TRICKS

&

IDEAS

TO NARROW YOUR VERIFICATION

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Creative solutions for you and your team

A set of diversified resources

Useful tips for videos and photos

FIRST STEPS

In this article I am going to present some **practical solutions and creative techniques** to refine our verification. Often, we can follow all the essential steps and resort to all the tools we know, and still, spend endless hours without finding a result that is worthwhile to us. This does not mean that it is impossible to verify the intended information, but it may be a sign that some details are escaping us.

We can start by reflecting on the factors that make us doubt the information. Next we will see three **basic elements that can raise suspicions**:

• The website where it has been published is unknown and lacks references

• No sources are cited

• The author does not exist

Remember that **it is essential to know the origin**, so when we cannot easily verify the origin we must activate an immediate alert. We cannot forget the importance of the data. Honest information should include links to the data sources that have been used. Most of that information must be verifiable by any reader and must be signed. If not, no one is responsible for it. An unsigned piece of information is a good indication that we are dealing with something suspicious. On the other hand, **if there is an author, investigate** him. You can search for his name or photo and check his history on the internet, (for example, check if he has more active accounts, if there are previous publications, if his contents are shared and what the reactions to them are, his biography, place where he is based ...), which will give you many clues to know if it is a fraud or not. **The more references** and content published in the field of the piece of information you are investigating, **the better**. If, on the other hand, you do not find any information that corroborates his identity or anything that was published, you already have more than enough reasons to be suspicious.

GO BEYOND THE HEADLINE

It is very important to **go beyond the headline**. Sharing something we have not read is standard practice. Therefore, it is always recommended to read all the information since a headline may lead us to believe information that bears little resemblance to the rest of the body of the news. **Always be suspicious** of those sensationalist headlines or those with barely credible claims. And also, if you feel the *Wow effect*, which means, if your first impression is that it causes a big impact on you (surprise, disgust, sadness…), this could be an indicator that someone is desperately trying to call for our attention and the intention will probably be to get more clicks and readers rather than to inform.

Check the publication date. Many hoaxes are simply old news taken out of context. So we should always look at the original publication date.

Discard humor pages. Some prank websites have a media format. No wonder some of their posts go viral as if they were true.

Control biases. We all read the information under our own personal or ideological biases. Being aware of them will help us not accept any news just because it confirms our point of view.

Trust the experts. In the end, it is best to always go to the one who knows. If the post you want to check passes all the previous filters, but there is still something that makes it suspicious, it is best to ask a subject matter expert.

THE PROCESS

Once you have concluded that you are dealing with dubious content and decide to verify it, keep in mind that the verification process can be long and complex and that **you must have good planning**. When planning, you must also take into account that each content is different; therefore each verification process may vary depending on the content. So do not forget that it is not about memorizing a series of steps and repeating them mechanically, but that we will have to adapt and always find the most appropriate path.

On the other hand, you must be prepared, that is, **you must have some solid knowledge** about the content that you are investigating. It will be very difficult to find out the veracity of specific information if we do not master the area into which it falls. Having previous knowledge about what we want to verify is going to be a great point in our favor, since there are very complex realities and conflicts that are going to require an understanding in the matter.

Finally, I advise you not to embark on this adventure alone. Verification work is something that **works best as a team**, not only to divide tasks, save time, and be more effective, but also to always ensure plurality. Different points of view and opinions will enrich our research and we will avoid falling into our own bias. In addition, having colleagues by our side will also help the team members to complement each other as some may cover the weakest points of others and vice versa

SPECIALIZE YOUR SEARCH

So far, we have focused on tools to search and verify facts, images and videos, but on the web there are many more tools that can be used for the most minute details. These resources can serve us on specific occasions and can be easily combined to achieve the greatest possible accuracy.

GETTING SPECIFIC

GEOLOCATION

Geolocation will help us obtain the real geographical location, and we can apply it to different functions:

- Finding the latitude longitude of a physical address (**Itouchmap**)
- To search for videos by location on YouTube (**GeoSearch)**
- Search for a place by its geographical coordinates or the location by physical address (**Google Maps**; **Yandex Maps**; **Baidu Maps**; **Naver Maps**)
- Consult photographic history of a specific place (**Google Earth**)

Other very useful tools for geolocation are **Wikimapia**, a resource for advanced and commented satellite maps, which also allows searching by category; and **OpenStreetMaps** in which maps are created using geographic information captured with mobile GPS devices and other free sources. In this cartography, both the created images and the vector data stored in its database are distributed under the Open Database License (ODbL).

METADATA

Finding the EXIF data is a useful method for locating the time or date a piece of content was captured. Every image we capture on a digital camera contains extra information in the image file, such as **time, date, camera settings**, **device information and even coordinates**, if the device has its GPS turned on. This is called its Exif data (Exchangeable image file format).

The tools that I recommend you to check the EXIF data of your pictures are:

Jeffrey's Exif viewer, **EXIFdata viewer Fotoforensics** or

Findexif

AND MANY MORE

Finally, we must highlight the great diversity of specialized sites that we can find on the Internet. We are not going to name all of them here, since it would be a practically impossible task, but we would like to focus on **Wolfram Alpha** which is a unique engine for computing answers and providing knowledge. It works by using its vast store of expert-level knowledge and algorithms to automatically answer questions, do analyses and generate reports. It covers a wide range of topics, going from linguistic analysis to dynamic computation. Some practical uses that we can give it are checking the weather information of specific dates and locations or even checking quotes to find out who said them.

But if you are digging into very specific contents you can check the following:

- Data about a given website or IP address: **The ViewDNS.info**
- Memes and claims: **Trackreddit.com** / **4chansearch.com** / **Gab.ai**
- Contact information (someone's address, email, telephone number...): **Spokeo**, **White Pages**, **Pipl.com** (this one is paid), **WebMii**.
- Posts: **whopostedwhat**
- The angle of the sun on specific dates: **SunCalc**
- Information about birds: **Cornell Lab's Merlin** / **Bird ID** (app)
- Flags: FlagID.org
- Languages: **OCR** / **Google Translator** (photos and handwriting)
- Data about the weather: **Weather underground**
- Origins (dates and places of birth or death by names and surnames) **Filae.com**

LAST TIPS, BUT NOT LEAST

DON´T GIVE UP!

What can we do if, after following all the steps, visiting all the pages we know and using all the possible tools, we continue to have poor results that do not help us to verify our information?

We are going to end this article with the most practical tips that can help us when things are difficult.

FOR PHOTOS:

1 LOCATIONS

Take geographic differences into account depending on the tool you are going to use. For example, if we want to verify an image that was published in China, it will be more efficient to use Baidu; Or we will tend to use Yandex for images of Western and former Soviet countries.

2 DETAILS

Look for details that can help us to geolocate: vehicle license plates, names of restaurants or shops, peculiar landscapes, urban elements such as buildings or bridges, people's appearance (skin tone, facial features, clothing ...), etc.

3 HIGH RESOLUTION

Remember that the higher the resolution, the more results we will obtain. Especially when we crop photos, increase the resolution as much as possible.
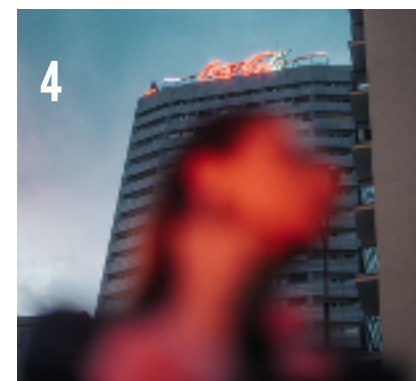
4 LEAVE IT OUT

Most of the tools that we have seen will have a great fixation to analyze faces, therefore, they will always show us many more results of the people that appear in the photos than of the rest of the elements. If we want to find out information about the elements around we can crop out or pixelate the faces (or any other element), leaving the search engines to focus on the rest of the elements.

FOR VIDEOS:

1 FILTERS

Use the date filter to view older videos that match these keywords.

2 KEY WORDS

Don't forget to also use acronyms and other types of words like articles or pronouns to get more precise keywords.
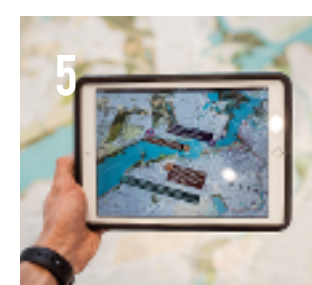
3 DIVERSIFY

YouTube is not the only platform to host and share videos. Look for references also on Vimeo, Dailymotion, Tik Tok, Jetpag, Youku, Twitch ...

4 TRANSLATE

If posters, signs, or any text written in a foreign language appear, use Google Translator.

5 REVERSE SEARCH

Reverse image search the different thumbnails.

VISUAL VERIFICATION GUIDE

PHOTOS

Each step is presented in graded traffic light colours to acknowledge that it is rarely possible to be 100% confident in every aspect of an eyewitness photograph

	NO				YES
1. Are you looking at the ORIGINAL version?	A reverse image search returns identical photos indexed online before the event in question took place	A reverse image search returns similar results with some identical features, suggesting it might be a composite	A date search on each social network reveals it to be the first of many versions shared online but we have not yet received confirmation from the uploader	We are unable to find other versions online and basic shadow and reflection checks suggest that it has not been manipulated	It was sent to us directly and we have spoken to the source
2. Do you know WHO captured the photo?	It came in via an anonymous email or chat app number	It was uploaded to a social network but the username does not appear elsewhere online. The uploader wants to remain anonymous	By running full name searches, reverse searching the user's profile photo, and/or researching the domain ownership of their blog or website, we were able to identify the uploader	We communicated with the uploader via social media to confirm that they took the photo	We questioned the source and their answers correlated with EXIF data, weather reports and their own online footprint
3. Do you know WHERE the photo was captured?	There was no location data available and it contains no visual clues to investigate	We have cross-referenced with other photos coming from the scene but there is no satellite or street view imagery available to confirm the location	We have used visual clues such as signage, architecture and clothing to establish a broad geographical region	We have cross-referenced landscape and landmarks using mapping tools and have confirmed the lat/long coordinates	The source was able to confirm other landmarks in their field of vision, which matched those shown on online maps
4. Do you know WHEN the photo was captured?	It was sent to us anonymously and there is no EXIF data available	We checked the timestamp on the social network to see when it was first shared online but we have no EXIF data confirming when it was taken	The social time stamp shows it was uploaded shortly after the event occurred and it features visual evidence that correlates with other eyewitness reports	We confirmed that the weather conditions and any shadows visible in the image correlate with the time, date and location given by the source	It contains EXIF data that, combined with other checks, confirms when it was taken
5. Do you know WHY the photo was captured?	We do not know who took the photo so we can't ascertain what their motivations might have been	The social media account was created very recently and/or social searches reveal the uploader rarely posts online so there is little evidence to confirm their movements or motivations	Wider online searches of the uploader's real name reveals that they are connected with an activist or advocacy organisation but there is no additional information to know their motivation in this case	Searches of the uploader's social media activity leading up to the event confirm their reasons for capturing the photo, i.e. holidaymaker, journalist, works locally	The photographer confirmed the circumstances surrounding the photo

VISUAL VERIFICATION GUIDE

VIDEOS

Each step is presented in graded traffic light colours to acknowledge that it is rarely possible to be 100% confident in every aspect of an eyewitness photograph

	NO				YES
1. Are you looking at the ORIGINAL version?	By searching keywords on each social network we found earlier versions of the video	A reverse image search of the video thumbnail reveals other versions online but we are unable to confirm which is the original	A web search for the URL shortcode suggests it is the first version shared online but we have been unable to speak to the uploader	We can find no other versions of the video online	It was sent to us directly and we have spoken to the source
2. Do you know WHO captured the photo?	It came in via an anonymous email or chat app number	It was uploaded to a social network but the username does not appear elsewhere online. The uploader wants to remain anonymous	By running full name searches, reverse searching the user's profile photo, and/or researching the domain ownership of their blog or website, we were able to identify the uploader	We communicated with the uploader via social media to confirm that they captured the video	We questioned the source and their answers correlated with weather reports, the device used and their own online footprint
3. Do you know WHERE the photo was captured?	The visual clues in the video are too limited for us to confirm where it was captured	A translation of any accompanying text provides clues to where it was shot but we have been unable to identify the location	We have used visual clues such as signage, architecture and clothing to assume a broad geographical region	We have cross-referenced landscape and landmarks using mapping tools and have confirmed the lat/long coordinates	We questioned the source and their answers about where the video was captured correlated with other visual identifiers from the area
4. Do you know WHEN the photo was captured?	The video was sent to us anonymously and there is no metadata available	We checked the timestamp on the earliest version uploaded to a social network, but we have no data to confirm when it was captured	The social time stamp shows it was uploaded shortly after the event occurred and it features visual evidence that correlates with other eyewitness reports	We questioned the source and were able to confirm that they were at the location when the video was captured	We confirmed that the weather conditions and any shadows visible in the image correlate with the time, date and location given by the source
5. Do you know WHY the photo was captured?	We do not know who shot the video so we can't ascertain what their motivations might have been	The social media account was created very recently and/or social searches reveal the uploader rarely posts online so there is little evidence to confirm their movements or motivations	Wider online searches of the uploader's real name reveals that they are connected with an activist or advocacy organisation but there is no additional information to know their motivation in this case	activity leading up to the event confirm their reasons for capturing the video, i.e. holidaymaker, journalist, works locally	We spoke to the source who confirmed the circumstances surrounding the video