Key Skills

AiM
Learning Solutions

Think Again!

Practical Introduction to Critical Thinking

European School of Administration
Ecole européenne d'administration

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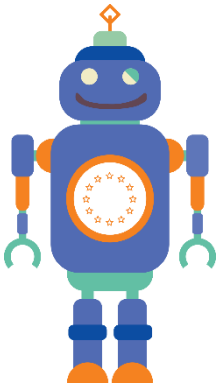
1. Introduction

Your employer does not pay you to think.



An indifferent employee is a happy employee.

Alternative facts, post-truth, fake news, buzz, hoaxes, bias facts, opinions and conspiracy theories... The success of ideas and speeches definitely do not seem correlated to their quality or truthfulness.

At a time when the flow of news has never been so dense, access to quality information has never been so difficult. Hence, it is very often difficult to distinguish between what true and false is.

The institutions are beginning to identify the challenges this brings to our democracies as evidenced by the initiatives of recent years and the European hashtag #TackleFakeNews. Some countries would serve as an anti-false information laboratory...

In this ebook, we tackle the following complex issues:

1. What are the ethical, political and economic issues and challenges of critical thinking?
2. What influence does the authority (real or online) and the "dictatorship of the snapshot" have on our behaviours and thought process?
3. At the individual level, what is the weight of our unconscious biases, our possible cognitive laziness or even our credibility?
4. At the collective level, who is responsible for "real" information?

This material supports the training course, "Think again! Practical introduction to critical thinking" from the "Key Competences" catalogue of the EUSA (European School of Administration). The objectives of this training course:

- Apply the key principles of **critical thinking** to the different dimensions of your work.
- Understand your own ways of thinking and your biases.
- Critically analyse the information you receive, even when it comes from convincing or expert sources.

In this introduction, we help you to reflect on the problem of critical thinking in our society and at work (1). Then we present the framework of this ebook (2), and we propose that you think about a model of critical thinking through an exercise on source selection (3). On this basis we formulate a practical proposition of a model of critical thinking (4). Finally, we offer a self-assessment test of your knowledge, skills and attitudes towards critical thinking (5).

1.1. Critical Thinking in neuroscience

Training module exercise: Which strawberries would you choose?

You have the choice between two baskets of strawberries both of which look fantastic but differ in their place of origin:

- The basket on the left comes from your next-door neighbour. She grows the strawberries herself throughout the year. You have a good relationship with her.
- The basket on the right comes from the local strawberry farmer, who recently won the best strawberry award in the country. He will bring you strawberries at the same time as your neighbour.
- *Which one would you choose?*
- *What influences your choice?*

The instructions and the debrief of this exercise are given during the training course.

Training module exercise: The Razor's Edge

"Humans are not only themselves;
they are also the environment where they were born,
the home in the city or farm where they learned to take their first steps,
the games that amused their childhood,
the stories of old women they heard,
the food they ate,
the schools they attended,
the sports they practised,
the poets they read,
the god they worshipped."

W. Somerset Maugham, "*The Razor's Edge*" (1946)

The instructions and the debrief of this exercise are given during the training course.

1.2. Context of the training course

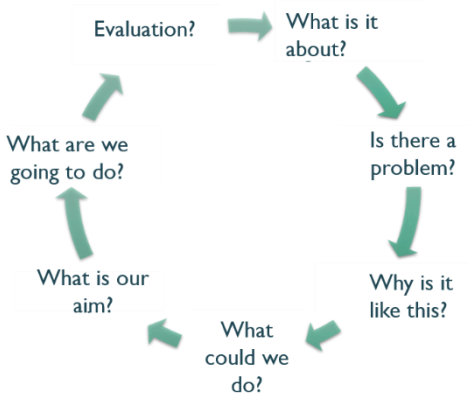
The successful application of critical thinking depends on many aspects, such as: our knowledge, skills and attitudes.

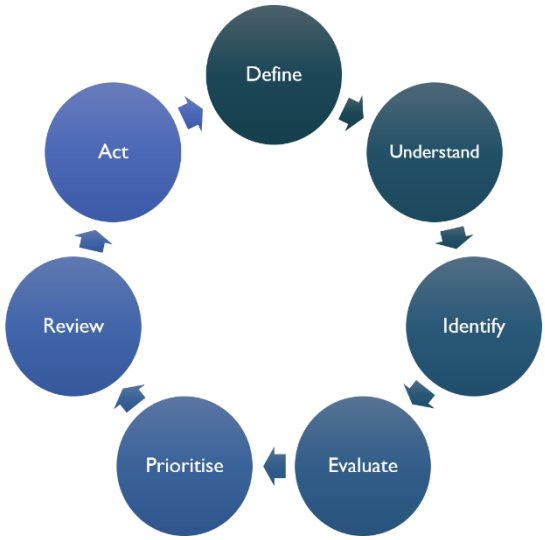
The integration of a methodology of critical analysis of the facts and opinions allows us above all to:

- **analyse and solve problems effectively**
- **communicate our position clearly and logically**
- **make the best decisions (based on data, not emotions)**
- **raise awareness of our biases**

However, the implementation of critical thinking is not only about making conscious or unconscious choices about situations, but also about how to approach and analyse these situations... and then to solve them. Before finalising a decision-making process, it is appropriate to define, identify and critically assess a situation, which also involves becoming aware of and understanding the influence of our personal input in the decision-making process.

Thus, in constant relationship with the application of the critical thinking, we can retain in our memory the processes of thought applied during the analysis and problem-solving process (first figure) or during the decision-making process (second figure).





Keep in mind during this training course that critical thinking is not just a skill that we acquire once and for all, but rather a constant practice of our brain to question the reality that surrounds us!

Link to another ebook: Discover models used in "Analysing and solving problems".

1.3. Towards a model of Critical Thinking

In a society where we are asked to analyse and solve problems more quickly, be able to work autonomously and make decisions, it is difficult to form an objective opinion of a situation or a hot topic. Doubtful contents circulating on the Internet influence our decisions, actions and interpretations. How can you equip yourself efficiently with information flows?

We invite you to leave the automatic pilot mode.

To be able to leave our automatic pilot mode easily and to quickly access a critical analysis of information and our thought processes, we need to be aware of these processes and the biases that accompany them.

The following exercise provides a simple and effective scenario that will allow you to (1) formulate your own critical thinking model and (2) self-assess your strengths and weaknesses.

Training module exercise: Teleworking

In this exercise, you must negotiate with other DGs of the Commission about the benefits of increasing teleworking rights in the Flexitime.

1. Explore the following 8 mini-sources in you assigned subgroups.
2. Select the 3 sources you find most relevant to defend your position.
3. Select arguments in order to be true to your DG and convince the other DG representatives.

Source 1	Source 2	Source 3	Source 4
Source 5	Source 6	Source 7	Source 8

Understand your thought processes.

In order to create a practical model for the application of critical thinking, it is interesting to trace the fundamental stages of the thought process.

Below, we ask you to reflect on the assessment of the knowledge, skills and attitudes that you adopted during the previous exercise.

Training module exercise: Understand your thought processes

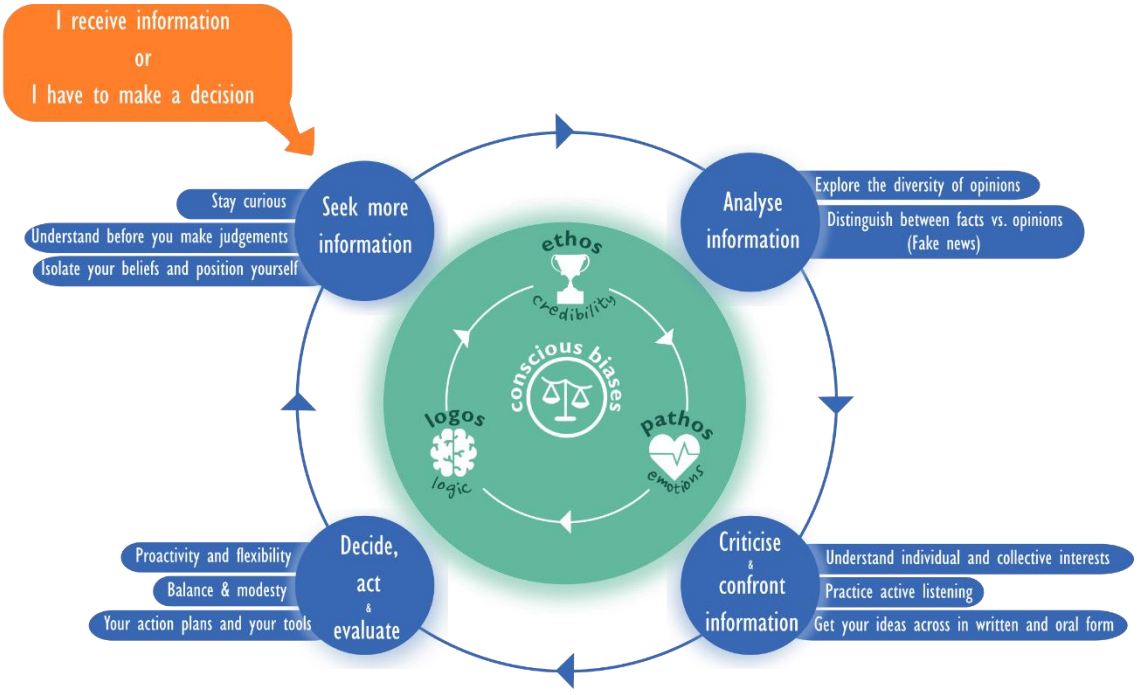
- What are the steps you took in the previous exercise?
- Select the thought processes that you have used when selecting information. We also left some fields free so that you can add personal processes.

☐ identify	☐ distinguish facts	☐ confront interpretations
☐ understand	☐ evaluate	☐ prioritise
☐ listen	☐ review	☐ take actions
☐ seek information	☐ be autonomous	☐ check the source
☐ beware of my prejudices	☐ develop an open mind	☐ let it be
☐ know what I know	☐ know what I suppose	☐ know what I ignore
☐	☐	☐
☐	☐	☐
☐	☐	☐

The instructions and the debrief of this exercise will be given during the training course.

1.4. Practical proposal of a model

As part of this training course, we propose the following model of refinement of critical thinking.
Of course, do not only accept it as is.
Compare it with the results of your own previous experience and evaluate it!



Let's explore together the steps of this practical proposition as a model of critical thinking:

1. *New information:* Information needs to be read and appreciated. It can ultimately help decision-making and/or problem-solving.
   At the heart of all information and improvement of critical thinking is a questioning of the ethos (credibility), pathos (emotions) and logos (logic).
   - *Ethos:* is the aspect through which the speaker or information inspires trust.
   - *Pathos:* is the area that governs your emotional dispositions. It depends on your expectations and the context of the situation.
   - *Logos:* is the logical argument itself, the logical capacity to reason and the way information is presented.
2. *Seek more information:* Taking the time to learn is essential. You can consult different resources to adopt different perspectives before positioning yourself.
   - *Stay curious:* allows fuelling this desire to know and develop your openness.
   - *Understand before you judgef:* serves to realise that there are no ready-made realities and that there is necessarily a perspective in any presentation of the facts.
   - *Isolate your beliefs and position yourself:* allows you to identify your cognitive biases and minimise judgement errors.
3. *Analyse information:* Consists in distinguishing misinformation from disinformation. We must arm ourselves with analytical tools to distinguish facts from opinions and explore their diversity.
   - *Distinguish the facts from the opinions:* alternative facts, post-truth, fake news, what are the steps to follow to analyse the information critically?
   - *Exploring diversity of opinions:* Despite differences of opinion, we tend to submit to certain authorities. What is the degree of influence of the individual? Which sources of authority influence us the most? What are my rules of intellectual self-defence?
4. *Criticise and confront information:* In a war of ideas, it may be helpful to understand the hidden stakes of stakeholders and respond to them in a clear way by practising active listening and choosing the best argumentative strategy
   - *Understanding individual and collective interests:* by strategically analysing the goals and constraints of each individual, we can adapt our argumentation.
   - *Practise active listening:* by putting aside our biases and focusing on others, we can begin a more constructive dialogue.
   - *Passing on our ideas in oral and written form:* by making the difference between logic and dialectics, we are never short of arguments.
5. *Decide, act and evaluate:* especially when and with whom to share what information.
   - *Proactivity & flexibility in response to the environment:* By setting priorities and limits according to the context, we adapt our ways of reacting in a critical way with regard to the environment.
   - *Weighting & modesty:* taking into account the complexity of reality and the continuum of misinformation to disinformation, we avoid being manipulated or overconfident.
   - *Action plan:* Recognising our strengths and weaknesses in terms of skills, behaviours and attitudes helps to ensure the success of our action plan.

1.5. Self-assessment

Let us stress the importance of "knowing what we do not know" in order to ensure that we do not necessarily have to rely on authority.

We offer a self-assessment of the ability to apply critical thinking at work.

Self-learning exercise: Self-assessment of Critical Thinking

Affirmations	0	1	2	3	4
	"completely disagree"	"disagree"	"rather agree"	"agree"	"completely agree"
I feel comfortable pointing out the weaknesses of the experts' work.	○	○	○	○	○
I can stay focused on the exact requirements of an activity.	○	○	○	○	○
I know the different meanings of the word "argument" in critical thinking.	○	○	○	○	○
I can analyse the structure of an argument.	○	○	○	○	○
I can formulate criticism without feeling that it makes me a bad person.	○	○	○	○	○
I know what is meant by "a line of reasoning".	○	○	○	○	○
I am aware of how my current beliefs could affect my way of viewing of a problem.	○	○	○	○	○
I am patient in identifying the line of reasoning in an argument.	○	○	○	○	○
I am good at recognising the signals used to indicate the steps of an argument.	○	○	○	○	○
I find it easy to separate key points from other information.	○	○	○	○	○
I am very patient in examining the facts in order to reach my goals with precision.	○	○	○	○	○
I am good at identifying unfair techniques used to persuade interpretations.	○	○	○	○	○
I am good at reading between the lines.	○	○	○	○	○
I find it easy to evaluate the evidence needed to support a point of view.	○	○	○	○	○
I usually pay attention to small details.	○	○	○	○	○

Affirmations	0	1	2	3	4
	"completely disagree"	"disagree"	"rather agree"	"agree"	"completely agree"
I find it easy to balance different points of view.	○	○	○	○	○
If I am not sure of something, I will do some research to find out more.	○	○	○	○	○
I can clearly present my own arguments.	○	○	○	○	○
I understand how to structure an argument.	○	○	○	○	○
I can distinguish descriptive writing from analytical writing.	○	○	○	○	○
I can easily spot inconsistencies in an argument.	○	○	○	○	○
I am good at identifying patterns and schemes.	○	○	○	○	○
I am aware of how my own upbringing could interfere with how I view a problem.	○	○	○	○	○
I know how to evaluate sources.	○	○	○	○	○
I understand why ambiguous language is often used in research articles.	○	○	○	○	○

Your score is

The results of the questionnaire are between 0 and 100.

Going through the questionnaire raises questions about what you know or do not know about critical thinking.

- The lower the score, the more likely you are to develop and improve your critical thinking skills through the exploration of this material and/or training course!
- A score above 75 suggests that you are very confident about your critical thinking skills. It is worth checking this against objective feedback from your mentors or colleagues.
- If your score is less than 100, tell yourself that there is always room for improvement!
- If your score is less than 45 and it stays this way after completing this training course, you may find it helpful to talk to a counsellor/facilitator to eliminate any problem areas.

Going deeper...

- The examination of a law on fake news began at the Parliament on Thursday, June 7, 2018. Given the seriousness of the issue, Conversation France, in partnership with the University of Lorraine and the CREM have compiled a digital book on fake news and post-truths (FR). It brings together 20 texts addressing the various facets and issues to better understand the threat.

- The initiative "*Awareness to Action*" proposes a free online guidebook on clear thinking for leaders. It tackles, among other elements, **obstacles to critical thinking**: bias, personality, culture, ignorance and misinformation. (EN)

- Sebastian Dieguez, a neuroscience researcher and neuropsychologist at the University of Fribourg, publishes a revealing book and delivers the key elements in this podcast on France-Culture " Total bullshit! At the heart of post-truth" (FR).
  Reference of the book: S. Dieguez. 2018. Total bullshit! At the heart of post-truth. PUF. *Total bullshit ! Au coeur de la post-vérité*. PUF.

"*The year 2016 has been declared as the year of the "post-truth". What do we mean by this term? According to the Oxford Dictionary, which made it its word of the year, the term could refer to "circumstances in which objective facts have less influence in shaping public opinion than the call to emotions and personal beliefs. This book sets out to return to the source of this inventory and identifies it in the concept of "bullshit" theorised by the philosopher Harry Frankfurt in 1986. What he defined as an "indifference to the "truth" of the lie is indeed a remarkably effective conceptual tool for grasping how opinion claims to trump the truth and for understanding the success of scientific impostures and "conspiracy theories". The era of post-truth is that of the bullshit instituted on a global scale and only a fine comprehension of this phenomenon will make it possible to engage in the fight which is in the making. Fortunately, such a science of bullshit is actually already available, but it is now compiled in one accessible, useful and stimulating volume.*" (Editor's summary. Our translation).

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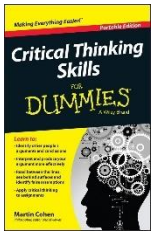
- **Cohen, M.** 2015. Critical Thinking for Dummies. John Wiley & Sons, 376 pages (EN).
  What are the ingredients of a good argument? What is the secret to communicating your ideas clearly and persuasively? How do you see through sloppy thinking and all this information made for each and everyone? If you have already asked yourself one of these questions, then this book is for you!
  These days, strong critical thinking skills provide an essential foundation for academic success, and Critical Thinking Skills for Dummies offer a clear and non-intimidating introduction to what can be a rather complex subject. Inside, you'll have hands-on and fun exercises that you can put to work today to improve your arguments and identify key issues. With this accessible and user-friendly guide, you'll get simple instructions on how to identify the assumptions, methodology and conclusions of others, evaluate evidence and interpret the texts effectively. You'll also find tips and advice on reading between the lines, assessing validity - and even advice on when not to apply logic too rigidly!"
  (Editor's summary)



2. Seek more information

"Thinking critically is to understand that everything is coloured by an idea."

Here we are at the first stage of our critical thinking model, i.e. getting more information and evaluating information. To do this, three skills and attitudes are necessary: stay curious, understand before making judgments, and isolate our beliefs in order to position ourselves.

2.1 Stay curious

To develop critical thinking is above all to ask questions. As we will see, we can adopt a proactive approach and complete our sources of information (see chapter 4 of this ebook).

When receiving information, we must be critical and know how to ask the right questions. The 5 Ws, also called Kipling's servants, are a simple methodology for systematic questioning.

The 5 Ws or servants of Kipling

WWWWWH

"Who? What? Where? Why? When? How?"

The WWWWWH is an empirical method of reasoning that can be disconcerting by its simplicity, logic and systematics. It makes it possible to reproduce the results of analysis in a rigorous way by a systematic and relatively exhaustive line of questioning.

This acronym is used by press agencies. We usually find this information in the first paragraph or sub-header of an article. Answering these questions makes it possible to extract priority information.

In fact, after summarising and ordering the 5 questions... a whole series of sub-questions can emerge. The table below illustrates them.

Letter	Question	Sub-Questions	Examples
W	Who?	From whom, with whom, on behalf of whom...	Person in charge, actors, subject, targets...
W	What?	What, with what, in relation to what...	Tool, objects, result, objectives...
W	Where?	Where, by where, to where...	Place, service...
W	Why?	Why, what cause, what factors...	Justification by the causes...
W	When?	When, from when, until when...	Dates, frequency, duration...
H	How?	How, in which manner, under which condition(s), by what process	Process, technique, action, means, material...

2.2 Understand before making judgements

There are no ready-made realities, even if they are presented to us as such. Indeed, in the presentation of everything there is a perspective. Before judging a source, it is important to understand its origin and/or its bias.

The acronym PESTLE allows to look at the objects of our world from different perspectives. It analyses a source with regard to macro-environmental factors (i.e. Political, Economic, Sociological, Technological, Legal and Ecological). Hence, it develops the ability to understand the deeper source and perspective of the information before judging it.

PESTLE evolves with time... What perspectives could we add?

2.3 Isolate your beliefs and position yourself

- What influences your judgement?
- What are your biases?

Cognitive biases are illusions of which we are victims, often unconsciously. They lead us to make errors.

There is a plethora of cognitive biases categorised by research in cognitive and social psychology.

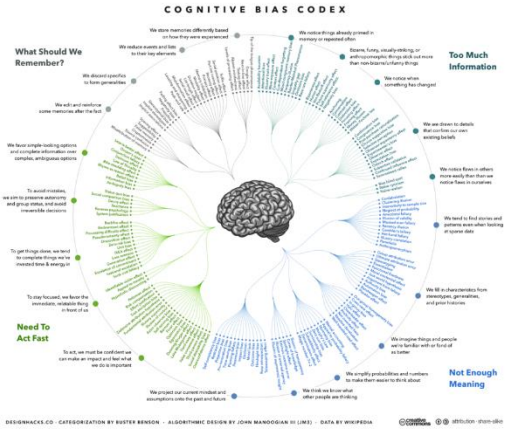
They can relate to many fields: perception, statistics, logic, causality, social relations, etc.

Concretely, our biases are often exploited by the advertising world but also by conspiracy policies or theories.

From an infinite number of biases...

Cognitive biases are often organised into four categories: biases that result from too much information, information that does not make enough sense, information needed by the need to act quickly and bias resulting from the limitations of our memory.

Drawing up an exhaustive list of these biases is almost impossible.
Here is an attempt at formalisation by John Manoogian&System III & Buster Benson.
Click on the image below to examine it in more detail.



More modest categorisations and applied visions have been developed, in particular through the "theory of the two speeds of thought" of Daniel Kahneman (2012).

...to the Kahneman biases

Daniel Kahneman is a Nobel Prize winner in economics. In 2011, he published "Thinking fast and slow". In this book, the author deals with the search for happiness, the theory of perspectives and especially cognitive biases.

According to Kahneman, we have two ways of thinking that our minds shared and govern our way of thinking and making decisions.

He associates a series of cognitive biases with these two systems of thought:

- System 1 is fast, instinctive and emotional. Thus, it works automatically and quickly, with little or no effort and no sense of deliberate control.
- System 2 is slower, more thoughtful and logical. It is above all more controlled. Thus, it pays attention to the restrictive mental activities required. The functioning of system 2 is often associated with the subjective experience of action, choice and concentration.

A striking example is given in his book:

"You are in the subway near a passenger who starts reading The Guardian. In your opinion, is this person more likely to have a PhD or without a post-secondary education?"

System 2 requires a cognitive effort, which we often do not want to undertake.

Although system 2 is powerful, it runs out quickly when you make demands on it too long.

Our system 2 is indeed lazy, and we mainly try to solve our problems with system 1.

The list of biases established by the author makes it possible to become aware of these cognitive illusions.

Anchoring Bias

- To rely too much on the first information we hear.
- In a wage negotiations, the first offer establishes the reasonable range that Crieveryone has in mind.

Availability Bias

- To overestimate the importance of the information that is available to us.
- Someone can argue that smoking is good for health because he knows a smoker who has lived to be a 100-years-old.

Snowball effect

- The likelihood of believing in something increases with the number of people believing in it.
- This is a known phenomenon of groups thinking that sometimes makes meetings unproductive.

Blind angle bias

- Not identifying our own cognitive biases is a cognitive bias in itself.
- People notice the cognitive and motivational biases of others much better than their own.

Bias of choice

- When you choose something, you tend to feel good about that choice, even if it has disadvantages.
- Your dog is probably the most beautiful in the world, even if it bites all passersby.

Illusion of grouping

- We tend to find repetitive patterns despite the randomness of events.
- This bias is the key to errors made when betting, such as thinking that a red ball is more likely to fall in roulette after a succession of red balls.

Confirmation bias

- We tend to listen to information that already confirms our pre-designed ideas.
- This is one of the many reasons why it is difficult to have a conversation about climate change!

Bias of caution

- There is a tendency to favour previous evidence or information rather than news.
- It took some time before the majority accepted that the earth was round as it maintained its previous knowledge.

Information bias

- The tendency to seek information even when it does not affect our actions.

- More information is not always favourable. Sometimes, we can make more accurate predictions with less information.

Ostrich effect

- The decision to ignore dangerous or negative information by putting a veil in front of one's face.
- Research suggests that investors check the value of their holdings less frequently when the market is unfavourable.

Result bias

- When judging a decision based on the outcome, rather than how that decision was made in that particular context.
- Just because you won a great deal of money in Vegas did not mean that betting was necessarily an intelligent decision.

Over confidence

- When we are too confident about our own abilities and therefore take more risks than necessary in our daily lives.
- Experts are more biased than lay people since they are more convinced that they are right.

Placebo effect

- When simply believing that something will have a particular effect results in the effect occurring.
- In medical experiments, people taking the placebo drug often experience the same effects as those receiving the real drug.

Innovation bias

- When a proponent of innovation tends to over-evaluate its usefulness and undervalue its limits.
- ...does Silicone Valley ring a bell?

Recency effect

- The tendency to give more importance to the latest information than to the older data.
- Investors often look at what the market looks like on a particular day and make misguided decision.

Salience

- The tendency to focus on the most recognisable traits of a person or concept.
- When one thinks of death, one might think of being devoured by a lion, while it is statistically more likely to die from a car accident.

Perceptual selection

- When allowing our expectations to influence the way we perceive the world.
- When confronting an opposing team, it is often thought that the other team has made more mistakes than ours.

Stereotyping

- When a group or person is expected to have a certain quality without having the actual information about the group or the piece of information.
- This allows us to quickly identify unknown people as friends or foes, but we tend to abuse stereotyping and accept our perceptions as facts.

Survival bias

- The errors that emanate from focusing solely on examples of survival, causing us to misjudge a situation.
- For example, we may tend to think that being an entrepreneur is easy because we do not hear about all those who have failed.

Zero risk bias

- We love certainty, even if it is counterproductive.
- Eliminate the risk that there is no room for potential danger.

Going deeper…

Critical Thinker Academy

- The Critical Thinker Academy promotes the online course on Critical Thinking. In particular, this academy proposes an approach of the importance of system 1 vs. system 2 in critical thinking (EN).
- "We accept the reality of the world with which we are presented." The Truman Show is a piece that offers a critical and sharp look at the different issues we deal with our biases, our beliefs, authority, the communication of ideas, the distinction between fiction and reality, etc.
- An informative article of Wikipedia on the notion of cognitive bias and a list of cognitive biases (EN).

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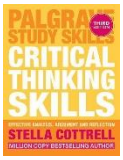
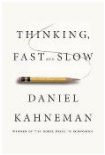
- **Stella Cottrel**. 2005. *Critical Thinking Skills. Effective Analysis, Argument and Reflection*. 3rd edition. 296 pages (EN).



"*Written by the internationally renowned author Stella Cottrell, this is an essential resource for students looking to refine their thinking, reading and writing skills. Stella Cottrell's student-centred approach demystifies critical thinking and breaks down a complex subject into manageable chunks. With clear explanations, relevant examples and plenty of exercises throughout, this book helps students to develop their analytical reasoning skills and apply them to a range of tasks including reading, note making and writing. This text will turn even the most hesitant student into a proficient critical thinker.*" (Editor's summary).

- **Daniel Kahneman**. 2012. *Thinking, Fast and Slow*. Penguin. 512 pages (EN).



"*The New York Times Bestseller, Thinking Fast and Slow offers a whole new look at the way our minds work and how we make decisions. Why is there more chance we'll believe something if it's in a bold type face? Why are judges more likely to deny parole before lunch? Why do we assume a good-looking person will be more competent? The answer lies in the two ways we make choices: fast, intuitive thinking, and slow, rational thinking. This book reveals how our minds are tripped up by error and prejudice (even when we think we are being logical), and gives you practical techniques for slower, smarter thinking. It will enable to you make better decisions at work, at home, and in everything you do.*"

3. Analyse information

Critical thinking is a use of reason whose purpose is to refine and clarify the statements without necessarily seeking to discredit them. The hypercritical method is a method of argument consisting in the systematic criticism of the slightest details of an affirmation or its sources. Thus, although this training course encourages you to develop your critical thinking, this chapter focuses on concrete tools of the implementation of a hypercritical method of verification of the sources.

In the rest of this ebook, we bring you answers to the following questions: When we talk about false information, what is it? What are these statements talking about? How can you detect them? Are they still malicious or false? Why are they so successful? How can you react or help those who believe in their content?

3.1 Distinguish between facts and opinions

Of course, you can learn more, but first you need to know the tools to separate facts from opinions. Opinions must, of course, be taken into account (in particular those of the most important stakeholders), but it must be remembered that they can sometimes contradict each other. How can you check your sources and enable yourself to act in the right way?

To solve a problem, you need to must distinguish between facts and opinions.

Moreover, there are certain facts that we think are true but are false and others that we think are false but that turn out to be true instead. Consider the following images ~ and see if you know how to ask the right questions.

Alternative facts, post-truth, fake news... "kesako"?

There is a difference between misinformation, the idea of deliberate deception to deceive, and disinformation that covers only an honest mistake. Let's sort through this lexical complexity.

Misinformation is knowingly communicating false information in order to deceive readers, viewers, listeners, and Internet users. Proponents of conspiracy theory accuse the mainstream media of misinformation to make their own speeches true.

- *Alternative facts*: a gross untruth. This concept was inaugurated by Kellyanne Conway, advisor to the White House under the presidency of Donald Trump.
- *Fake News*: false information that seems to be real news because it follows the traditional codes of journalism. It presents itself "under the guise of a classical press articles" and "aims to mislead the reader" (*Le Temps*). Hence, false information is created knowingly or instrumentalised by political, economic or ideological authorities in order to influence how you can assess a situation or the relevance of a political, economic or ideological decision. Not to be confused with a hoax.

- *Buzz*: viral information, which has not yet been proven false.
- *Hoax*: A hoax is also false news, often broadcast by e-mail, unlike fake news which follows the codes of journalism. The term, according to *Le Temps*, "means a deliberately erroneous information broadcast on the Internet". It is, therefore, fake, a viral hoax often broadcast by e-mail and via social networks, especially created for malicious purposes. Hoaxbuster.com is a website whose mission is to put an end to the circulation of hoaxes on the French-speaking web. Other tools are provided below.
- *Intox*: Diminutive of intoxication, an intox is a form of disinformation, an "insidious action on the minds, tending to accredit certain opinions, demoralise and to weaken the critical sense" (Le Petit Robert). An intox is a "hoax that seeks to pass off as true what is wrong".
- *Post-truth*: Post-truth was named the word of the year 2016 by the British Oxford Dictionary. Post-truth "describes a forged discourse on emotion and personal beliefs rather than facts", according to a definition by Time Magazine. In the post-truth era, opinion and emotion matter more than facts.
- *Bias (media)*: voluntary presentation of information, ideas or events in a way altered by apriori or by a conviction.
- *Plot*: This is an explanatory narrative, questioning the official truth and postulating that certain historical or current events have been orchestrated, in the greatest secrecy, by a group of powerful individuals with the sole objective of advancing their interests. These concerted projects are secretly aimed at harming (to some extent, an institution). Conspiracy theories provide simple and definitive explanations for deciphering complex events. They compete with established facts and so-called official theses. Conspiracy is often part of the extreme right-influence groups, mostly on the Internet and social networks.
- *Rumour*: Emergence and circulation in the social body of information either not yet confirmed publicly by official sources, or denied by them. (Jean-Noel Kapferer) A rumour can be true or be the result of an interpretation but also invented from scratch.

In reality, these types of misinformation or disinformation also develop in order to make sense out of something real. They bring an understanding of unexplained phenomena or ambiguous situations. They enable collective management of danger and threat by controlling our environment and reducing the emotional impact of fatal situations.

These methods are successful because we believe in them and, in turn, this belief influences the dissemination of a statement. It is related to psychological, social, cultural, cognitive, contextual and relational factors. Some hoaxes or legends can become true (self-realisation).

Keep in mind that some questionable statements are plausible. Often false information confirms our previous beliefs, focuses on hot topics, reminds scenarios already heard and... these are subjects for which data are not available to all!

Moreover, certain current procedures are used to reinforce the credibility of a statement: we use characters that favour identification, we take advantage of a certain sense of detail and we state the expert source(s) of authenticity, we give a presentation of scientific appearance, etc.

By playing on contextual factors, statements have been spread by reliable people and denied by people we do not trust - the biases confirm and solidify the information bubble in which we find ourselves.

> Before understanding what false information is, you have to know what real information is. Rose Marie Farinelle, a teacher at a primary school in Haute-Savoie, understood this well. Her initiative to educate our brains to flush out false information from an early age has earned her an award at UNESCO.

So, where can I check the fact about all of this?

Here are several websites that you could use for checking the facts: Hoax-slayer.com, Truth or Fiction.com, FactCheck.org, PolitiFact, The Washington Post Fact CheckerThatsnonsens.com and of course Snopes.com.

Why is this false information so numerous and so viral?

Who benefits from false information?

- Where does the manipulation come from?... Not necessarily from where we would expect it!
- Although advertisers do not hesitate to implement the great ways to sell us products, and even participate in disinformation...often disinformation is misinformation, relatively unintentional.
- Beyond the advertisers, we also find political groups, conspiracy, and even well-intentioned people. An NGO or friendly activists can also relay false information.
- For example, we have seen a **photo journey of a migrant** put together from scratch to actually promote a famous photography festival. The site, which has trapped the media, has itself revealed the hoax, which allowed to speak about the festival. (source)

Why is "Fake News" circulating so well?

- False information travels faster than real information. A study done by MIT over a period of 11 years and over 126,000 tweets, showed that fake news was 70% more likely to be re-shared than real information. In other words, it takes six times longer to broadcast true information than false information. Lastly, true news is rarely broadcast by more than 1,000 people, while the most popular fake news reaches up to 100,000 people... Why?
- Two main arguments should be mentioned: false information is generally more "new", and novelty often takes precedence over truthfulness. In addition, false information is also more likely to affect pathos (emotion), and thus arouse our attention, empathy and sharing.

Simple routines must indeed be acquired: to identify who wrote the article, on which site, on what date and to ascertain if it is a reliable or parodic information site seems essential. Below are other practical tools to help you search for the truth.

My Toolbox for Information Verification

One of the essential tools of the verification of information is its contextualisation. A photo or a video can be manipulated. The photo is true; the context is manipulated or the opposite.

✔ *Check the date of an image, video or article*

- Sites like **Google Image** and **TinEye** detect occurrences of previous publications ("Reverse Image Search").
- For videos, you can count on cooperation from Youtube and Amnesty, who have put a system online or you can **test the URL of a video**. This site tells you when a video was posted on Youtube. This is a valuable clue, even though the video may have been stolen or reposted elsewhere.

Opposite, a photo shows a child as a victim of war in eastern Ukraine... True or false? It's up to you to check!

✔ *Analyse the Image*

- In this photo, one could ask: Are the shields of the Iranian police really this colour? Are the sidewalks of Tehran painted yellow? Do young Iranians dress this way? Before trusting any website, your common sense and knowledge are the first tools to use during image verification.
- This photo, for example, is supposedly a scene taking place in December 2009 published by the evenning News of France 2. The site of France 24 will later reveal that "the photo was actually taken in Honduras". The safest way to know that it was badly captioned was to show it to an Iranian: he can tell you that it is cold in Teheran and that no one would walk in T-shirts at that time of the year.

- The websites FotoForensics and Image Forensic reveal the changes made on the images. They are private, free and open-source.
- Any image originally includes hidden EXIF data (when and where pictures were taken and their characteristics). You can extract these characteristics by visiting Findexif or Metapicz.

✔ *Check the Author*

You have to check who is distributing the information. What does the profile of the site or the person distributing the information or image look like? Are previous publications and the general context of information consistent?

The websites Pipl and Webmii are looking for the "Internet trace" of a user. They can help you identify it and find related photos. The search is done on all US social networks, including the deep web (which is ignored by most of these kinds of programs).

In the case of social networks: what is the profile of the user who posted the image? Who was the first poster of the image? Are previous publications consistent?

✔ *Analyse the article*

- Is the title and sub-headings of the article provocative?
- Does the title contradict the sub-headings?
- The website FakeBox (*for a fee*) proposes to automatically detect fake news. However, research in artificial intelligence in the field is in its initial stages. So, here are several websites that you could use for checking facts: Hoax-slayer.com, Truth or Fiction.com, FactCheck.org, PolitiFact, The Washington Post Fact Checker Thatsnonsens.com and of course Snopes.com.

The best protection against false information and propaganda is to critically evaluate the source and ask the right questions:

- *Is it factual information or opinion?*
- *What is the purpose of this information?*
- *Who put this information out?*
- *Is the source trustworthy?*
- *Is this information available elsewhere?*
- *Is this information new or old and why is it available at this time?*

Training module exercise: Checking facts, practical exercise!

Can you determine, using the tools presented and your critical thinking if these images and articles are true or false?

The articles:

- The pope admits that sometimes he falls asleep while praying.

- A young Austrian woman is suing her parents for posting photos of her as a baby on Facebook.

The pictures:

- Was this photo faked?

- Did this meeting between Lennon and Che Guevara take place?

- Do black lions exist?

- Do cows rest on cars?

Self-learning exercise: Detecting Fake News (FR)

The game What the Fake is a quiz developed by Radio-television Switzerland. It makes you aware of the difficulty of locating fake news but also allows you to sharpen your reflexes to sort out fake news. As a bonus, explanatory videos with Thomas Wiesel has some answers!

Self-learning exercise: Creating Fake News (EN)

"If you put yourself in the shoes of a person who is trying to deceive you, it should increase your ability to identify and resist his techniques."

Two games invite users to create a fictitious online media, spreading false information, with the aim of expanding its audience while maintaining a minimum level of credibility.

The goal is to develop your mental antibodies to immunise you against the dissemination of false information.

Several strategies are proposed to the players, who can mobilise an army of fake accounts on the social networks, retouch images or propagate doubtful articles to reach their ends.

Test the game Get Bad News

Test the game Fake it to Make it

3.2 Explore the diversity of opinions

Do not believe in what you think.

Individual and collective thinking

In the movie "12 angry men", a young man of modest origin is accused of murdering his father and faces the death penalty." The jury of 12 men retires to deliberate and proceed immediately to a vote: eleven of them vote him guilty. The decision must be unanimous. The juror who voted not guilty, summoned to justify himself, explains that he has a doubt and that the life of a man deserves a few hours of discussion. Then he tries to convince them one by one.

The jury situation described in "12 angry men" has many symptoms that normally lead to a phenomenon of collective thinking. For example, the majority of the group believed in the moral correctness of their decision - they punished a bad person, they had a stereotypical view of the people who opposed them (bleeding heart, benefactors). There was extreme pressure to conform, an illusion of unanimity (at least initially), many self-censoring jurors (they did not first express their opinions) and strong personalities who were trying to push the group in a certain direction.

Training module exercise: act or not act in the movie "12 angry men"

- What do you see in this video?
- What skills are shown?
- In a social group, we sometimes have clear opinions about things but we do not always act - For what reasons?

Self-learning exercise: biases and compliance in the movie "12 angry men"

Ask yourself the following questions after watching the video "12 angry men".

- How did the use of prejudices and stereotypes influence the jurors' thinking?

- How was confirmation bias used by jurors?

- Is there any indication that compliance has played a role in the jury decision process?

- When some of the jurors finally decided to vote "not guilty", did they change their vote because of the normative influence or the influence of the information?

- Have there been any examples of fundamental attribution error or actor/observer bias in the film?

Arguments made by authorities

Opinions of experts of a domain have a particular status. With their knowledge, they are able to give an informed opinion on a particular issue. However, in conflicting situations opposing parties may appeal against a second opinion, because even the opinions of the experts may be called into question. It is, therefore, important to be able to have a measured and nuanced attitude vis-à-vis the opinions of experts.

- On the one hand, take into account the contribution of their reflection and their particular competence;
- On the other hand, remember that an opinion, even of an expert, is still only an opinion.

For example, we remember the opinion of Lord Kelvin (the physicist who discovered the "absolute zero") in 1900: "There is nothing more to discover in physics today. All that remains is to improve the accuracy of measurements". "A few years later, many important discoveries were made by other scientists. As Mark Twain wrote: "They did not know it was impossible, so they did it".

In the beginning of this chapter, we tried to spark awareness of your thought processes in order to offer you a model based on them. Do you have to accept it in its entirety and submit to this model as authority?

Stanley Milgram (1933-1984), an American social psychologist, has focused on the study of submission to authority. The purpose of the experiment was to study the reaction of an individual placed at the centre of a conflict between his consciousness and authority.

- Where does submission to authority end?
- Where does the responsibility of the individual begin?
- How can we reconcile the imperatives of authority with the voice of our conscience?

Watch the video below the trailer of the movie "The experimenter" on Milgram's experiment.

Through this experiment, Stanley Milgram studies submission to authority, that is, the ability of the individual to obey a superior. For this purpose, as he often does in experimental psychology, he uses a naive subject whose observation he observes vis-à-vis a researcher.

The results are impressive: 62.5% of individuals are willing to inflict a deadly electric shock (450 volts) to another individual as soon as a researcher orders them to do so. In addition, the few individuals able to resist submission only stop at 360 volts, a shock already very dangerous for humans.

Self-learning exercise: Our sensitivity to authority

These observations are open to some questions and discussions:

1. Based on the results of the Milgram experiment, do you think that people who "compromise their own ethics in order to obey authority" are responsible for the treatment of others if the authority figure gave instructions to harm another person?
2. Why do you think that people follow the instructions of authority so much, even if they are technically able to "disobey"? Why do you think the people in the study administered lethal shocks to the "learner" in the experiment, even though they knew it was wrong?
3. Are there certain qualities that differentiate authority figures? Would certain qualities lead you to follow one over another? (Name some qualities)
4. In one of the videos from Milgram's experiment, we see that some people delivering the shocks seem to want to leave the experiment, but continue when the authority (no one in the lab) tells them they have to continue the experiment. Why do you think they continue even if they tried to stop before?
5. Has a person of authority ever been able to convince you to do something you did not want to do, intentionally or unintentionally? If so, then why did you personally compromise your own beliefs in order to submit to the will of the said figure of authority?
6. Do you think that people in today's society will be more aware of the good vs. bad, or do you think that a figure of authority will always be able to influence their judgement? Explain why or why not.

More recently, the University of Ghent has called its students to "Dare to think". Several teachers have given lessons on the basis of doubtful statements. The goal was for students to react and oppose their teachers.

Going deeper…

- The CRAAP Model to debunk Fake News. When you search for information, you're going to find lots of it... but is it good information? You will have to determine that for yourself, and the CRAAP Test can help. The CRAAP Test is a list of questions to help you evaluate the information you find. Different criteria will be more or less important depending on your situation or need.

- **Can you detect false news? Here is a quiz from The Guardian proposing it to you (EN).**

- An excerpt from "Thank you for Smoking" offers an interesting reflection on authority arguments.
- Bubbles is a Danish research centre demonstrating the importance of group influence and how to manage it.

  In addition to champagne, bubbles are generally associated with financial situations in which assets are traded at prices well in excess of their fundamental value. Stocks and real estate can overheat, but so do opinions on the web, social status, and a host of other phenomena in science and society.

  Vincent Hendricks is a Danish philosopher and logician. He is a professor of formal philosophy and director of the Centre for Information and Studies on Bubbles at the University of Copenhagen.
- Some good Twitter accounts to follow on critical thinking and reporting false information:
  - Malachy Browne @malachybrowne from @reportedly and, of course his colleague @acarvin)
  - Tom Trewinnard, @Tom_El_Rumi from @checkdesk and @Meedan
  - Claire Wardle from @TowCenter
  - The expert coalition @firstdraftnews led by Jenni Sargent @JenniSarge
  - Dhruti Shah, @dhrutishah from @BBCnews
  - Joey Galvin @Joey_Galvin from @storyful
  - Jochen Spangenberg, @jospang from @revealEU
  - Anne-Marie Lupu, @amloopoo from EBU
- The non profit First Draft website supports truth and news verification. It contains a myriad of incredible information on false news and the way to fight it (EN).
- The website FactCheck.org produced an information spot on the detection of false news. Fact Check is a self-proclaimed "non-partisan, non profit" project of the University of Pennsylvania's Annenberg Public Policy Center that "aims to reduce the level of deception and confusion in American politics." It monitors the factual accuracy of the statements of major US political actors, TV ads, debates, speeches, interviews and press releases.
- There are more than 100 fact-checking initiatives across more than 47 countries. These are all readily available on Reporters' Lab.

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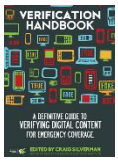
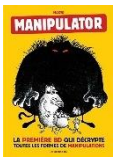


"*When a crisis breaks out, reliable sources such as news and support agencies need to sift through and verify the mass of shared and published reports, and report to the public with accurate and verified information. The manual provides practical advice to facilitate disaster preparedness. Newsrooms, and best practices for verifying and using information, photos, and videos provided by the crowd.*
Written by leading journalists from the BBC, Storyful, ABC, Digital First Media and other audit experts, the Verification Handbook is a revolutionary new resource for journalists and aid providers. It offers the tools, techniques and step-by-step instructions for managing User-Generated Content (UGC) in an emergency. " (Editor's summary, our translation).

- **Makyo, P.** 2016 *Manipulator: The first comic that decrypts all forms of manipulation.* . Les arènes BD. 113 pages (FR)



"*Manipulation is ubiquitous in our daily lives. It parasitises social relations, family ties and the world of work. It is an instrument of power that masks the truth and constitutes a handicap to sincere exchanges.*

To manipulate is above all to lie. To fight against an evil, one must know its effects and causes. To understand manipulation is above all to learn how to protect yourself from it. This is the goal of Manipulator. A true essay, this book is an essential tool for detecting all attempts at manipulation. ". (Editor's summary. Our translation)

- **Klatzmann, J.** 2013. *Attention statistics! How to avoid the pitfalls*. La Découverte. 197 pages. (FR)

"*If in each French region farmers consume more potatoes per person than non-farmers, how is it that for the whole country it is the opposite? "Very simple," you will reply... when you have read the explanation. Many other examples of trapped or erroneous data are cited in this book: how can we "fudge" the stock price index? Why are there fewer deaths when doctors are on strike? Why do international comparisons of income mean nothing? How can polling institutes lead to opposite results? Why are the devaluation rates all wrong? Why is your life expectancy higher than statistics say? Joseph Klatzmann, former director at INSEE, former professor of rural economics at the Institut National Agronomique Paris-Grignon, director of studies at the École des Hautes Etudes en Sciences Sociales and member of the Académie d'Agriculture France, shows that the statistics deserve to be read with caution and gives us the keys to overcome the pitfalls. ". (Editor's summary, our translation)*

- **Baillargeon, N.** 2006. *Small intellectual self-defence course* . Lux. Broché. 344 pages (FR)

"*Written in a clear and accessible language and illustrated by Charb, this book is a real introduction to critical thinking, more than ever before indispensable to anyone who wants to ensure his intellectual self-defence.*
We will first find a broad overview of the fundamental tools that any critical thinker must master: language, logic, rhetoric, numbers, probabilities, statistics, and so on. These are then applied to the justification of beliefs in three crucial areas: personal experience, science and the media.
If we had a real education system, we would give intellectual self-defence classes. - Noam Chomsky" (Editor's summary, our translation).

4. Criticise and confront information

4.1 Understand individual and collective interests

What are the hidden or declared stakeholder issues?

For an interaction to be critical, we can use a strategic analysis of the situation.

Individual and collective interests are related to people's needs:

- What are my goals?
- What are the constraints of the situation?
- What are the collective issues?
- What are the individual interests?
- What is the message I want to convey?

Approaching a situation and its needs strategically makes it possible to respond to interests without hiding behind purely intellectual or emotional arguments.

Then, by adopting a non-violent and ecological communication makes it possible to affirm and to make known our needs to the others as well as to be aware of those of others...

To describe these interests, here is an infographic summary distinguishing the manipulation of the mind, the call to emotions, erroneous deduction, manipulation of contents, the confusion between cause and effect and the attack.

4.2 Practise active listening

Most of the time we are deceiving ourselves: we think we already know what the other is going to say. Only it is very rarely the case. How can we overcome this passive listening?

Active listening is about focusing on the other person's words rather than thinking about what we can say next. Often, removing our ego is difficult.

> The first step, to paraphrase the old cliché, is to recognise that the problem exists.
>
> Once we see where our predispositions lie within ourselves, we can much more easily make progress not to allow the cognitive biases associated with passive listening influence our state of mind when we communicate.
>
> For this, we can ask questions, start a dialogue, seek clarity and focus objectively on the subject discussed, thus avoiding generalisations.

We consider active listening as a tool for overcoming conversational narcissism or cognitive ethnocentrism, a necessary step for open-mindedness and the affirmation of critical thinking.

4.3 Get your ideas across in written and oral form

To argue in a debate, we distinguish, as in Schopenhauer (1864):

- **Logic**: The Science of Demonstration Principles in Search of Objective Reality
- **Dialectics**: the science of argumentation ploys

Below we give you a selection of 10 stratagems to get your ideas across, both orally and in writing, when you run out of arguments.

10 stratagems to get your ideas across.

1. Do not confuse truthfulness and validity of a thesis.
   - When an opponent refutes some evidence, do not be fooled, it does not mean that he refutes your whole thesis.
2. Do not engage in controversy with the firstcomer.
   - Knowledge and/or intellect may be lacking in your opponent, and "peace is better than truth". It is important that an argument is beneficial to both parties. Before embarking on a debate, do not forget to ask yourself if it is worth it!
3. Argumentation *ad rem* vs. *ad hominem*.
   - An argument *ad rem* relates to the thing-in-itself: you can agree with your opponent or not on the objective reality and the nature of things.
   - An *ad hominem* argument focuses on a relative proof: for example, instead of arguing about an objective truth of something, you could argue that another thesis contradicts the thesis of your opponent!
4. Direct vs. indirect refutation.
   - You can argue by applying a direct refutation: directly attack the fundamentals of your opponent's thesis, that is, the premises or conclusions that are drawn from them. This will invalidate all the arguments that flow from it.
   - You can argue by applying an indirect refutation, and thus interest yourself in the consequences of the thesis itself, either by demonstrating that the thesis leads to an objectively false consequence, or by finding a particular case that should be included in the field of the thesis but to which it cannot apply.
5. The more general a thesis is, the more it is attackable and refutable.
   - By expanding an opposing thesis beyond its natural limits (broader or more general meaning), you can exaggerate and disprove it.
   - On the contrary, by reducing the limits of your thesis, it will be easier to defend your position.
6. Hide your game.
   - It is more effective to have your adversary accept the premises one by one than to directly reveal where you want to go.
7. Force the opponent to exaggerate.
   - By provocation, you can encourage your opponent to widen the limits of his argument, and thus facilitate the refutation of his thesis.
8. Anger the opponent.
   - Making your opponent angry can veil his judgement, and thus make him lose sight of his interests... at your own risk!
   - Making your opponent angry can veil his judgement, and thus make him lose sight of his interests... at your own risk!
9. Make a diversion.
   - If you are aware of your disadvantage in the argumentation, make diversion: talk about something totally different as if it had something to do with the debate and open a new argument against your opponent.
10. Ultimate stratagem: be insulting and rude.
    - When everything is lost because the opponent and his arguments are stronger, some move to so-called *ad personam* arguments... attacking the debater rather than the very subject of the argument. This is a case of force majeure that some of your opponents might try to use against you!

Going deeper…

- Would you like to stop believing things that make us unhappy? Good news ! Our beliefs are just strategies put in place by our brains to serve our values. We can change them! What if we could only believe things that make us happy? Would you like it? Fabrice and Axel are authors and directors of the web series "And everyone does not care".

- The truth ? Everyone does not care...

- Listening to clients and colleagues to gather ideas and information is a key capability that successful people possess. Tony Salvador shares some strategies for being a better listener: losing preconceived ideas, being vulnerable and open to new ideas, and not being afraid to hear what we would rather not hear.

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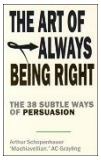

"*In discussions and meetings the aim of everyone is to persuade. Yet we know that really the best result is obtained by the person who is most skilled in holding his position. "The Art of Always Being Right" catalogues the 38 subtle tricks businessmen, negotiators, politicians, lawyers use to gain advantage. It may well be that you are in the right. But once you enter into a debate with someone else, being right is not enough - you are entirely on your own. You need to parry moves designed to throw you. This book will teach you all you need to know.*" (Editor's summary)

5. Decide, act and evaluate

5.1 Proactivity and flexibility in response to the environment

We have focused on this ebook on the things that influence us and the opportunities we have to influence events and the environment around us. An important skill is knowing when and in which context to influence one's environment.

If critical thinking is to remain active, it is essential to know how far to go and where to stop. We must find a balance in our reactions: to bring logic where it is lacking (logos) or the emotion where it is missing, etc. In a team dimension, for example, when the pathos is very present in a situation, it is not appropriate to add elements of emotional triggers.

To be more and more alert, do not hesitate to stay alert by asking the right questions.

We must also understand the concerns of those who believe in it...

- If you refute a rumour, be reassuring, explain the unfounded story.
- Explain its origin if it is the resumption of an old statement.
- Make sure that you are interested in being appreciated by those who believe in it and are affected by it...

How to avoid you do not being targeted?

We can be the victim of rumour and false information. The European Union is often the target. How to avoid being targeted?

- Maintaining a good reputation: admitting when you are wrong, presenting convincing sources and inspiring confidence at all times will put the odds in your favour.
- Have clear and coherent communication: If you want to avoid the errors of interpretation and the transformation of your remarks, do not allow the possibility of various interpretations.
- Respect the law: It may seem useless to repeat this but ... at most you will be transparent and at the very least, you will have only yourself to blame; at the very least you will be the target of erroneous analyses.

How to defend yourself?

It may be too late and you may already be the victim of a rumour or misinformation within the Institutions. Several options are available to you.

- **Silence**: it may seem surprising but think first and do not react heatedly. When a rumour has few consequences, it will take less time to dissipate and go unnoticed if you do not pay too much attention to it. Sometimes, not reacting will make it diffuse.
- **Investigate**: If a rumour exists, bring attention to it to prove it is false (if that is the case). Conduct an inquiry, offer objective facts in order to diffuse it, restore the truth by explaining the message using extreme logic. However, do not be too active so that it appears you want to smother the case.
- **File a complaint and find your allies**: you can discredit the source and file a complaint of defamation. Remember that it is always possible to file a complaint against the intentional spread of false information. The law protects you.

5.2 Balance and moderation

"Press, do not swallow."

To apply critical thinking and act to the right extent, let's not lose sight of the complexity of reality. On the one hand, we can go into an extreme conspiracy, where everything is wrong and where everything is there to manipulate us. At the opposite extreme, trusting all possible sources, even the most contrary to our values, allows us to open our minds and not to remain locked in our bubbles...

So, how do we position ourselves on this continuum? As we did in Chapter 2 of this training course, analysing the information is a good thing; to believe it word for word is another thing. Accepting we are wrong in our evaluation of the information is yet another thing.

Our beliefs are not static. We can revise, qualify or confirm them by discussing, revising the circumstances, being confronted with new experiences...

Finally, from misinformation to disinformation, there is sometimes only one step, so you have to evaluate the intentions of your source.

5.3 My action plan and my tools

Where do you go from here?

- Reinforce your knowledge of how search engines and social networks work!
- Confront contradictory speeches (dD not delete your Facebook friends with different opinions. Consult different sources of information that you would normally ignore).
- Learn how to argue.
- Cross check your sources.
- Check the origin of the images.

Additionally, the following method, which was inspired by Dwight D. Eisenhower, 34th President of the United States of America, aims to prioritise tasks.

The President one day declared: "What is important is rarely urgent and what is urgent rarely important."

The Eisenhower matrix was developed from this quote as a way to help people prioritise their tasks.

Here's how it works:

<table>
<tr><td>A</td><td>Important and urgent activities</td><td>B</td><td>Important activities but not urgent</td></tr>
<tr><td colspan="2">Tasks to be executed immediately and by oneself.
These are the most essential tasks. You must do them immediately, start with them even if it does not delight you.
We too often tend to procrastinate to avoid tasks that do not interest us.</td><td colspan="2">Tasks to plan and execute yourself.
Not important but urgent: if you can, delegate these tasks to your subordinates.
Otherwise, do not wait for them unless important and urgent tasks are present in your "to do list". But do it fast!</td></tr>
<tr><td>C</td><td>Urgent but not important activities</td><td>D</td><td>Activities that are not urgent and not important</td></tr>
</table>

A	**Important and urgent activities**	**B**	**Important activities but not urgent**
Tasks to delegate quickly. These tasks must be completed before the deadline. You do not have to dive right in, but you have to set a slot today for each important and non-urgent task. A good way to not forget them.		Neither important nor urgent: these are the only tasks you can postpone. For once you have permission, do not hesitate: procrastinate! These tasks can also serve as "valves" between two tasks that require more concentration and application.	

Training module exercise: Self-assessment and Action Plan

Goal:

- Address the most important and urgent matters.

Instructions:

1. Repeat the thought processes, the steps of the model and the tools covered during this training course.
    - Here is a non-exhaustive list of keywords: identify, distinguish facts, confront interpretations, understand and evaluate information, prioritise, listen actively, take actions, be autonomous, stay curious, beware of prejudices, develop my openness, spirit, PESTLE, 5W's, become aware of my biases, check the information, etc.
2. Select the processes in which you have issues.
3. Place the skills or attitudes you want to develop on the diagram below.
4. Classify them according to their degree of importance and their degree of urgency.