

Workshop

Communication and interpersonal skills in complex systems

Chania, 16th May 2023

Prof. Nicoletta Vegni
Niccolò Cusano University

Prof. Francesco Melchiori
Niccolò Cusano University

#EuropeanUniversities

Building
the universities
for the future



Activity 1

ATHENA

“Guess what I feel...”

- each group member draws a sheet of paper from the envelope and finds a written emotion
- without mentioning the written word he/she will have to make the other group members understand the emotion
- you can use gestures and words, whole sentences or even acting and role playing
- The only rule is **not to make direct references to the word written on the sheet**
- Group members will discuss and choose the emotion from a list
- For each word the group has 2 attempts
- Time limit: 25 minutes

ATHENA

Happy

Sad

Angry

Anxious

Excited

Calm

Satisfied

Frustrated

Nervous

Relieved

Joyful

Disappointed

Confident

Insecure

Grateful

Envious

Hopeful

Despairing

Proud

Shamed



25:00

Challenges

**Write on the poster the challenges of
this task**

You have 5 minutes!

VERBAL AND NON-VERBAL COMMUNICATION

We could also say

DIGITAL AND ANALOGICAL COMMUNICATION

DIGITAL COMMUNICATION refers to Cognitive aspects and is related to the explicit content of the message

ATHENA

ANALOGICAL COMMUNICATION refers to Emotional aspects and is related to the implicit content of the message

**TO ENSURE A USEFUL AND FUNCTIONAL COMMUNICATION
DIGITAL AND ANALOGICAL ASPECTS SHOULD BE
CONSISTENT WITH EACH OTHER otherwise.....**



WE ARE DOOMED TO

MISUNDERSTANDING

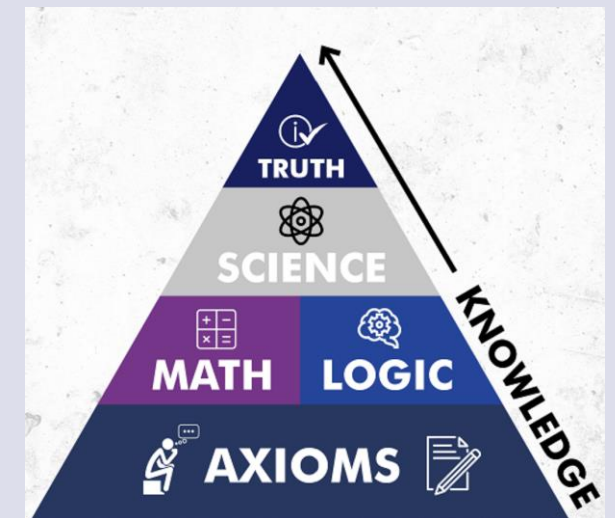
Digital and analogical communication is one of the 5 axioms of communication according to Palo Alto Group (*Pragmatic of Human Communication, 1979*)

What is an axiom?

It is a basic principle that is assumed as true

Why “pragmatic”?

They assume that communication affects behaviour and vice versa. They also assume that communication IS a behaviour



Axiom 1: it is impossible not to communicate

We said that communication is a behaviour

As it is not possible not to behave, it is not possible not to communicate

Behavior hasn't an opposite Communication hasn't an opposite

EVEN IF YOU THINK YOU ARE NOT COMMUNICATING...YOU ARE...IN SOME WAYS

Axiom 2: Every communication has a content aspect and a relationship aspect, such that the second one (relationship) defines the first one and is therefore a meta-communication

IT IS NOT ONLY WHAT I AM SAYING...BUT ALSO WHO IS STRONGER AND POWERFUL DURING THE CONVERSATION

Axioms 3: The nature of a relationship depends on the punctuation of communication sequences between communicators.

In other words, this axiom deals with points of views and different prospectives during a conversation or different level of information.

In a work setting, a manager might punctuate a sequence of events as starting with an employee's mistake, while the employee might see it as starting with the manager's lack of clear instructions. This difference in punctuation can affect how each person perceives their working relationship and their roles within the organization.

Axiom 4: Communication has digital and analogical aspects

To ensure a useful and functional communication process, those two aspects have to be coherent between them.

This is not so easy as it seems, as analogical aspects are influenced by emotions and digital aspects are basically ruled by cognitive skills and rationality

Axiom 5: All communication sequences are either symmetrical or complementary, depending on whether the relationship between communicants is based on differences or equality

Symmetric relationship: friends, group of students...

Complementary relationship: teacher and students, parents and children...

By being aware of these axioms, people can better understand how their communication patterns affect their relationships.

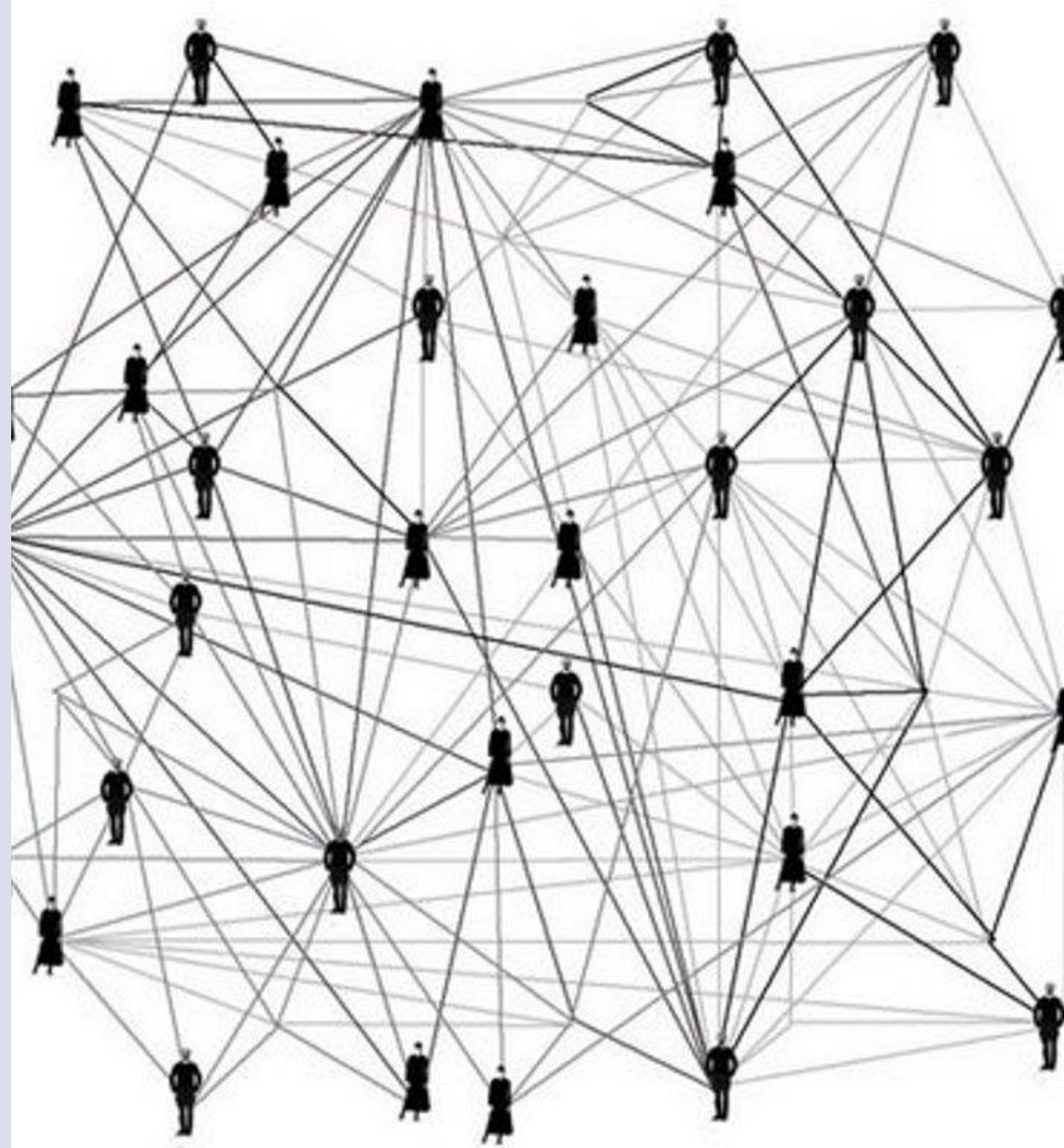
WHAT IS A COMPLEX SYSTEM?

We will refer to some definitions of
“General Theory of Systems”
by Karl Ludwig von Bertalanffy

“A system is a complex
of interacting elements”

L. von Bertalanffy (v., 1968, p. 54)

Complexity Class	Known	Unknown	Knowns Unknown	Unknowns
Simple	✓	x	✓	x
Complicated	✓	x	✓	✓
Complex	x	✓	✓	x
Chaotic	x	✓	x	✓



ACTIVITY 2

“Let’s create in a complex system...”

- Each group has to create a **stick figure** representing the entire group by identifying:

3 strengths and 3 weaknesses

- ATTENTION: each of the 6 selected aspects must belong to at least one (or more) person in the group
- Choose a name for your **Group Figure**
- Time limit: 25 minutes

ATHENA



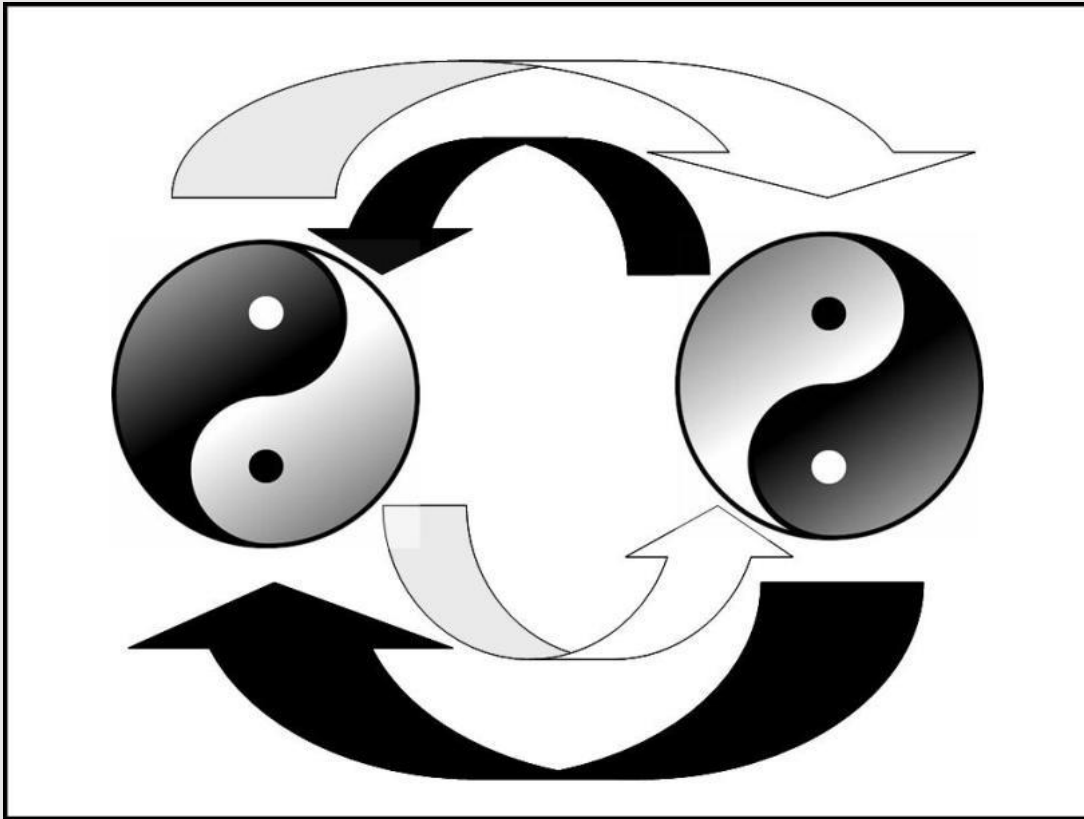
A complex system is regulated by several principles

ATHENA

- The whole is greater than the sum of its parts
- Totality
- Non-summativity
- Retroactions
- Equifinality

TOTALITY

ATHENA



Each part of a system is in such a relationship with its constituent parts that any change in one part causes a change in all the parts and in the whole system

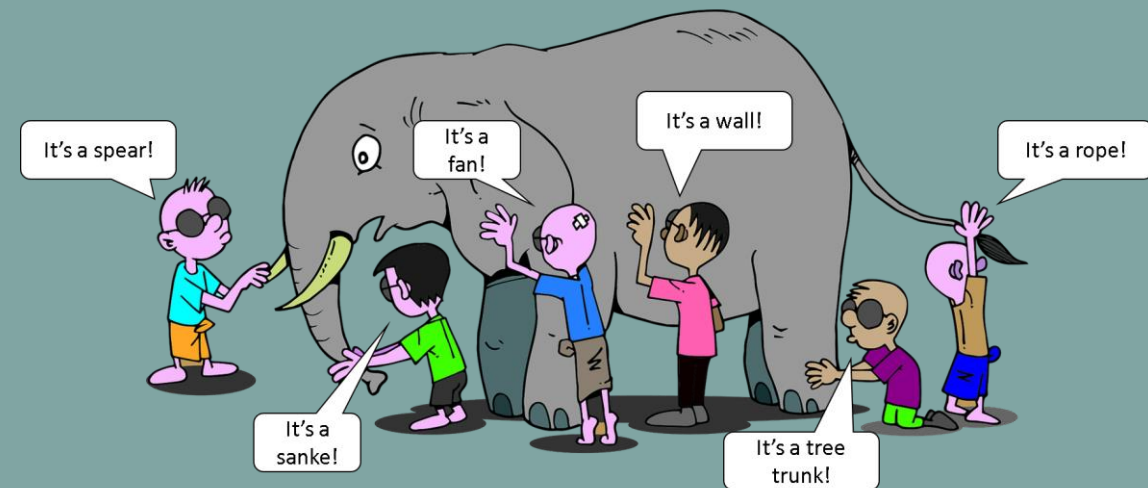
NON-SUMMATIVITY

A system is not the sum of its parts;
analysing isolated segments would
not lead to a comprehensive
understanding of the whole system.

ATHENA



The blind men and the elephant



RETROACTION

Each open system reacts to and
modifies input data

POSITIVE RETROACTION

leads to change, so stability and balance
are lost

NEGATIVE RETROACTION

uses the input data to preserve the static
state of the system

EQUIFINALITY

The same results may have different causes.

The same causes do not produce the same effects and vice versa.

ATHENA



Now let's address the weaknesses of your Figure...

ATHENA

How your group as a complex system can apply the principles to reach a positive change....

- Start a internal negotiation to design actions/interventions that could determine an improvement of your group figure...
- Bear in mind communication axioms, principles and unpredictable outcomes of complex systems (Murphy's law as in *Interstellar* movie).
- You have only 10 minutes!

