

Human Intelligence: a constructive inquiry

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A constructive inquiry into emotional intelligence

How can we generate more communicative quality and interaction in our relationships with others?

What is the distinction we make between constructive influence... and manipulation?

What are our personality traits and preferences?

How can we explore our behavioral tendencies?

What is collective intelligence?



How our brain works

- 1. A look at our brain... and the Amygdala
- 2. The brain and its neurons
- 3. Human Beings: animals with 3 brains, MacLean
- 4. Human brains have 2 alternatives: Sperry, Nobel Prize winner
- 4. Four cerebral spheres: Hermann's model



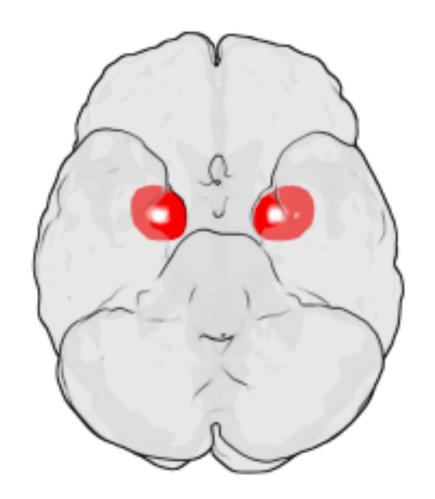
The Amygdala:

Two almond-shaped clusters of nuclei within temporal lobes

Emotional responses: anger, fear... "emotional hijacking"

Rapid decision-making

"Random Access Memory" for the brain





Interesting facts about the brain

It consumes 25 watts

The body consumes 95 watts

Our brain reacts to stimuli within 85 ms

We develop a consciousness about these stimuli in 250 ms



Our neuronal intelligence commands us

The brain and nervous system is composed of billions of neurons, each one connected to millions of others.

Our brain is constantly adapting itself

Connections between neurons are cellular and always evolving.

Our brain only wears out if we don't use it.

In our neurons, electric activity is triggered by chemical phenomena, producing different substances.

Neurotransmitters send messages able to cross over minute distances, called synapses, transmitting information from one brain cell to another.

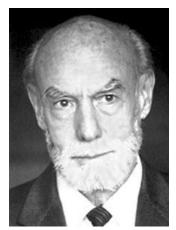


Our alternative selves

Roger Wolcott Sperry, Nobel Prize winner: "One brain reasons, while the other dreams."

Left brain

Right brain



Left brain: manages our ability to speak and to express ourselves

Right brain: how we think without language



Left brain: critical, analytical, deductive

Language, oral expression

Abstraction: analytical capability, deducing with a rational approach

Methodology: using methodical step-by-step processes based on logical order

Logical calculation based on numbers and facts

Determining cause and effect



Right brain: creative, synthetic, intuitive

Understanding nonverbal elements	Recognizing shapes and faces easily Image, imagination, colors
Visual	Describing with drawings Spatial perception, visualizing in 3 dimensions Able to locate key elements in a given context
Auditive	Tone, intonation of the voice: style, pace and rhythm
Dreaming, intuition	Analogies, associations
Kinesthetic www.e	Describing gestures Recognizing objects by touching them mergingstep.com 9



But who are we?

Exploring the human personality

Key words:

Preferences

Character traits

Dominants

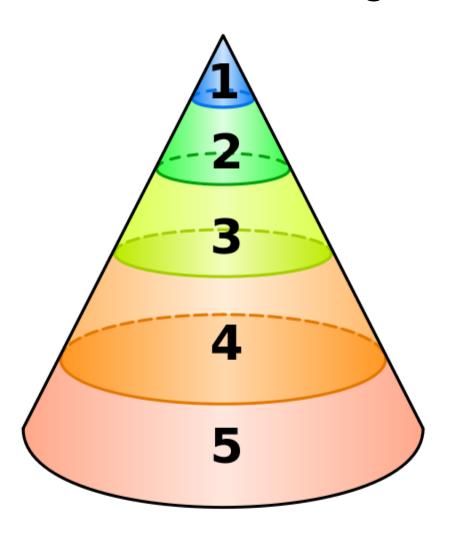
Consciousness, awareness... unconscious behaviors

Archetypes

Collective Intelligence... Collective Unconsciousness



The psyche, according to psychoanalysis



Representation of the structure of the psyche:

- 1. The Me
- 2. The consciousness
- 3. The personal unconsciousness
- 4. Collective unconsciousness
- 5. The part of the collective unconsciousness that cannot be known, the "archaic unconsciousness."



Two important keys to any psychometric evaluation:

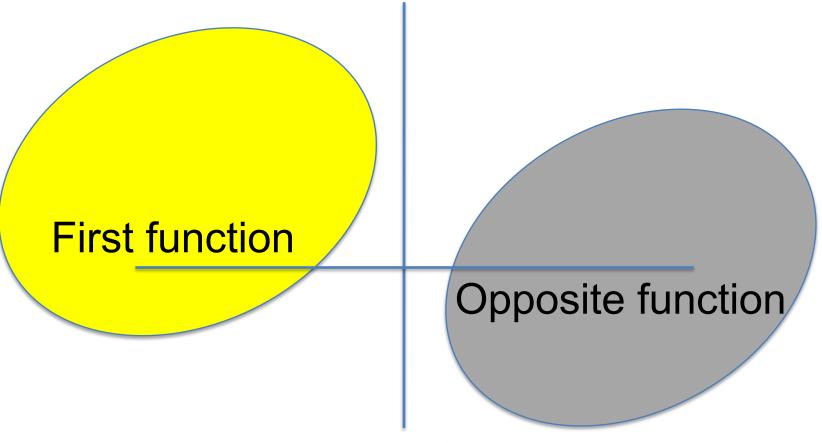
Fidelity

Validation



What MBTI describes

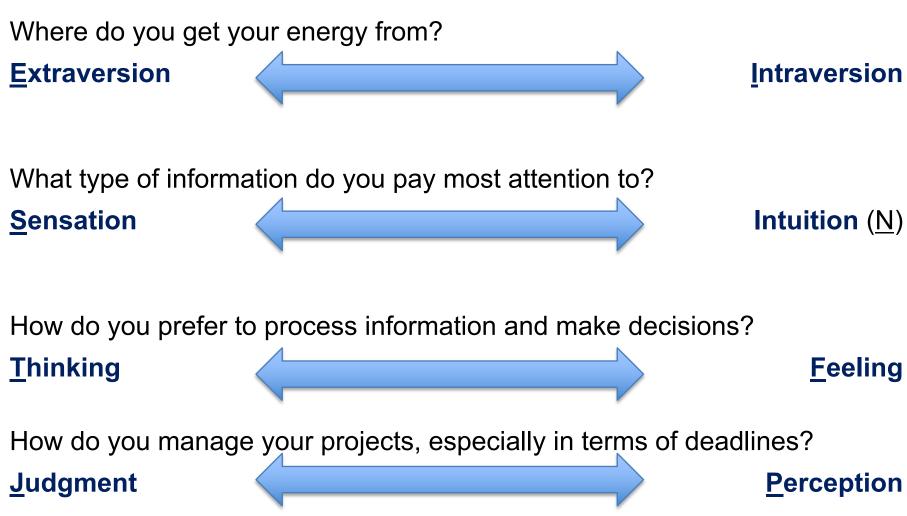
Dominant function



Underlying function



MBTI 4 fundamental dimensions





The potential for conflict between judgement and perception

Judgment (for MBTI, <u>not</u> what is right or wrong, but discernment, or distinguishing between what is accepted as valid... and what is not) An individual who scores strongly in judgment requires a coherent structure

and an orderly process. Once a project is finished, we must not call it into question. That is a Pandora Box of doubt and second-guessing!

Perception (for MBTI, an individual perceives a problem in its globality, and one good idea easily leads to another. They do not understand why different aspects of a problem should be considered as separate entities. They see how different pieces of a puzzle fit together. They perceive it as a system.) These individuals typically take time to become inspired by the problem, then they work in a rush to seek innovative solutions, many of them, and all at once! They destabilize their colleagues because they want to add their innovative ideas to what has been already considered as finished.



OCEAN, or the Big 5:

a psychometric reference, *not* a tool

- (O) Open-minded to experiences appreciating artistic expression, strong sensations, adventures, non-conformist thinking, curiosity and imagination.
- (C) Conscientious self-disciplined, goal-oriented, respecting obligations, organization rather than spontaneity
- **(E) Extraversion** energy, tendency to seek stimulation and the social-interaction with others.
- (A) Agreeability measuring cooperative attitudes rather than suspicion, even anti-social behavior towards others.
- (N) Neurotic measuring emotional stability: potential vulnerability to anger, worry, depression.



Ned Hermann, 4 spheres of the brain

Director of management training at General Electric, he studied Sperry's research (Left / Right hemisphere) as well as McLean's 3 brains theory.

He developed and validated **Hermann Brain Dominance Instrument** (HBDI), **an instrument to measure a person's preferred way of thinking**.

The profile is a **metaphor of <u>preferences</u>** for thinking of an individual as it relates to 4 quadrants of human intelligence.

A **dominant** is a starting base, a point of reference, like with a compass. We are – of course! – more than able to explore other behaviors.



Classification according to Herrmann

Left brain, cortical	Right brain, cortical
Left brain, limbic	Right brain limbic



Logical

Analytical

Fact-based

Quantitative

Holistic

Intuitive

Integrative

Synthesizes information

Whole Brain Model
Ned Hermann

Sequential

Organizes

Detailed

Planned

Interpersonal

Feeling-based

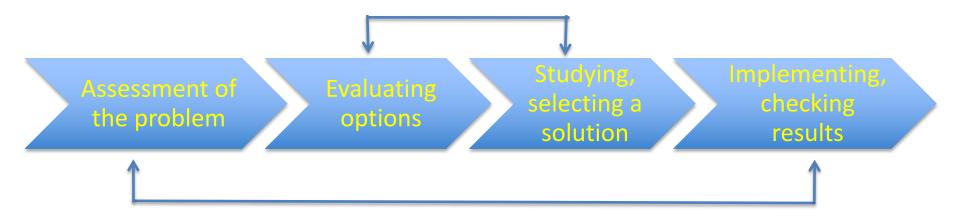
Kinesthetic

Emotional Intelligence



How our brains perceive problem-solving

Right-brain dominance



Left-brain dominance



How we might react when we encounter a problem

It's in conflict with our logic

Incoherent

Complicated

Defective

A contradiction...

A gap between a future vision and current reality

A challenge

An enigma

A paradox

A creative game

Disturbs the order in our lives
Danger
Confusion

A misunderstanding in our interpersonal relationships: Hostility
A conflict...



Reflex questions we may have when there is a problem

Collect and analyze facts and figures

How often?

How important is this data?

What are the consequences?

How much?

Can we score it, rank it, create a weighting, a scale?

Define issues and final outcomes

What are we aiming for?

Our future vision?

Project the ideal solution

Use a creative game approach...

Take practical aspects into account:

Where and when?

What ways and means?

Which methods?

What schedule?

Consider human relationships and motivations:

Who is concerned?

Who is the final decider?

Who will you work with?

Who will you compete against?

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How we seek solutions

We analyze feasibility
We set specifications
Use a matrix for a logical search

We use drawings and diagrams
Generate associations
Metaphors, "It's like..."
Find out what's already been
"discovered"

We capture and list solutions as soon as we have them
We need to focus on planning
We assess and manage available resources

We want to create a favorable climate for fresh thinking
No censoring of others
We need a constant flow of ideas



What we focus on as we implement solutions

Resolve logical contradictions
Divide issue into incremental parts
Impose more control, define limits
Establish intellectual coherence
Is the solution SMART?
Simplify a complicated situation

Is it future-oriented?
Will it meet the challenge?
Is it coherent with long-term goals?
Innovative, different and creative
Audacious...

Really applicable?
A need for inherent order
Time management
It eliminates a threat
Need to state who does what, when,
where and how

Does it establish good relationships?
Eliminate misunderstanding?
Teamwork
Improves communication
Respect people
Does it resolve a conflict?



Exercises

Our fundamental needs

Criteria for motivation

Functional mechanisms we constantly express



Our fundamental needs

Left Brain, Cortical
We seek rational coherence

Right brain, Cortical
We seek novelty, how to
invent new solutions

Decision-making Acquiring facts, data

Acquiring insights Being recognized

Left Brain, Limbic
A practical sense of security,
knowing we have a plan

Right brain, Limbic Emotional, relational security

How can we reach results?

Appreciated
Being accepted
Feeling loved

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Criteria of motivation

Facts, financ thinking, pe		Fantasy, risk, innovation aesthetics	, pleasure,
	De-motivation		

Wasting time Routine

Risk Conflict

Protection, organization, prudence, financial well-being, planning, reliability

Social interaction, sentiments, sensibility

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Fundamental mechanisms we constantly express

Re-analyzing incoherent elements Gathering facts Deep focus on technical details Taking constraints into account Seeing new possibilities Resolving problems intuitively Relating one argument to another

Developing processes
Envisioning projects in terms of scheduling, budgets
Going all the way to the end of a process

Persuading others, reconciling contradictions
Perception of relational difficulties
Considering values



Our perception of time

Accounting for time as a benchmark

Present: more focused on measuring, calculating in terms of performance

Seeking existing models, norms, standards

Playing with deadlines

Future

Seeking innovation

Planning and structuring our time

Present: here and now

When will we finish?

What are we going to do next?

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Devoting all our time to a particular goal

Past: we try to return to a time when there was perceived