Università degli Studi di Genova
Genoa University

Scuola di Scienze Sociali

BA TOURISM SCIENCES: BUSINESS, CULTURE AND TERRITORY

TOURISM PSYCHOLOGY

Teaching Unit No. 4

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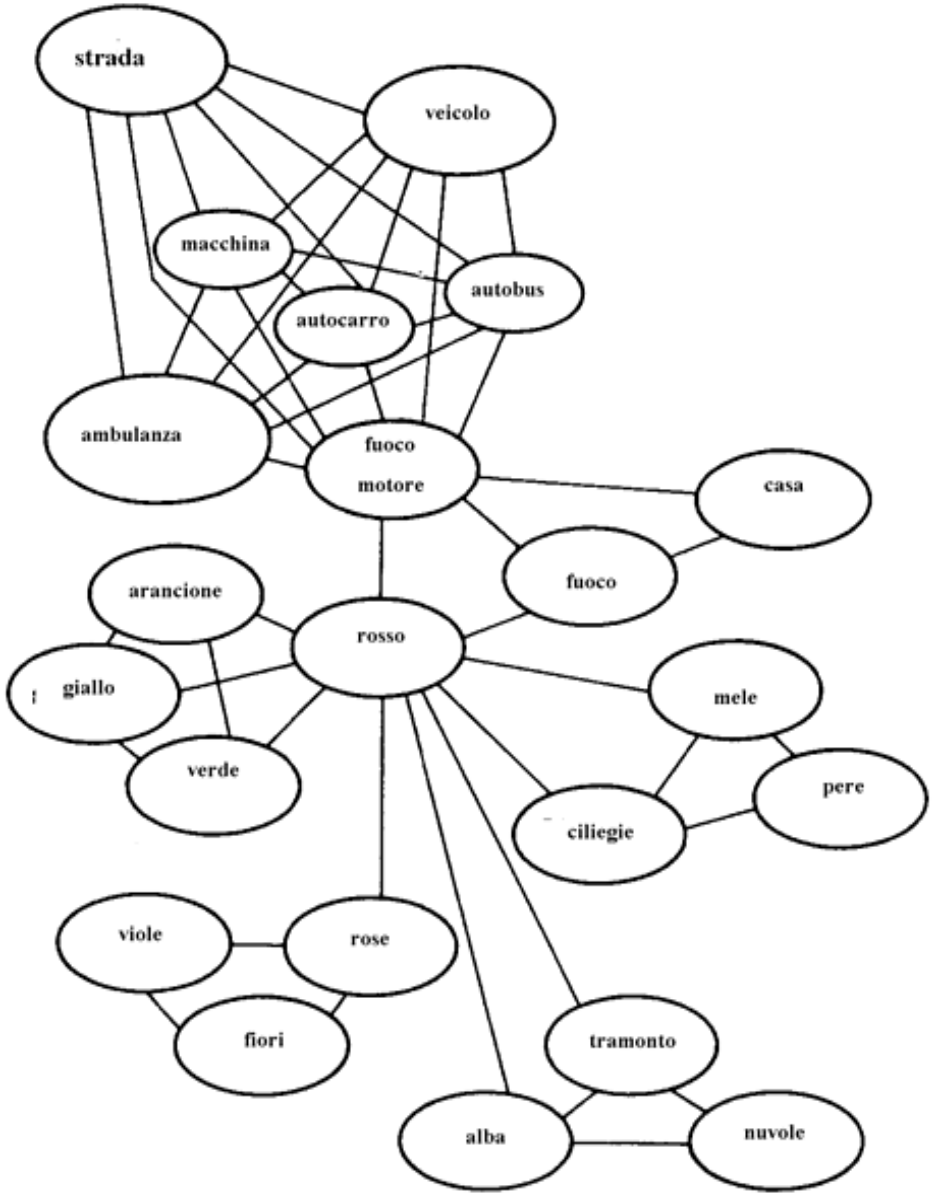
DECISION

Categorization

- **Concepts**: categories of objects, events or people with common characteristics

1. Simplify the perceptual flow and through categorization, establish continuity between present experience, past experience and future action.
2. Inferential function of the unperceived
3. Understanding the world and guiding behavior

Categorization



- **CNS Theory**
- Set of characteristics necessary and sufficient to be a member of the category
- Necessity criterion
- No tract can be deleted
- Criterion of sufficiency
- No traits can be added

- **Semantic networks**

(Collins e Quillian, 1969)

- Models based on defining attributes

Categorization

- **Categories** (Rosch, 1973)
- No organization is ever defined, only probabilistic.
- Less stable concept

- The organization into categories is based on two psychological principles:
  - Cognitive Economy
  - Structure of the Perceived World

Reasoning

- **Deductive reasoning**

- From general premises to particular conclusions
- It does not increase the amount of semantic information contained in the premises (knowledge intrinsically present in the premises).
- The conclusion is necessarily true if all the premises are true
- The most typical form studied by psychologists is the **syllogism**

Reasoning

- **Syllogism**

- Form of reasoning composed of:
- Major premise
- Minor premise
- Consequence

The factual truth of the premises and consequences has no bearing on the correctness of deductive reasoning.

1. *Carla is employed*
2. *All employees are graduates*
3. *Carla is a graduate*

but also:

1. *Carla is a driver*
2. *All drivers are men*
3. *Carla is a man*

Reasoning

- **Mental models**
- Analog representation of a possible state of affairs compatible with a premise
- They reflect the way we understand a situation
- Several studies (Wason, Johnson-Laird, 1872) have shown how people use mental models in solving problems with deductive reasoning, as well as logical inference rules.

Reasoning

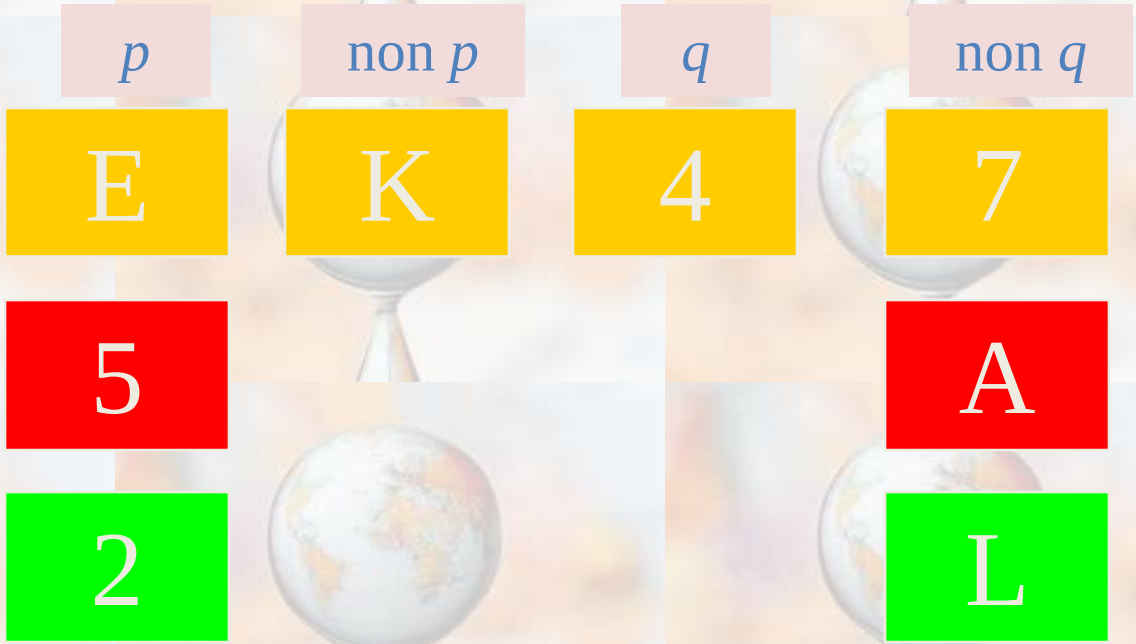
- **Inductive reasoning**
- Inferential processes ranging from particular to general
- Allows you to identify regularity in facts and objects
- Such regularity is then generalized in hypotheses that when applied make it possible to make predictions (correct or not) about the environment.
- It is based on two functions, **identification of regularity** and **generalization**, which can also lead to error

Deductive reasoning: conditional reasoning (1)

Deck of cards with letter on one side and number on the other

Rule: "if on one side there is a vowel on the other side there is an even number" [if p then q]

Task: check the rule by turning the minimum number of cards required



Deductive reasoning: conditional reasoning (2)

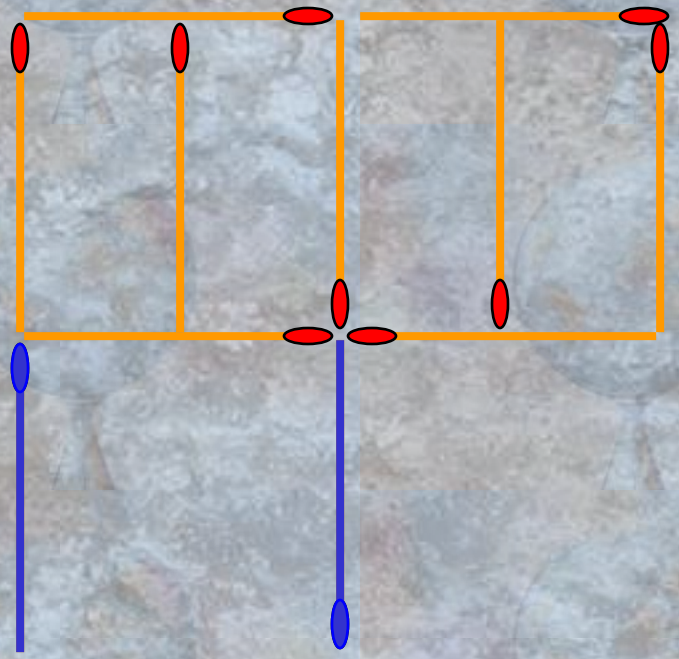
Travel documents with locations on one side and means of transport on the other side

Rule: "Every time I go to Rome I use the train."

Task: check the rule by turning the minimum number of cards required

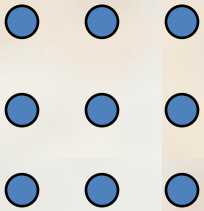
Productive thinking

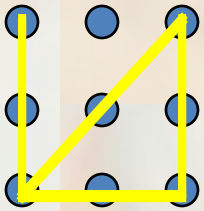
Moving two matches get three squares

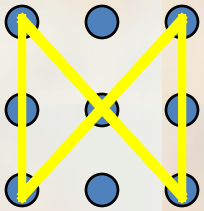


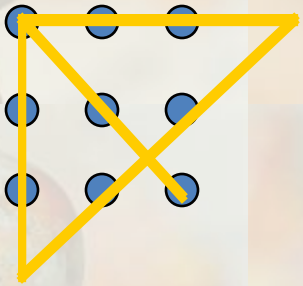
The nine point problem

Join the nine points by drawing only four straight segments, without repeating on the already drawn segments and without removing the pen from the sheet.



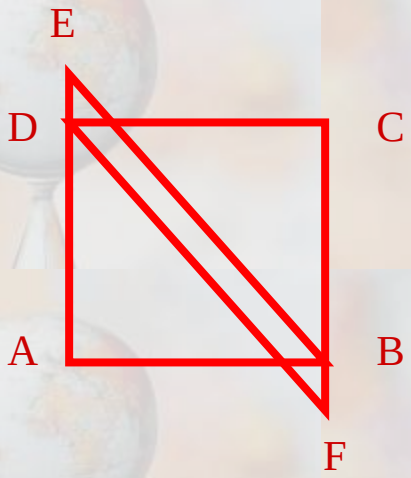


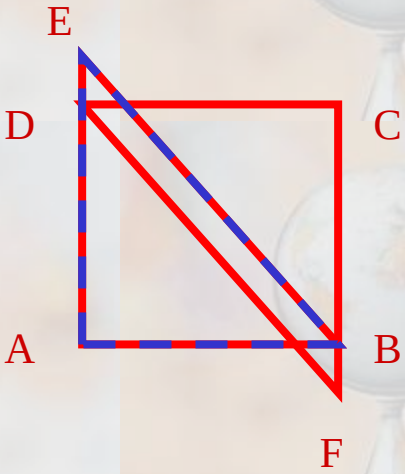


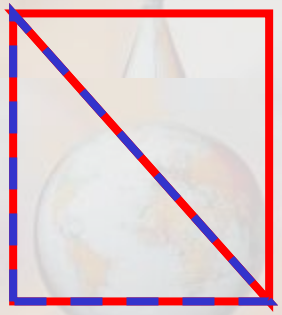


Mental restructuring of problems: insight

Calculate the area of the figure consisting of the ABCD square and the BEDF parallelogram

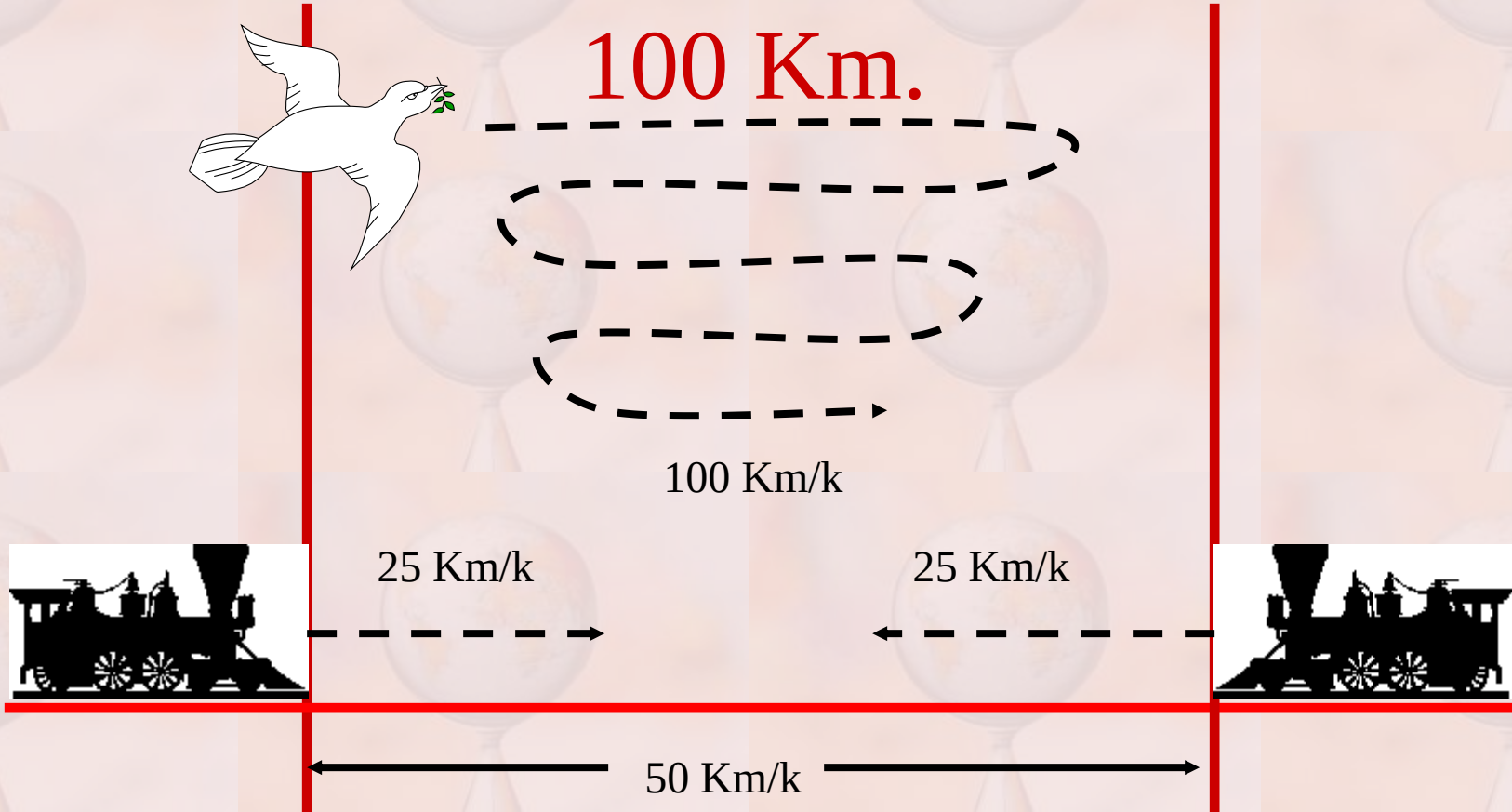






Representation of problems

Two train stations are 50 km away. At 2 p.m. on a Saturday two trains leave from the two stations in the direction of each other. Just as the trains leave the stations, a bird takes flight from the first train in the direction of the second. When the bird reaches the second train, it turns back towards the first. The bird continues like this until the trains meet. If both trains are travelling at 25km/h and the bird flies at 100km/h, how many kilometres will the bird have travelled when the two trains meet?



Reasoning

- **Algorithm**
- Sequence (finished set) of rules that, if applied correctly, lead to the solution of a problem in a certain way

- **Heuristics**
- Cognitive shortcut that can lead to the solution of a problem
- Simple and cost-effective strategy compared to limited human cognitive resources; not error-free

Reasoning

- Types of heuristics
- Analysis of means and ends
- Reverse procedure
- Heuristics of representativeness
- Availability heuristics

Problem solving

- Solutions production
- **Intuition:** a sudden realization of the relationship between various elements that previously seemed disconnected (Köhler, 1927)

Problem solving

- **Obstacles to problem-solving**

- Functionality: tendency to think of an object only in terms of its specific use

- Mental health: persistence of old forms of problem solving

- Incorrect evaluation of solutions