Stop disinformation. Didactic guide to learn to verify

English version

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Introduction

In this didactic guide we are going to talk to you about a very important topic that affects everyone: disinformation. Have you ever heard of fake news? Do you have the feeling that some content you receive through social networks or WhatsApp groups is a bit suspicious?

In the information age we live in, it is very easy to find news and articles on the internet that seem to be true, but are actually false or distorted. Therefore, it is important to learn how to verify the information we receive to make sure it is reliable and we are not being misled.

In this guide we will explain what disinformation is, what reasons may be behind it and why it is such an important problem for today's societies. We will also clarify some of the concepts related to information disorders and tell you about some of the most common ways to misinform or manipulate public opinion.

Once you have seen how easy it is to mislead or be misled, we will talk about fact-checking and show you the main strategies and tools you can use to detect disinformation and make sure that what you are reading or watching is true.

Remember that having the ability to verify information is crucial to make informed and responsible decisions in our daily lives. So, join us throughout the following explanations, videos and activities that we propose and help us to fight against disinformation!

Information for teachers

This didactic guide consists of 6 units in which you will find: 8 videos that expose the content in an entertaining way, texts that support and develop the content of the videos and a proposal of activities in each of the units to strengthen concepts and test tools. We add at the end a selection of additional didactic materials, tools and educational games on disinformation in case you want to go a little further than what we propose in this open learning resource.

Our goal is that you have in your hand all the necessary resources to address the problem of disinformation in the classroom.

Unit 1. The problem of disinformation

⦿ Objectives

- To understand the impact of disinformation on societies.
- To identify different areas particularly affected by the problem of disinformation.

▷ Disinformation, everyone's problem

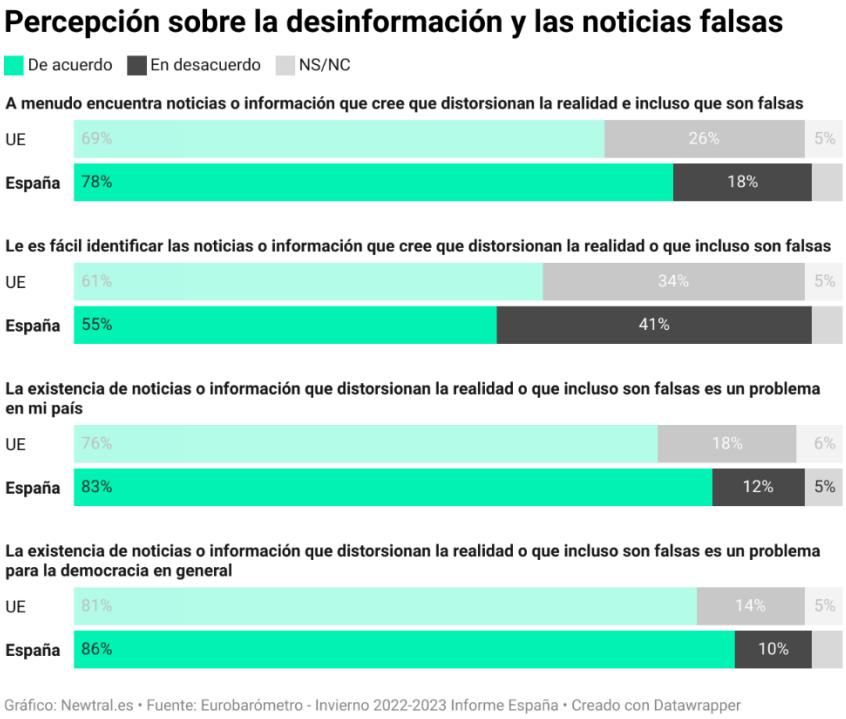
In this video we explain what disinformation is and the aims of those who promote it. In addition, we tell you who it is aimed at and what collateral damage it can cause.

🕮 Disinformation as a problem

Disinformation is a serious problem for 21st century societies and this is reflected in numerous reports that every year show the impact of this phenomenon in different countries and its perception by citizens. Let's take a look at some data:

- Newtral collects the results of the latest Eurobarometer published by the European Union (2022-2023), according to which 76% of European citizens and 83% of Spaniards consider disinformation to be a problem.

Furthermore, 78% of Spaniards say they often encounter fake news and only 55% think it is easy for them to detect it.



Newtral: [Perception of disinformation and fake news.]

- According to the Digital News Report 2022, only 40% of the people surveyed, from 46 countries, trust the news. In Spain, the percentage drops to 33% and if we look only at young Spaniards, it drops to 26%.

Digital News Report España (2023): [Trust in the news. International comparison].

Disinformation can be a very important source of social alarm and cause serious inconvenience to governments, companies, institutions and even vulnerable groups.

In May 2023, for example, an old hoax about "chemtrails", the trails of airplanes through which governments would be spraying chemicals to the population or modifying the weather so that there would be no precipitation, spread again. According to eldiario.es, this hoax led to hundreds of complaints from groups and citizens to the State Prosecutor's Office demanding that these trails be investigated.

The electoral arena is one of the most affected by disinformation. In the 2016 U.S. presidential election, the spread of fake news on social networks was widely reported. Several accounts and websites were found to be spreading false and misleading information to influence public opinion. These fake news were massively shared and had an impact on the perception of the candidates and the issues in dispute.

During Brazil's 2018 presidential election, disinformation also proliferated on social networks and WhatsApp. Fake news was spread about the candidates and conspiracy theories were created to manipulate public opinion. This generated confusion and polarization, affecting political debate and voters' informed decision making. This scheme was repeated or even aggravated in the 2020 elections, as EFE Verifica notes.

Disinformation also has serious consequences in armed conflicts, as it can fuel violence, perpetuate prejudice and hinder the search for peaceful solutions. Thus, in the Ukrainian war, disinformation tactics have been used to delegitimize opponents. Fake news has been spread to sow discord and increase tension between different ethnic and political groups. In addition, fake accounts and profiles have been created on social networks to spread propaganda and disinformation.

Moreover, disinformation can have a devastating impact on public health. The spread of false, erroneous or misleading information can lead to making decisions that are dangerous to your health, such as consuming harmful substances that can lead to death or avoiding life-saving vaccines, thus increasing the risk of infectious diseases. Precisely in the context of an infectious disease, COVID-19, we find a paradigmatic example of the consequences of disinformation, as you can read below.

Case study

On February 15, 2020, Tedros Adhanom, Director General of the World Health Organization delivered a speech at the Munich Security Conference in which he noted his concern about "the proliferation of rumors and disinformation that hinder the response [to EVID-19]" and introduced the term "infodemic" to equate the dangerousness of the virus with that of pandemic disinformation (Adhanom Ghebreyesus, 2020). That same month, Silvye Briand, Director of Infectious Risks at WHO's Health Emergencies Programme and responsible for its infodemic strategy, explained in The Lancet the risk of disinformation in a health emergency situation such as the one the world was facing at the time:

What is at stake during an outbreak is making sure that people will do the right things to control the disease or mitigate its impact. Therefore, it is not only about informing people so that they are informed, but also about making sure that people are informed to act appropriately (Zarocostas, 2020).

A good summary of the dangers of disinformation in a health crisis are the categories identified during the first three months of the pandemic by (Hansson et al., 2021) as types of messages potentially harmful to the population.

1. Messages that portray as harmful or unnecessary protective measures mandated or recommended by authorities: the alleged toxicity of the masks
2. Messages promoting the use of false remedies: baking soda with lemon to prevent contagions.
3. Messages related to the supposed immunity or low probability of contagion of people with certain biological characteristics (blood group) or habits (smoking): smoking tobacco does not protect against coronavirus.
4. Messages minimizing the danger of the virus, the possibilities of transmission or even its existence, encouraging irresponsible behavior: no Spanish court declared that COVID did not exist.
5. Scams related to false protection measures or theft of personal data.
6. Messages of hate towards certain groups as supposedly responsible for the spread of the virus.

The repercussions of this type of content on the population can be serious, so it is no exaggeration to point out that in a pandemic situation disinformation can become a matter of life and death (Krause et al., 2020). The importance that the WHO itself gave to the communication aspect of the pandemic can be seen not only in the public statements of its leaders but also in measures such as the immediate implementation of the WHO Epidemic Information Network (EPI-WIN), designed to involve reliable sources and prescribers as amplifiers of

accurate information in sectors such as health, tourism or food (EPI-WIN, World Health Organization's epidemic information network, 2021) or its early contact with social networks and search engines to curb the spread of disinformation (Adhanom Ghebreyesus, 2020).

Let's go down memory lane... Do you remember having heard or received any false remedy to cure or prevent COVID-19, any hoax about vaccines or masks?

✎ Activity: Are we vulnerable to disinformation?

Objective

To reflect on people's vulnerability to fake news.

Development

After watching the video of this unit and reading the corresponding texts, make a group reflection on the problem of disinformation: what is the purpose of false content, is society weak before this type of practices, is it defenseless against disinformation, what can be done to combat it?

Unit 2. Information disorders

⦿ Objectives

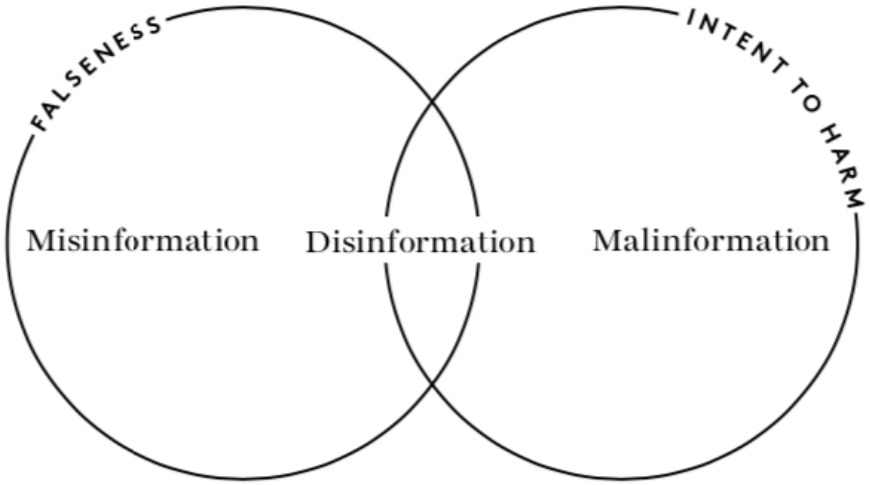
- To know and understand the differences between fake news, disinformation, misinformation and malinformation.
- To identify the characteristics of disinformation.

▷ Introduction to information disorders

In this video we explain the difference between disinformation, misinformation and malinformation, the three types of information disorders that initiatives such as First Draft News talk about.

🕮 Clarifying concepts

When we talk about disinformation, we tend to associate this phenomenon with a term that has come into widespread use in recent years: fake news. Fake news is indeed false, often sensationalist, information that is disseminated under the guise of a news report, but there are many different ways to mislead and not all of them are fake news. In reality, this term only partially reflects a much broader and more complete problem: the problem of news clutter. Information disorders can be defined by three concepts: disinformation, misinformation and malinformation.



Claire Wardle (2020). Understanding Information disorder

Disinformation

We call disinformation any false, inaccurate, or misleading information presented and promoted with the intent to do public harm or for profit (A Multi-Dimensional Approach to Disinformation. Report of the High Level Group on Fake News and Online Disinformation, 2018). Therefore, we are talking about content that does not have to be completely false and with a clear intentionality behind it.

According to Wardle, to complete the concept it would be necessary to add to these intentions with a clear logic of profit, a third one with less rational origins: "causing trouble just because", which may serve to explain some of the less frequent cases, such as the dissemination of decontextualized images of a natural disaster. In any case, those who initially create and distribute this type of content have the objective of intoxicating public opinion.

For example: knowingly lying about what a politician has said in an interview.

Misinformation

If misinformation is such a serious problem, it is because there is a large number of people who collaborate in its propagation without being aware of its falsity or inaccuracy, even with good intentions. This is what Wardle calls misinformation: erroneous or false information that has been spread with no intention of causing harm, in the belief that it is true information.

For example: the false and alarmist "news" that a person spreads, convinced of its veracity, in the Whatsapp group of his family to warn them of a hypothetical risk.

Malinformation

Information disorders are completed with malicious information or malinformation, true but private or restricted information that is shared with the intention of harming an individual, a country or an institution.

For example: disclosing private information about a person's family situation with the intention of harming him or her in a given context.

Of these three information disorders that we have just defined, disinformation (of which fake news is an example), will be our main object of interest. Disinformation takes advantage of certain psychological needs, human behaviors and cognitive biases to expand and affect as many people as possible. Understanding how it works and the different resources it can use is an essential step to be able to identify it and act upon it, preventing, at least, its distribution.

🕮 General features of disinformation

To identify disinformation, in addition to knowing the concept, it is interesting to understand its most common characteristics. The document Guidelines for teachers and educators on tackling disinformation and promoting digital literacy through education and training is part of the European Union's Action Plan for Digital Education (2021-2027) and points out the following as some of the main characteristics of disinformation:

- It speaks to the emotions of the target audience. It makes it difficult for the person to think logically and critically.
- It attacks the opponent, promoting an "us versus them" view of reality.
- Simplifies facts and excludes context.
- Repeats an idea over and over again.
- Ignores the nuances of facts by presenting only one side of something.
- Manipulates images in various ways, such as retouching and cropping.
- Takes images from their original contexts and combines them with other images, music/sounds and text to create new meanings.
- Uses famous people and celebrities that the target group admires.
- Increasingly uses cheapfakes and deepfakes.
- It is resistant to evidence that attempts to disprove it.

✎ Activity: Learn to disinform

Objective

To experience, through a simulation, disinformation strategies in social networks in order to identify them and be able to defend against them.

Development

Now that we know what disinformation is and some of its basic characteristics, let's try to put ourselves in the shoes of a manipulator and use his techniques in social networks through an online simulation game. We give you two very similar options designed by the Social Decision-making Lab of the University of Cambridge for you to choose from:

Bad news: *"In Bad News, you assume the role of a fake news peddler. Abandon all pretense of ethics and choose a path that makes you an unscrupulous media mogul. But don't lose sight of your "followers" and "credibility" meters. Your task is to get as many followers as you can while slowly building up fake credibility as a news site. But beware: you lose if you tell blatant lies or disappoint your followers!"*

Go Viral: *"GO VIRAL! is a five-minute game that helps you protect yourself against COVID-19 disinformation. You will learn some of the most common strategies used to spread false and misleading information about the virus. Understanding these tricks allows you to offer resistance to them the next time you encounter them on the Internet."*

Once you have played individually or in a group, reflect on the manipulation strategies you have seen applied in either game.

Unit 3. What types of disinformation exist?

⦿ Objectives

- To identify the resources frequently used by disinformers.
- To identify possible false or misleading contents.
- To develop a critical attitude towards the informative contents received.

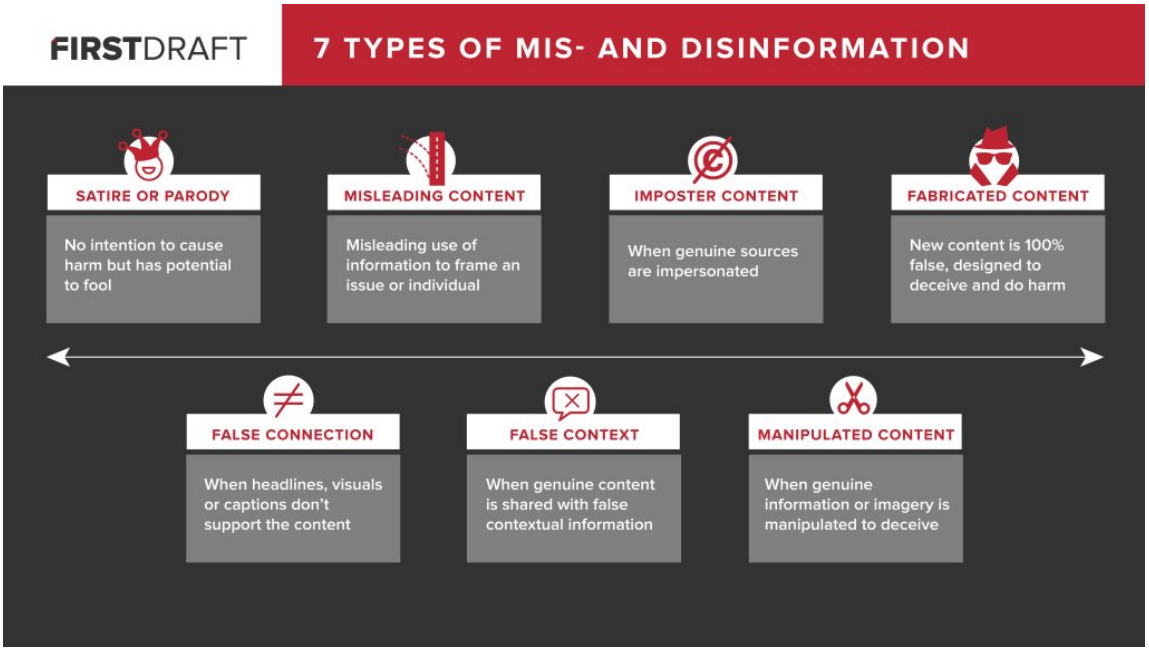
▷ Ways to deceive through information

In this video we explain the seven most common forms of manipulation or disinformation identified by First Draft: false connection, misleading content, false context, imposter content, manipulated content, fabricated content and satire or parody.

🕮 Types of disinformation

One of the most cited and reproduced classifications of the different types of disinformation is the one proposed by Claire Wardle. Her intention was to provide arguments against the use of the term "fake news" to refer to any type of disinformation, showing that there was a wide gradation of possibilities that

did not imply using exclusively falsehoods with the appearance of news. According to this classification we can speak of:



Claire Wardle. Fake news. It's complicated

Satire or parody

This category can present two variants: originally satirical content that, once decontextualized, loses its humorous sense and becomes disinformation, or misleading content that hides behind the satirical character to spread rumors.

For example: although the networks circulated several messages in which the watch company Casio supposedly "got wet" talking about the relationship between Piqué and Shakira, following the famous song of the artist in which the brand is mentioned, these contents come from parody accounts, as Chequeado clarifies.

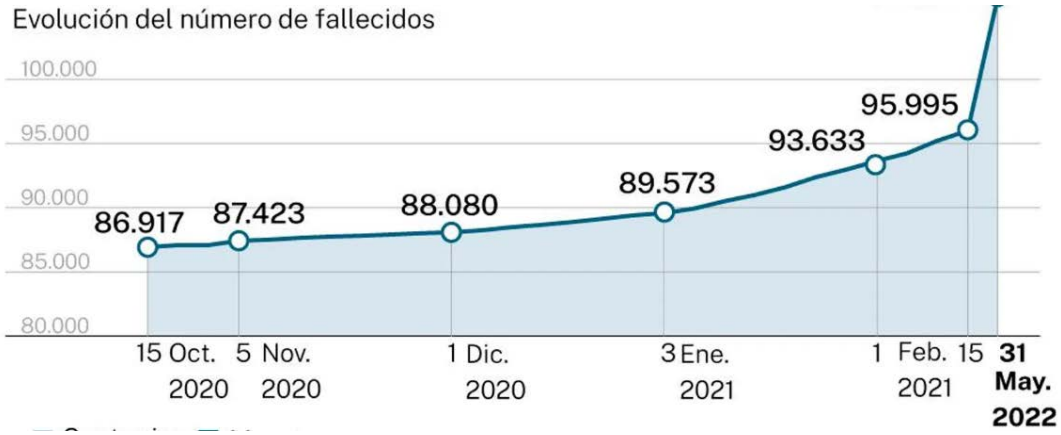
False connection

Journalistic practice -whose paradigm is the clickbait-, which consists of generating a striking and sensationalist headline that may not correspond to the content of the text to which it is directed and that has the purpose of attracting readers. The false connection can also be generated with captions or other visual elements.

For example: Elle magazine headlines an article "A study shows that striped T-shirts are bad for your health". This headline refers to a study that does not actually mention striped T-shirts anywhere. According to the text of the article itself, the research "has found a direct link between observing parallel lines with headaches and migraines". Claiming that striped T-shirts are harmful to health adds an extra dose of creativity to the story.....

Misleading content

This consists of using existing information in a biased way to alter its meaning. It can manifest itself through partial extracts from interviews, manipulation of scales of graphs, or omission of some data that qualify or contextualize the main discourse based only on a part of them.



La Razón: Covid mortality

For example: although the graph published by La Razón includes true data, if 15 months are represented on the X axis of the graph as if they were 15 days, our impression of the evolution of COVID mortality will be erroneous.

False context

The content being shared is, in essence, real (a photo, a video, a public statement), but the contextual information explaining what exactly is happening, when or to whom, is false.

For example: in Newtral we are alerted about a video in which several young people dance in a discotheque in Kiev (Ukraine). The video is real; what is not true is that it corresponds to a recording made in May 2023, in the middle of the war. In reality, it is a video from November 2021, before the start of the war. But some have taken it out of context and used it to question the aid sent to Ukraine.

Imposter content

False or misleading content published from profiles or pages that pretend to be real - from public figures to institutions, media or companies - so that the credibility that the impersonated might have supports the false content in the eyes of the user. Impostor content is also used to create profiles of fake supporters of social movements or political parties, both to generate a false appearance of social support, and to ridicule the adversary through the exaggerated, unpopular or inane posts of their supposed supporters in what could be called "false flag operations".

For example: the U.S. pharmaceutical company Eli Lilly and Company was not willing to give away insulin. But that's what users were led to believe by some netizen who created a fake profile of the company on Twitter. This is nothing more than a way of damaging the company - which suffered a big fall on the stock market - and of generating false illusions among many diabetes sufferers.

Manipulated content

Fake content generally created from a photo, video or real image capture that is edited by introducing or removing elements that alter its original meaning.

Maldita.es: Original and manipulated image

For example: if you saw Volodymir Zelenski wearing a T-shirt with a Nazi symbol, don't trust your eyes. This image is a montage created to discredit the Ukrainian president in the middle of the conflict with Russia. In Maldita.es they show us the original photo.

Fabricated content

100% false content, created to deceive and without any basis in reality.

For example: many of the Whatsapp chains we receive almost daily are an example of this 100% fake content, manufactured specifically to deceive. Some of these hoaxes come back every so often, like this one about the new rule that allows Whatsapp to use your photos, which Maldita.es warns us about.

Depending on the type of disinformation we are facing there are a number of tools that may be more appropriate than others, but, in any case, the main thing is to have certain strategies to act against content that we are suspicious of.

▷ It's that easy to manipulate

In this video we show you that anyone can easily manipulate, creating fake news, impersonating other users, generating tweets that are not true or manipulating chat conversations.

✎ Activity: Impostors

Objective

To experience firsthand how easy it is to create fake content that looks real and to reflect on how susceptible we can be to messages that mimic the design of social networks or media.

Development

We have seen that one of the types of disinformation is known as "impostor content" and we have also seen how easy it is to create fake content on the Internet with the appearance of veracity. In this unit we propose you to create your own fake tweet with this tool. You must select who you are going to impersonate, what image you are going to use and what statement you are going to put in their mouth and the way you are going to write it (remember what we saw in Unit 1 of this guide). Important: you can choose a real statement from that person or make it up because the rest of your classmates will have to guess whether he or she said it or not. If you choose a real statement save the source to show it later.

The result is shared in turns in the classroom and the participants must try to guess if the impersonated person really said that or not.

Finally, a reflection on how easy it is to create false content with the appearance of verisimilitude and how credulous we can become when faced with images that look like this.

Unit 4. Fact-checking and fact-checkers

⦿ Objectives

- To become familiar with the concept of fact-checking, its origin and evolution.
- To know the principles that guarantee the impartiality and quality of the fact-checkers' work.

▷ What is fact-checking?

In this video we explain what fact-checking or data verification is, what its origin is, what commitments must be met by fact checkers and where they can be found.

🕮 Fact-checking

You may not know the terms fact-checking or data verification. But surely you have heard of Newtral or Maldita (and their Maldito Bulo). These entities are what we know as fact-checkers and in recent years they have become very valuable agents in the fight against disinformation. In a simple way, we can define a fact-checker as an entity that is dedicated to checking the veracity of

information or content published in the media or disseminated through the Internet, disproving false or misleading news and thus contributing to curb the advance of content that is not accurate and reliable.

Fact-checking is a task that journalists carry out on a regular basis in the exercise of their profession, both to avoid inaccuracies in their information and to refute content published by other sources. However, fact-checking, understood as an activity in itself, focused on demonstrating the veracity or inaccuracy of statements made by third parties or content published by various sources, is relatively recent and its origin is closely linked to the political world.

Fact-checking today, however, is not restricted exclusively to political messages, but can encompass any area of public life: from health to culture. Fact-checkers work on public statements made by politicians or by anyone whose words have an impact on the lives of others and their aim is to provide clear and rigorous information to consumers so that they can make conscious choices in voting and other essential decisions. Its activity could be synthesized in the action of subjecting supposedly objective public statements to evidentiary tests and judging them according to their accuracy outside the influence of political and economic power interests.

Its origins, in the modern sense of the term, can be traced back to the early 20th century in the United States, when journalists decided to launch their own publications to combat political disinformation. Thus, these early practices of fact-checking are closely linked to the work developed by muckrakers (Amazeen, 2017), the first investigative journalists who tried to denounce the abuses of companies and institutions.

But it is at the beginning of the 21st century, and particularly between 2014 and 2016, when the current fact-checking wave begins to consolidate with a significant growth of organizations and journalistic companies dedicated to this activity. One of the main milestones of the consolidation of this trend is the creation of what is today a reference institution within fact-checking: the International Fact-Checking Network (IFCN). The IFCN was created in 2015 within the Poynter Institute to bring together journalistic fact-checking initiatives that work according to a set of ethical principles defined by the institution and to act as an independent auditor of the impartiality and quality of these new journalistic initiatives. The media under this project sign a code of principles that must govern their operation and are audited each year by independent consultants who certify whether or not they comply with them:

1. Non-partisanship and fairness: signatories must be equally demanding in their verification process with all political and institutional actors. *If they only review the statements of one political party, they cannot be part of the association.*

2. Transparency of sources: signatories want their readers to be able to verify the findings for themselves and provide all sources (as long as

there is no risk to them) in sufficient detail so that readers can draw their own conclusions. *It is common to find hyperlinks in their articles to the original sources of the data they publish.*

3. Transparency in financing and organization: signatories are transparent about their funding sources and organizational structure. If they accept funding from other organizations, they ensure that the funders have no influence on the conclusions reached by the fact-checkers in their reports. *In many cases, the media are under pressure from their owners and shareholders. That is why it is interesting to know who owns a media outlet.*

4. Transparency of methodology: signatories explain the methodology they use to select, research, write, edit, publish and correct their fact-checks. They encourage readers to submit fact-checking claims and are transparent about why and how they fact-check. *Transparency in the process helps us decide whether we can trust it.*

5. Open and honest proofreading policy: signatories publish their proofreading policy and follow it scrupulously. They proofread in a clear and transparent manner in accordance with the proofreading policy, ensuring, as far as possible, that readers see the corrected version. *This clarifies the changes made to an article since it was first published.*

In this way, with the guarantees of impartiality and quality offered by entities such as the IFCN, fact-checkers function as a new democratic institution whose purpose is to promote truth in public discourse. Through their activity, they contribute to improving the transparency and accountability of the media, increasing public confidence in the news, and by changing misperceptions, they help to generate a well-informed public opinion.

Activity: Discovering fact-checkers

Objective

To familiarize students with the work of fact-checkers as a reliable source of information as long as they meet certain standards.

Development

Examine the list of IFCN members and answer: How many members does IFCN have? Which Spanish fact-checkers are members of IFCN?

Divide the class into groups. Each group deals with the analysis of a different Spanish fact-checker. You have to locate a fact-check published on the website of your chosen media and analyze whether it uses neutral (non-partisan) language, whether its fact-check is based on data and whether that data is accessible to you. Finally, you will share the results with the whole class.

Unit 5. Ways to detect disinformation

⦿ Objectives

- To know and manage the strategic and technical resources to verify the information received.

▷ How to detect disinformation

In this video we give you a few tips "to avoid being cheated": evaluate the source, read beyond the headline, check the images, avoid prejudices and contrast the information.

🕮 Verification pillars

As we advanced in the previous unit, data verification -or fact-checking- in journalism can be understood in two ways: on the one hand, as a traditional practice of checking statements and figures before the publication of a news item (by way of quality control) and on the other hand, in its more contemporary meaning, as the verification of information already published or statements made by public personalities.

Verification is based on the systematic and reasoned questioning of data and content presented to us as true. The very nature of the process entails doubting and asking questions in relation to different aspects, both of the content and its origin, and it is a practice that, at a basic level, any citizen can perform.

In the following lines we will address some essential questions that we should ask ourselves before taking a piece of news for granted in order to contribute, at least, to cutting the chain of disinformation.

According to Urbani (2020) the five pillars of verification are: provenance, source, date, location and motivation; each of them entails the formulation of a series of questions whose answer will provide us with clues about the veracity or, at least, the apparent credibility of a piece of content.

Check the provenance

It is important to know whether what we have in front of us is a primary original content or whether it is a fragment, reprint or reference to other content that may deprive us of the necessary context or omit important information to interpret it properly.

A content provenance check may reveal that statements have been deliberately edited to omit relevant aspects that change their meaning, that old images taken out of their original context have been reused to falsely link them to a current event, or that references in a text to data from a study are manipulated or inaccurate. The process of provenance verification involves tracing the origin of the content being referenced and checking whether the interpretation or fragment we are offered corresponds to the original.

Some basic questions:

- Is the content original or has it been culled from previous reports, misleadingly reappropriated?
- Has the content been digitally manipulated in any way?
- Can we confirm the time and place the photo/video was taken, using available metadata?
- Can we confirm the time and place the photo/video was taken, using visual clues in the content?

For example: the photo of Afghan refugees arriving in Belgium with their backpacks loaded with weapons that had been digitally added.

Check the source

When talking about the source we must distinguish between who publishes the content that reaches us and who creates it. On many occasions trying to get to the original source of images is the only way to verify something that may have been echoed by different websites or profiles, but it is a task that may require a certain degree of expertise.

Some basic questions:

- Who is behind the website or profile that publishes the content?
- Is it an official account?
- Is the source reliable?
- What does the profile or website look like? Does it look like a real person or institution?
- Can you find the author's name in other content on the internet?
- Has the event been reported on other sites, and are these sites reliable?
- What does the URL or profile name look like? Does it try to mimic an official site?
- Are there names of experts or witnesses in the content that can be found in other sources?
- Are the experts or institutions cited known?

For example: sometimes it is not complicated to find out that the source is not very reliable. Influencer Marina Yers had to end up rectifying after having assured that "water dehydrates". Of course, she is not an expert on the subject and the sources she refers to ("Google it") are rather diffuse. But some teenagers can be "blinded" when their idol makes a claim, even if that claim is simply the opinion of an uninformed person.

Check date and location

The false context -described above as a disinformative modality- is a very common resource to try to deceive the public: demonstrations in support of causes, riots or images of natural disasters can be presented as linked to current events and to a geographical context close to the recipient, when, in fact, they have happened at another time and place. What is considered the first sentence for spreading disinformation in Spain punishes, precisely, the publication on Twitter of the video of a brutal assault on a woman in China, attributing the aggression to unaccompanied minors from a center in Canet de Mar (Barcelona).

Some basic questions:

- When did the event occur?
- Do the dates of publication and the dates on which the events occurred coincide?
- Are the dates specific or not (e.g., "last month")?
- Do the links in the news item refer to other original news sources?
- Are there multiple sources reporting the event?

- Are the posts geotagged (e.g., on Facebook, Twitter or Instagram)?
- If there are photos or videos Are there unique geographic features, unique buildings or signs that identify the location?

For example: In this Maldito Bulo denial it is shown that Pedro Sánchez did not announce his resignation as Secretary General of the PSOE after the municipal elections. It is true that Onda Cero Radio said so... but in 2016.

Think about motivation

Trying to identify and understand the motivations that may exist behind the dissemination of a content contributes to a more complete assessment of its credibility. It is complicated to be certain about the interests that may be behind the publication of some content, but we can locate indicators that allow us to formulate reasonable hypotheses about it.

Some basic questions:

- Is the person disseminating the content a direct witness to the event?
- Is the person disseminating the content linked to political, social or other organizations?
- Does the person disseminating the message belong to public agencies, research centers or companies?
- Does the source have an employment or economic relationship with any of the parties benefiting from the speech being transmitted?

For example: much of the disinformation that circulates comes from politicians, from people linked in varying degrees to parties or activists who use lies or misrepresentation as a weapon against their rivals. In March 2023 Luis Pérez Fernández, known on social networks as 'Alvise Pérez', was convicted for violation of the right to honor for having published, at the height of the collapse of hospitals during the pandemic, that the mayor of Madrid at the time, Manuela Carmena, had received a respirator at her home to avoid waiting times in the public health system.

▷ I can do fact-checking too

In this video you will see practical examples of three simple home fact-checking tricks: reading beyond the headline, using an online hoax tracker and reverse image search.

🕮 Online tools to verify information

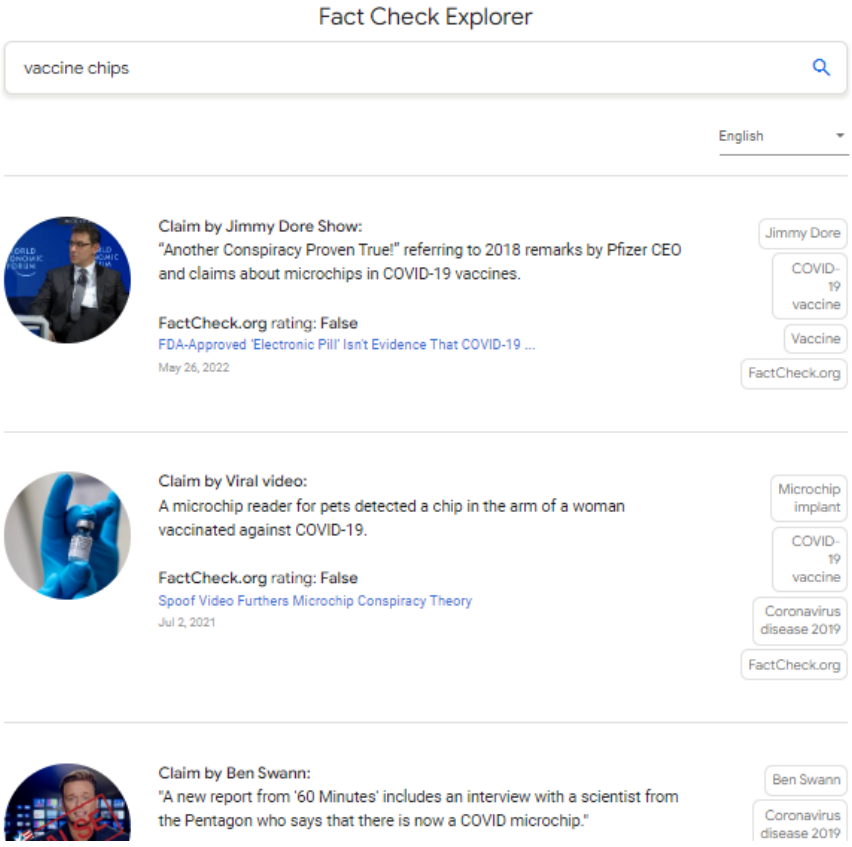
Now that some of the questions that can be asked to determine the veracity of content have been explained, it is time to talk about the tools that are available to try to answer them.

General search engines

A search engine such as Google or Bing can be a good option to trace the origin of a headline that we receive as a screenshot, check if a content has been published by other media, trace the background of a supposed expert or the full version of a report. If, in addition, we take advantage of advanced search options by language, geographic origin or publication date, its value as a verification tool is optimized. Have you been sent a screenshot of a headline and want to check if what it says is true? Your best bet is to use a search engine to check it out.

Verification search engine

A simple and straightforward option when faced with dubious content is to check if there is already a verification published by a rigorous journalistic entity. Google offers Fact Check Explorer, a search engine specifically for this purpose that returns results from verified fact-checkers based on the terms entered. In addition to locating whether the content in question has been denied, you can quickly see whether it has been denied by different sources. As a complementary measure, we can search directly on the websites of entities affiliated to international organizations that ensure the journalistic integrity of their members, such as the International Fact-Checking Network.



Results in english for the search "vaccine chips"

For example, a search for the words "vaccine chips" in Fact Check Explorer brings up several false news debunks related to the alleged incorporation of microchips in vaccines against VID-CoV-19.

Archive.org

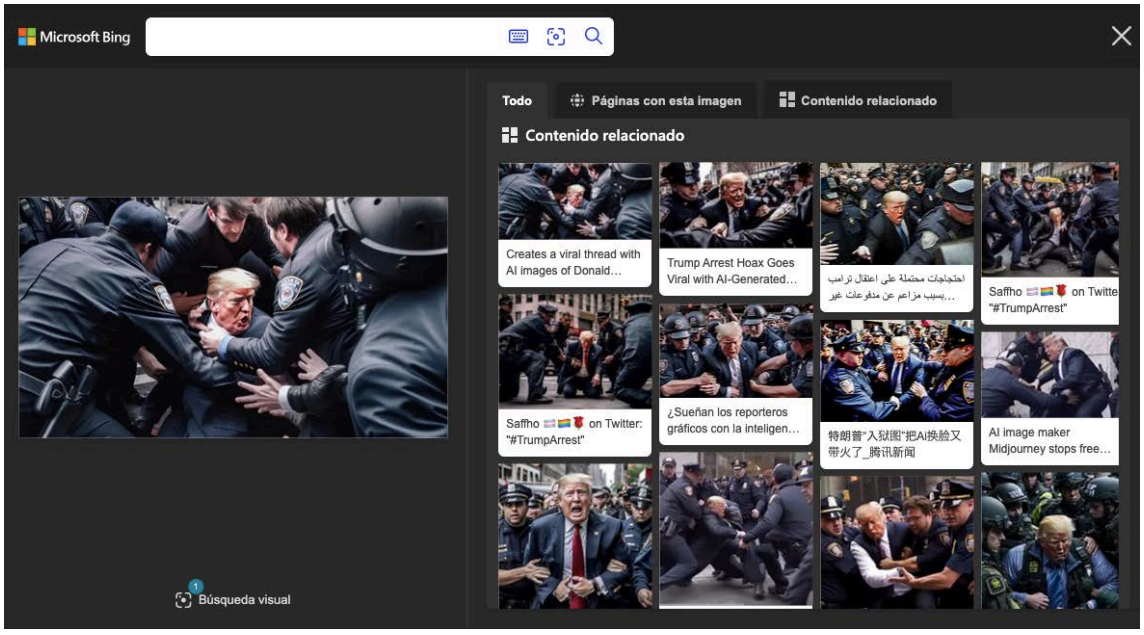
The contents published in blogs and web pages are easily editable without any apparent record of the modifications made so that, in general, it can be difficult to check if what we are currently consulting is the same as what was originally published. Internet Archive's Wayback Machine allows you to access chronologically organized snapshots of different versions of websites and also

to preserve the current version of a page for use as a citable source, limiting the risks of referring to data that may have been modified without being acknowledged by the authors.

For example: Maldita uses in this verification Wayback Machine to deny that the newspaper El Mundo had published a false content that was going viral.

Reverse image search

Reverse image search is especially useful to verify if we are facing a decontextualized content, which reflects an event from another time or place than the one it declares. Nowadays, the main search engines already incorporate the possibility of entering an image instead of a search term, but we also have the possibility of performing a simultaneous search on Google, Bing, Yandex and TinyEye through the RevEye tool, which, in addition to optimizing the search, allows us to compare results. The most accessible reverse video search tools - such as Youtube DataViewer from Amnesty International or InVID - are based on frame extraction to obtain static images that can be crawled with the same technology.



Results for reverse image search on Bing

For example: the reverse search for this image of Trump being arrested leads us to several news items where it is made clear that it is an image generated with artificial intelligence.

Metadata in images

All images we capture with digital cameras contain additional information in the image file, such as time, date, camera settings, device information and even

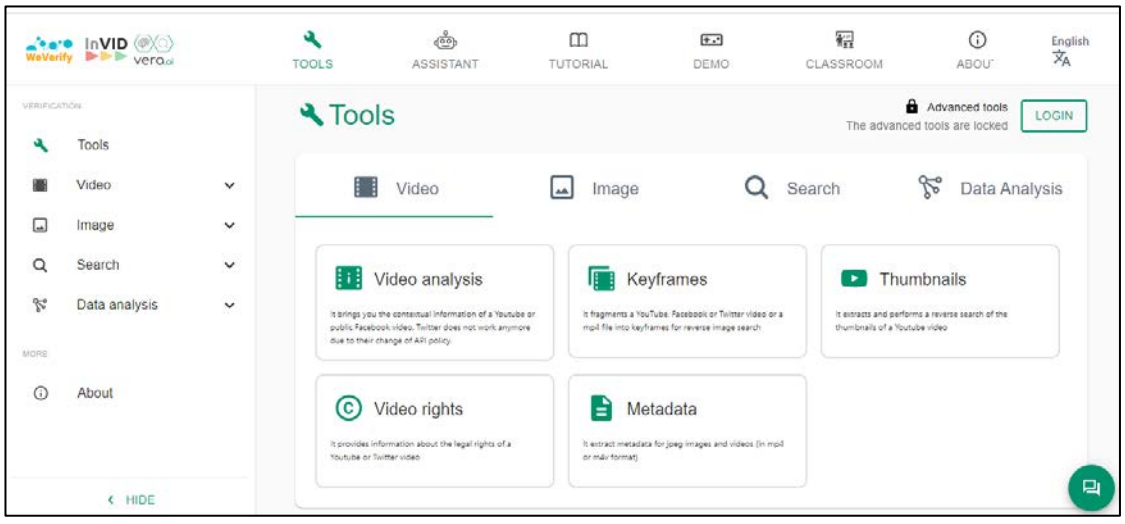
coordinates, if the device has GPS enabled. This is your EXIF (exchangeable image file format) data and it is possible to obtain relevant information from it with tools such as Metadata2Go, EXIFdata or Pic2Map. The data obtained with this type of analysis can itself rule out the veracity of a context or be used to perform additional checks, through tools such as SunCalc or Wolfram Alpha, which provide information about the weather or the position of the sun at a specific time and place.

Identifying bots in networks

Disinformers often resort to fake identities or automated accounts to simulate social support for a cause, spread hoaxes or attack political rivals. While detecting fake profiles managed by humans requires somewhat complex analysis, the behavioral patterns of bot armies differ greatly from those of a real user, to the point that some tools such as Pegabot offer probabilities that an account is automated. In any case, there are different options that allow us to analyze the activity of an account and obtain the most relevant data, such as AccountAnalysis, SocialBlade or Twitonomy.

InVID-WeVerify

A real toolbox developed by AFP with European public funding that, through a single space, offers different types of analysis for photographs and videos in addition to reverse searches, access to metadata and specialized searches.



Some analysis options in InVid

Activity: Using tools

Objective

To become familiar with simple tools to verify data

Development

We propose 3 simple activities to test some of the tools we have mentioned.

As we have seen, Wayback Machine is a huge online archive that allows us to view previous versions of a web page to check if there were changes in it and if, for example, someone has removed an inconvenient statement or a wrong data published with malicious intent. In this case we are simply going to see an example of what we can find there: this is the RTVE web page today, and this is what it looked like on December 23, 1996. Enter Wayback Machine and try the web page you want.

Bill Gates is the owner of Microsoft and is a frequent target of disinformation campaigns. Use Fact Check Explorer, type his name in the search bar and see what has been said - and disproved - about him.

Look at the image below. It looks like Darth Vader's head carved in stone on some kind of building, doesn't it, and would you be able to figure out exactly what it is and where it is, using a reverse lookup tool? Download the image and try crawling it on Google Images, Bing Visual Search or Tiny Eye.

Unit 6. Aditional resources

If you have come this far, you have surely learned a lot about disinformation, about the strategies used to spread it and about the resources you have at your disposal to fight it.

Before finishing this didactic guide we propose a short video that summarizes everything we have seen so far and a good collection of didactic resources, games and verification tools in case you want to go deeper into the subject.

▷ Summarizing

A short summary of the content of the previous seven videos and some resources to help you become a verification pro.

Games

In unit 2 of this didactic guide we invite you to try Go Viral and Bad News, but there are more games that try to explain how disinformation works and its effects. From here we recommend these:

- Breaking Harmony Square is an online game in which you adopt the role of a disinformation specialist whose mission is to disrupt the peace and tranquility of a small community by fomenting internal divisions.

- The hoax factory is an online scape room from Maldita.es in which you take on the role of an investigative journalist. You have 45 minutes to uncover a plot dedicated to producing disinformation.
- Fact-Check It! is a role-playing card game that stimulates critical thinking, fact-based dialogue and students' analytical skills.
- Fake it to make it is an online simulation game in which you must start a fake news website to get money through the visits you manage to generate.
- Fakey presents a news feed that mixes different contents with characteristics of clickbait, fake news, conspiracy theories, etc. and asks users to react to them by sharing, hiding or verifying the information.

🗐 Didactic materials

In this section you can find a selection of manuals accessible online for educational and informative purposes. They will help you to go deeper into the fight against disinformation with a simple language and will give you ideas about additional activities and contents.

Anzivino, M.; Caiani, M.; Del Zotto, M.; Berndt, A. (2020). Digital competences to deal with fake news. In Digital Resistance. Council of Europe. https://book.coe.int/en/secondary-education/8916-pdf-digital-resistance.html

Braesel, S.; Karg, T. (2021). Media and information literacy. A practical training guide. Deutsche Welle. https://akademie.dw.com/es/alfabetización-mediática-e-informacional-guía-práctica-de-capacitación-tercera-edición/a-61370039

Degli-Esposti, Sara. (2023). Cómo protegerme de la desinformación. Madrid: Instituto Nacional de Tecnologías Educativas y de Formación del Profesorado (INTEF). http://ir.gl/35ccd9

Final report of the Commission expert group on tackling disinformation and promoting digital literacy through education and training. (2022). European Commission, Directorate-General for Education, Youth, Sport and Culture. https://data.europa.eu/doi/10.2766/283100

Guidelines for teachers and educators on tackling disinformation and promoting digital literacy through education and training. (2022). European Commission, Directorate-General for Education, Youth, Sport and Culture. https://data.europa.eu/doi/10.2766/28248

Ireton, C., y Posseti, J. (2018). Journalism, «Fake News» and Disinformation: A Handbook for Journalism Education and Training. UNESCO. https://en.unesco.org/fightfakenews

Mantzarlis, Alexios (2018). Fact-checking 101. En C. Ireton & J. Posseti (Eds.), Journalism, "Fake News" and Disinformation: A Handbook for Journalism Education and Training, pp. 81-95. UNESCO. https://en.unesco.org/fightfakenews

Urbani, Shaydanay (2020). First Draft Essential Guide: Verifying Online Information. https://firstdraftnews.org/long-form-article/verifying-online-information/

Wardle, Claire (2020). First Draft Essential Guide: Understanding Information Disorder. First Draft. https://firstdraftnews.org/long-form-article/understanding-information-disorder/

💻 Tools

In unit 5 we have seen some online tools that allow us to make basic checks on the content we receive. If you have been left wanting to explore more, here are some "toolboxes" that contain more than enough resources for you to make your own checks:

- VerificaRTVE Toolbox
- Maldita Toolbox
- First Draft Toolbox
- Tools That Fight Disinformation Online

Credits

Didactic guide:

Alberto Dafonte Gómez, María Isabel Míguez González and Silvia Sierra Martínez (Universidade de Vigo).

Videos:

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Director: Alberto Dafonte Gómez, María Isabel Míguez González (Universidade de Vigo)

Production and realization: Oswaldo García Crespo (Universidade de Vigo)

Script: Nicolás Rodríguez, Carlota Mosquera

Photography and sound: David Hernández (Adarme Visual)

Editing and postproduction: Álex Penabade (Adarme Visual)

Color correction: David Hernández (Adarme Visual)

Art Direction: Iria Pinheiro

Motion Graphics: Marcos Mosquera (Mosk.tv)

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