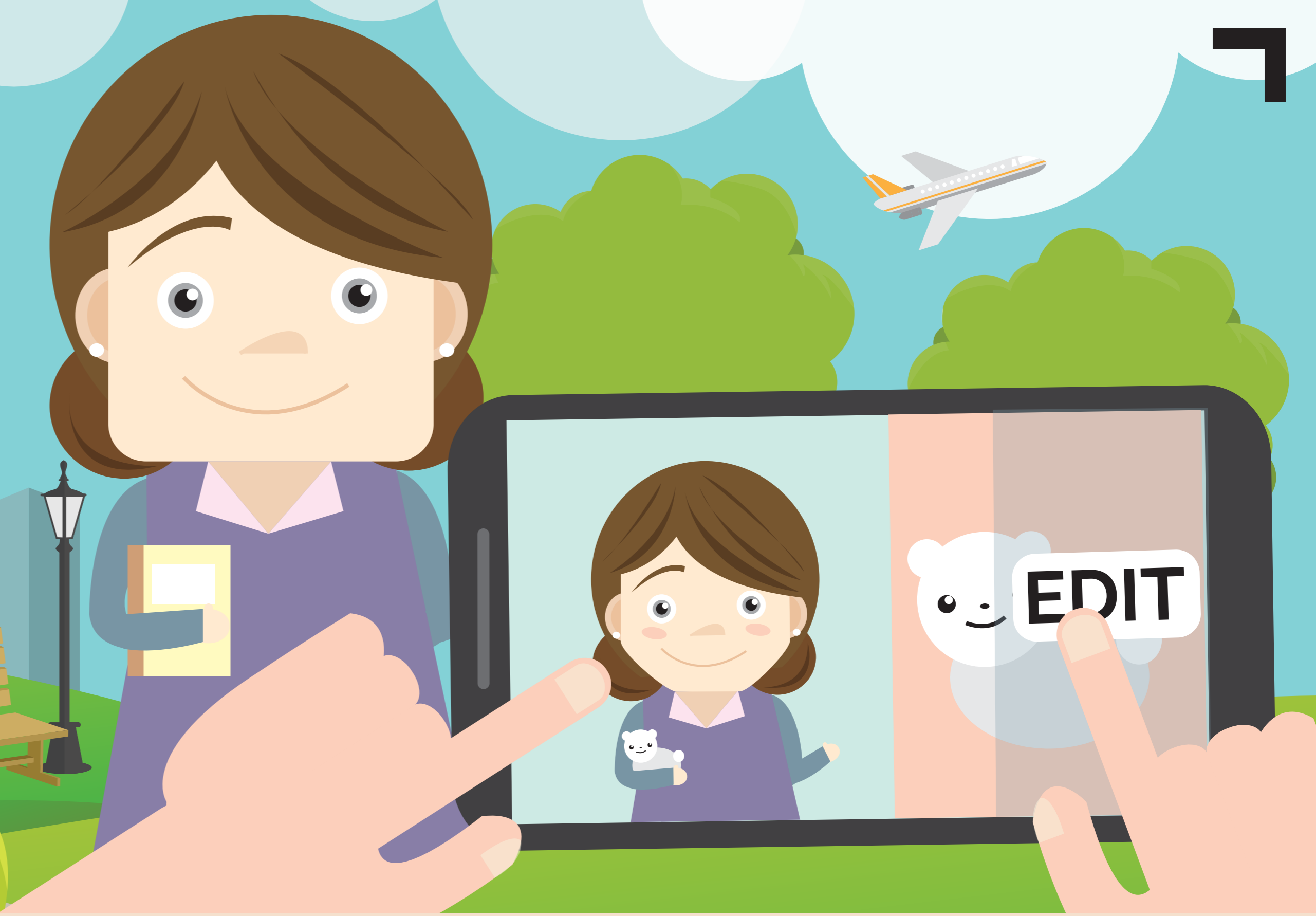


HOW TO SPOT DOCTORED PHOTOGRAPHS



HOW DO DOCTORED IMAGES AFFECT US?



THEY ALTER OUR PAST MEMORIES

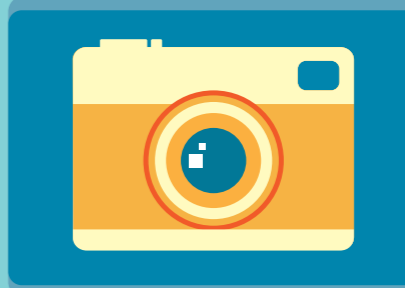
+ According to one study, old memories are the easiest to manipulate. Test subjects were shown their childhood photographs, mixed with doctored images of them taking hot-air balloon rides. 50% of them "recalled" the hot-air balloon ride even though it never happened.



THEY INFLUENCE OUR BEHAVIOUR

- + Photographs of food in menus make the food appear more appetizing
- + Fashion photographs are touched up to make models look slimmer and more beautiful
- + Political photographs are sometimes doctored to put a candidate in good light or to discredit his opponents

Why are we EASILY FOOLED?

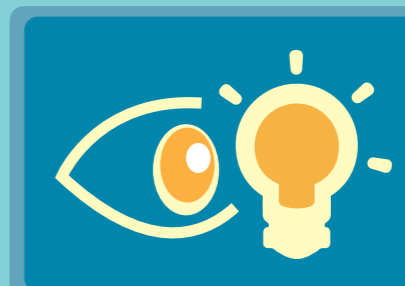


According to Kimberly Wade, a memory researcher from the University of Warwick:

▶ People tend to trust photographs as "frozen moments in time", even though they are aware that these can be doctored.

▶ People are more liable to be persuaded by false images that fit their personal bias, e.g. if you dislike a certain politician, you are more inclined to believe a doctored image of him.

▶ Even if told an image is faked, we may not remember knowing that it is doctored.



According to Hany Farid, an image doctoring expert from Dartmouth College in New Hampshire, United States:

▶ Humans are not good at telling which photographs are fake, as the brain is bad at analysing lighting and reflections.

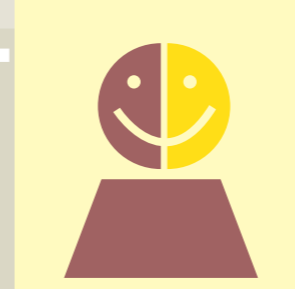
▶ It is possible to prove that a photograph is fake, but it is almost impossible to prove it is authentic. For instance, a photographer can decide what to shoot or to omit; some photographs may even be staged instead of capturing an event as it unfolds.

Check the sources attributed in the images. If the photographs are of a major event, are these attributed to any news agency or press photographer? If not, do they look like part of a first-hand account by an eyewitness and do they tally with other eyewitness accounts or news reports?



Look out for **imperfections and inconsistencies** which might point to a digitally manipulated photograph, such as bad blending, discrepancies in lighting and fake edges.

For an example, see: <http://lifehacker.com/5644259/how-to-detect-a-photoshopped-image>



HOW TO DETECT DOCTORED IMAGES?

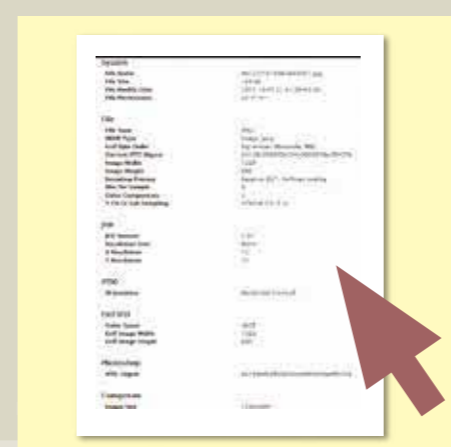
Reverse image searching online can reveal fakes which are inconsistent with source photographs or similar photographs. This is also useful for uncovering authentic photographs which have been used in unrelated events.

For steps in doing a reverse image search, go to: <https://support.google.com/websearch/answer/1325808?hl=en>



Image analysis software or apps. Some of these use algorithms to detect edits made to photographs. Others extract EXIF (Exchangeable Image File) data which provides information such as shutter speed, date and time the image was taken, and resolution (among many other details). Some images may even store GPS information so you can easily see where the images were taken.

For a list of such tools, please see: <http://www.stopfake.org/en/13-online-tools-that-help-to-verify-the-authenticity-of-a-photo/>



- Sources:
- <http://www.bbc.com/future/story/20121213-fake-pictures-make-real-memories>
 - http://www.cjr.org/the_news_frontier/detecting_fake_photos_with_dig.php
 - <http://www.scientificamerican.com/article/5-ways-to-spot-a-fake/>
 - <http://lifehacker.com/5644259/how-to-detect-a-photoshopped-image>
 - <http://www.stopfake.org/en/13-online-tools-that-help-to-verify-the-authenticity-of-a-photo/>

TEST YOURSELF

Now that you know the basics of spotting doctored photographs, why not test yourself?

Venice Freezes Over ? <http://www.nlb.gov.sg/sure/venice-freezes-over/>

Sky High Selfie <http://www.nlb.gov.sg/sure/skyhigh/>