way they would like to relate to each other.

Lorraine: "It's about trusting Jack to do his job."

Jack: "I must be myself"

3. Simulated desired behaviours to strengthen new neuro-pathways.

Lorraine: "You know I think I can do this."

Jack: "I need to just be me"

Three conditions must be present for a new behaviour to be incorporated: consistency, repetition and a period of time (Gordon 2007). In this setting, Lorraine has had the opportunity to simulate a new behaviour in a *safe* "off Broadway" setting. Feeling "safe" is the operative word here. An uncomfortable but not uncommon professional situation has been objectified sufficiently for both parties to feel safe enough to depict and articulate personal feelings without defaulting into rationalisation mode. Seeing her own depiction of the situation with Jack, Lorraine's response was "This is me! Wow, not a very nice person to be with!" – a remark in stark contrast to her previous response to her profile, "I like this- you can't be wishy-washy and get the job done." Previously, when Lorraine was invited to reflect on her behaviour, predictably she would have felt threatened, criticized and possibly even a failure. When anyone's behavioural constructs are challenged (and when we are unable to accept what others see in us) the response is likely to be one of withdrawal, defence or attack (Damasio 2000, Squire 2009). Like the humble Mollusc which retreats into its shell when it perceives danger, humans learn very quickly when to withdraw and when to attack in self-defence. Not surprising then that Lorraine became dismissive and defaulted into justifications for doing something that seemed natural and logical. Processed by the Brocca area, verbal communication works with information available and accessible at any specific point in time. As Varela-Maturana (1998) said, "*We don't know what we don't know*" It is logical then that Lorraine could only express what she *did* know to be the truth as she saw it albeit through the lens of her own cognitive bias. The 3d simulation approach, utilising a para-verbal language, guided Lorraine through a process by which she felt in control and "contained" long enough to hush the verbal rationalisations, allowing personal insights to hit home.

Lorraine has been following a known, familiar pattern of behaviour that so far, has been "effective" in achieving her work targets but has been negatively impacting the way she lives, "even on holidays". This cognitive bias has been impeding her openness to advice on doing things differently because she was unable to "see" and experience the need to change. Lorraine has been feeding her cognitive system in the best way she knew how but even her daily meditations and dedicated reading about leadership are *off-line* visualisations. Off-line visualisations bring to mind images of what we already have from mnemonic gestalts and life experiences- a closed circle without new input - a

cognitive, neo-cortical based process very often formed by experiences and personal mental constructs. The Play of Life seems to facilitate a personalised external and tactile on-line visualisation that gives the mind safe access to new information. Lorraine needed to feed her cognition with new experiences to create new anagrams of information. Without any imposed intervention of what she should or should not do as a leader, Lorraine accepted new information without defence or rejection. A new gestalt has been imprinted.

Undoubtedly, knowledge feeds our intellect and increases the arsenal of tools needed to deal with different situations in life. But knowledge does not necessarily increase our wisdom.

Dr. Carlos A Raimundo

There is a fascination about knowing about the brain. The risk is that this may create more informed brains but not necessarily more engaged people who are emotionally and socially intelligent. “Knowing” is not necessarily linked to knowing what to do, what role to play, in a specific situation. Having “leadership qualities and capacity” is helpful but not sufficient. Achieving bottom line outcomes is essential but again is not a measure of effective leadership- Outcomes can be reached on the backs of high levels of employee turnover stress and staff turnover. We don’t need more people, executives, leaders, teachers or parents who just “know” more, we need more people who can act better ... and this “acting better” encompasses oneself, the other and humankind. The good news is that this “acting better” towards one another, this “Tele” can be learnt!

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