



Project Management Fundamentals

Fondamenti di Project Management
2023

PART 10 – COMMUNICATION FOR ENGINEERS

Seminar Part 10 Topics

PART 10 – COMMUNICATION FOR ENGINEERS

- 1) Why so important
- 2) Communication model
- 3) Cultural intelligence
- 4) Proxemic
- 5) Brain Physiology
- 6) Representational modes
- 7) NLP Communication model
- 8) Goal settings
- 9) Fundamentals of negotiations
- 10) Motivation
- 11) Spiral Dynamics
- 12) Connections
- 13) Metaphors
- 14) Bibliography

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

COMMUNICATION – Why so important?

Project Managers say that communication is a great part of their job.

Guess the percentage...

Quite possibly

70-80%



Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Engineers and communication

Basically an engineer is defined: “a problem solver”.

Experience tell us that engineers are well prepared, strong minded, methodical and self disciplined.

So they have:



From Disney Pictures: Aladdin, 1992

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information



Triviality:
Michael Crichton
in his novel: Airframe
(ITA: Punto Critico,
1996),
says that engineers are
those boys that when
others stopped playing
toy cars to chase girls,
they didn't.

Why Engineers appear not suited for communication?

Clearly, because they are primarily trained to address technical challenges.

They are “used” to deal with numbers, math, physics, rules and standards, machines and very square shaped environments.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

To sum up

Engineers are trained to exploit their

IQ

Intelligence Quotient

Engineers are NOT trained to develop their

EQ

Emotional Quotient

N.B.

- ▶ Intelligence Quotient is fixed
- ▶ it depends on the biological wiring of a person's brain,
- ▶ can be trained but is not possible to make it grow in magnitude

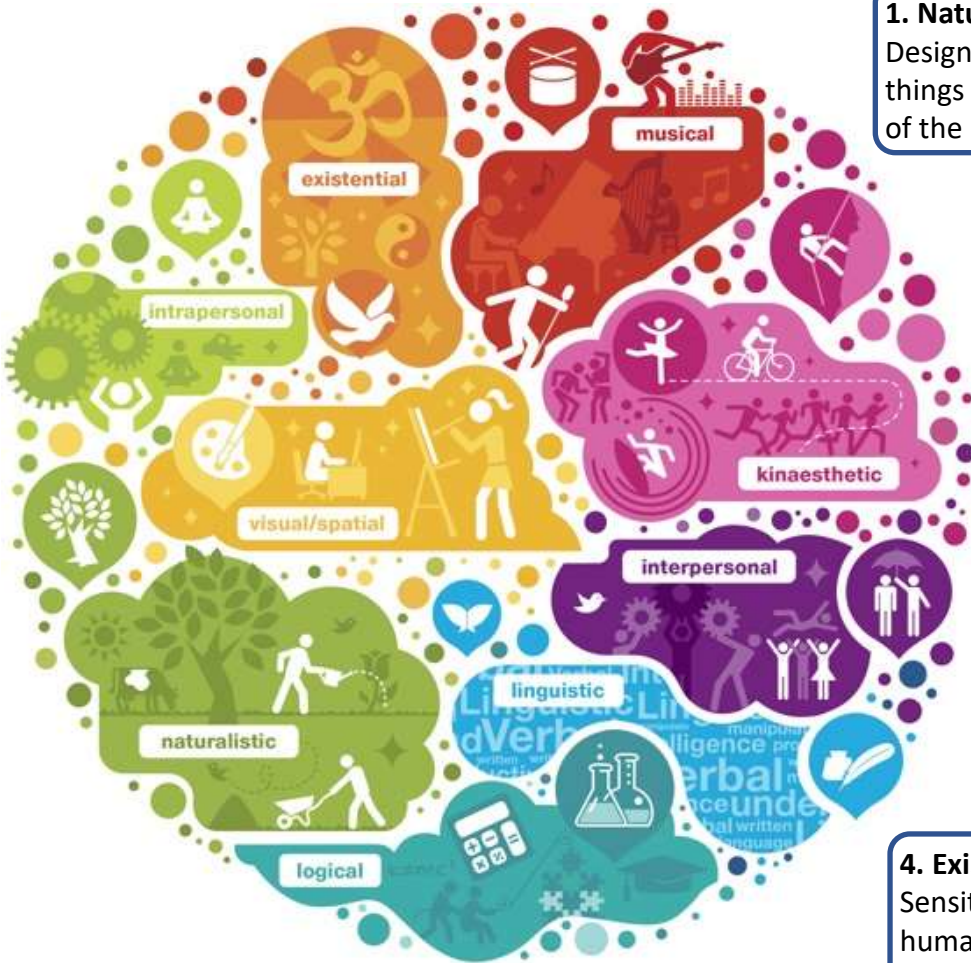
N.B.

- ▶ Emotional Quotient is not a fixed biological feature
- ▶ Can be improved and cultivate
- ▶ Is based on innate abilities + learned abilities

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Gardner's Multiple Intelligences Theory



1. Naturalist Intelligence ("Nature Smart")

Designates the human ability to discriminate among living things (plants, animals) as well as sensitivity to other features of the natural world (clouds, rock configurations).

2. Musical Intelligence ("Musical Smart")

Musical intelligence is the capacity to discern pitch, rhythm, timbre, and tone. This intelligence enables us to recognize, create, reproduce, and reflect on music, as demonstrated by composers, conductors, musicians, vocalist, and sensitive listeners.

3. Logical-Mathematical Intelligence (Number/Reasoning Smart)

Logical-mathematical intelligence is the ability to calculate, quantify, consider propositions and hypotheses, and carry out complete mathematical operations.



4. Existential Intelligence (Spirit Smart)

Sensitivity and capacity to tackle deep questions about human existence, such as the meaning of life, why do we die, and how did we get here.

5. Interpersonal Intelligence (People Smart")

Interpersonal intelligence is the ability to understand and interact effectively with others. It involves effective verbal and nonverbal communication, the ability to note distinctions among others, sensitivity to the moods and temperaments of others, and the ability to entertain multiple perspectives.

6. Bodily-Kinesthetic Intelligence ("Body Smart")

Bodily kinesthetic intelligence is the capacity to manipulate objects and use a variety of physical skills. This intelligence also involves a sense of timing and the perfection of skills through mind-body union.

7. Linguistic Intelligence (Word Smart)

Linguistic intelligence is the ability to think in words and to use language to express and appreciate complex meanings. puzzles.

8. Intra-personal Intelligence (Self Smart")

Intra-personal intelligence is the capacity to understand oneself and one's thoughts and feelings, and to use such knowledge in planning and directioning one's life.

9. Spatial Intelligence ("Picture Smart")

Spatial intelligence is the ability to think in three dimensions.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

10.1 Why so important

Mindset

The psychologist Carol Dweck, demonstrated that attitude is fundamental for getting result.

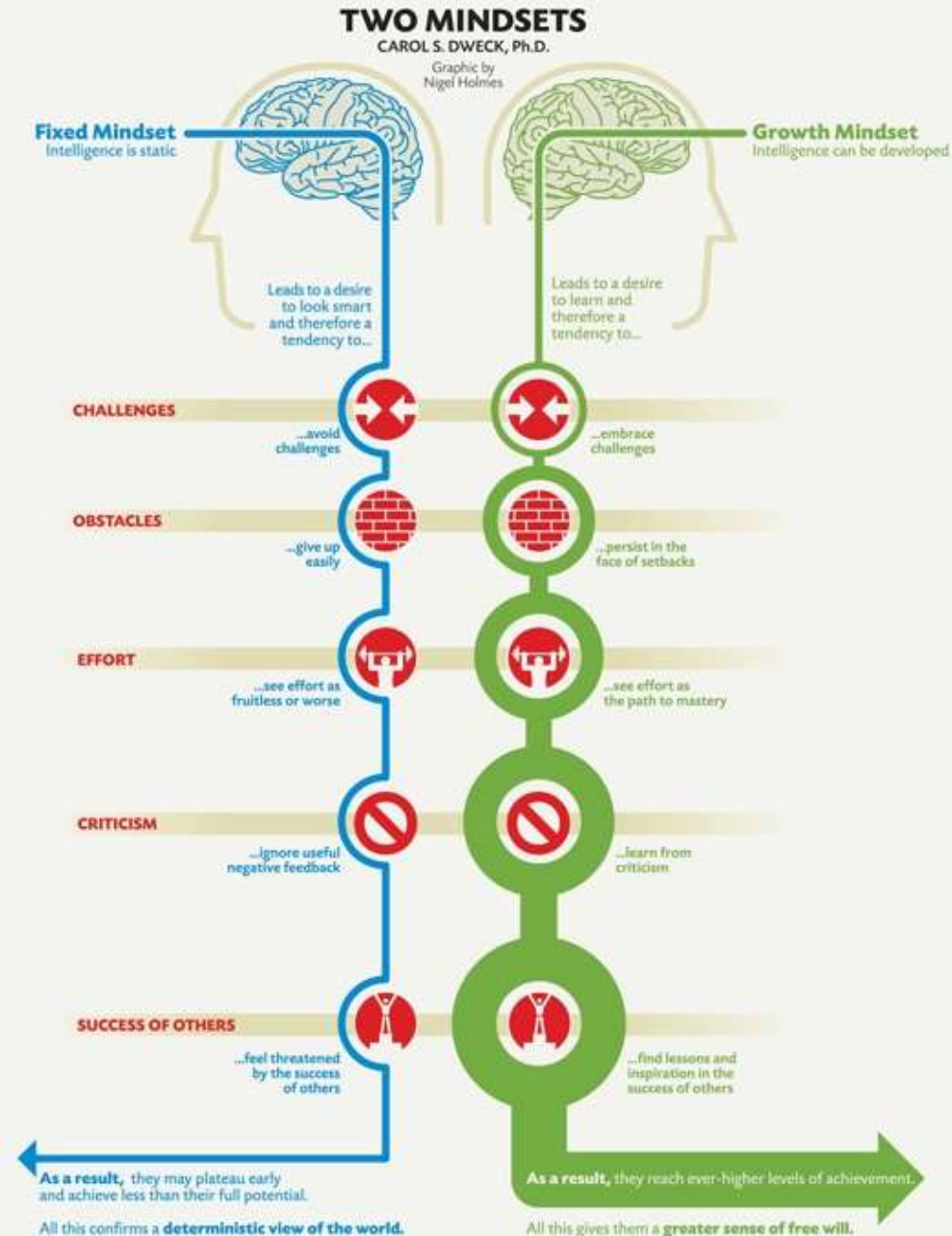
Clearly a biological base is needed, but with medium intelligence gives possibility to reach great performance in any field if steered in the proper way.

“Growth mindset” attitude:

- ▶ Embraces challenges
- ▶ Persists in the face of setback
- ▶ Sees effort as the path to mastery
- ▶ Learns from criticism
- ▶ Finds lessons and inspirations in the success of others

Social and economical disadvantaged people can succeed in any field, intelligence is relative.

Source: Mindset: The New Psychology of Success, Carol Dweck, 2006



Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Communication model

Many tried to create a model of the communication processes.

Def. 10.1: “A model is a selective representation in verbal or diagrammatic form of some aspect of the dynamic process of mass communication.” [Denis McQuail]

There are 8 major models of communication, that can be divided into 3 categories:

1. Linear models

Only look at one-way communication. The most prominent linear models of communication are:

- ▶ Aristotle’s model of communication
- ▶ Laswell’s model
- ▶ The Shannon-Weaver model
- ▶ Berlo’s S-M-C-R model

2. Interactive models

They look at two-way communication. These are the following:

- ▶ The Osgood-Schramm model
- ▶ The Westley and Maclean model

3. Transactional models

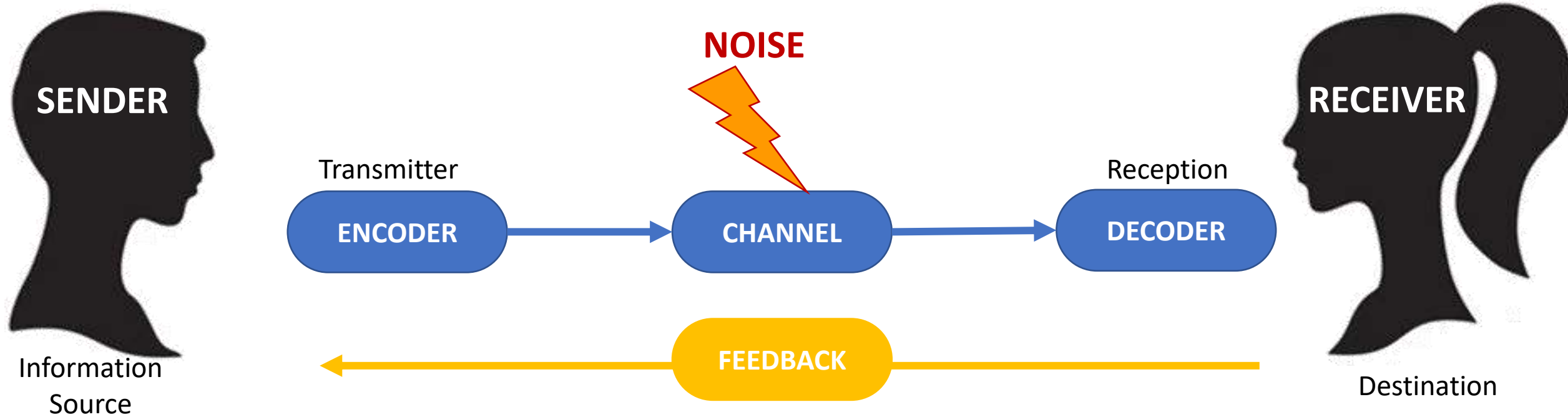
They look at two-way communication where the message gets more complex as the communication event progresses. These include:

- ▶ Barnlund’s transactional model
- ▶ Dance’s helical model

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

The Shannon-Weaver communication model



Maybe the most popular model, developed by 2 mathematicians during the WW2 for engineering endeavours but is applicable at human communication.

Noise is “anything that is added to the signal between its transmission and reception that is not intended by the source.” (John Fiske)

Feedback was added after Norbert Wiener studies on cybernetics.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Important tips of Shannon-Weaver communication model

1. The message is not transmitted equal to itself but receive 2 transformations: CODING and DECODING
2. There are at least 2 different version of the same message.
3. The transmission of the message is affected by noise
4. Errors during CODING and DECODING and NOISE can alter the message content.
5. A feedback is necessary to evaluate if the content of the received message is effectively compatible with the intention of the sender



Feedback Importance: If you want to convey a content..
...you are responsible of what the receiver understands, not only what you are transmitting!

Why communication is so important?

Paul Watzlawick's Communication Axioms

Axiom 1: You cannot not communicate

Axiom 2: The content and relationship aspect
(the latter dominates the former)

Axiom 3: Characterization by punctuation of communication
processes (communication consists of a cause and an effect.)

Axiom 4: Digital and analog modalities
(Digital modalities ➡ explicit information = verbal.
Analog modalities ➡ multitude of possible interpretations = nonverbal)

Axiom 5: Symmetry and complementarity of relationships
(symmetrical relationship ➡ balanced and based on commonalities.
Complementary communication ➡ based on differences = could be
constructive mutual complementarity or destructive power imbalance.)
[Pragmatic human communication]



Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Communication Trichotomy

Fundamentally there are 3 forms of communication (in a common human interaction):

- ▶ **Verbal:** based on the language, driven by rules, conventions and cultural schemes
- ▶ **Paraverbal:** what is associated with the language: voice tone, pauses, rhythm, etc. . It sustains the language and express intentions.
- ▶ **Non Verbal:** it's all about corporeity. Posture, gestures, gaze, facial expressions, proxemics it's all about corporeity. It is the most subjective component and specific to each person

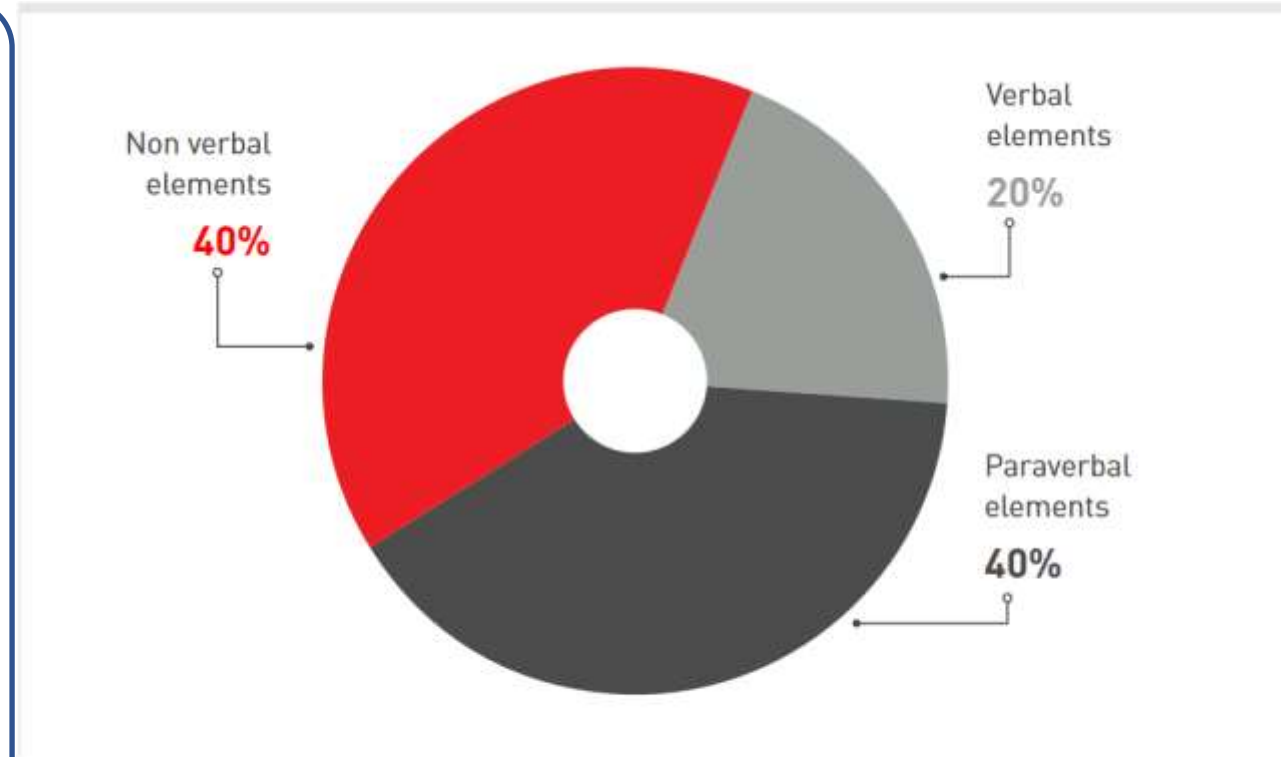


Figure 2. Quantitative data on verbal elements, paraverbal elements, and nonverbal elements according to van-der Hofstadt (2005, p. 20).

“A Reader, Not a Speaker”: On the Verbal, Paraverbal and Nonverbal Communication Trichotomy

Susana Ridao Rodrigo* (<http://orcid.org/0000-0002-1109-655X>)

Departamento de Lengua Española y Lingüística General, Facultad de Letras, Universidad de Murcia, Murcia, Spain

Published: 11-06-17

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Cultural attitudes 1

In his book “The culture Map” (2014), Erin Meyer describes how many aspects of communication are affected by culture (and country of origin)

1. Communicating
2. Evaluating
3. Persuading
4. Leading
5. Deciding
6. Trusting
7. Disagreeing
8. Scheduling

FIGURE 1.1. COMMUNICATING



Low Context Good communication is precise, simple, and clear. Messages are expressed and understood at face value. Repetition is appreciated if it helps clarify the communication.

High Context Good communication is sophisticated, nuanced, and layered. Messages are both spoken and read between the lines. Messages are often implied but not plainly expressed.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Cultural attitudes 2

FIGURE 2.2. EVALUATING



FIGURE 3.1. PERSUADING



Concept-first Individuals have been trained to first develop the theory or complex concept before presenting a fact, statement, or opinion. The preference is to begin a message or report by building up a theoretical argument before moving on to a conclusion. The conceptual principles underlying each situation are valued.

Application-first Individuals are trained to begin with a fact, statement, or opinion and later add concepts to back up or explain the conclusion as necessary. The preference is to begin a message or report with an executive summary or bullet points. Discussions are approached in a practical, concrete manner. Theoretical or philosophical discussions are avoided in a business environment.

Cultural attitudes 3

FIGURE 4.1. LEADING



- Egalitarian** The ideal distance between a boss and a subordinate is low. The best boss is a facilitator among equals. Organizational structures are flat. Communication often skips hierarchical lines.
- Hierarchical** The ideal distance between a boss and a subordinate is high. The best boss is a strong director who leads from the front. Status is important. Organizational structures are multi-layered and fixed. Communication follows set hierarchical lines.

FIGURE 5.3. DECIDING

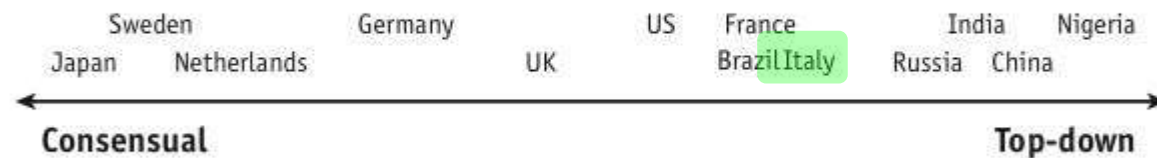


FIGURE 6.1. TRUSTING



- Task-based** Trust is built through business-related activities. Work relationships are built and dropped easily, based on the practicality of the situation. You do good work consistently, you are reliable, I enjoy working with you, I trust you.
- Relationship-based** Trust is built through sharing meals, evening drinks, and visits at coffee machine. Work relationships build up slowly over the long term. I've seen who you are at a deep level, I've shared personal time with you, I know others well who trust you, I trust you.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Cultural attitudes 4

FIGURE 7.1. DISAGREEING



Confrontational

Disagreement and debate is positive for the team or organization. Open confrontation is appropriate and will not negatively impact the relationship.

Avoids confrontation

Disagreement and debate is negative for the team or organization. Open confrontation is inappropriate and will break group harmony or negatively impact the relationship.

FIGURE 8.1. SCHEDULING



Linear time

Project steps are approached in a sequential fashion, completing one task before beginning the next. One thing at a time. No interruptions. The focus is on the deadline and sticking to the schedule. Emphasis is on promptness and good organization over flexibility.

Flexible time

Project steps are approached in a fluid manner, changing tasks as opportunities arise. Many things are dealt with at once and interruptions accepted. The focus is on adaptability and flexibility is valued over organization.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Cultural attitudes

Def. 10.2: Cultures can be divided in into:

- ▶ **High contest culture (or complex structured cultures):** in which communication and significance perception are referred to weak signals, situational and nonverbal. Big attention to social relationships and conventions
- ▶ **Low Contest (or linear cultures):** in which is highly valuated language, written and spoken words. Great attention to rules and agreements.



Disclaimer:

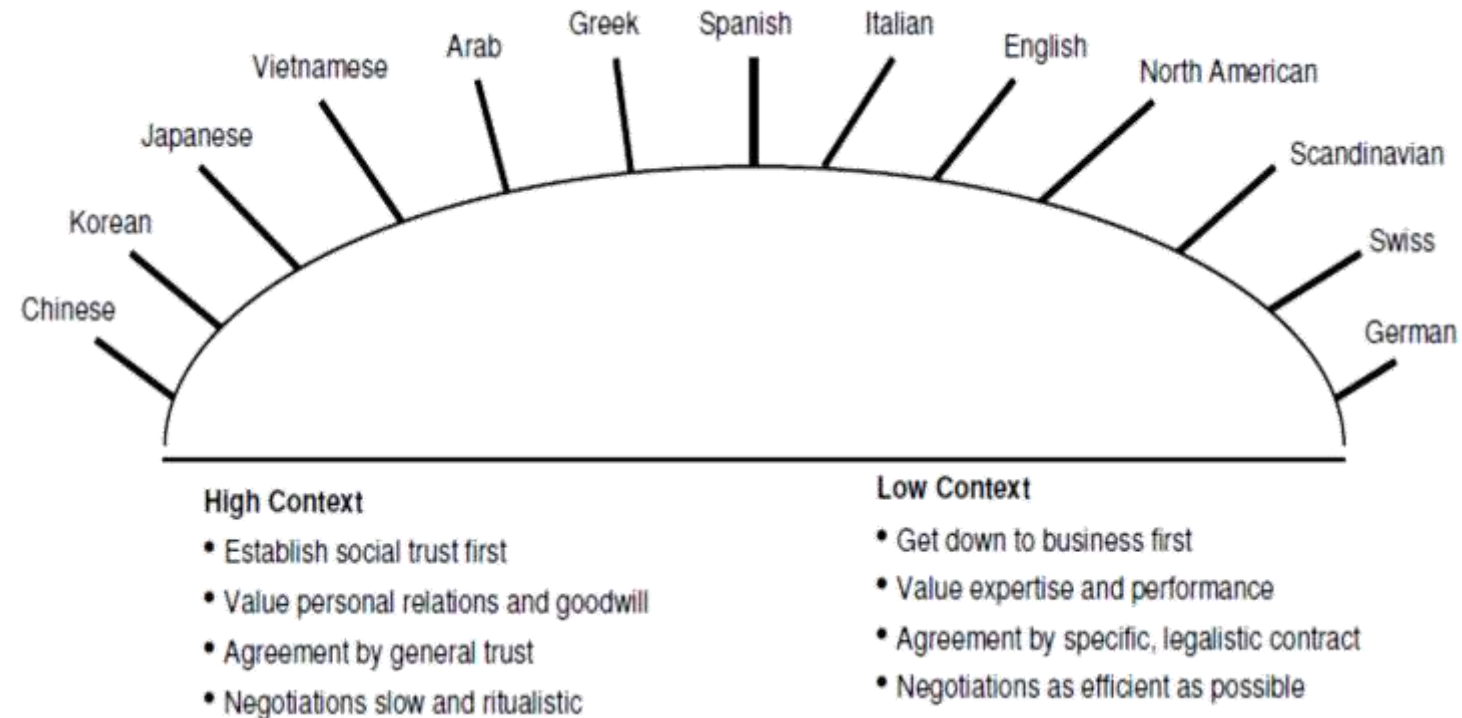
- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Cultural attitudes on business

Implication on business relationship are consequentially to the attitude in communication and relationships.

So working and trading with people of a different country could become a swamp of unwanted issues, creating misunderstanding and problems reverberating on the business itself or in the collaboration.

Being aware of specific culture's customs and traditions, rituals, expectations would be of great help.



Source: Munter, M. "Cross-cultural Communications for Managers", *Business Horizons*, May/June 1993.

Paying respect to the counterpart's culture is the silver bullet in multicultural communication.

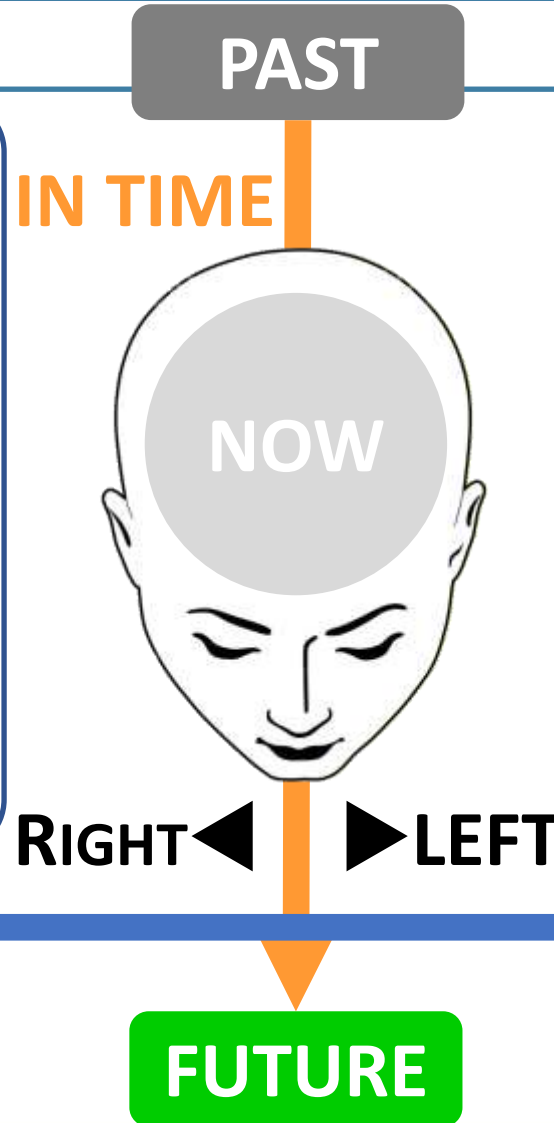
Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Timeline Representation

NLP

- ▶ **IN TIME (associated):** when people perceive themselves immersed in their timeline, and passed through by it (tendentially western people are headed to the future, past is backwards; eastern Orthodox Christian people are tendentially headed to the past, future is backwards because past is known, future is unknown)
- ▶ Time is subjective, not clearly identified, time is consequential and linked to feelings, difficulty in planning, late on dates



- ▶ **THROUGH TIME (dissociated):** when people perceive themselves as dissociated by the timeline and perceive the present moment as detached from them (usually they see time in front of them in a line perpendicular to their line of view, tendentially from left to right; for left-handed may be the opposite)
- ▶ Time is objective and well identified, time is sequential, they can plan easily and are good in evaluations.

FUTURE

PAST

THROUGH TIME

FUTURE

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Cultural attitudes on activities

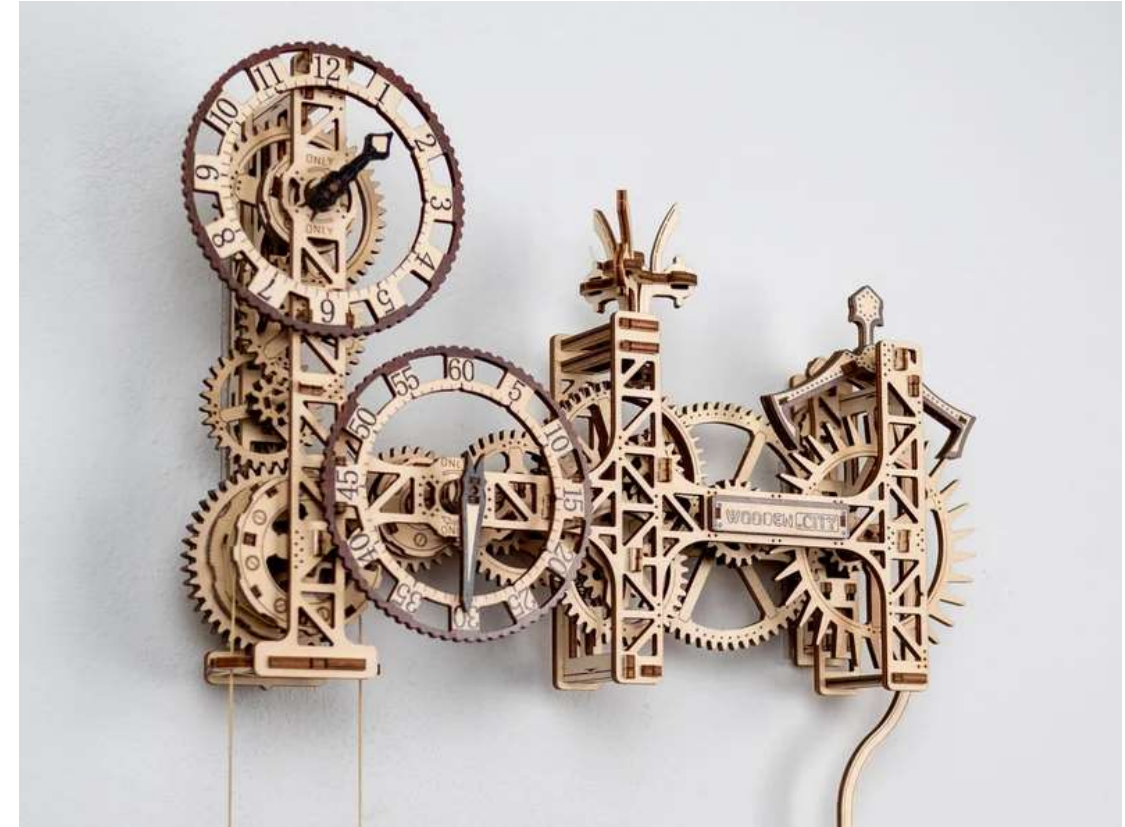
There are two fundamental attitudes towards the task that people should attend to:

Monochronic:

- ▶ One action at a time, closing one before starting another.
- ▶ Typical attitude of Linear Cultures,
- ▶ Strong attention to time.

Polychronic:

- ▶ More action contemporarily moving from one to another depending on situation, solicitations , inspiration of the moment (multitasking).
- ▶ Typical attitude of Complex Cultures,
- ▶ Weak consideration of time



Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

The hidden dimension

The anthropologist Edward T. Hall after the end of WW2, was asked to find a way to facilitate the recovery of the Japan, prostrated by the war.

During his studies, he found a link between the culture and the preferred interpersonal distance.

Def. 10.3 Proxemic:

The study of cultural expectations regarding interpersonal distances.

► **High contest – Complex structured cultures:**

Individuals belonging to this kind of culture tends to maintain a short distance during conversation and interactions.

► **Low Contest – Linear cultures:**

Individuals belonging to this kind of cultures prefer a clearly bigger interpersonal space



Perception and entity of distances are influenced by

- Culture
- Age
- Sex
- Social condition
- Kind of relationship
- Psychic disease (eg. Schizophrenia)

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Interpersonal Zones

It is possible to identify 4 different “zones” around a person (interpersonal space bubbles):

1. **Intimacy Zone:** 0-0,5m
2. **Personal Zone:** 0,5-1,5m
3. **Social Zone:** 1,5-3,5m
4. **Public Zone:** >3,5m

When uninvited people invade a zone not allowed to them or undesired, this make you uncomfortable.

The same rule is valid for you when invading a zone in which is not supposed you can get in.

On the other hand if you keep to much distance with people of a high context culture, could appear rude and offensive.



Disclaimer:

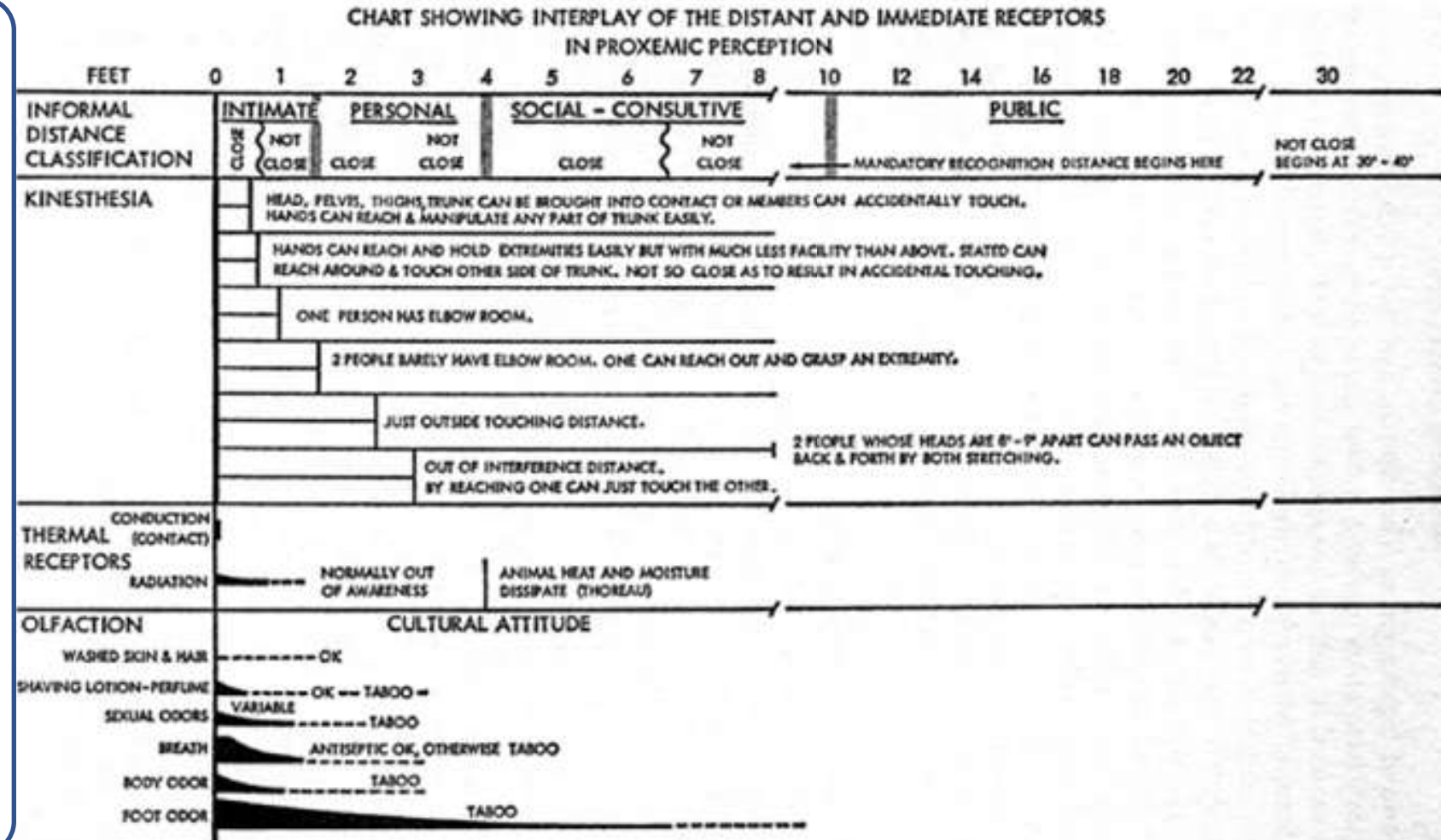
- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Interpersonal Zones

Not only distance is involved by proxemic, but also all the other way of getting in touch with another person's bubble, like:

- ▶ Kinaesthesia
- ▶ Thermal receptors
- ▶ Olfaction (smells, breathe, ...)

Here the distance table for western culture people.



Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

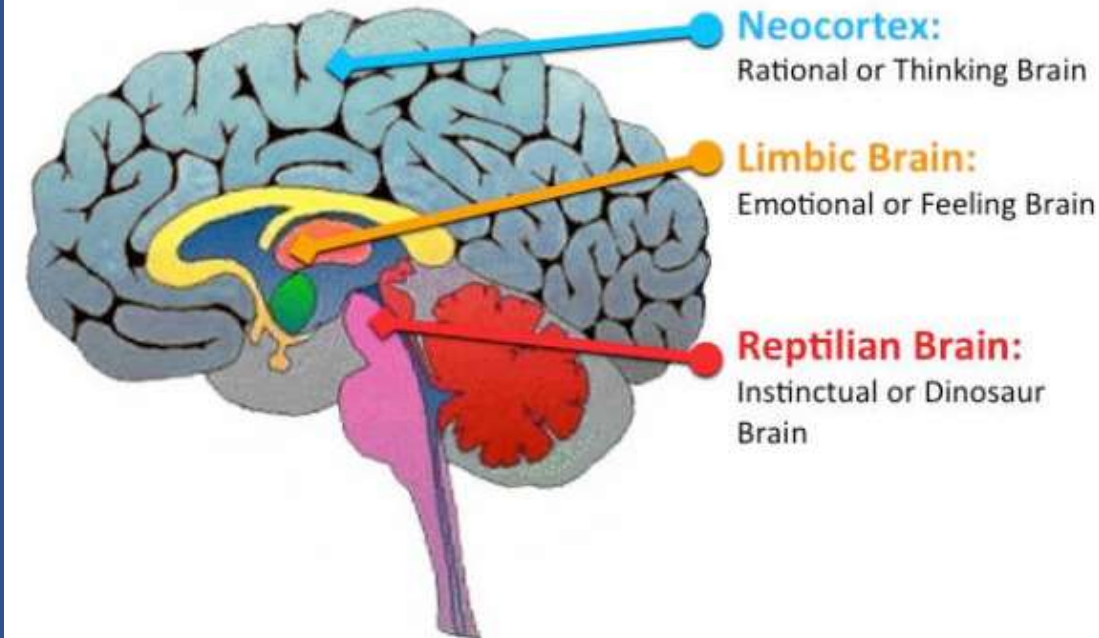
How Brain works

NLP

The brain is the most important tool we have to picture the world.

Theory of The triune (three in one) brain, by Paul D. MacLean (1985) suggested that the evolution of the brain generate 3 subsequent brain structures:

- 1) **Archipallium** : (hypothalamus) the reptile brain – instinctual and automatic responses, cannot learn.
- 2) **Paleopallium**: the limbic system (typical of mammalian) – in which are based emotions and a part of memory
- 3) **Neopallium**: (neocortex) owned by primates – in which are based reasoning, speculative abilities and consciousness.
It learns, evolves, generates abstractions.



This theory is now abandoned, in favor of a theory based on a more interconnected process in brain development, but still compelling, and gives some insights on the basic human reactions

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Brain & Learning

NLP

There are 3 different levels of learning

- 0) **Instinct – no learning:** Reptiles
- 1) **Learning by experiencing something:** Typical of mammalian
- 2) **Learning by seeing someone else experiencing something:** Primates can use this methodology
- 3) **Learning by description of someone else experience:** Only humans, principally due to the possibility to use an articulate language, and create pictures of the experience.

There is no difference between what your conscience:

- ▶ experience by senses
- ▶ experience by imagination

So the human brain could creates his own reality.



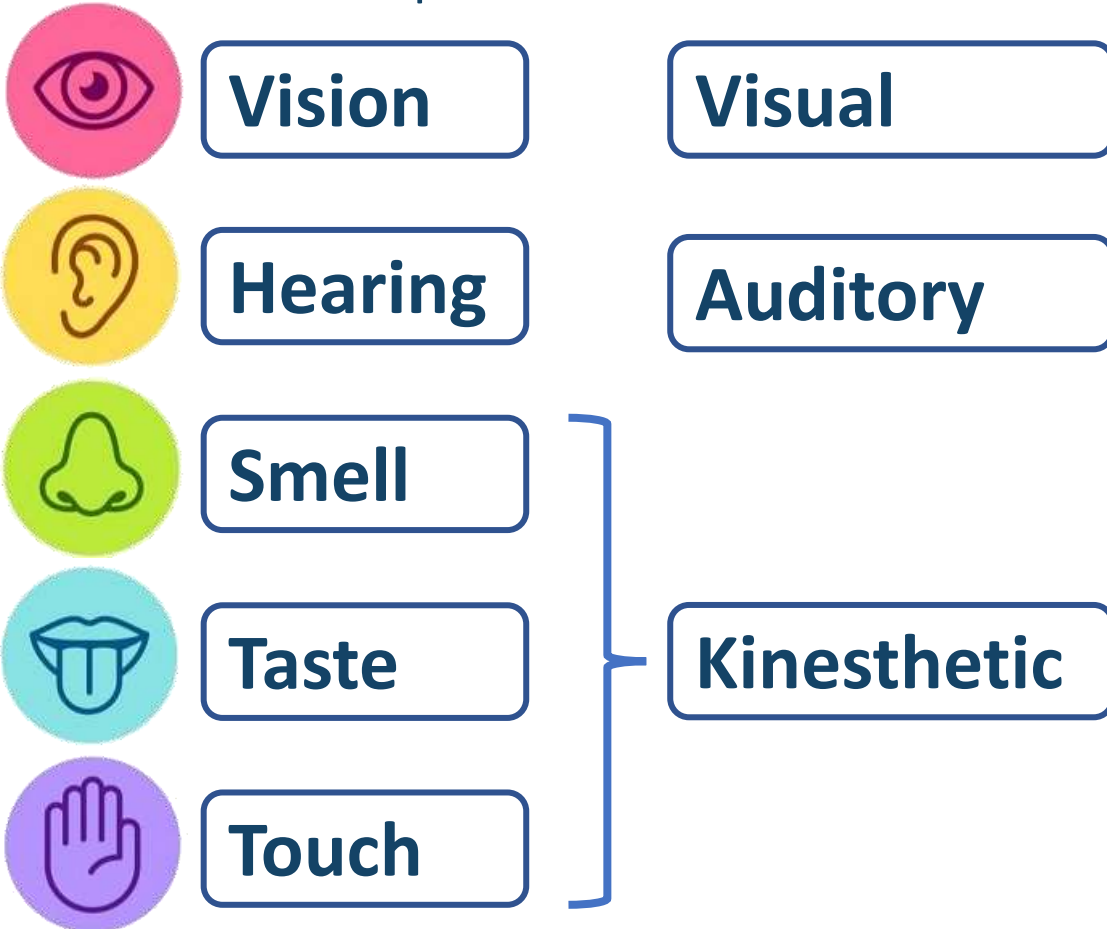
Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Representational modes (ITA: Modalità Rappresentazionali)

NLP

How do humans perceive the outside world? By 5 senses:



People have a preferred sense by which interacts with the world.

They still use every sense (or channel) but they tend to:

- ▶ Prefer one overall
- ▶ Have a second usually a bit less preferred
- ▶ Use the third one only when forced

Communication conveyed through the preferred channel is more effective, can reach the counterpart faster and easier.

Sometimes if you use the wrong channel people simply ignore the message.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Learning Styles

NLP

From this point of view educational systems discovered that people have preference on the way they can learn things.

In Anglo-Saxons learning systems is commonly acquired that people have a different Learning Style:



AUDITORY

Auditory learners make up **30%** of the population.

If you're an auditory learner information comes in best through your ears, from speeches, presentations or audio books. You have a knack for foreign languages and benefit from study groups.



VISUAL

Visual learners make up **65%** of the population.

They tend to be neat and tidy, excellent spellers and quick to read charts. Visual learners also tend to be the fastest talkers.



KINESTHETIC

Kinesthetic make up just **5%** of the population.

They are primarily male and love anything hands-on. These learners are often skilled athletes or musicians and are drawn to construction projects, science experiments and field trips.



© Matthew Henry Hall. All Rights Reserved. www.matthewhenryhall.com

"Kinesthetic is a learning style. Auditory and visual are learning styles. Cheating is not a learning style."

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

How to find the right channel

NLP

Is it possible to discover the channel used by our interlocutor?

Of course yes, **principally** analysing predicates: the verbs used in the speech.

VISUAL:

“I see what you are saying.”
“That looks good.”
“That idea isn’t clear.”
“I am hazy about that.”
“I went blank.”
“Let’s cast some light on the subject.”
“Get a new perspective.”
“I view it this way.”
“Looking back on it now,
it appears differently.”
“An enlightening (insightful, colorful) example.”
“Do you see what I mean?”

AUDITORY:

“I hear you.”
“That rings a bell.”
“It sounds good to me.”
“Everything just suddenly clicked.”
“Listen to yourself.”
“That idea has been rattling around
in my head.”
“Something tells me to be careful.”
“I can really tune in to what you’re
saying.”

KINESTHETIC:

“It if feels right, do it.”
“Get a handle on it..”
“Do you grasp the basic concept?”
“Get in touch with yourself.”
“I have a solid understanding.”
“I am up against a wall.”
“Change your standpoint.”
“You are so insensitive.”
“I have a feeling you’re right.”
“I am boxed in a corner.”
“He is under my thumb.”
“They really put the screws to me.”

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Gender and channels

NLP

Human's operating system was updated last time more or less at the end of the last ice Age (~12000b.c.). Agriculture was develop after this date and then culture and society followed. This means that our basic operating system was optimized for Hunter-Gatherers lifestyle. For that reason:



Males: tend to be much more Visual and Kinesthetic, to perform in hunting and protecting the family/clan from threats.

Females: tend to be much more Auditive, to keeping in touch with each other during gathering activities, creating social relationships during chores.

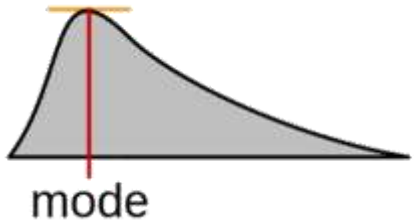


The development in society are not stored in our genetical memories, but in culture. Changes and evolutions in lifestyle, social life and technology have radically changed the environment (in which our natural programming was fitted) too rapidly for a biological redesign. We have to deal with this obsolete software with Instruction, Social and Behavioural rules, Intelligence.

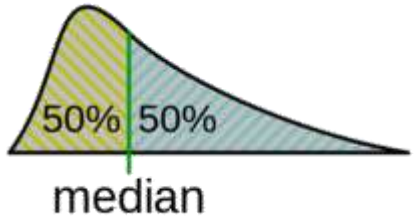
Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

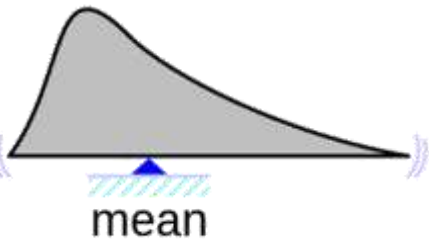
A bit of social statistics



Mode or Norm (Moda o Norma): most present characteristic in the statistical sample.



Median (Mediana): middle value that divide into two part of the same weight the statistical sample.



Mean (Media): average value, calculated as the sum of samples divided for the samples number.

Normal: doesn't mean right! It means the most present detail, situation, behavior, attitude, etc. present in the statistical population considered for the analysis.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Look in my eyes: what's the norm?



Looking the eyes of this 8 people, what is the norm?

So people that don't have their eyes belonging to the "normal" ones, are...

Abnormal?

So how is «normality» intended?

Abnormality scares people, but the we X-men and Superheroes are not normal.

Basically supernormal is a part of abnormal people.

This to say that every person is unique, with his/her (o whatever pronoun you want to use) skills, peculiarity and abilities, maybe different from the mass of others.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Multisensorial Communication (Spoiler Alarm!)

NLP



INVICTUS (2009)

By Clint Eastwood

- **Morgan Freeman**
- **Matt Damon**

From the novel: Playing the Enemy: Nelson Mandela and the Game that Made a Nation

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Eye access cues

NLP

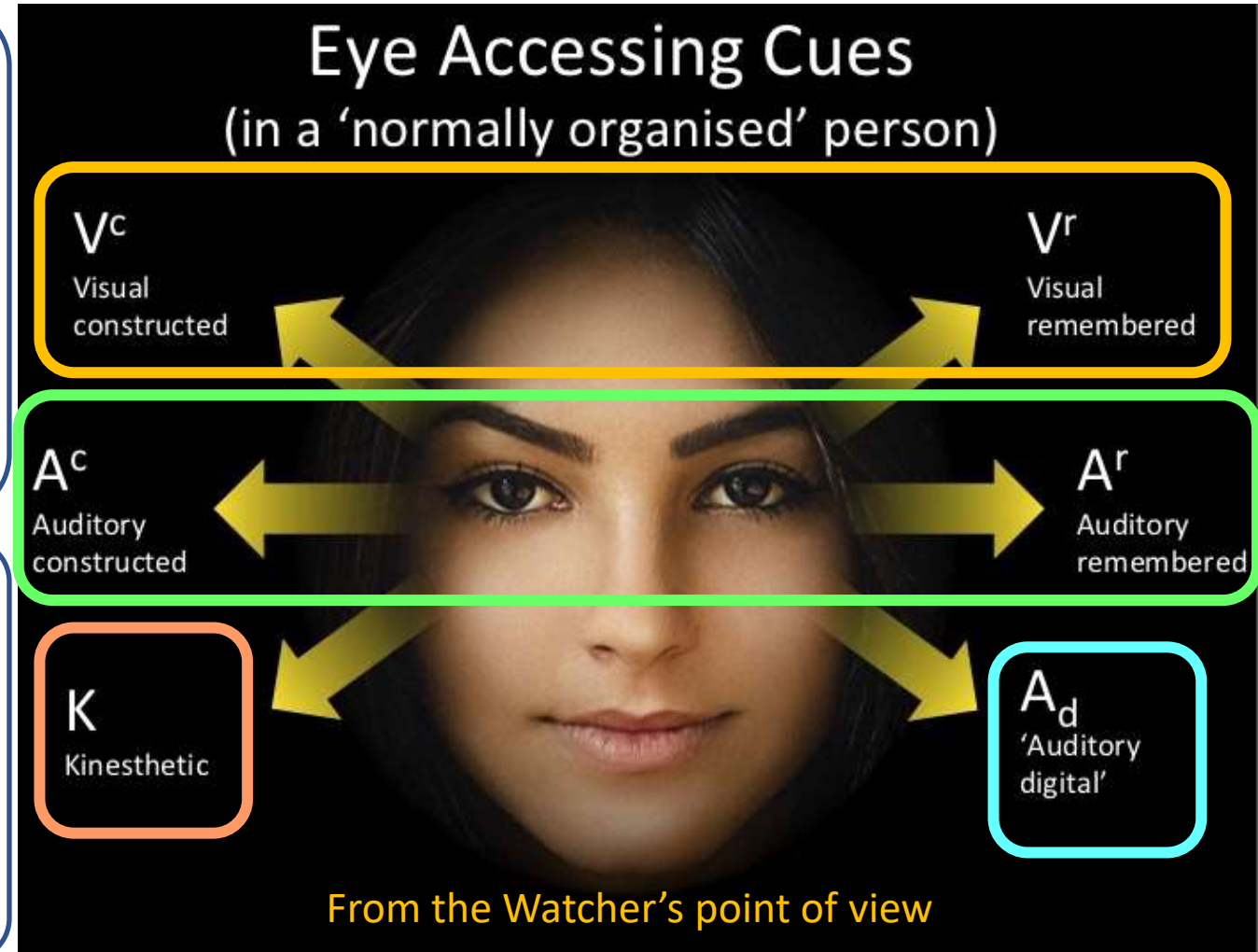
Researches found that normally wired people (80-90% of the population) tend to move their eyes in a specific way when they access to a defined representational mode. 20% of the population, typically left-handed people or some ethnicities like “Basque people” have a completely different system.

RR = Right Remembered

LC = Left Constructed (in some cases it could implicate the people in front of you are lying)

K = remember feeling and sensations

Ad = is talking to him/herself



Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Neuro Linguistic Programming

NLP

During '70s was developed by Richard Bandler and John Grinder a methodology that condensate many edge finding of psychology, linguistic, nascent cybernetic and neurosciences.

The goal was to create a system that would allow a more effective communication, but developments pushed this methodology up to heling psychosis and mental diseases.

Modeling was at the basis of this methodology.

Observing people who reach exceptional results, understanding the way and the methods they use to get there, allows to create a model to be replicated by anyone who want to get the same results.

They found that “beliefs” are fundamental in this process.

A belief **is always true** for the one who originated it, correct beliefs is at the basis of success:

- ▶ Is possible
- ▶ I can do it
- ▶ The method is correct

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Neuro Linguistic tips 1

NLP

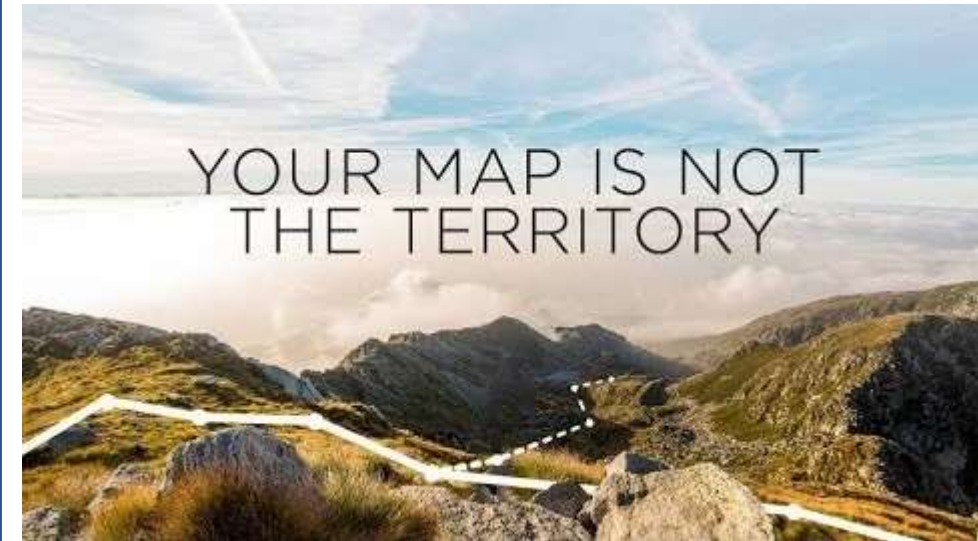
Def. 10.4: The map is not the territory (Universal modelling process) [Alfred Korzybski, 1931]

One of the assumption of NLP is that people do not perceive the whole reality.

People create a mental map of the situation, a map that is inaccurate and lacks many details, easy to manage and corresponding to their cultural beliefs.

Filter acting on the reality perception are:

- ▶ **Deletions** (many details are eliminated)
- ▶ **Distortions** (try to make the model adhere to what you already know or believe)
- ▶ **Generalizations** (one fits all attempt, comparing and classifying the information)



Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Neuro Linguistic tips 2

NLP

Refrain from judgement

Usually people don't listen, but they are preparing the answers during the time the interlocutor is speaking.

Listening is fundamental! Communication starts from Listening.

“Don't judge”, gives you the opportunity to pay attention to the content received not (pre)reactive, only trying to reach the supremacy, but collaborative and proactive.

A basic positive NLP assumption quotes:

People are doing their best

- ▶ **with the instruments they have,**
- ▶ **in this moment in time**

So considering this position there are a couple of possible levers:

- ▶ **Instruments:** giving people different instruments, would change their situational behavior
- ▶ **Time:** time is fundamental, and changing the time would change the situation

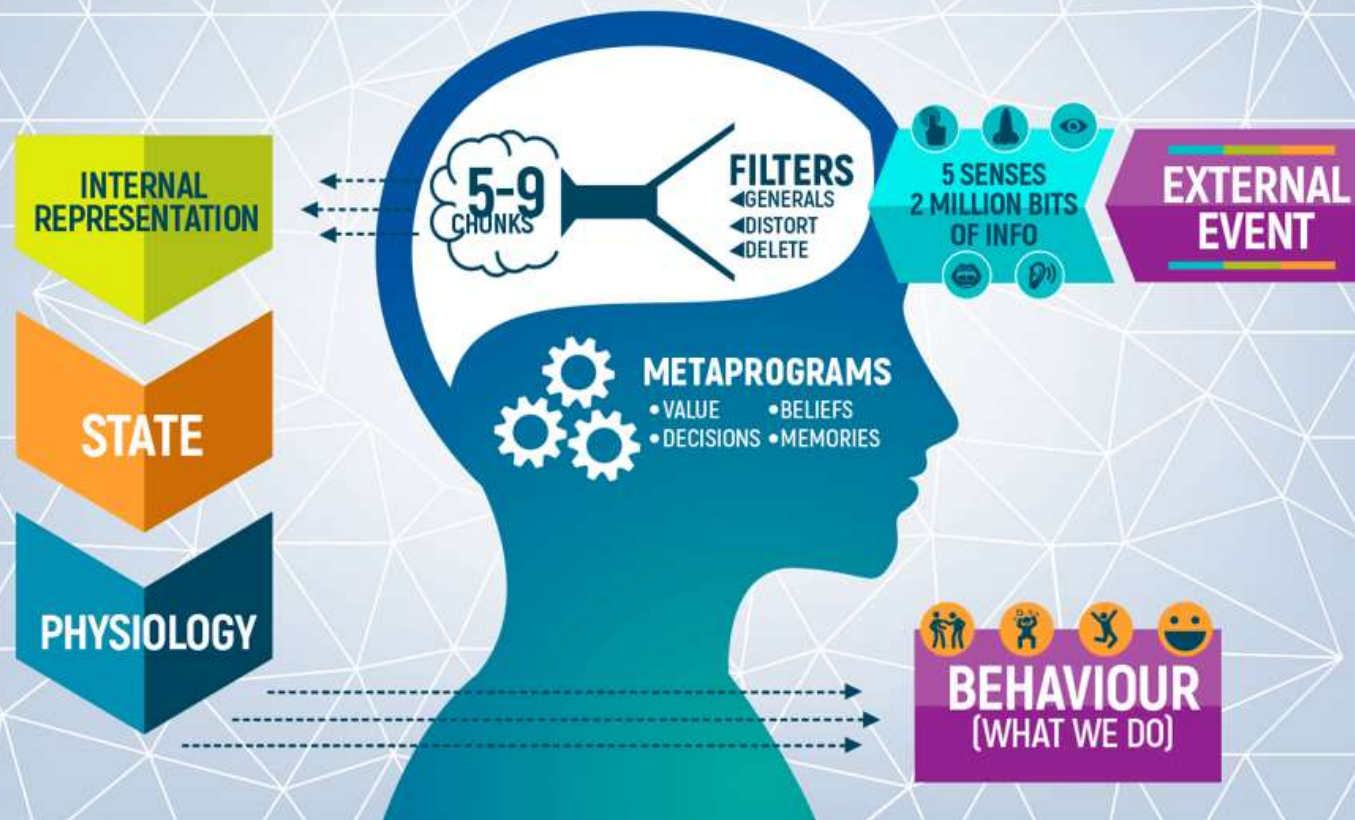
Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Neuro Linguistic communication model

NLP

THE NLP COMMUNICATION MODEL



A graphic representation of NLP Communication Model.

Is clearly based non on the communication message send by transmitter, but focused on the behavioural feedback from the receiver.

So focused on the communication expected results.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Defining the goal of communication 1

Since we clearly defined that the goal of communication is basically conveying the right message to get the right feedback from the interlocutor, arise a question:
When a goal is correct?

Clearly is not a moral question (it should be anyway) but a methodological question.
Setting the right goal is fundamental to spend rightly the effort, that otherwise could be wasted without any expected result.

An acronym is commonly used to identify a well defined goal:

S.M.A.R.T.

- | | |
|---------------------|---|
| Simple | = easy to define and understand |
| Measurable | = identified by metrics and indicators |
| Achievable | = enough and right resources to get it |
| Realistic | = possible with given environment/constraints |
| Time (based) | = plannable (¿project?) |



Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Defining the goal of communication 2

Requirements for ethical behaviour push towards a more sustainable goal definition.

SMART

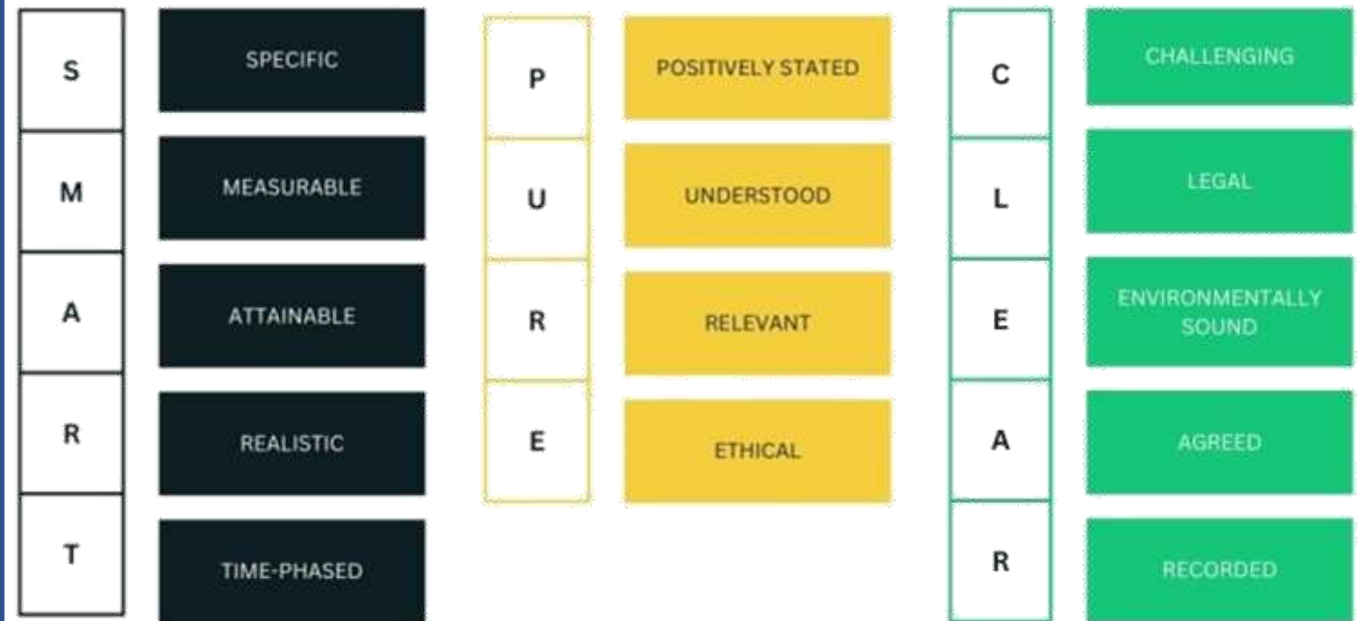
- ▶ **Specific:** Is our goal clearly defined?
- ▶ **Measurable:** Can we measure our progress?
- ▶ **Attainable:** Do we have the resources in place to attain the goal?
- ▶ **Realistic:** Given our environment, is our goal realistic?
- ▶ **Time-phased:** Can we provide a clear timeline for our intermediate and final goals?

PURE

- ▶ **Positively stated:** Can we convey our goal positively and constructively?
- ▶ **Understood:** Does everyone understand the goal we have in mind?
- ▶ **Relevant:** Is our goal relevant to everyone involved?
- ▶ **Ethical:** Does attaining this goal require a compromise in ethics?

CLEAR

- ▶ **Challenging:** Is the goal challenging and will it continue to be so?
- ▶ **Legal:** Is everything in the process of attaining our goal legal?
- ▶ **Environmentally sound:** Will our goal or its attainment unduly stress our internal or external environment?
- ▶ **Agreed:** Do we all agree to pursue this goal?
- ▶ **Recorded:** Has this goal been recorded for reference to track?



Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Negotiations

Communications is not so simple as could be thought.
The right channel, the best intention, a shareable well defined goal are often **NOT** enough.
Perhaps very often you face a counterpart very difficult to deal with.
For that reason you should negotiate.
Again a very difficult situation in which engineers are in trouble because they are expecting that numbers and evidence can make the trick, but is not the case, especially with other powerful humans, with completely different (dark?!) purpose.



From Disney Pictures: Aladdin, 1992

Def. 10.5: Negotiation

A back-and-forth communication designed to reach an agreement when you and the other side have some interests that are shared and others that are opposed. [William Ury]

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

What kind of negotiation are possible?

Basically we have two fundamental kind of negotiation:

Kind of Negotiation	Game Theory correspondent
Distributive Negotiation	Win-Lose (Sum zero game)
Integrative Negotiation	Win-Win (Positive Sum game)

- Distributive Negotiation:** It is the common intended negotiation in which one of the parts win the bargain and the other one lose.
This means that Valour involved in the exchange is defined and fixed, the effort are focused on getting a piece as bigger as possible, taking from the part reserved for the other contenders.
- Integrative Negotiation:** It is a non common negotiation, in which the focus is in increasing the global value creating increasing margins for all the parts involved in the bargain. It assumes that different actors give a different value to different things.
The trick stays in increasing vantage for one part in the component much valuable for him/her, and the same for the other parts.
At the end there is more value shared than the beginning.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

B.A.T.N.A

When you start negotiation you should be prepared on the possible alternatives you have. Sitting on the table without having a clear idea on the real importance of the agreement, and the possible consequences will expose you to a very dangerous situation. Once you are cornered you will be obliged to accept unwanted worsening conditions.

Def. 10.6 B.A.T.N.A. = Best Alternative To a Negotiated Agreement

BATNA is your escape alternative, the residual option you can consider to choose if forced to leave the table without any kind of arrangement.

Sitting down with one or more BATNA in your pocket means keeping open the door to leave the table.

Remember that :

- 1 Option:** is a forcing
- 2 Options:** is (potentially) a dilemma (at least the agreement and a BATNA)
- 3 or more Options:** is a choice



Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Z.O.P.A.

When the agreement is possible?

Essentially when you can find an overlap between the envelope or your expectations and the envelope of your counterpart.

Def. 10.7 Z.O.P.A. = Zone Of Possible Agreement

The overlap of counterparts envelope key factors involved in a negotiation

If there are no points in which your desiderata encounters the corresponding of your opponents there is no match, no agreement is possible. In this case you can:

- ▶ leave the negotiation
- ▶ try to stretch the respective ZOPA, of yours and of others, to create a potential agreement space.

Once again this is the possibility to create a **Win-Win** situation in which all parts contribute in creating value for themselves and for others.



Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

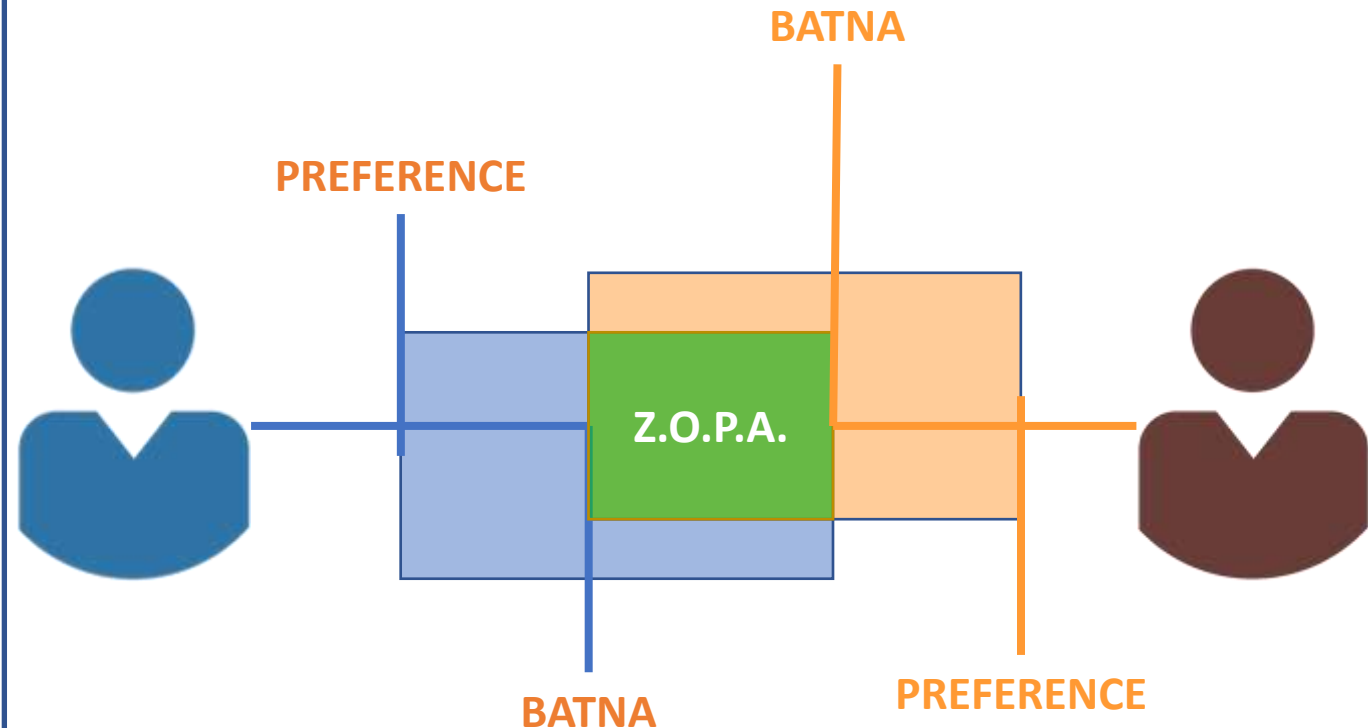
Agreement space

Here is simplified based on **2 different key factors** the envelopes of possible agreement.

Clearly the possibility to expand the ZOPA or to add some other variables in the multidimensional agreement space is only limited by the interlocutors creativity.

We have to acknowledge that there are a lot of situation from business to diplomacy in which negotiation in fundamental, and many are the situation we can see in which people refuse to find a agreed solution, but if fundamental to remember that:

Wars are expensive, also for the winners!



[Fisher, Ury, Patton]

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

What moves people

What are the reasons that moves people in social relationships and find agreement.

Many are the motivation theories, some well funded on solid evidence and scientific proof some other less.

In the beginning of the 20th century, psychologists were looking for the reason that could move people and make them act in a way or another.

The tragedy of the war was shocking and the scars and consequences remained for a long time, in Europe so much that another war was ignite 21 years later, less than a generation.

After the two WWs, this scientists (principally in the USA) were looking for:

what makes people wise, aware of themselves and the decisions they take.



The original question was:
Is there a scale of genetically predetermined needs?
In other word:
Are there a number of common innate needs that moves people to act for their satisfaction?

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

The Maslow's Pyramid of Need 1

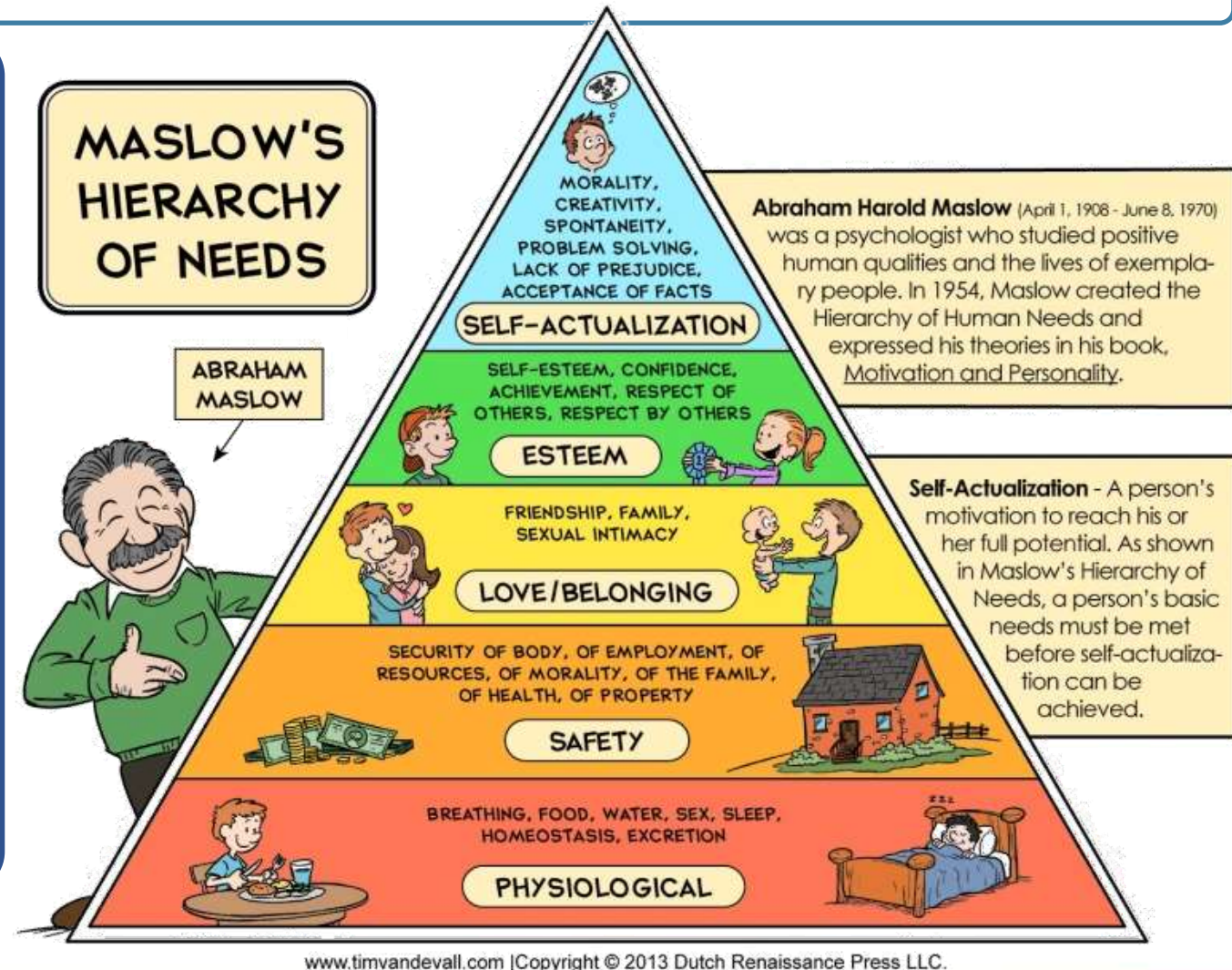
In 1954 Abraham Maslow in the book "Motivation and Personality" presented his theory.

The theory describes a pyramid of 5 levels. People start satisfying their needs from the base and climb to the top once the lower stage is fulfilled.

If a stage/status is lost, a person is forced to make a step downward to the previous one.

This model is easy to understand and well matching with everyone common life experience.

Source of the picture: www.timvandevall.com (2013)



Disclaimer:

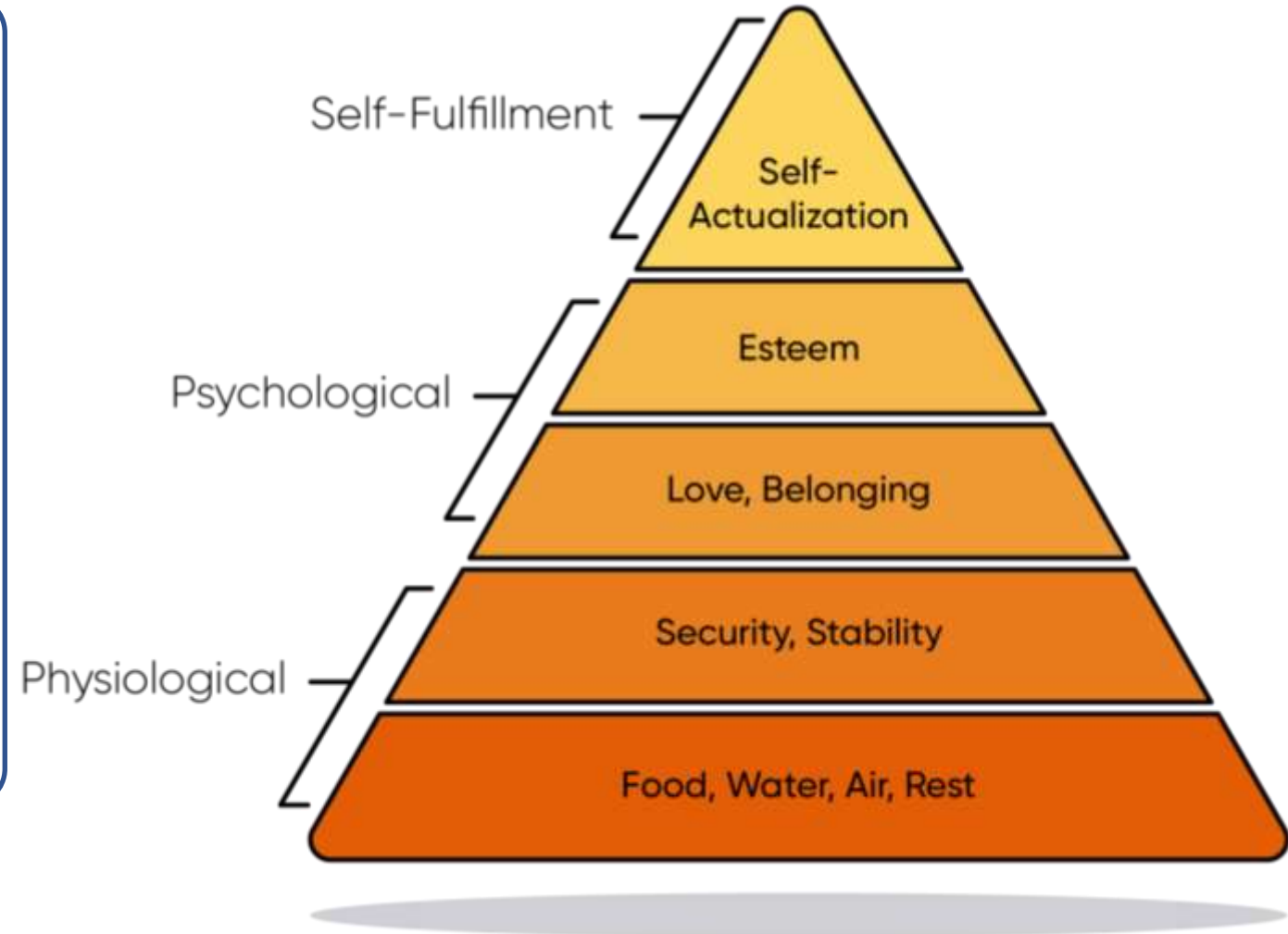
- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

The Maslow's Pyramid of Need 2

The problem is that the model wasn't obtained with a scientific data but derivate by pure observation of human behaviour.
So this simple theory was not developed on solid basis.

For that reason many Maslow's colleagues doubted about the real effectiveness of the model.

The Pyramid presume that human expectations are finished and after self fulfilment there is nothing else to desire or achieve.



Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

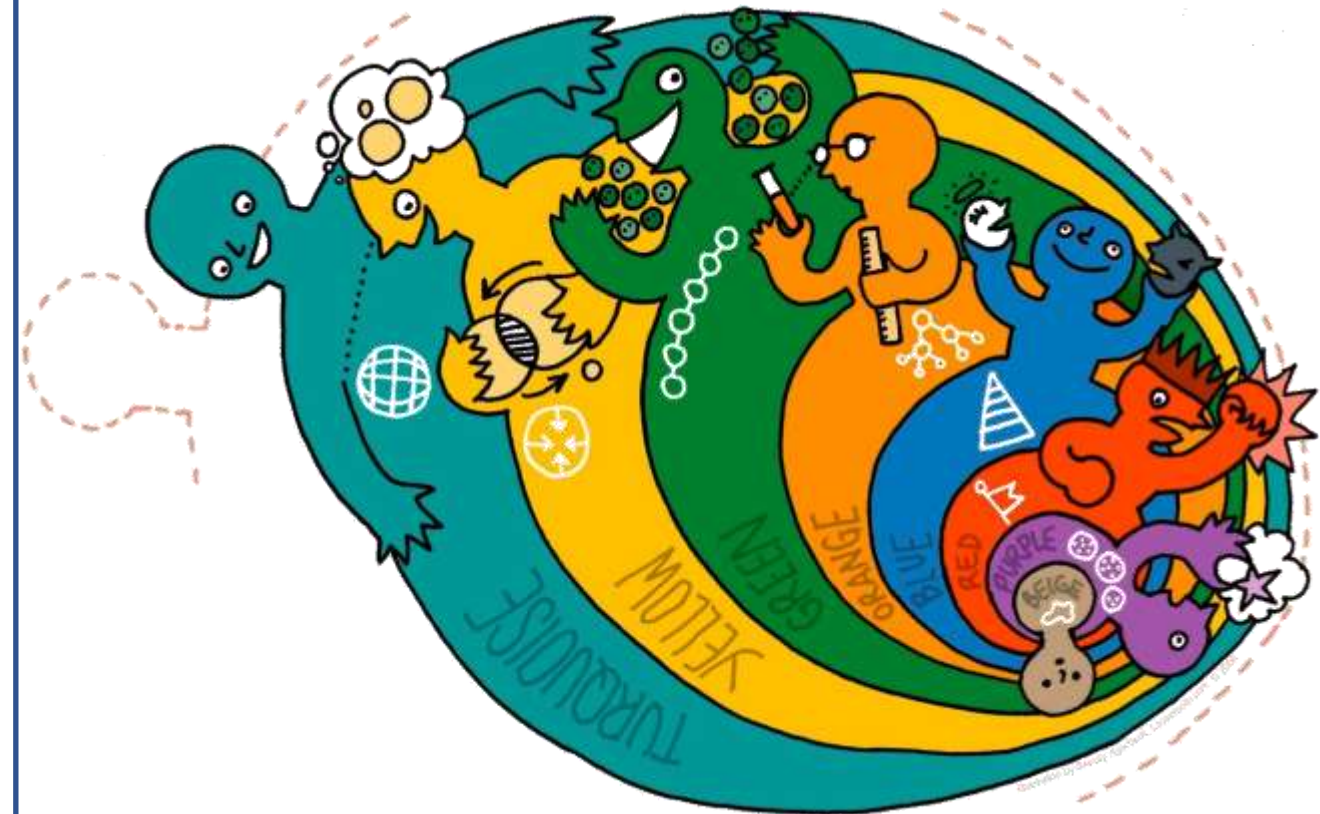
Spiral Dynamics

Another psychologist, colleague and friend of Maslow, tried to help starting collecting data to generate a database that could support the theory. His name was : Claire W. Graves.

Unfortunately his findings drove him in a completely different direction, suggesting another reading of the situation and the human behaviour.

He identified a grooving system of different existence levels (o vMeme), without and end.

These levels was identifying a different thinking structure or framework, derived from the adaptation to an external environmental solicitation.

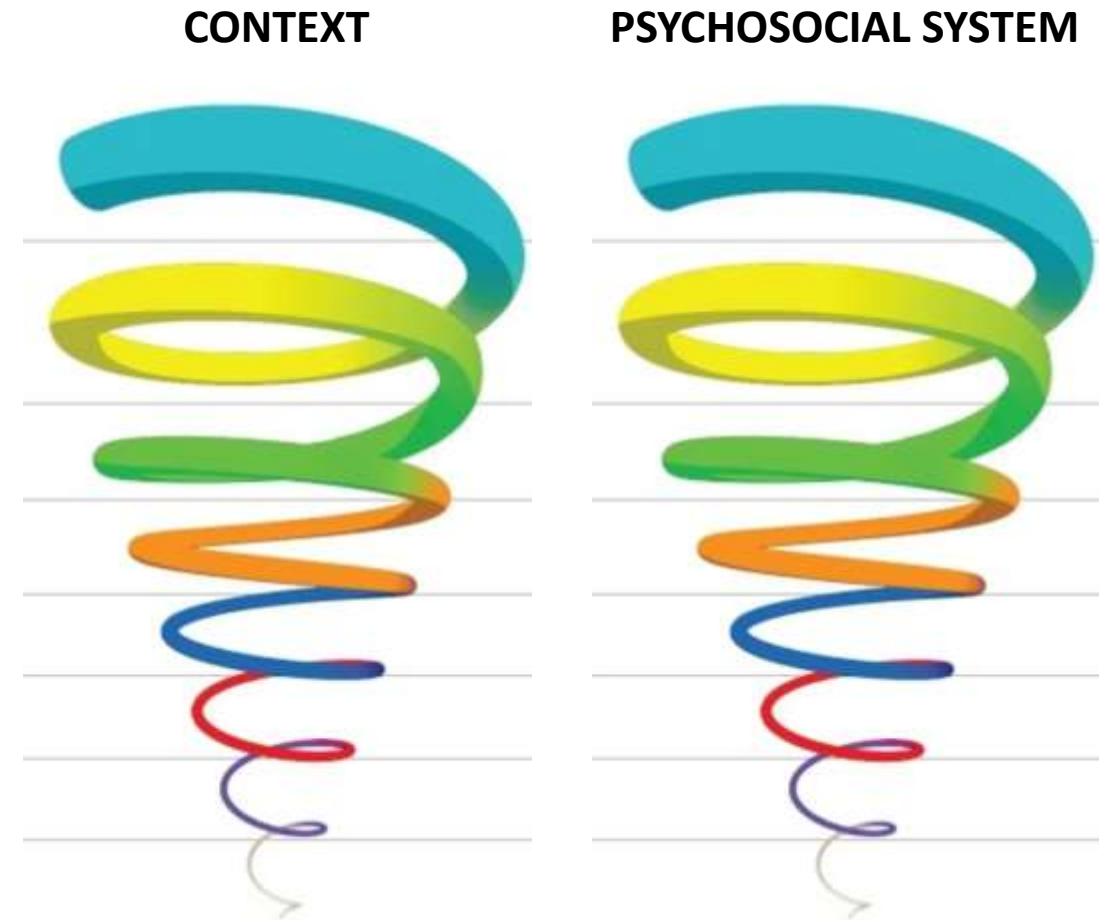


Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Double spiral system

- ▶ Humanity lives in a continuous state of flow and transition in which the solutions from the past induce problems in the future.
- ▶ Due to the increasing of the complexity of the environment in which they live, individuals by their mental resources develop new psychosocial systems to cope with the challenges they face. (2 spirals system)
- ▶ These psychosocial systems could be at individual level or at social level.
- ▶ The brain structure itself changes to generate new cognitive paradigms to adapt to insurging new existential problems.



Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Bio-Psycho-Social System

Originally called (1952):

“Theory of double emergent cyclical spiral of the biopsychosocial adult development system”

Bio: neurology and chemical energy of life

Psycho: for personality variance and life experience

Social: collective energy of group dynamics

System: interdependence of action/reaction in the human organizations

After the death of Graves, the model was developed by Don Beck and Christopher Cowan and with Natasha Todorovic.

Don Beck in the years left the original path and start developing a more commercial model, no more adherent to the basic theory



Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

What & How thinking

Def. 10.8: Concept

For cognitive sciences, is an abstract idea usually associated to a symbolic representation (a word or a symbol), to be communicated, exchanged, shared or discussed by people.

A concept is a content.



What we are talking about could be put inside a Box (if there is one big enough?)
No?! Then it is a Concept

N.B.: For the Spiral Dynamics theory

- ▶ Concepts are infinite,
- ▶ Schemes by which concepts are correlated are finite and identifiable.

Def. 10.9: Conceptualization

Is the ability of human beings to correlate different concepts by generation of relationships.

The whole assemble of conceptualization of a person is his/her own map of the world, the Personale reality, the way to think and to evaluate things.

Conceptualization is the way people correlate concepts.



Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Memetics

Def. 10.10: Meme

Mememes are material or immaterial objects, that like Genes, could bring inside meanings and rules.



Def. 10.11: vMeme (Level of existence)

A biopsychosocial system, a framework by which people tend to generate their thought and the way they elaborate and face the challenges of their environment.

These are in the end Values systems.

N.B.

vMeme do not identify people, but define which systems of thinking they have developed and which of these systems they are using in a certain moment.

A person can use every system already evolved or evolve a subsequent one.

Nobody is always thinking from a single systems but has preferred ones on which gravitates much more.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Spiral Dynamics Levels

The levels (vMeme) identified are 9, but for the 8th and 9th there are not yet enough data from the field to completely define them.

Levels are identified in 3 different ways: numbers, couple of letters, colours (only indicative). Here the list:

LEVEL N°	Spyral position	STAGE	Colour	1 st Spiral Life Conditions	2 nd Spiral Brain/mind coping abilities
1	A-N	1	Beige	Survival	Instinctive
2	B-O	1	Purple	Security	Animistic
3	C-P	1	Red	Power	Egocentric
4	D-Q	1	Blue	Order	Absolutistic
5	E-R	1	Orange	Success	Multiplistic
6	F-S	1	Green	Community	Relativistic
7	G-T (A'-N')	2	Yellow	Synergy	Systemic
8	H-U (B'-O')	2	Turquoise	Holism	Holistic
9	I-V (C'-P')	2	Coral		



Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Locus of control

Def. 10.12: Locus of Control (Control room)

Is the belief on who manage, dominate of influence life.

Answers to the question: Who or What control the person's life.

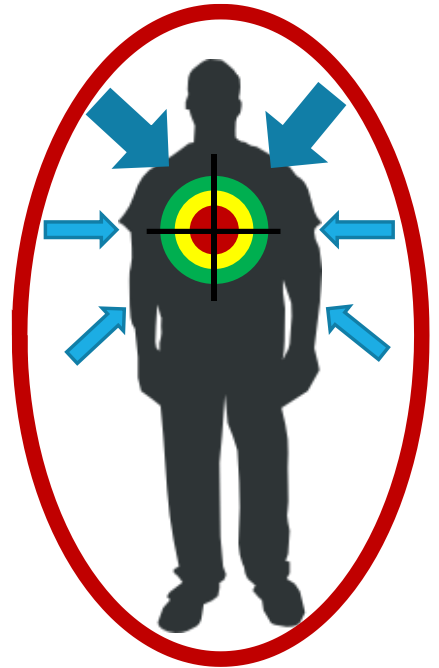
Is the idealistic place by which the control is exercised

Could be:

- ▶ **Internal:** when a person believes he can control the direction of his life and things that happen
- ▶ **External:** when a person believes that the control on the direction of his life and things that happen is in the hand of external forces.



Locus of Control
INTERNAL
*You **make** things happen*



Locus of Control
EXTERNAL
*Things happen **to** you*

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Focus of control

Def. 10.13: Focus of control (Destination of actions)

In the direction to which are aimed the person's actions, the control intention.

Answers to the question: Who or What is responsible for something, the person or the external world.

Could be:

- ▶ **Internal:** when responsibility is on the person (→ adaptation)
- ▶ **External:** when the responsibility is given to external organizations, rules, systems,... (→ influence the external system)

We're calling this...



From Disney Pictures: Frozen II, 2019

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Spiral Dynamics Levels

Here the complete table with references to Locus and Focus of control, the importance of self and the Status Quo management.

LEVEL N°	Spyral position	STAGE	Colour	1 st Spiral Life Conditions	2 nd Spiral Brain/mind coping abilities	Locus of Control	Focus of Control	Importance of self	Status Quo management
1	A-N	1	Beige	Survival	Instinctive	---	---	---	--
2	B-O	1	Purple	Security	Animistic	External	Internal	Keeps Order	Ethnocentric
3	C-P	1	Red	Power	Egocentric	Internal	External	Loves change	Egocentric
4	D-Q	1	Blue	Order	Absolutistic	External	Internal	Keeps Order	Ethnocentric
5	E-R	1	Orange	Success	Multiplistic	Internal	External	Loves change	Egocentric
6	F-S	1	Green	Community	Relativistic	External	Internal	Keeps Order	Ethnocentric
7	G-T (A'-N')	2	Yellow	Synergy	Systemic	Internal	External	Loves change	Egocentric
8	H-U (B'-O')	2	Turquoise	Holism	Holistic	External	Internal	Loves change	Ethnocentric
9	I-V (C'-P')	2	Coral						

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Level 1: A-N (Beige): Autistic

Central Idea: Express the self through automatism and instincts like any other animal, following the primary physiological needs and the environmental conditions.

System Value: Autistic

Base: Sense of survival

Life conditions: Natural environment, as it was defined by nature

Mental abilities: Express primary physiological needs.

Social Structure: Free animals

Colour: **HOT**

Locus of control: Inexistent

Focus of control: Inexistent

What makes happy: Basic needs satisfied, being nurtured, rested and no urgent physiological nuisances.

What makes angry: Hunger, Sleep privation, urgent physiological nuisances.

Bargain chip: Satisfaction of primary needs and compelling desires.

Leadership: Inexistent.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Level 2: B-O (Purple): The Tribe

Central Idea: Sacrificing the self for the ancestors or spirits desires, like nature or order of things; ask to external powers for safety and protection.

System Value: Animistic

Base: Ancestral spirits

Life conditions: Mysterious and frightening world (because it is incomprehensible)

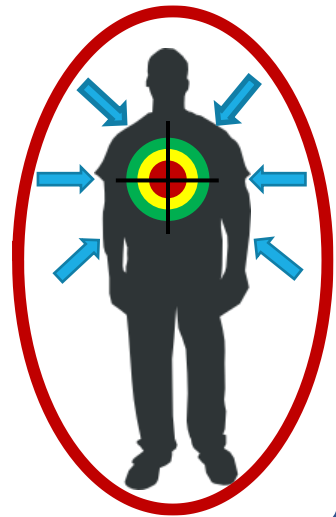
Mental abilities: Giving up on themselves to appease "the spirits" and find safety in the community

Social Structure: Tribal group

Colour: **COLD**

Locus of control: **EXTERNAL**

Focus of control: **INTERNAL**



What makes happy: Spirits are satisfied, traditions and rituals have been respected.

What makes angry: Violate traditions, infuriating forces that rule the world, or avoid to curry favor with them.

Bargain chip: Protection (through magic).

Leadership: The elders.

Level 3: C-P (Red): The Dominator

Central Idea: Express the self without a sense of guilt, no caring for others and consequences, the important is immediate pleasure, avoid humiliation, dominate instead of being dominated, frighten instead of being afraid.

System Value: Egocentric

Base: God of power

Life conditions: The world is a jungle, the stronger lives

Mental abilities: Self-awareness, I have the right to express myself, others don't matter

Social Structure: Domination

Colour: **HOT**

Locus of control: **INTERNAL**

Focus of control: **EXTERNAL**



What makes happy: Having power, Having things, the possibility to satisfy every desire, whatever they are.

What makes angry: Having no power, being teased publicly, appearing weak.

Bargain chip: The power.

Leadership: The stronger.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Level 4: D-Q (Blue): The rules' servant

Central Idea: Sacrificing the self now for a future reward in a world driven by fear and disorder, seeking meaning and guidance in a universe governed by a higher forces.

System Value: Absolutistic

Base: Force do the Truth

Life conditions: A world controlled by a superior forces

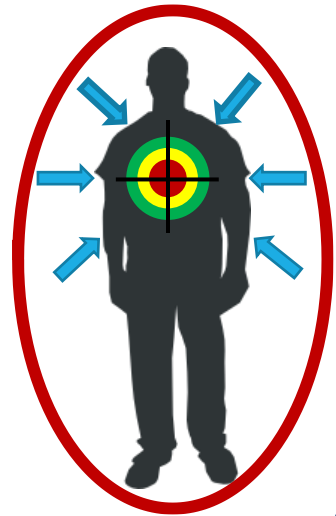
Mental abilities: Awareness of the consequences

Social Structure: Pyramidal

Colour: **COLD**

Locus of control: **EXTERNAL**

Focus of control: **INTERNAL**



What makes happy: Find the source of the right rules and respect them looking for the future prize.

What makes angry: Not being able to respect rules .

Bargain chip: Honour and respect.

Leadership: Hierarchy .

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Level 5: E-R (Orange): The Entrepreneur

Central Idea: Expressing the self in a calculated way aimed at getting what you want, and solving problems in a world of opportunity, where competition is fierce. The goal is to win, to continuously improve.

System Value: Multiplistic

Base: Drive and motivation

Life conditions: Abundance and opportunities to be seized

Mental abilities: Explore options for improvement

Social Structure: Delegating

Colour: **HOT**

Locus of control: **INTERNAL**

Focus of control: **EXTERNAL**



What makes happy: Improvement.

What makes angry: Appearing stupid or poor.

Bargain chip: The possibility to improve.

Leadership: The most effective in creating positive results.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Level 6: F-S (Green): The community first

Central Idea: Sacrifice the self without hesitation to have and share benefits, being accepted right away. The truth is relative and contextualized to the needs of the community. Love and belonging to the group are the most important things group are the most important things.

System Value: Relativistic

Base: Union between people

Life conditions: A world of sharing and coexistence

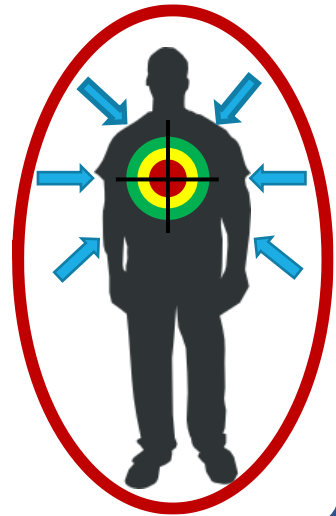
Mental abilities: Giving up on themself for the sake of the community, sensitivity and contextual realism

Social Structure: Egalitarian

Colour: **COLD**

Locus of control: **EXTERNAL**

Focus of control: **INTERNAL**



What makes happy: Sharing, a world of solid relationships.

What makes angry: Selfishness, abusing others.

Bargain chip: Empathy.

Leadership: The most capable of creating consensus.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Level 7: G-T (Yellow): The participating individual

Central Idea: Expressing the self but never at the expense of others or nature, so that life and the rest of the system can continue in a sustainable and natural way.

System Value: Systemic

Base: Flow and flexibility

Life conditions: A precarious world full of risks and at risk of collapse

Mental abilities: Systemic and relativistic thought

Social Structure: Flexible and integrative

Colour: **HOT**

Locus of control: **INTERNAL**

Focus of control: **EXTERNAL**



What makes happy: Find a way to let the system working.

What makes angry: Tends not to get angry, rather feel sorry when components of a system are not integrated.

Bargain chip: Information (Knowledge).

Leadership: The most effective in convey and mange information.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Level 8: H-U (Turquoise): Shared consciousness

Central Idea: Sacrificing the self for existential realities.

System Value: Holistic

Base: Global vision

Life conditions: A delicate system of interconnected forces, in which order and disorder coexist in harmony

Mental abilities: Thought transpersonal and interconnected

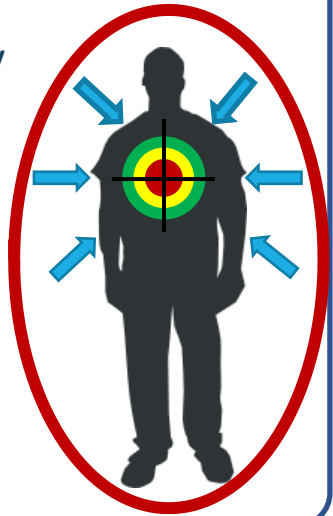
Social Structure: Shared mind (hypothetical)

Colour: **COLD**

Locus of control: **EXTERNAL**

Focus of control: **INTERNAL**

There are not enough data to describe completely this level



What makes happy: ---

What makes angry: ---

Bargain chip: ---

Leadership: ---

How many friends someone needs

The anthropologist Robin Dunbar analysed the number of relationships that are commonly sustainable by a human being. This number depends from the dimension of the part of our brain called neocortex, but also and much more from the quality of relationships.

“It’s not just a matter of remembering who is who, or how x relates to y and both are related to me, but rather how I can use my knowledge of the individuals involved to manage those relationships when I need to call on them.”

[How Many Friends Does One Person Need? Dunbar’s Number and Other Evolutionary Quirks I need to call on them. - Robin Dunbar - Harvard University Press – 2010]



Def. 10.11 Mentalization

The ability to consider the behavior of others as the result of mental states similar to one's own. Is also the ability to keep present one's own mind and that of others.

As a consequence recognizing the existence of others and regulate one's behavior accordingly.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

How many relationships it is possible to keep in mind?

Studies show that is possible to have at maximum 150 relevant relationships at different level of importance.

These relationships could be represented as concentric circles

The number of people included increase progressively, while contextually decrease the intensity with a multiplier ~ 3

More than 150 are only name and references.



3-5 People – Intimates

Daily contact

12-15 People – Sympathy group

Their sudden disappearance would leave us upset (sport teams, juries, the apostles)

30-35 Persons – Acquaintances

Dimension of the nocturnal camp of hunter-gatherer

100 Persons – The Clan

Dimension of early stable villages

Σ
5

20

55

150

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Organization Images

We are all more or less part of a certain organization.

Working is an activity that put in touch people, giving birth to a formal or informal organizations.

Formal organizations usually explicit their own set of rules and their own context in which people are immersed and have to deal with.

Gareth Morgan (born 22 December 1943) is a British/Canadian organizational theorist, and Distinguished Research Professor at York University in Toronto in his book **Images of Organization** (2006), described how everyone of us has in his own mind a defined mental model of the organization in which is involved.

This Metaphor of the organization one has in mind affect the behavior and the approach with the organization and possible changes that could occur.

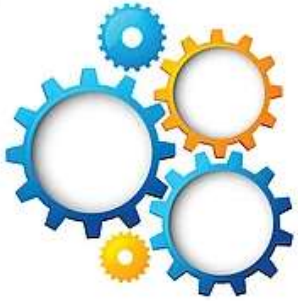


Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Metaphors 1

Metaphors are the pictures by which organizations are represented.



MACHINES

1. MACHINES

Can be designed, controlled and re-engineered. Components can be changed
They behave in predictable ways

Leadership:

Leaders forecast, plan, organize, communicate, coordinate and control.
The principles of scientific management are seen as paramount.



ORGANISMS

2. ORGANISMS

Open systems that adapt and respond to environment.
They have a definite lifecycle.

Leadership:

Leaders need the organization is nourished and the various parts of it are well connected to each other. They address factors that inhibit the organization's growth and health.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Metaphors 2

Metaphors are the pictures by which organizations are represented.



BRAINS

3. BRAINS

Are intelligence-led and +resemble a library and memory bank. They have a language system that allows them to process information, reassembling it into new ways of operating.

Leadership:

Leadership is more diffuse and knowledge-based; intelligence and ability to connect ideas is valued. Self-organization through «quality circles» and similar approaches is expected.



CULTURES

4. CULTURES

Are like an ethnic group with “shared systems of meaning” and norms, shared beliefs and expectations, which bind people together. Symbols that reinforce these beliefs are very important.

Leadership:

Leadership focus is on the shared frames of reference that make organization possible. People are appreciated for what they stand for in the networks of relationships

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Metaphors 3

Metaphors are the pictures by which organizations are represented.



POLITICAL
SYSTEMS

5. POLITICAL SYSTEMS

Are systems of government managing the common and conflicting needs of various interest groups. Coalitions of interest form, and power is used to get things done.

Leadership:

Power is a key issue. Stakeholders are identified and, through negotiation, alliances are formed, Control of boundaries, information and technology give leverage. Powerful oratory is valued.



PSYCHIC PRISON

6. PSYCHIC PRISON

They reflects the unconscious “shadows” we carry over from family and other relationships, so that structures, rules, beliefs and behaviors are not corporate but personal. They can become like cults, seeking to “tie people in”.

Leadership:

Leaders must be aware of unconscious assumptions they experience or that others project on to them, avoiding “thought control”. Their awareness of these issues leads them to focus on ethical dimensions of organization, life and purpose.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Metaphors 4

Metaphors are the pictures by which organizations are represented.



FLUX AND
TRANSFORMATION

7. FLUX AND TRANSFORMATION

They are seen as examples of chaos and complexity, where hierarchy and control have limited relevance. Order emerges naturally from a process of continuous transformation.

Leadership:

Leaders must let go of the idea that they truly control outcomes. They can decide on a desired outcome, protect key values and use small changes to create large effects in the right general direction, adjusting emphasis as the future unfolds.



INSTRUMENT OF
DOMINATION

8. INSTRUMENTS OF DOMINATION

They are intrinsically systems of control. They harness resources (including people, seen as “resources”) to achieve their purposes, using charisma, tradition, economic power and legal or structural power to gain compliance.

Leadership:

Leaders in organizations may be challenged by this critique, but benefit by seeking to understand it. They can respond by reviewing the social role of their organizations (external), and the needs of organization members (internal) – Work-life balance, stress, health and safety etc.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Metaphors 5

Metaphors are the pictures by which organizations are represented.



ARCHITECTURE

9. ARCHITECTURE (Mumford and Beekman, 1994)

They provide a designed fit-for-purpose environment for effective work. Organizations design exists to support and enable the organization's purpose, providing a context that makes work easier, but without exerting control. Ideally the elegance of the design enriches work.

Leadership:

Leaders take account of the social organization (formal and informal) and of its patterns of communication and behaviour. They consider the activities of the organization and design its processes to meet the needs of both activities and people. Stronger processes are used where they must bear heavier weight.

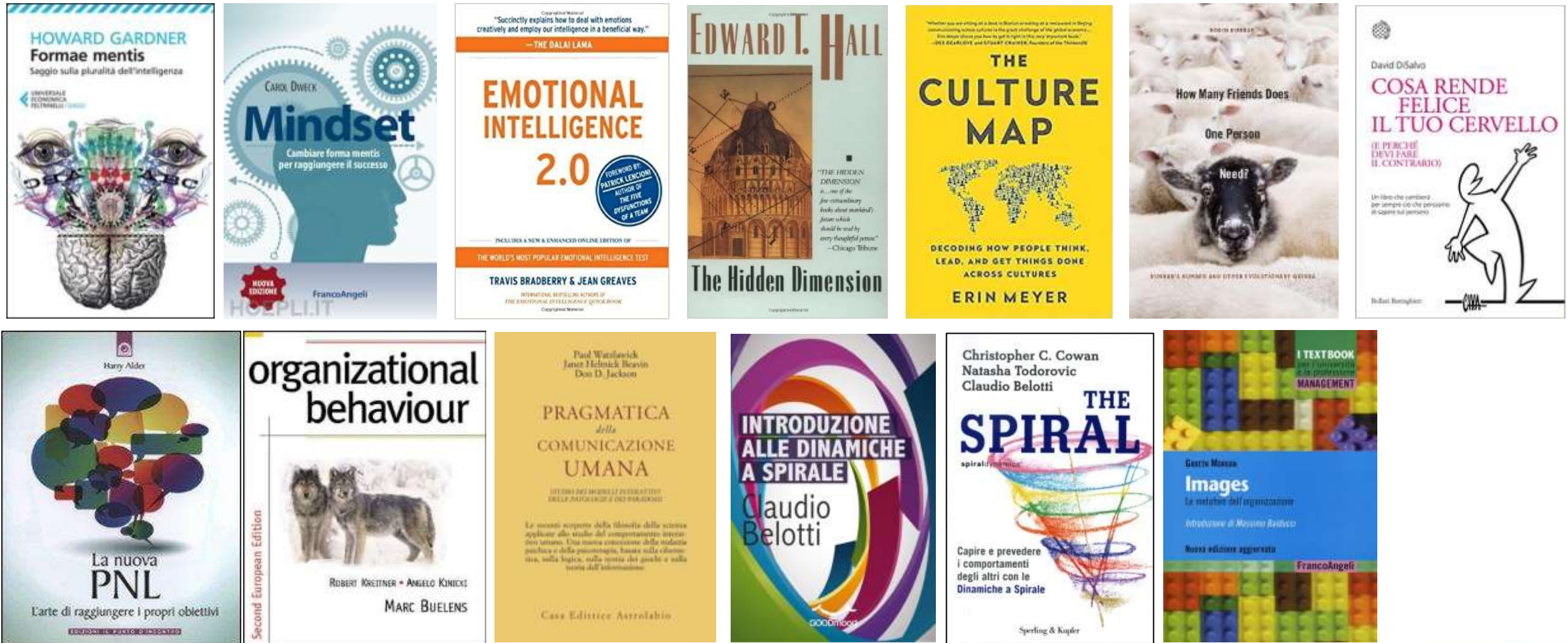
These metaphors are important in understanding the organization culture and the better approach to communicate with the organization and the people involved in it.

The comprehension and respect of the organization cultures and beliefs, rituals, structures of power, expectations and all, could give a useful key to access to it, instead of forcing bad manners and get in collision, jeopardizing the communication and the goal to achieve.

Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

Bibliography



Disclaimer:

- Terminology, pictures and reference are only for didactic purpose, without any kind of commercial use.
- Reference are made whenever is possible to report the original source of information

PART 10 – COMMUNICATION FOR ENGINEERS

Thank you for your attention

