MISUNDERSTOOD: THE IT MANAGER'S LAMENT - A CASE STUDY IN INTER-PROFESSIONAL MISCOMMUNICATION

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The Symptoms

Why discuss the profession of information technology at a conference focused on the diplomatic community? There is a very good reason: communication between information technologists and their clients – including diplomats - does not work as well as it should.

We know that information technology has become ubiquitous. We also know that diplomats rely extensively on web services, electronic mail and documents in electronic form. Yet when communication does not work well, technologists poorly understand the needs of the diplomatic community. As a result, technical solutions may not address the real needs of end-users. When this happens, there is a backlash: diplomats accredited to international organisations and members of their governing bodies have control over these organisations' budgets, including those for information technology. Proof of the results of unmet expectations (due to poor communication) is easily found:

Example 1 - The United Nations Economic and Social Council (ECOSOC) passed annual resolutions from 1992 to 1998 asking for simple, easy and unrestricted access to information from international organisations. The fact that such resolutions had to be passed each year indicates that the organisations' responses were not considered adequate.

Example 2 - The Advisory Committee for the Coordination of Information Systems (ACCIS), an inter-agency body established in 1988, was abolished in 1993 for not having met the expectations of the Member States. It was replaced in 1994 by a new body, the Information Systems Coordinating Committee (ISCC) which, in turn, had a substantial part of its budget frozen by the UN General Assembly in 1999 and was subsequently abolished in 2001.

Example 3 - The finance committee (5th Committee) of the United Nations General Assembly reduced the proposed budget for the biennium 2002-2003 of the Information Technology Services Division in New York by twenty percent (yes, 20%).

Example 4 - In virtually all the international organisations of the UN system, the highest-ranking official dealing with information technology has a boss who has a boss who has a boss. In other words, the role is considered merely as a utility comparable to the cafeteria or building maintenance.

Many more examples of this kind could be produced. Relations between diplomats and information technologists are polite but there is no real dialog.

Diagnosis: a case of serious misunderstanding between professions. An evaluation of the situation over many years, considering a large population of technologists and end-users, indicates that miscommunication is a prime cause of the problem.

The Paradox

The willingness of electrical and electronic engineers, researchers, computer scientists and many other players to take risks, to be creative and enthusiastic has changed our world. They are taking us in the direction of an information society and the consequential digital divide.

Until 1844, information travelled only as fast as the fastest means of physical transport: the Pony Express by land, steamships across the ocean. Then came the electric telegraph, aptly described as the *Victorian Internet* by Tom Standage.[1]

Machines that could be described as "computers" have been around in many forms since the end of the 19th century, and truly programmable computers as we know them today became commercially available in the late 1940s. (At that time, Thomas Watson, the chief executive of International Business Machines [IBM] thought that five such computers would be enough to meet the computing needs of the world.)

Since the invention of the transistor in 1947, innovation in the field of analogue and digital electronics has steadily gathered speed. Devices based on these technologies have become ubiquitous, starting with the television set and photocopiers and offering us today a wide range of sophisticated appliances that include video-recorders, personal computers, cellular telephones, global satellite positioning, personal digital assistants, digital photographic cameras, digitised music, compact disks and so much more.

Electronic mail, the World Wide Web and related technologies such as browsers, search engines, and computer-assisted translation have, since 1990, given a growing number of people access to vast amounts of data and infor-

mation without having to physically visit the places where this information is kept.

As we enter the age of the Knowledge Worker, how do we view the people who have made this possible? Surprisingly, not as heroes or valuable members of society. This creates a paradox: who are the people most admired (almost to the point of adulation), most highly paid and in whom a large percentage of the population is greatly interested? Athletes and artists, such as the most successful movie stars and pop music performers.

Who are the people most trusted, liked and respected in our societies? Nurses, fire fighters and others who help us in times of trouble.

Who are the people most distrusted? Used car salesmen, lawyers and politicians.

And the most feared? Members of organised crime and dentists.

Where do electronic engineers and computer scientists come into the picture? As figures of fun, little respected, sometimes resented or criticised. They tend to be identified with a popular cartoon character, Dilbert. He is an individual who likes technology for its own sake. Scott Adams' book, *The Dilbert Principle*, provides a ferocious description of how people working in technology see their managers (and *vice versa*).[2]

How did this situation come about, and what impact does it have on effective communication among professions?

Anyone who has attempted to program a video-recorder, to use the 500 functions available in a minute cell phone or digital camera, or who has acquired some new software, will know that the vendors and developers have not told us the whole truth. The promises that vendors have failed to keep are many: at the level of the technologies themselves, we have all heard about "user-friendly," "plug and play," "fit and forget," "best in class," "first class support" and many other such statements that are no more than marketing hype.

At the level of delivery of value, particularly to senior management, the unkept promises include "artificial intelligence," "Decision Support Systems," "Executive Information Systems," "Computer Translations," "seamless integration of heterogeneous databases" and many more similar statements, many of them incomprehensible to the uninitiated.

Another reason for dissatisfaction, if not distrust, is the lack of permanence of information technologies – it used to be said that "if it works, it's obsolete" and this is becoming increasingly apparent in the speed with which we are expected by vendors to replace or upgrade our systems and software. Of

course, each new piece of equipment and software brings its own new problems, bugs and challenges.

Developers, who are wildly optimistic people, have given us buggy software, runaway projects, incomprehensible documentation and a feeling that their ability to estimate the duration and cost of IT projects is not very good.

If such unkept promises were the outcome of deliberate actions, courts would be very busy dealing with these problems. In reality, the true culprit is miscommunication.

Historical Reminder

The history of humanity is relatively short. It is generally accepted that Cro-Magnon, as anthropologists call our species, appeared some 40,000 years ago.

Writing was invented 5,000 years ago or so and, by then, oral tradition in Mesopotamia had transmitted an explanation for the origin of diverse languages: the story of the Tower of Babel. In the *Bible*'s book of Genesis, the narration states that "the whole world spoke the same language, using the same words" and that to prevent humankind from reaching the heavens it was decided to "confuse their language so that one does not understand what another says."

"The Tower of Babel"
by Pieter Breughel

Three points should be noted: the first is that the issue of miscommunication has a long history. The first human settlements are thought to have started 11,000 years ago, and the oldest known version of the Book of Genesis is 3,000 years old. Miscommunication is an old problem to which humanity has not yet found a solution.

The second is that the proposed universal language (Esperanto) nearly succeeded in becoming the working language of the League of Nations. Near success is, however, failure. A number of languages have been used as a *lingua franca* (including Latin, French and English); they have helped to facilitate communication between groups with different mother tongues, but only to a degree.

The third point is that miscommunication also occurs among people with the same mother tongue. Inter-professional communication is a case in point.

People are not Simple

Current research indicates that humans and pigmy chimpanzees (bonobos) have 98.5% of their DNA structure in common. The 1.5% difference has had a tremendous impact, as it gave us not only a larger brain but also the ability to deal with abstract concepts, complex language, writing, music, tool making (but also weapon making) and a complex personality.

The factors that define an individual human being are many and research in this field makes it clear that the study is far from complete and that understanding needs to be developed much further.

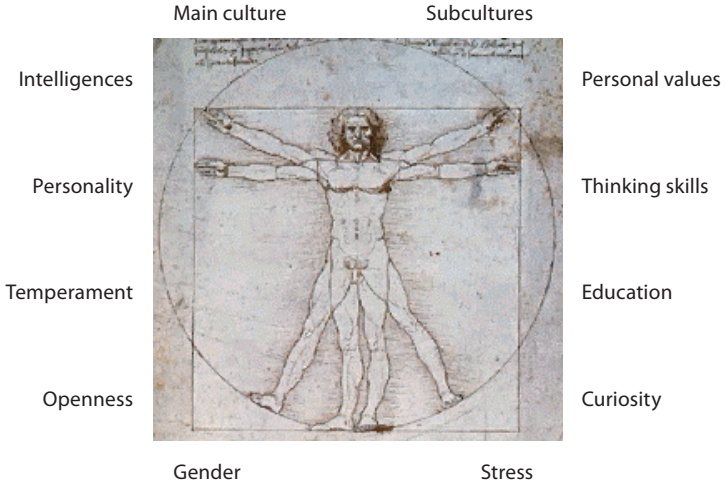

Figure 1 – Factors Influencing Communication Skills

The major factors that influence our communication skills are summarised in *Figure 1*. Below follow thumbnail descriptions of these factors and the impact they have on the way we communicate.

Main Culture

Culture defines the environment in which we are nurtured; it includes multiple factors such as internal and external forces, climate and location on the globe, and population density. However, the factors that have the greatest influence in the topic under discussion are a culture's definitions of Right and Wrong, what constitutes socially acceptable emotional behaviour, the perception of time and what is respected within a culture.

Examples: Punctuality is a very flexible concept. Turning up "on time" in certain cultures may mean finding the host quite unready. Some cultures have a great respect for age, others for consensus and conformity. In some cultures, public expressions of emotion (anger, joy, grief) are the norm, while in others these are discouraged (stiff upper lip).

Subcultures

We are all members of several subcultures, often without being conscious of it. These subcultures define our social circles and, with their own patterns and rituals, they are of a tribal nature. When these subcultures develop a vision of themselves as an elite with special values, this becomes a very strong barrier to effective communication.

Examples: Information technologists often exhibit an elitist behaviour because the industry attracts people who are creative and very intelligent. This encourages them to think of themselves as "special." In the 1950s, anyone able to do anything at all with a computer was referred to as a mathematical genius, and this belief persists today, particularly among the technologists themselves.

Other examples of sub-cultures include social and sports clubs, networks in the workplace, church, professional associations, the Freemasons, etc.

Both main and sub-cultures represent a minefield for the unaware. As global networks and computing reduce the importance of distance and time, society needs to give more attention to cultural and social issues than it has done hitherto.

Personal Values

Cultures and subcultures are the background against which we acquire our individual personal values, such as work ethics, what motivates us, how we feel about truthfulness, and our sense of aesthetics.

Examples: In certain societies it is admissible to tell a lie if this allows the speaker to avoid open disagreement with somebody or saying NO, both of which are socially unacceptable. In other societies, work is regarded as a necessary evil (the text of a song says that "only fools and horses work for their living"), while in others truthfulness and excellence in work are held as honourable targets.

Education

Formal education and subsequent investment of personal time in the search for new knowledge and experience are part of who we are, what we can achieve and

also an important part of how we perceive the world and communicate. Education gives us a wider vocabulary, languages other than our mother tongue (at various levels of proficiency) and an awareness of the world around us. These are major contributory factors to our ability not only to communicate but also to connect with others.

Discussion: Much education provided in the 20th century was based on the model developed during the late 19th century to meet the needs of the industrial revolution – based on reading, writing and arithmetic. Two features of this model are inappropriate to the world in which we live today. One is the concept that for every problem there is a correct answer, often only one (that expected by the teacher). We know by now that complex problems are never solved, only transformed, and that many of the problems with which we deal have no single answer. In fact, there are multiple choices, none of which is perfect and, as a result, the education system should be giving us tools to assess information, make choices and understand their consequences.

The second inappropriate feature of this educational model is that exchanging information during a school or university examination is called "cheating." In today's education, emphasis remains on individual work and on competition to get the highest possible marks as these tend to provide access to better career opportunities or to more exclusive and highly regarded institutes of higher education. It is clear that the information society will rely on information sharing and collaboration; the current educational model imposes one more barrier to overcome in achieving this ideal.

Thinking Skills

Thinking is a learnable process that supports our conscious actions, in particular communication in its many forms: negotiation, creativity and problem solving. Edward de Bono[3], in the introductory note to his *Thinking Course* book, writes:

> Thinking is the ultimate human resource. The quality of our future will depend entirely on the quality of our thinking. This applies on a personal level, a community level and on the world level.
>
> On the whole our thinking is rather poor, short-sighted and egocentric. We have come to believe that judgement and argument are sufficient. In a rapidly changing world we are finding that our thinking is inadequate to meet the demands put upon it.[4]

Intelligence

Mental skills are far more varied in scope and nature than the now somewhat discredited IQ tests indicate, based as they are on verbal and numerical skills. Research conducted over the last 20 years on the nature of intelligence and genius has revealed that there are several kinds of intelligence.

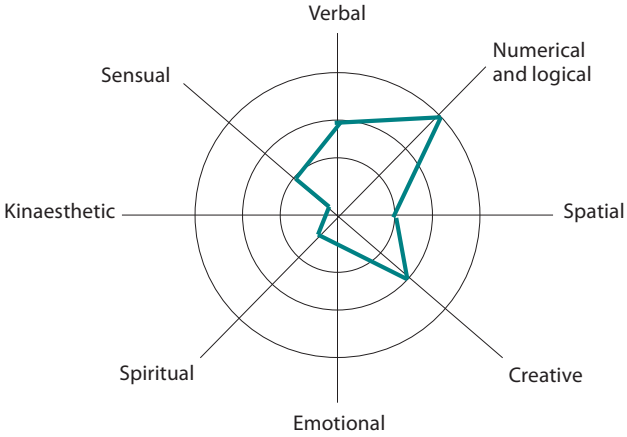

Figure 2 – Types of Intelligence

Most of the types of intelligence shown in *Figure 2* are self-evident, and only those having direct impact on communication will be described here. For more detailed descriptions and a deeper discussion of this topic, *Buzan's Book of Genius* is recommended reading.[5]

Emotional intelligence[6] refers to the understanding of others and our individual ability to understand and manage our emotions. *Spiritual intelligence* was described by A.A. Maslow as the ultimate human goal in the hierarchy of needs and relates to one's feeling of sense of purpose and to having a profound understanding of oneself. We should not forget that an individual's position on Maslow's pyramid of needs is also a determining factor in communication.

Figure 2 illustrates how these forms of intelligence can be mapped (the inner concentric circles representing low scores, the outer one defining the highest achievable level). Joining the dots for each intelligence gives an individual's profile. The profile shown is not atypical of a computer programmer.

Many individuals such as computer programmers, who have exceptional skills in mathematics and in the logical manipulation of abstract concepts, and often also very good creative ability, may regard themselves, or more commonly, be regarded by their peers as "geniuses" and, regrettably, start behaving

as if they were. However, the use of a chart such as the one in *Figure 2* reveals a different picture by highlighting many gaps. If the other intelligences are not developed to a high level, these people are specialists in their field and potential misfits in life.

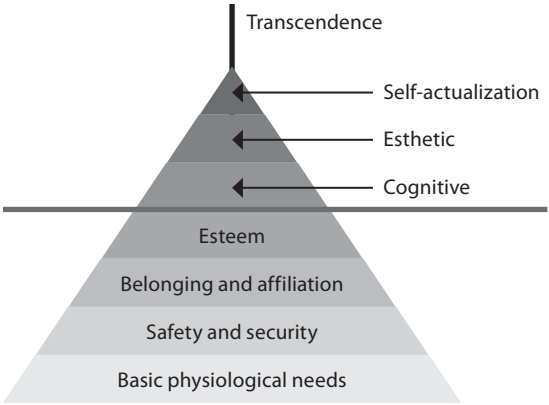

Figure 3 – Maslow's Pyramid of Human Needs

For completeness, Maslow's pyramid of human needs (see *Figure 3*) is divided into two groups, the lower of which, below the line, he called "deficiency needs" – these must be met to allow an individual to move to the next higher level. At the Esteem level, an individual achieves, is competent and gains approval and recognition. At the Cognitive level, an individual knows, understands and explores. At the Aesthetic level, an individual understands and appreciates symmetry, order and beauty. At the Self-Actualisation level, an individual finds self-fulfilment and achieves her/his potential.

Maslow later added an additional state, Transcendence, that represents an individual's ability to enable others to find self-fulfilment and realise their potential. People who have reached the higher levels of Maslow's pyramid are more likely to be good communicators than those who have not.

Personality

Just as each of us has a unique fingerprint, we also have unique mixes of personality traits. Psychologists and psychiatrists have provided classification schemes to group the main personality traits into families applicable to a large population.

One of the best-known classifications is the Myers-Briggs Type Indicator (MBTI)[7] often used for career counselling and for assessing employee suitability for career moves. Used by non-experts, these classifications are potentially harmful to individuals who may be sidelined into areas of work where they rapidly become misfits. The Myers-Briggs Type Indicator classifies individuals through analysing responses to multiple questions in a group of four parameters, each of which can take two extreme values:

Introverted (I)	or	Extroverted (E)
Intuitive (N)	or	Sensing (S)
Thinking (T)	or	Feeling (F)
Judgement (J)	or	Perception (P)

Extensive analysis of the classifications of people who perform well in their professions shows that the profile for a substantial population of information technologists is INTJ or INTS. In real life, most people fall somewhere in between the extreme values for the four above scales. It would, however, be worthwhile to identify if people working in the field of diplomacy are also of a predominant Myers-Briggs profile.

Discussion: The nature of miscommunication between professions starts to become apparent in the following example: a woman in her mid-forties is a highly successful and creative fashion designer. She is also left-handed (with a strong ESFP profile). Having decided to move into computer-aided design, she employs a computer programmer, a male in his late twenties, highly logical and technically knowledgeable. He is right-handed.

How well do you think the solution he will develop will meet the needs of the fashion designer? The right answer is NOT AT ALL. There are hundreds of computing disasters to confirm that this is exactly what happens. At the same time, he will no doubt say, "I gave you what you asked for."

Temperament[8]

Further research on personality types, particularly by Kiersey,[9] led to the more detailed definition of the sixteen combinations of Myers-Briggs types. This research defines four main groups of temperament:

- Artisans
- Idealists
- Rationals
- Guardians

Each has specific strengths and suitability to well-defined types of activities. In summary, these are:

Artisans: defined as the ultimate utilitarians; the four temperaments associated with artisans are:

Entertainers – Composers:	ISFP
Entertainers – Performers:	ESFP
Operators – Crafters:	ISTP
Operators – Promoters:	ESTP

Idealists: defined as having the ability to deal with the abstract and strong at cooperation:

Mentors – Counsellors:	INFJ
Mentors – Teachers:	ENFJ
Advocates – Healers:	INFP
Advocates – Champions:	ENFP

Rationals: defined as having strong strategic analysis and organisational skills:

Engineers – Architects:	INTP
Engineers – Inventors:	ENTP
Coordinators – Mastermind:	INTJ
Coordinators – Field Marshall:	ENTJ

Guardians: defined as being very good at logistics, dealing with specifics and cooperation:

Administrators – Inspectors:	ISTJ
Administrators – Supervisor:	ESTJ
Conservators – Protectors:	ISFJ
Conservators – Providers:	ESFJ

The fact that professions will attract people with similar temperaments enables the tendency of professions to see themselves as privileged groups, and encourages their concept of "one of us" to the detriment of communication with people outside the profession. The Myers-Briggs Indicator is a develop-

ment of an older and well-established technique for defining personality and temperament, the Enneagram.[10]

Curiosity

One of the major forces in the chemical cocktail and electric storm environment of the human brain is curiosity: the drive to question many things and thus investigate new subjects or seek different ways of doing things. A good quotation on curiosity comes from Charles Handy in his book *The Age of Unreason*: "Necessity may be the mother of invention but curiosity is the mother of discovery."[11]

Children are always curious and they use the word "why" all the time. Regrettably, the education system and our increasingly hectic lifestyle, driven by cell phones, being permanently online, and a strong sense of (artificial?) urgency, gradually build limits to our curiosity and to our inclination to explore our constantly changing world. The worst side effect of a lack of curiosity is the misguided belief that we actually know everything.

Openness

Best defined as our ability to recognise and accept the new, openness is an essential component of communication. Given that every individual is unique, it follows that what is right for one person may not be so for another. Similarly, some things will be important to one person and completely irrelevant to another.

Openness is a hard attribute to acquire and develop, as we find it easy to become prisoners of the familiar. Vanessa Mae, a young violinist who plays an unconventional repertoire, said, "people who say *I know what I like*, actually mean *I like what I know*." A low degree of openness drives the mental filters that make us poor listeners and thus prevents us from understanding the messages being conveyed to us.

Stress

Before discussing stress and its effect on communication, we need to consider some features of our brain. Our DNA, built over a period of several hundred million years, has given us a complex brain considered to consist of three layers: a reptile brain, a limbic brain and the cortex and neo-cortex.

The reptile brain, also known as the r-complex, is responsible for the basic functions of life, such as breathing, and drives the basic urges of survival: fight or flight, reproduction, and acquisition of territory (yes, it includes office space and car parking). It also drives our basic emotions. The limbic brain is

responsible for transforming information into memories and in driving bonding needs including those emotions involved in forming attachments. The neocortex accounts for 80% of our brain and is the centre that controls such processes as language, logic and the integration of sensory information. The neocortex is divided into two parts, the left brain and the right brain, each with their dedicated functions.

What does the structure of the brain have to do with our communication skills? Whenever we experience a threat or a thrill, such as a roller coaster, the reptile brain causes the generation of adrenaline, neo-epinephrine, corticotrophin and other chemicals. Their effect is to override the neo-cortex to give us more strength and speed, and to prepare our body to deal with the situation.

Aha! When we are stressed by a situation, our thinking brain gets switched off. No wonder we often regret what we say in the heat of the moment. For many people, negotiations on serious matters, public speaking, or disagreeing with a colleague, boss or another professional, are all highly stressful situations.

Gender

This factor will not be discussed in this paper other than to acknowledge that hormones such as testosterone (male) and oxytocin (female) have a powerful impact on interpersonal relations and communication.

Warning

Additional factors have an impact on the ability to communicate, such as an individual's energy and attitude towards risk taking. The problem is complex enough as is and these will not be considered in this paper.

However, we should not forget that all of the above is based on research that involves large populations and that the outcome represents what statisticians describe as a "normal" distribution, meaning that a high percentage, usually 67%, of the population examined falls within a range of values or behaviours.

Those who fall outside this "normal" range on the high or the low end present additional challenges, as they can range from the depressive to the manic and from the uncouth to the sociopath and the power-hungry. Every situation is unique and all these means to evaluate the problem of miscommunication should be seen as basic guidelines.

Barriers to Inter-Professional Communication

The previous sections of this paper paint a picture of multiple interacting factors that play a role in the way we communicate. When we communicate, we also need to overcome many self-created barriers, most of which are in our subconscious brain. We know from our own experience that it is easier to communicate with people with whom we have some affinity or bonding - for example, people with similar Myers-Briggs types or members of specific subcultures - than it is with people with whom we have less, let alone little, in common.

What makes communication easier with these people is the implicit trust that exists among members of a community and the shared verbal aspects of communication, such as jargon, as well as non-verbal cues such as the wearing of identical football club scarves. As we communicate with members of other subcultures or professions, two major barriers appear: perception and listening skills.

Perceptions and Prejudices

Whether we like it or not, or want it or not, perceptions and prejudices conspire to create a trust barrier between people with clear differences such as nationality, profession, level of education, and even source of education. For an in-depth discussion of egocentrism, ethnocentrism and other factors creating bias in our perceptions and prejudices, *A Brief History of Everything* by the philosopher Ken Wilber is highly recommended.[12]

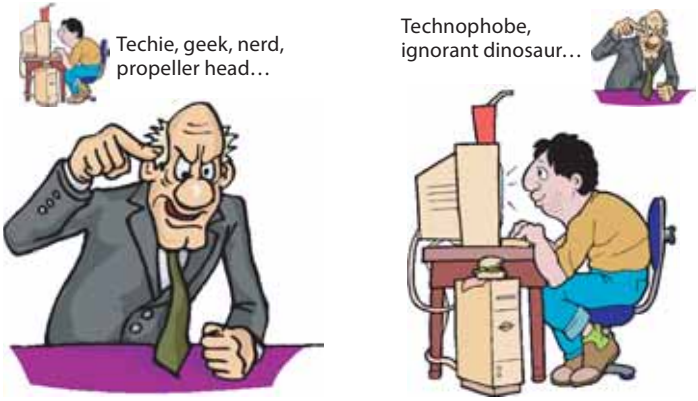

Figure 4 – Information Technologists and their Clients

Information technologists and their bosses, clients or other professionals typically regard each other as shown in *Figure 4*. These prejudices come from comments made by other people, cartoons such as Dilbert that ridicule technical people, personal experience and usually, crude generalisations.

We often lack the tools and skills to recognise the nature of these barriers to trust, and more particularly of the different thinking and communication styles of professions and individuals. As a result, prejudices are reinforced instead of overcome.

Poor Listening Skills

Although nature has given us two ears and one mouth, for many people the concept of "communication" is oriented towards output, not input. However, the most common cause of miscommunication is ineffective listening. Listening is quite different from hearing.

We may happily believe that we are good listeners. Studies and statistics do not support this view and show that the average person is likely to understand and retain only about 50% of a conversation, and this surprisingly low percentage drops to an unimpressive 25% retention rate forty-eight hours later. Should it be a surprise that people so often disagree about what was discussed? One component of the problem stems from how our brain operates: in order to avoid sensory overload the brain blocks out inputs. Advertisers who bombard us with messages on TV and radio no doubt wish it were otherwise. However, the brain is so used to blocking inputs that it often screens out things that are important to us.

Another component is found in the filters built by our cultural, subcultural and other factors defining us as individuals. Whenever somebody says something that does not fit with our perception of the world, the filters come into operation, limiting our ability to understand what is being said and, instead, triggering a thinking process that will drive us to interrupt, think about how to counter-argue and do anything else but listen effectively.

Many of us fall into the trap of multi-tasking (the brain has enormous spare capacity) given the fairly low transfer rate of speech. Daydreaming, doodling on a piece of paper and looking at other people in the room are all clear signs of multi-tasking which, again, limits our listening ability. Worst of all is the effect of our emotions when listening: if the message is boring, too long, or too well known, or if we take a dislike to the speaker's appearance or accent (dare I include race, gender or educational level?), these block listening even further, and miscommunication is the only result that can be expected.

Not Understanding the Listener's Position

Given our different temperaments, backgrounds, and all the other factors discussed earlier, we all have our individual "Logical Bubble," a space which defines our perception of right and wrong, good and bad, priorities and overall perspective on all matters. When these logical bubbles do not have an extensive overlap, miscommunication is guaranteed. Returning to the dialog between an information technologist and another professional, for example a business manager, it is not unusual for these two parties to have different questions at the top of their minds.

The information technologist's view of the world is illustrated in *Figure 5*. Said in an unkind way, the typical technologist is more interested in the toy-shop aspect of the work than in what value will be delivered to the employer organisation. "Will this work?" is fun, a learning opportunity and a great chance to apply the IT craft and impress one's IT peers.

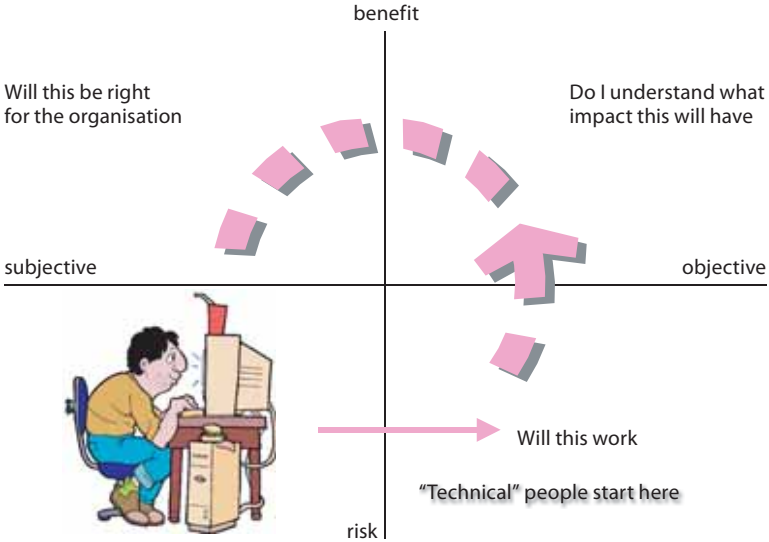

Figure 5 – The Information Technologist's View of the World

However, the business manager has a different approach, as shown in *Figure 6*. Communication will be successful only if the subjective, "gut-feel" issues are addressed first, and often access to the manager will be influenced by the degree of trust that exists in the relationship with the information technol-

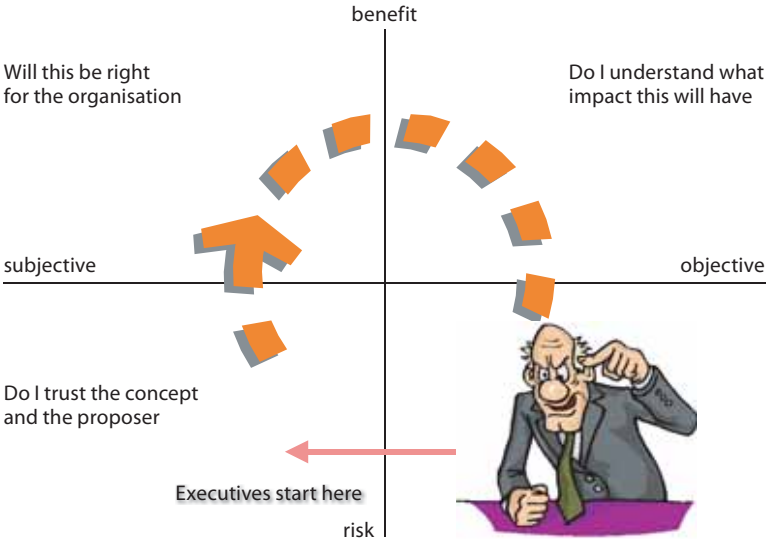

Figure 6 – The Business Manager's Approach

ogist. A poor track record of delivery and perpetual optimism that all problems can be fixed quickly do not help build such trust.

The story about communication most often told in IT conferences is about meeting the business manager in the lift and spending the journey to the top floor in total silence. Members of the audience understand that this is a missed opportunity and, at the same time, feel unable to do anything about it, reinforcing their image as poor communicators.

Poor Communication Skills

Although society aims at 100% literacy and we all know how to talk, our formal education rarely includes the learning of communications skills, written, verbal and presentational. In most cases, we pay dearly for this absence in our professional and personal lives.

Common offences against communications include: not making the purpose of the communication clear from the outset, using too many and/or inappropriate words, taking too much time and using irritators, particularly in verbal exchanges. Typical irritators are "if," "but," "in a sense," and "on the other hand." A few pointers to improve communication skills are given below.

From Professional Misfit to Effective Communicator

This short paper is not intended to be a textbook. The brief sections that follow provide pointers for further exploration, study and practice. While everything mentioned in this section is simple and possible, making improvements is not easy. It requires us to change patterns of behaviour established since childhood.

True Knowledge of Self

According to the ancient historian Plutarch, "Know Thyself" (*Gnothi se auton*) was the admonition inscribed at the temple dedicated to Apollo in Delphi. Yet it seems that humankind is not very good at learning from history. The expression, "Why do you see the straw in your brother's eye, but fail to see the beam that is in yours," appears in two of the Gospels of the New Testament (Matthew and Luke). For as long as you can see the "imperfections" of others and not recognise your own, your ability to communicate with others will be impaired outside a circle of like-minded individuals, which could be your professional environment or another tribal culture.

The fact that little has changed is confirmed by reading the poem, "To a Louse," written by the Scottish poet Robert Burns in 1786, in which the final stanza reads "O wad some Power the giftie gie us, to see oursels as ithers see us! It wad frae monie a blunder free us."

Readers interested in additional material on this topic should look up information on Johari's window, which discusses four categories:

The OPEN window: that which is known to oneself and to others.
The BLIND SPOT: that which is not known to oneself and is known to others.
The HIDDEN window: that which is known to oneself and not to others.
The UNKNOWN window: that which is not known either to oneself or to others.

The Professional Misfit

It is easy to describe a misfit in engineering terms: a square peg in a round hole. In professional terms, a misfit is a person active in an environment where there is a mismatch between the values and expectations of the individual and those of the circles in which the activity takes place – for example a place of employment.

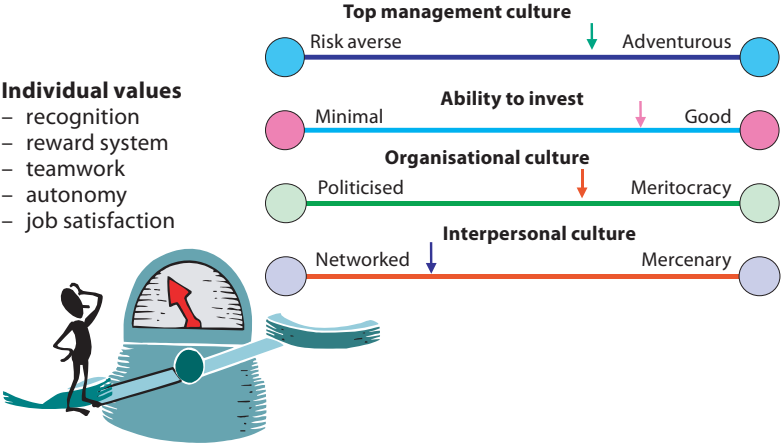

Figure 7 – Individual Values and Environment

Figure 7 illustrates some of the parameters that cause individuals to become misfits. For example, an ambitious, results oriented person working in an organisation that does not reward such efforts, but has instead a politicised reward system will become a misfit.

Misfits who cannot leave the environment in which they are active (which can happen because of many reasons: age, family ties, health, insufficient qualifications) have limited choices: they may be able to adapt to the environment by adjusting their values or they will lose their motivation and enthusiasm. What is left for them is to survive until retirement or until something else comes along.

Can you expect unmotivated people working in an environment incompatible with their values to be superior communicators?

Effective Communication: Active Listening

The issue of poor listening skills was discussed earlier. Improving listening skills requires a conscious and determined effort to do a number of things throughout the listening process:

- Avoid multi-tasking and distractions. **Concentrate** on the speaker and only on the speaker. Whenever possible, seek a calm, distraction-free environment, turn off your cell phone and beeper and, particularly, be conscious of your own mind wandering and daydreaming.

- Confirm to the speaker that you are interested and attentive by **acknowledging** your active participation through verbal ("I see") and non-verbal signals (nodding). Acknowledging does not mean giving in to the temptation to interrupt the speaker.
- **Interact** with the speaker by eliciting focused information. The communication should be a dialog through questions that increase your understanding and encourage the speaker to share information with you, using such questions also to expand the discussion and clarify points about which you may not be certain.
- **Self-control** requires you, the listener, to respond to controversial and sensitive subjects in a way that allows you to remain focussed on the speaker's points and messages. This requires that you should know thyself and that your emotional intelligence should be developed sufficiently to avoid strong disagreement, or worse still, a fight, thus preventing further communication.
- Develop **awareness of the speaker**, in particular the speaker's emotional state, through learning how to read tone, level of voice and non-verbal cues (body language) since without this there is a risk that the content of the communication may be submerged and thus lost.
- **Understanding the content's structure**. Is the speaker conveying information in an orderly manner or raising points that may not fit logically together? Is the speaker offering fact, assumption or theory? The effective listener must learn to keep track of the speaker's message.

Effective Communication: From I to You

The two most commonly used words in the English language are "I" and "NO." Communication centred on the writer or speaker, characterised by the constant use of "I," fails to focus on the interest and needs of the recipient. Effective communication requires that the other party should receive relevant and appropriate information, advice and support. Therefore, effective communication requires the speaker or writer to:

- understand fully the purpose of the communication (why am I writing or speaking, what messages do I wish to convey to the recipient or audience);
- use the appropriate medium and language to convey the information. This must match the expectations, culture and profile of the recipient or audience;
- ensure conciseness and clarity.

When you hear somebody say, "I told you a million times…" to another person, who do you think has failed to communicate?

Effective Communication: Managing Stress and Distractions

Certain types of stress activate the reptile brain and bypass the cerebral cortex so that instinct takes over rational thinking. Stress, however, can be managed to some degree and what is truly important is to acquire the ability to recognise when stress affects our behaviour and to learn techniques that help manage stress. There are many such techniques and every individual needs to find those effective for them personally.

Managing distractions, which involve using the brain's spare processing capacity to purposes other than active listening, rational thinking focusing on the topic under discussion and directing our intelligence, knowledge, memory and all other factors discussed in this paper, is hard to achieve as it requires a strong mental discipline to maintain focus and concentration. Without it however, our ability to communicate effectively will be seriously handicapped.

Tools and Techniques to Reduce Miscommunication

Out of the large catalogue of tools and techniques that can be used to reduce the chance of miscommunication, two are worth describing here. Mind-mapping is a technique developed by Tony Buzan to create a graphic-rich summary of concepts and how they are related.[13] Mind-mapping creates structures that facilitate exchanges of information. Given the focus on concepts and relations, instead of extensive use of text, it permits discussions to focus on areas of agreement instead of disagreement.

Online and e-mail discussions are favoured by information technologists as an extension of the tools they use for their day-to-day work. However, these techniques often have undesirable side-effects:

- Many people regard these tools as highly informal and do not exercise the same care in choosing their words and formulating their thoughts as they would in a face-to-face exchange or in preparing a report or formal letter.
- The absence of an overall context for the communication means that there are few indications of the emotional state of the writer.
- There is a risk that a private discussion may become public by the indiscriminate dissemination of copies of the exchanges to a larger, relevant or not, population.

At the same time, the positive aspects of online and e-mail communications should not be forgotten:

- Exchanges are asynchronous, which allows their use regardless of distance and time zone.
- This asynchronous exchange also gives "time to think," something we are at risk of loosing as technology makes it easier to be online all the time, everywhere. Communication deprived of time to think risks becoming miscommunication.
- Dominant individuals, whose voice and body language may inhibit others from participating in discussions and sharing their valuable input, are subdued.

Conclusions

In which nothing is concluded (to quote Samuel Johnson's *Rasselas*).

- Miscommunication is a major cause of most of humankind's problems.
- Humankind has been aware of miscommunication for many thousands of years and has not been able to find a solution.
- Miscommunication is not limited to exchanges between people who have different languages. It also exists among people who have the same mother tongue.
- Humans are complex and their communication is influenced by culture, subculture, education, intelligence, personality and temperament and many other factors. It is reasonable to assume that all human beings are just as different as their fingerprints.
- Humans are not taught how to communicate, on the assumption that this comes naturally. This assumption is of doubtful validity, as communication is a learnable skill.
- We have two ears and one mouth. We should believe that, in order to avoid miscommunication, it is more important to listen than to talk.
- Communication is most effective when the focus is on YOU, the recipient, and not on I, the originator.
- Learning how to improve our communication skills involves several simple tasks. However, simple does not mean easy: these tasks require important changes in behaviour patterns acquired since birth.

Endnotes

1 Tom Standage, *The Victorian Internet* (New York: Berkley, 1999).
2 Scott Adams, *The Dilbert Principle* (New York: HarperBusiness, 1997).
3 For more information on the work of Edward de Bono, see his official website at **http://www.edwdebono.com**, with links to courses, books and other material on thinking and learning.
4 Edward de Bono, *De Bono's Thinking Course* (UK: Facts on File, 1988).
5 Tony Buzan and Raymond Keene, *Buzan's Book of Genius* (London: Hutchinson, 1994).
6 See Daniel P. Goleman, *Working with Emotional Intelligence* (New York: Bantam, 2000).
7 For more information see **http://www.personalitypage.com**, a website about psychological type, based primarily upon the works of Carl G. Jung and Isabel Briggs Myers (includes the Myers-Briggs assessment questionnaire).
8 For more information on temperament, see the website of the Temperament Research Institute at **http://www.tri-network.com**.
9 For further information of Keirsey's research, consult: David Keirsey and Marilyn Bates, *Please Understand Me: Character and Temperament Types* (Del Mar: Prometheus Nemesis, 1984); David Keirsey, *Please Understand Me II: Temperament, Character, Intelligence* (Del Mar: Prometheus Nemesis, 1998); and the website for the Keirsey Temperament Sorter and Keirsey Temperament Theory, at **http://keirsey.com**.
10 See the website of the Enneagram Institute, at **http://www.enneagraminstitute.com**.
11 Charles Handy, *The Age of Unreason* (Boston: Harvard Business School, 1991).
12 Ken Wilber, *A Brief History of Everything* (Boston: Shambhala, 2001).
13 See Tony Buzan, *The Mind Map Book* (New York: Plume, 1996).