



# Environment

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# Some “philosophical” questions



- What is “**out**” there?
- And is it really “**out**”?
- How do we come to know it?
- What’s our relationship with “**that**”?
- What’s the relation with innovation?



**Let's play a game...**



# A strange roulette/1: What if...



- All the numbers and colors are replaced with the same number and color (the roulette has only the number 7 and the red color)





# Certainty

- Probabilities are always 1 or 0
- The knowledge that we have is the “true” knowledge
- Data are given

# A (not) strange roulette/2 What if..



— nothing change (37 numbers and two colours)



# Risk



- Probabilities are lower than 1, but given and known
- The knowledge that we have is true with a given probability
- Knowledge is a collection of data with given probabilities



# A strange roulette/3 What if...

- The distribution of numbers and colours is unknown at the beginning to the players
- When the ball stop the croupier shows the tile for the future rounds







# Uncertainty

- Probabilities are not known
- They vary according to our capacity to acquire and process them
- Data are out there
- Information are the data selected, which are given a meaning (and a probability)
- Knowledge is a selected set of information about a subject



# A strange roulette/4 What if...

- Same condition as Uncertainty but,
- Every time the croupier shows the ball, then the roulette is reinitialized with a new distribution of numbers and colours





# Ambiguity 1 - Weak

- Data are meaningless external stimuli
- Information is the meaning given to data by the knower
- An interpretative frame is used to make sense of the information
- Knowledge is the conceptual frame through which data are interpreted and given meaning



# So in ambiguity 1 situation...

- The meaning of data changes according to the mental frame we chose to adopt
- Same data can have different interpretation and generate conflicting information
- Everything is relative to the perspective of the observer



# A strange roulette/5 What if...

- Same condition as Ambiguity 1, but...
- Players can spend resources to change tiles and made odds in their favour
- Nobody know who will try to do, but each player has this potential





# Ambiguity 2 – Strong

- The world is not specified, but we can manipulate it...
- Different worlds are possible
- Our actions and words manipulate, influence and create a world
- The challenge is to create a world that matches our views

# So in ambiguity 2 situation...



- Many worlds possible but also in many want to create different worlds...
- Challenge is to convince others to comply with our vision: the more enrolled the more the world become “true”
- The world we create will constraint others, but also us...



# And what about Innovation and Entrepreneurship?

## — In Certain and Risky Environments?

- Innovation: about predicting probabilities for new optimal solution, according to risk factor
- Entrepreneur: a person that inquires reality and takes a risk to develop it

## — In Uncertain Environments?

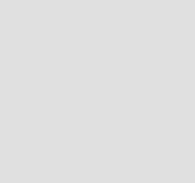
- Innovation: is about acquiring information through routines to produce a satisfactory solution at the minimum cost
- Entrepreneur: a person that set up an organization as an efficient and effective information processing entity

## — In Ambiguous Environments?

- Innovation: inventing plausible realities and convince others through means
- Entrepreneur: a person that thinks about a plausible reality and sells it as true creating a world in which is so...



# Can we find examples?





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