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CHAPTER 15

Systems Intelligence and Its Relationship to Communication Theories

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This paper discusses a new theory, Systems Intelligence, and discusses its implications for and overlaps with the field of Communication. Given the prime role Communication plays in the field of Leadership, to really understand the latter, one must first come to grips with the former. The nature of Systems Intelligence is discussed, along with its relationship to Systems Thinking and the importance of personal beliefs. Several well known Communication theories are shown to have some theoretical overlap with Systems Intelligence, indicating the potential for research which combines such theories and Systems Intelligence.

Introduction

Picture a relationship between two adults. Consider how we typically envision and discuss relationships. We often talk about each other's state of happiness, needs, and demands. In times of conflict, we might be thinking about each partner's preferred outcomes and feelings. In other words, we typically see relationships as a dichotomy, where the two entities are separate but intertwined, perhaps visualised as a double helix. Yet, is this double helix in itself not an entity? Is there not a third party in partnerships? This third party is the relationship itself, the couple – an entity that is more than just the sum of its parts; an entity that both affects and is affected by its interacting parts. Together, the couple and the individual partners comprise what is known as a system.

Let's extend this even further. If we accept that there are three parties in a couple's relationship – each person and the relationship itself – then we need to accept that communication within the couple is influenced by more than just each person: it is influenced by the system too. When each partner makes a decision, or the partners together make a decision, they need to consider not only what's best for them individually, but also what's best for the relationship. Each partner will have beliefs about and perceptions of the relationship. They are likely to have preconceptions about "where the relationship is going" and what their roles are within the relationship. Hopefully, their views of the relationship, that third party to their interaction, overlap significantly.

This common experience of being in a relationship, and the relative ease with which we can accept that, yes, there is more than just the interaction between two people at work, provides a good illustration of the importance of a new theory, Systems Intelligence. This is a theory which has far-reaching implications for many fields, including leadership. However, many authors agree that managing meaning is the primary role of the leader and that central to managing meaning is communication (Fairhurst and Sarr 1996; Jablin and Putnam 2001). This paper introduces the concept of Systems Intelligence and discusses how its acknowledgement of the universal presence of systems within our lives motivates their consideration relative to several well-known communication theories.

Systems Intelligence

Systems Intelligence is a term coined by the joint research efforts of Raimo Hämäläinen and Esa Saarinen of the Helsinki Systems Analysis Laboratory, and explored in their work *Systems intelligence: Discovering a hidden competence in human action and organisational life* (Hämäläinen and Saarinen 2004). It is a term that combines the concept of intelligence, in multiple forms, with the structure of systems thinking. Hämäläinen is a leading figure in decision making and game theory and Saarinen is a well-known Finnish philosopher. Together they have developed a holistic approach to placing the individual in context with others and the systems that they belong to, and proposing that the individual operates within their context with a greater or lesser degree of intelligence.

Systems Intelligence provides the link between Senge's personal mastery and systems thinking.

Their work is informed by, and seeks to extend, the work of Howard Gardner and others. Gardner proposed in the 1970s the concept of multiple intelligences (Gardner 1993). He challenged the traditional notion of IQ and suggested that intelligence is a far more multi-faceted concept than the ability to score well on mathematical and linguistic problem solving exercises. He rather suggested we could also talk about intelligence in musical, spatial, personal and other fields. This work was further extended more recently by Daniel Goleman who extended and popularized the concept of emotional intelligence (Goleman 1995). Emotional Intelligence refers to a person's ability to perceive, assess, and manage the emotions of one's self, of others, and of groups.

Saarinen and Hämäläinen also draw heavily on the work of Peter Senge, and other practitioners of Systems Thinking. In *The Fifth Discipline*, Senge proposed Systems Thinking as the key discipline in creating learning organizations (Senge 1992). The growing complexity of the world and the interconnectedness of aspects of life, according to Senge, mean we can no longer continue to break apart problems and focus on specific issues. Our tendency to treat things as discrete entities results in a loss of two things: the ability to see the whole and the ability to foresee the consequences that action in one area will have in another. He argues for the need for individuals to change their perception and see themselves as separate from the world to intrinsically be connected to it. Rather than simply react to events, or even look for patterns of behaviour, we should examine the structure that is producing the patterns of behaviour. However, where Systems Thinking focuses on an objective modelling of the wholes and perspectives it conceptualizes, Systems Intelligence has a more personal emphasis.

In fact, Hämäläinen and Saarinen see Systems Intelligence as providing the link between Senge's personal mastery and systems thinking (Hämäläinen and Saarinen 2004). The concept of personal mastery, according to Senge (1992), is a process rather than a product. People with a high level personal mastery are able to reflect on what they want, and where they are relative to what they want; the gap between this vision and reality Senge terms "creative tension" (1992, p. 142) . They

are able to generate and sustain creative tension and thus lifelong generative learning. They focus on the rewards of the journey over the destination. People with a high level of personal mastery are able to combine intuition and rationality; even though they may not be able to explain their decisions they instinctively know when what seems obvious won't work, and when what seems ridiculous will. For Hämäläinen and Saarinen that instinctive ability to see beyond the surface to the deep structure and, furthermore, the individual's ability to take personal responsibility for their actions in the system as they acknowledge their interconnectedness with it, are Systems Intelligence. "Systems Intelligence is Systems Thinking having become an integral part of a person's Personal Mastery" (Hämäläinen and Saarinen 2004, p. 16).

There are several key similarities and differences between Systems Thinking and Systems Intelligence. In terms of similarities, both theories approach people and their environment as interconnected and interdependent. Both see the world as composed of systems and want to examine these as whole entities. Both concede that these whole entities are, however, mental constructs and thus the boundaries of a system are capable of being redrawn. But, Systems Intelligence looks to embrace and drive change rather than to describe and account for it. It is outcome oriented in a way that Systems Thinking is not. "Unlike Systems Thinking, Systems Intelligence is a capacity in the human being that involves instinctual, intuitive, tacit, subconscious and unconscious and inarticulate aspects that cannot be straightforwardly reduced to a full-fledged and transparent cognitive dimension" (Hämäläinen and Saarinen 2004, p. 16). Thus, Senge seeks to teach managers to reframe their problems and, rather than blame an external cause, realise that they and their problems are part of a single system which requires analysis. Conversely, Systems Intelligence considers that some people have an intuitive ability to operate effectively in systems and that these people are able to instigate systemic change. Systems intelligent individuals are able to acknowledge the invisible parts of a system, are adaptive and sensitive to changes in their behaviour, are capable of understanding changes in the structures of the system and are then able to revise their behaviour accordingly (Hämäläinen and Saarinen 2004).

While Systems Thinking is largely a quite technical academic theory, Systems Intelligence places the individual firmly within the system and firmly within real life. It looks for a pragmatic approach to interaction from within the system, examining how the individual responds to feedback in a manner that promotes successful interaction and modification of behaviour. To continue with the example of a relationship, it looks at how each member of "the couple" negotiates their own needs, each other's needs and the needs of the relationship and how each person modifies their behaviour to achieve these.

The Nature of Systems

Let us begin our exploration of Systems Intelligence by considering the term system. What is a system according to Systems Intelligence? One of the core beliefs of SI theory is that while people perceive of themselves as separate individuals existing independently, they are in fact part of a series of complex systems. They are part to a whole, and the whole is more important than the parts. For SI, a system is built as much by the interconnectedness of its individual elements as the individual elements themselves. The system also has the power to generate, and to generate beyond what its elements can produce. The system has its own emergent features, which cannot be reduced merely to the features of its individual elements. However, though the system has primacy over its components, those components can influence the nature of the system. This is one of the core concepts and areas of applicability for Systems Intelligence, and, we suggest, for the field of communication. Examples of systems that we operate within include from the micro to the macro, from our family to our workplace, society and to the global economy (Hämäläinen

and Saarinen 2004). Systems may be as concrete as an organization or traffic, or may be as abstract as parenthood and friendship.

Having established what a system is, what then are the effects of belonging to the systems of our lives? For Hämäläinen and Saarinen, the effects are primarily seen in behaviour. There are three basic tenets underlying a system: structure produces behaviour; beliefs regarding structures produce behaviour; and beliefs regarding the beliefs others have regarding structures produce behaviour.

What does this mean? In effect, our behaviour is influenced, largely unconsciously, by the structure we operate within, our own view of that structure and what we perceive others to believe. For example, in the workplace we might communicate with our superior based on the culture of our organisation, our own view of our place within the organisational hierarchy, and what we believe the expectations of our supervisor are regarding how we will interact with them. Yet, Hämäläinen and Saarinen state that both the system itself and our perception of the system can be flawed. If our behaviour is a response to flawed perception then we can go on enacting behaviours that we would change if we could see the bigger picture; thus we self-perpetuate the flaws of the system itself. They also point out that there is not necessarily "an external reason for the particulars of a system, yet people in the system can feel helpless regarding their possibilities of changing the system." (Hämäläinen and Saarinen 2004, p. 11). Systems, then, are structures that influence our behaviour, but also our perceptions and values. They are at the core of how we behave and what we believe.

The Importance of Beliefs

Systems Intelligence requires us to call into question our beliefs. We need to recognise that what we believe as fundamental is in fact a reflection of our experiences, and our beliefs "are also influenced by highly idiosyncratic coincidence." (Hämäläinen and Saarinen 2004, p. 17). Our beliefs reflect particular incidents in our lives. Not only do we accept that our beliefs are at the core of us, we also project this onto others, assuming that we know what other people believe, an assumption of shared values. For example, we may presume that because our colleague is the same colour, age and works in the same organisation as us they will share our belief that fraud is morally wrong. Yet what real basis do we have to make that assumption? Or, we may believe that monogamy is a given in relationships and not even consider that our partner does not share that belief.

Another important point is that "one's beliefs might seem unchangeable and yet they can be subject to massive redefinition in an instant" (Hämäläinen and Saarinen 2004, p. 18). The death of a friend, the discovery of a betrayal by a loved one, involvement in an accident – all these can result in the restructuring of our beliefs and the adoption of new behaviours. Because Systems Intelligence involves people, it always involves beliefs. Hämäläinen and Saarinen propose that belief management and belief leadership will become cornerstones of the theory. The Systems Intelligent individual "can manage their own belief systems, the belief systems of others as well as the systems these beliefs systems together constitute, better than those low in System Intelligence" (Hämäläinen and Saarinen 2004, p. 18). They point out three critical dimensions of Systems Intelligence:

(1) Thinking (believing) about one's own thinking (and believing), and realising the opportunities therein.

(2) Thinking (believing) about what others are thinking (and believing), and realising the opportunities therein.

(3) Thinking (believing) about the interaction systems, rituals, social habits and their chains, and realising the opportunities of influencing those systems. (Hämäläinen and Saarinen 2004, p. 18)

The ability to reflect on one's own behaviour and reframe beliefs is key to high Systems Intelligence, as the more typical tendency is to adhere rigidly to a particular perspective (Hämäläinen and Saarinen 2004). We cannot limit ourselves to questioning our own beliefs and practices, however. We must also view the world through the perspective of others, a concept SI shares with Emotional Intelligence.

The Individual, the Other, and the System

"Systems thinking starts when a person looks at the world through the eyes of another person," according to West C. Churchman, one of the founders of Systems Thinking (1968). "Exploring the views of others is one way to grasp features of the system in a given situation, and to understand one's own input into the system," according to Hämäläinen and Saarinen (2004, p. 20). To explore the viewpoint of others, we might employ some of the standard techniques of interpersonal communication: active listening, reading body language, using dialogue, using Senge's inquiry mode. Yet, these techniques are not enough, according to Systems Intelligence. Let's take relationship counselling as an example. We might reflect upon our own behaviours. We might learn to see through the eyes of our partner. But as we have already considered, we are not always directed to view the relationship itself as an entity or a system. We and our partners are only parts of the whole, and the whole is greater than both of us. SI argues for the need to place interactions in their greater context. Each partner's beliefs and perceptions about "the relationship" are as important their ability to reflect on each other's behaviour. However, in typical "bipolar subject—object thinking, the person either perceives him or herself to be a subject that acts upon an external system, seeking to cause an impact, or else the environment as a subject acts upon him/her as an object." (Hämäläinen and Saarinen 2004, p. 21). This immediately restricts behavioural options. Instead, a holistic viewpoint needs to be adopted – a recognition that one is a part of the system both affected by and able to affect the wider structure, and interconnected with others in the structure.

The ability to see oneself as a part of a system means an awareness of how one's behaviour (and change in one's behaviour) impacts on others; how feedback on one's behaviour is received from others; and the impact of the current system on everybody. It also means recognition of one's own and others' current behaviour and the patterns behind those. There is also an aspirational component, in that the Systems Intelligent individual can envision the state they would like to share with others, and further extend that to envision the ideal that we are likely to share (Hämäläinen and Saarinen 2004).

Changing the System

An underlying premise of Systems Intelligence is that individuals can have an effect on the system. They can not only have the effect of perpetuating the system, but can also, by a small change in behaviour, alter the system in profound ways. In order to do this purposefully, the individual needs to be Systems Intelligent. They need to be aware of the existence of the system and its structure. They need to understand the impact the system has on the individuals comprising it. They need to be aware of their own place in the system and they need to have the ability to see with another's eyes. Systems Intelligence avoids conceptualising human behaviour as linear cause and effect reactions and viewing individuals as separate units rather than parts of

the same whole. Instead, it invites us to view the world and our place in it as part of a series of connections and interrelations.

Systems Intelligence is themed around "know how" rather than "know that". It is not a body of knowledge that can be imparted to individuals to make them better people; it needs to be put into practice. We can learn about Systems Intelligence without becoming Systems Intelligent. Yet it is a challenge for personal learning, in that it encourages us to embrace and drive change, not for its own sake, but with the goal of improvement in quality of life. SI has a philosophical underpinning in that it assumes the Systems Intelligent person thinks beyond the boundaries of their own ego. The person who is willing to act systems intelligently is attempting to improve the system, not just for their own benefit, but for the benefit of all parts of the system and for the good of the system itself (Hämäläinen and Saarinen 2004). A good analogy here is the green consumer, who changes their purchasing behaviour to planet friendly products in the belief that they are "making a difference" to the future health of the planet. A highly systems intelligent green consumer will take this even further – they will look at exactly which companies they are buying from and analyse if their products are truly green or if it is just a marketing ploy. They may also campaign to change the labelling of products, thus bringing about a change in the system as a whole. Or, to revisit our couple, they might choose to spend a day together rather than apart, even if they both have attractive alternative activities, recognising that the relationship itself needs nurturing.

To return to the underpinning concept of belief, a crucial component of SI is the recognition that beliefs can be changed. As Hämäläinen and Saarinen say, "They can be changed dramatically, massively, instantaneously and with incremental input."(2004, p. 23). A change in belief can dramatically change the structure of the system. A small intervention can have enormous leverage in the system itself; for example, here in New Zealand one bicycle accident, resulting in a brain damaged son, led to a mother's campaign that changed bike helmet laws. Yet just as a positive change in belief can impact the system, erroneous beliefs can uphold the system. If individuals within a system have an incorrect perception of what others believe, the chances of cooperation are limited. Systems Intelligence, then, asks us to be humble, to admit we may be wrong in our perceptions and assumptions about others' beliefs. Correspondingly, a small change in our own behaviour may lead others to reassess what they believe about us. If all agents in the system are willing to readjust their beliefs there is a "possibility of a cumulative enrichment and improvement" (Hämäläinen and Saarinen 2004, p. 23). This strong relationship between beliefs and behaviour is well explained in the Theory of Reasoned Action (Fishbein and Ajzen 1975), which shows the relationship between beliefs, attitudes, intentions and behaviour.

If intervention from within the system, through such things as flexibility of belief structure and behavioural change, is one way of changing it, what are other ways? There can also be intervention external to the system – perhaps a natural disaster, a death, a new technology. Change can also come from altering the nature of the relationship. For example, a collegial relationship that got off on the wrong foot, that is then altered, is likely to affect the dynamics of the entire staff. System change can also be planned and deliberate. It might also arise through communication with other members of the system, who collectively agree to an alteration. What is clear is that a fairly small alteration can have a tremendous leverage on the system.

Unfortunately, the opportunity for leverage often goes unnoticed. We see ourselves as mere cogs in the wheel – rather than think of ourselves as "contributing agents of an interactive system" we feel we lack influence, and are limited by others and the over-riding system (Hämäläinen and Saarinen 2004, p. 27). We fail to see how this mode of thinking itself contributes to the system's oppression of the individual. By believing we cannot a make difference we create our own reality. In bad relationships, we feel as though we are trapped in patterns of behaviour. Yet if the

feedback loop was one of possibility of change and growth of the individual and the system, the possibilities for improvement become endless.

However, most human systems push "people down rather than up as individuals and as group members" (Hämäläinen and Saarinen 2004, p. 27). We tend to focus on how we are treated within the system, rather than how we treat others. We may feel repressed and insignificant within the system. For example, if we feel our effort is unrecognised at work we are less inclined to praise the efforts of others (I got no recognition, why should they?) and we may also punish the system (I am not going to work as hard now as I receive no reward). The Systems Intelligent individual would look at ways to alter the system or their own behaviour within it, rather than just repeatedly react to this imperfect system. We also tend to assume from people's behaviours that that is what they are more generally. If someone is loud and rude in our workplace, we assume they are loud and rude everywhere. In fact, that may just be their pattern of behaviour solely within that particular system. Finally, it is difficult to be the lone wolf. If the organizational culture encourages negativity, it is hard to maintain a positive attitude in the face of repetitive misery. "A key conviction of…Systems Intelligence Theory is that all human systems have a tendency to slide towards the negative, unless a conscious and creative effort is launched to counterbalance the tendency" (Hämäläinen and Saarinen 2004, p. 28).

What emerges is what Hämäläinen and Saarinen call the *System of Holding Back in Return*. It is a slightly more sophisticated manifestation of "I have the right not to be nice to you since you have not yet been nice to me". Consider the partner who thinks, 'if you speak to me like that I'm going to stop talking to you'. This negative spiral is about a duality – my needs are not being met so I am not going to meet yours – rather than a system, where the needs of the couple would be taken into account. Even when the majority of people dislike the prevailing system, they simply adjust to it and adopt its characteristics because they believe it cannot be changed. A Systems Intelligent person recognises the pattern and recognises their ability to influence it.

Systems Intelligence and Communication Theories

Communication is the process which builds the systems we live in and the process by which change is effected. It is the process through which we interact with others in the system and the system itself. It is therefore central to Systems Intelligence. Conversely, Systems Intelligence also appears to be central to communication. Communication does not take place in a system vacuum. Communication on all levels occurs within systems. On an interpersonal level we have the systems of our friendships, relationships and families that we operate within. At an organizational level, we have the departments within the organization, the organization itself, the industry, the society and so on. In the mass media, we have the systems of the media organizations, the culture, the country. Systems, as defined by Systems Intelligence, encompass all types of communication.

How, then, can we introduce Systems Intelligence to communication theory? One way is by considering ontology and epistemology. Systems Intelligence theory combines the objective and interpretive approach to research. It has the behavioural scientist's desire to describe human conduct as occurring because of forces outside of human awareness, but has the interpretivist's belief in attributing behaviour to conscious intent, allowing for the individual's decision to respond differently if desired (Griffin 2000). Systems Intelligence in relation to communication theory seems particularly relevant to the interpretive approaches. There is congruity with the socio-cultural approach to communication, which posits that reality is produced, maintained, repaired and transformed through the process of communication. SI also allows for the individual to effect and affect the systems they inhabit. The critical approach to communication seeks to

stimulate more demanding ethical conduct and reflective social action. This resembles the idea of the good life and the loss of ego-driven action inherent in SI. Finally, the phenomenological approach to communication theorises that authentic human relationships are possible through dialogue only when both parties' agenda is to understand what it is like to be the other (Griffin 2000). So too, SI relies on the SI individual to be able to see with another's eyes.

There are also several communication theories which touch on key aspects of Systems Intelligence. The Interactional View of communication, as discussed by Paul Watzlawick and the Palo Alto group (Watzlawick et al. 1967; Watzlawick et al. 1974; Watzlawick 1978), looks at the family as a system and at how the behaviour of one family member can only be understood by examining the communication patterns of all the members. Watzlawick et al. (1967) discuss how family members are involved in tacit collusion to maintain the status quo, much as SI refers to people adopting the behaviour of the system. From organizational communication theory, the Information Systems approach (Weick 1969, 1995) emphasises interconnectedness and acknowledges the role of feedback in the double interact. It also promotes action over inaction, as does SI. The Cultural approach to organizations which Michael Pacanowsky (Pacanowsky and O'Donnell-Trujillo 1983) developed from Clifford Geertz' ethnographic work recognises the role of the system in viewing the organization as being a culture rather than having a culture. Its symbolic interpretation of stories within an organization puts a similar emphasis on perception, values and beliefs as SI. It is a descriptive theory, however, and does not really seek to influence and change. Intercultural communication theory also has some kinship with Systems Intelligence. Clearly cultures are systems; therefore, studying intercultural communication involves studying how people from different systems interact. Most of intercultural communication, such as Anxiety/Uncertainty Management Theory (Gudykunst 1988), focuses on encounters between cultural in-groups and strangers – Systems Intelligence casts a wider net, looking also at how people within the culture or system interact.

Yet another communication theory, the Coordinated Management of Meaning (CMM) theory proposed by W. Barnett Pearce and Vernon Cronen (1980), also has some strong ties to SI. They discuss the "Cosmopolitan Communicator" who has remarkable similarities to the Systems Intelligent individual. The cosmopolitan communicator is someone who views their own life as part of something greater, and wants to intelligently join in the world so as to enrich it. These people are consistently socially eloquent and able to speak comfortably with people of different backgrounds, values and beliefs. Yet Pearce seems to regard these people as occasional freaks of nature, rare entities due to the fact they need "the wisdom of a sage, the patience of a saint, and the skills of a therapist" (1989, p. 198). Nevertheless, this theory overlaps significantly with Systems Intelligence in some areas. Both recognise the practitioners involvement in what they study (we cannot be outside the system looking in); both have as a goal of theory the gaining of wisdom on how to act; both recognise the social world is made, not found, and there are plural truths (Pearce 1994). CMM, however, never really articulates the power of beliefs in the same way that SI does. It also does not recognise the system the persons-in-conversation are in as impacting on the communication, though it does acknowledge the context of the speech act and the influence the communicators have on each other.

At an organisational level, Stanley Deetz' Critical theory also has parallels with SI (Deetz 1982). Critical theory views large corporations as dominant forces in society – more powerful even than the church, state, or family in the ability they have to influence people's lives. Deetz (1982, 1992, 1995) looks at managerial control and how communication within organisations is used to perpetuate corporate decision-making processes that exclude the voices of the people affected by those decisions, namely workers, customers and shareholders. He posits that most workers have the choice between loyalty or leaving, and that often when they choose loyalty they are in fact

buying into a system that exploits and oppresses them. He argues that the force of an organizational practice is strongest when people do not think about it, but just unquestioningly accept that is the way things are done (Deetz 1995). Systems Intelligence agrees with much of Deetz' description of the organisation as a system. It too notes that systems pervade our lives without us being consciously aware of it, and that we often adopt beliefs and behaviours that do not challenge the system within which we operate. However, while Deetz' (1995) solution to managerialism is to create a more democratic organisation that allows all stakeholders to participate in decision making and changes the behaviour of managers, SI allows the possibility of a systems intelligent person being aware of their surrounds and instigating change for the greater good. SI, in other words, does not accept that all workers (or other stakeholders) are equally oppressed by a dominant structure. It avoids the danger of stereotyping people's capacity to behave freely because of their prescribed role in the system. It gives hope for the individual as instigator of change.

Thinking back to our couple's relationship example, much of interpersonal communication theory is not informed by systems thinking. Rather the focus is on the individual as a separate entity. The individual is asked to reflect on their own behaviour, consider the feedback of others, and adapt accordingly. Yet rarely is the individual encouraged to see themselves and others as part of a larger system which is effecting and affecting the behaviour of both. Systems Intelligence challenges us to place communication, all communication, in the context of a system. It encourages us to view the individual as part of a system in a constant loop of feedback with other members of the system and the system itself. We are also challenged to consider that the behaviour of the individual can alter the system. At the risk of sounding flippant, communication theory does not systematically acknowledge the role of systems in communication. This, I suggest, is an area rich for research.

Conclusion

Clearly, there is a place for considering Systems Intelligence research in the field of communication. We cannot deny that communication takes place within the context of systems – our relationships, our families, our workplaces, our clubs, our teams and so on. There is a need to extend our study of communication beyond the participants, to take into account the system or systems encompassing and influencing them, and which they in turn are influencing. Furthermore, Systems Intelligence is applicable in the areas of organizational communication and mass media. It also needs exploring in relationship to leadership, an area where communication theory has been thoroughly applied. Furthermore, there is opportunity to explore Systems Intelligence and Maoridom where there is a clear overlap in the Maori concept of whanau and a greater system, where behaviour of the individual reflects on and affects the system as a whole. We might also look at migrants and international students. A myriad of possible research questions naturally arise. Are the students who adapt quickly to their new environs systems intelligent? When we help migrants to settle are we educating them in the workings of the new system as well as the new language? Are we doing this explicitly or implicitly? Are people who are competent intercultural communicators also systems intelligent, as in being able to communicate effectively they have unconsciously adapted to multiple new systems?

The concept of Systems Intelligence offers an exciting new approach to communication theory and will lend itself to practical application. The intricacies of communication theories can also enrich the new theory of Systems Intelligence. It only needs some pioneering researchers to take up the challenge of exploring overlap between the fields. Once such links are well understood, then leaders of tomorrow will be armed with a powerful tool in creating meaning in their organizations.

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