Image Design: Critical Image Analysis

Ruston Ocampo Banal Jr.
33633743

A Practice-Based Independent Research Project submitted for the degree of Master of Arts in Designing Education

Design Department

Goldsmiths, University of London
July 2022

Declaration of Authorship: I, Ruston Ocampo Banal Jr, hereby declare that this IRP and the work presented in it is entirely my own. Where I have consulted the work of others, this is always clearly stated.

Signed:
Date: Jul 22, 2022

Abstract:

The objective of Image Design was to teach the learner how to recognize manipulated images and how to analyze the intention in creating these manipulated images through a process involving critical thinking and the use of the most effective open source intelligence tools (OSINT). It is with the intention of enhancing visual literacy in the Philippine educational curriculum and preventing the spread of misinformation via images on social media. It's my idea of social justice.

In this research project, specific cases of alleged image-based networked propaganda are cited in a discussion of the problem of disinformation campaigns that influenced the decision-making ability of the Filipino people during the previous election in 2022. I discussed the case of President Bongbong Marcos' diploma by dissecting what was contained in the image of the diploma itself, which captivated the interest of several online news outlets, including Rappler, Bloomberg, and The Guardian, which published my story. I also mentioned the use of fabricated images in some viral Facebook posts, which I called out, resulting in the thread starters admitting or editing the captions of their posts.

My approach to expounding the subject was to administer an elective class that is an exact deviation from the traditional Photo 101 course, which typically covers DSLR camera functions and darkroom techniques, depending on the availability of the equipment. I introduced activities that combine critical thinking and creativity in the creation of images that are socio-politically and culturally relevant to each student, using smartphones and social media to express these visual narratives. In addition, I introduced assessment tools that test the participants' ability to distinguish between manipulated and unmanipulated images, as well as a section in which a dialogue about a particular image would begin with a question about the image of interest in order to spark a conversation.

I examine the use of open source intelligence tools (OSINT), as well as what I learned from my discussions with two of Goldsmiths University of London's most prestigious departments and agencies, the Center for Investigative Journalism (TCIJ) and the Forensic Architecture, by conducting interviews with key individuals who shared the best practice tools in imaging analysis and investigation.

Recommendations are explained based on the extent of the work I undertook and the results I obtained from this limited research, which explores all the possible avenues for further investigation of the topic that could be of benefit to people, particularly the younger generation of Filipino students.

Keywords: critical thinking, manipulated, not manipulated, dismantle, creativity, disinformation

Introduction

When I first started pitching my research proposal for this project, the working title was "visual storytelling for social media." The idea came from my desire to redesign the photography course I teach at the local university where I work, which is a basic elective in a communication arts programme. The photography subject was a foundational dark room technique with a lesson on familiarizing oneself with the many aspects of a DSLR camera in order to acquire that industry-standards ideal image. However, in the new syllabus that I planned to implement, the DSLR wasn't even required. The students simply need to utilize their mobile smartphones with cameras.

The reason for this is that I no longer consider the DSLR to be relevant in light of how these communication arts students use and consume photos as visual language both within and outside of the classroom. Since the arrival of social media as part of our everyday interaction with the world, smartphones are more often than not turned on soon before these students arrive at school. I believe we are all in this scenario. Their portability, the technology they have with their constantly updating APPS, the end-user friendliness of its ergonomic design by holding it in our hands, which gives us control at all times, all of this has power.

By creating learning goals that were specifically crafted to reflect the lifestyle of a visual storyteller, I was able to communicate my idea to the class as well as my system from my professional experience as a multimedia journalist at the largest news agency in my country. I told the class that for every photography assignment they had to complete and turn in, they could imagine themselves as news reporters or vloggers, and their sharing of photographs would be an extension of their views on justice and truth. They can be personal, but they must be honest. Facebook and Instagram are the sites that we decided to utilize for submissions. Each entry was a simulated social media post, and the impact of the image was judged in part by how people responded to it.

Some students found it revolting, particularly those who had acquired DSLR cameras but afterwards realized they would never use them. The initiative was warmly received by many, and I sensed a release of what they wanted to say in visual form, in keeping with their social media-based lifestyle.

When I showed them the image categories that are part of the learning objectives they must complete, they were startled because they appeared to be the same as the old curriculum. We include a landscape photography activity, portrait photography, environmental portrait photography, food photography, and self-portrait photography. However, while these appear to be comparable to the traditional Photography 101, the context that must be presented is fundamentally different.

In landscape photography, the activity required the student to submit a landscape photograph of a location that, due to climate change, he or she believes demands attention. In portrait photography, each student was required to submit a black-and-white portrait of a person who

was very close to him or her and had a significant impact on his or her life. In environmental portraits, the requirement was to submit a portrait of a person in which his workplace was an integral part of the framing and composition, while the self-portrait was essentially an artistic selfie.

Food photography is something that they have been doing on the side, but they have only soon found that it can be used as a learning activity in a subject such as this. The criteria was to simply take a flat-lay image of the breakfast they consumed for the next five days in a row, utilizing just the light coming from a window or any other available source of light coming from outside of their household. The goal was to document what they actually have, rather than making it appear as though they had things that, on a daily basis, they do not. Because each of the students looked to have such a strong interest in what was on the table that fed their fellow classmates, the activity revolving around food was by far the most entertaining session that we worked in.

The activities were designed to spark ideas and conversations on the importance of representation in presenting stories about real-life people, situations and events. And, as a method of documenting reality, it pushes students to become analytical in their search for subjects worthy of telling their truthful narrative, as well as critical thinkers in developing their ideas for addressing concerns that can impact lives through photography.

This is where image design is simply rooted.

Image Design

Image Design is a combination of words that, according to my professor, Jennifer Bain, PhD, encapsulates what I intend to create as a theoretical and practical tool that accelerates the learner's visual literacy to identify the veracity or truthfulness of a specific image and analyze the intention behind creating the image.She was the one who came up with the name for the project.

It's a work in progress definition, and I see myself as the custodian of the process of discovery as I unravel the various methods of investigation.

The approach begins by carefully examining an image in question by dissecting the design elements that make up the image and placing each piece in its proper context using the best image forensic tools currently available online. Just as I stated at the beginning of this writing, examining an image critically and analytically cannot just be a technical exercise. The main building block of visual literacy is the ability to create a legitimate image based on personal observation and experience. This implies that each individual must develop their own image-making skills. To be able to dismantle an image, one must first be able to construct one.

Although the examples I gave were all related to photography, image design encompasses all kinds of visuals, including photographs with laid-out texts, graphic arts and design work

produced in print and digital formats, and photographic output made using sensors or film. Screenshots from movies, television shows, and videos are also included.

As a multimedia journalist, I have found that it is crucial to create a tool or system that can be incorporated into a curriculum that offers a media literacy course in order to combat misinformation and disinformation, particularly in the context of the Philippine educational system. In January 2022, according to a recent estimate by Datareportal, there were 92.05 million social media users in the Philippines, who were spread over multiple social media platforms. Facebook is used by 83.85 million Filipinos, whereas 18.65 million people use Instagram.[1] The two systems rely heavily on the use of images, as this is their operating backbone.

This is extremely intriguing because being at the top of the world in terms of social media use makes the more than 110 million Filipino population a targeted audience for social media giants to milk for income in terms of engagement. And, unfortunately, as primary users and consumers of online images based on social media usage, the gullibility of the bulk of internet users among Filipinos is shown by the pervasive transmission of disinformation.

In 2016, the University of Oxford made a study and examined the formal organization of cyber troops around the world, and how these actors use computational propaganda for political purposes. The Philippines was identified as one of the 81 countries that had a cyber troop activity. This involved building an inventory of the evolving strategies, tools, and techniques of computational propaganda, such as the use of "political bots" to amplify hate speech or other forms of manipulated content, the illegal harvesting of data or micro-targeting, or deploying armies of "trolls" to suppress political activism or freedom of the press. [2]

In September of 2022, Meta announced that they removed two separate networks for violating their policy against coordinated inauthentic behavior (CIB). One of these networks originated in China and the other in the Philippines. These were 155 accounts, 11 Pages, 9 Groups and 6 Instagram accounts for violating the policy against foreign or government interference which is coordinated inauthentic behavior on behalf of a foreign or government entity. This activity originated in China and focused primarily on the Philippines and Southeast Asia more broadly, and also on the United States.[3]

Astonishing how powerful this entire system is. However, this does not mean that the idealistic desire to work for social justice will be quenched.

[1] Kemp, Simom. "Digital 2022: The Philippines." *DataReportal*, 15 Feb. 2022, https://datareportal.com/reports/digital-2022-philippines?rq=philippines.
[2] Bradshaw, Samantha, et al. "Industrialized Disinformation: 2020 Global Inventory of Organized Social Media Manipulation." *The Computational Propaganda Research Project*, University of Oxford, 22 Feb. 2021.
[3] Gleicher, Nathaniel. "Removing Coordinated Inauthentic Behavior." *Meta*, 22 Sept. 2020, https://about.fb.com/news/2020/09/removing-coordinated-inauthentic-behavior-china-philippines/.

My exploration into the potential of image design in this project begins with both my academic and professional work. I intend to use the data that I have already obtained during the course of this research project, which entails the introduction of the initial concept of image design as a test run that replaced the traditional photography subject that we had at the University.

An online virtual gallery of photographs called ImageDesign.ph has been built for me to utilize as a place to get feedback from people who will become my collaborators. Some of the images come from my personal collection, while others were developed with the help of other digital artists. I plan to hold photo exhibitions open to the public in which I hope to elicit participation from a broad cross-section of the general public. I will use the email blasting machines and sponsored adverts that I have been employing as a professional social media manager of an international company to promote the photographs that I intended to acquire online engagement.

This method is an instrument to assess critical thinking and how individuals examine images, which may or may not be manipulated.

Using the open source intelligence tools provided to me by Forensic Architecture and The Center for Investigative Journalism at Goldsmiths University of London, I will investigate their possibilities and limitations.

Issue

Investigating Philippine President Bongbong Marcos case and some Facebook Fakeries

In the last election of 2022, the proliferation of fake news was hugely practiced when Cambridge Analytica exposed that Presidential Candidate BongBong Marcos asked them to rebrand his family name. Bongbong is a son of the dictator, Ferdinand Marcos, infamous for his Martial Law regime that killed more than 3,000 people in the 21 years of rule.

One of the causes of the prevalence of fake news is the socioeconomic situation, particularly the accessibility with which one can acquire reliable news sources. The poor no longer have the time to check the credibility of these fake news stories, not to mention the highly potent machinery of those deploying misinformation strategies and propaganda bots. And it's extremely sad that certain politicians have adopted this strategy in order to hold onto their positions of authority by undermining the reliability and integrity of reputable news organizations.[4]

We may also be able to look back on the history of the Filipino people. Even before the advent of social media, many Filipinos were credulous in their belief in rumors without proof. In addition to being unwilling to seek out the truth simply because the lies support their way of life or livelihood, they frequently believe hearsay despite the lack of hard evidence. Additionally, the dissemination of misinformation is greatly aided by the fact that popular public figures and celebrities encourage and spread false information by endorsing it.[5]

---

[4] Legazpi, Richard,film director. interview. Conducted by Ruston Banal. July, 16, 2022.
[5] Moran, Zac, photo editor. Interview. Conducted by Ruston Banal. Jul 14, 2022

Among the alleged fake news that resulted in a huge discourse and divided Filipinos was his University of Oxford diploma, which he said was a legitimate document that proves he is an alumnus of the prestigious University. .From the very beginning, I doubted what he presented on social media pictures of him in front of the University of Oxford facade, holding a diploma. Noticing how these diplomas were created, I speculated they were meant to mislead.

At first, I doubted the font that was used in the text, which is just a modern font related to the sans serif family, which is just very recent. The question is that, if it is a 1978 diploma, the supposed date of his graduation in Oxford, this should be old. And doing a reverse image search revealed the same format of diploma you can find on websites selling fake certificates for 30 dollars. This started the speculation.

Ferdinand "Bongbong" Marcos poses with his son in front of St. Edmund Hall at the University of Oxford, holding his diploma.. (Photo is from "Bongbong Marcos Page." Twitter, twitter.com, 12 Apr. 2015, https://twitter.com/bongbongmarcos/status/587201188992548864/photo/1.)

Another dubious section was the letter from a certain Jeremy Drew,where,in the letter, he said that the certificate was folded, but when Marcos presented it, it had no crease. An image analysis also revealed that his email letter to Marcos was fabricated, based on the error level analysis found on the page.

According to Oxford University, certificates are only given to those who attended the ceremony of the conferment. And this can be requested only through an online application. Such a letter with personal notes is hardly believable, considering Bongbong is not even a distinguished alumni from the University.

After gathering all these questionable data based on image analysis, an exchange with Oxford personnel revealed that Bongbong never actually graduated but only was given a Special Diploma, same as a certificate of attendance, acknowledging his matriculation in the university between to enter a BA degree.

After publishing my story on Rappler and Inq, several news agencies followed through, adding a continuous questioning about the integrity of the vice presidential candidate. This all started with a single inquiry from image analysis.

On May 11, 2022, Bongbong Marcos won as the new President of the Philippines. 31 million Filipinos voted for him.

I recently called out another instance of a misleading post from the page Horror Junkie. The page has more than 280,000 followers and is known for spreading conspiracies that a large portion of its audience tends to believe. Horror Junkie wrote in a post about St. George's church in Lukova, the Czech Republic, that the church had been abandoned but that it had since become a shrine with ghost sculptures of those who had died there. People responded favorably when they learned the truth about the location after I immediately called out and wrote the accurate information.
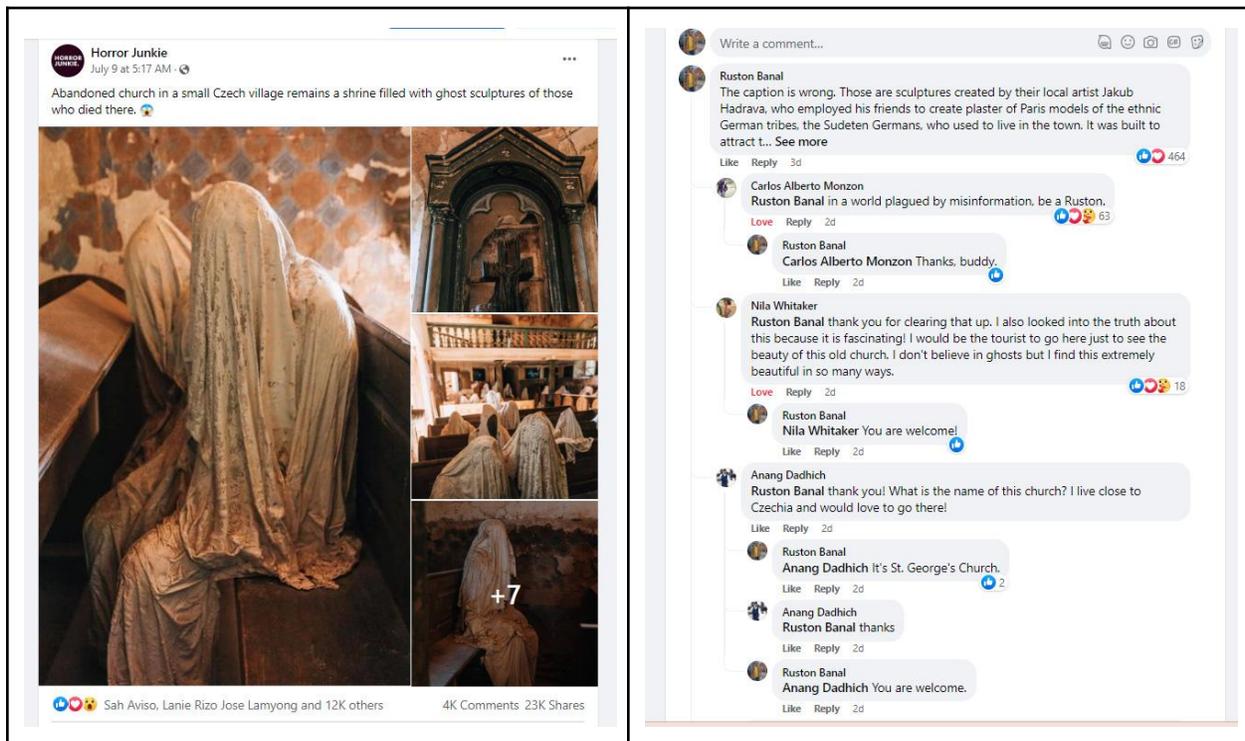
The screenshot of the incorrect post, which I pointed out in the comments section. The caption has since been edited to reflect the correct information.

News broke in December 2021 that Comet Leonard would pass over the sky of the Philippines and might even be visible to the naked eye. A post from the community page Be An Inquirer, which is run by the news organization Inquirer.net, was one that appeared in the Facebook newsfeed. It featured MJ Magallon's photography "TAIL OF A CHRISTMAS COMET," which shows the Comet Leonard gliding past the skyline of Manila. Despite the light pollution in Metro Manila, Magallon said he was genuinely surprised to have managed to capture the faint detail of the comet's tail." [6]

Everything shown in this picture, combining the alleged "Comet Leonard" and the "Manila Skyline" cannot be real. I stated that the size, in relation to the buildings and in the atmosphere of the Earth, should be visible even in Pampanga, the province where I live, which is 60 kilometers from Manila. Even a 200mm lens would miss it due to background light pollution. Optical theory doesn't make sense here. Comets are typically seen from outside the Earth's atmosphere. If it's in there, it should have fallen to the ground by now.

Magallon later admitted that the photo is a composite, which means that he only added the Comet Leonard in the frame after photographers who are familiar with astrophotography were outraged.

MJ Magallon's photograph of Comet Leonard, for which he claimed he waited for hours just to capture the spectacle. Following online criticism from those who believe the image is a forgery, he later admitted that it is a composite image. (Photo courtesy of MJ Magallon)

---

[6] Be An Inquirer Facebook Page. Accessed December 27, 2021. Link: https://www.facebook.com/officialbeaninquirer/photos/a.866279360380425/1712077249133961/

In the same year, I called out another photographer who shared a photo of a Milky Way which appeared to be a recycled photo with a patched foreground. Many were astounded with the awe-inspiring imagery, but only to those who never knew the fakery behind it. In the post dated September 05, 2021, I explained the method of my analysis of the image.

"By simply looking at it, I didn't have to use the error level analysis (ELA), or clone clusters for pixel detection to" forensically" detect pixel overlap. The moment I saw it pasted on a white frame already made it dubious, as it depletes the hope to extract metadata.

Without explaining it further, the comparison below is my assessment. I used reverse search on Google. If you think two similar Milky Way shots can exist as identical, that is a total no.

I admit I am not a rocket scientist, but I had good grades in college presenting in class Stephen Hawking's madness about the universe or how Galileo refuted the geocentric model of the Greeks, which gave way to the heliocentric "Copernican" model in the high Renaissance. I am sure I had a basic knowledge of galaxies. For me, this photo below defies physics.

While my skill in photo forensic is something I have kept hidden for the last 7 years as a member of a reputable photo organization abroad, where my job is to check hundreds of images coming from different parts of the world on a daily basis, sometimes, you can't help but stand to show some aspect of truth just because it's the human way to do it.

I have seen a lot of photographers, Filipino photographers, some are even people I know, who try to evade the limitation of photography to the point of "manipulating" the image, and announcing it otherwise, just to gain admiration on Facebook. It's cringeworthy. That's not the way to do it, Dear.

Whatever skills you have, however expensive your gear is, however skillful you are in Photoshop, you can never be the best photographer.

To make an imprint in this competitive industry is not about skills or how you captured the blue moon in all its details. Do you know how? It has something to do with CONTEXT. "
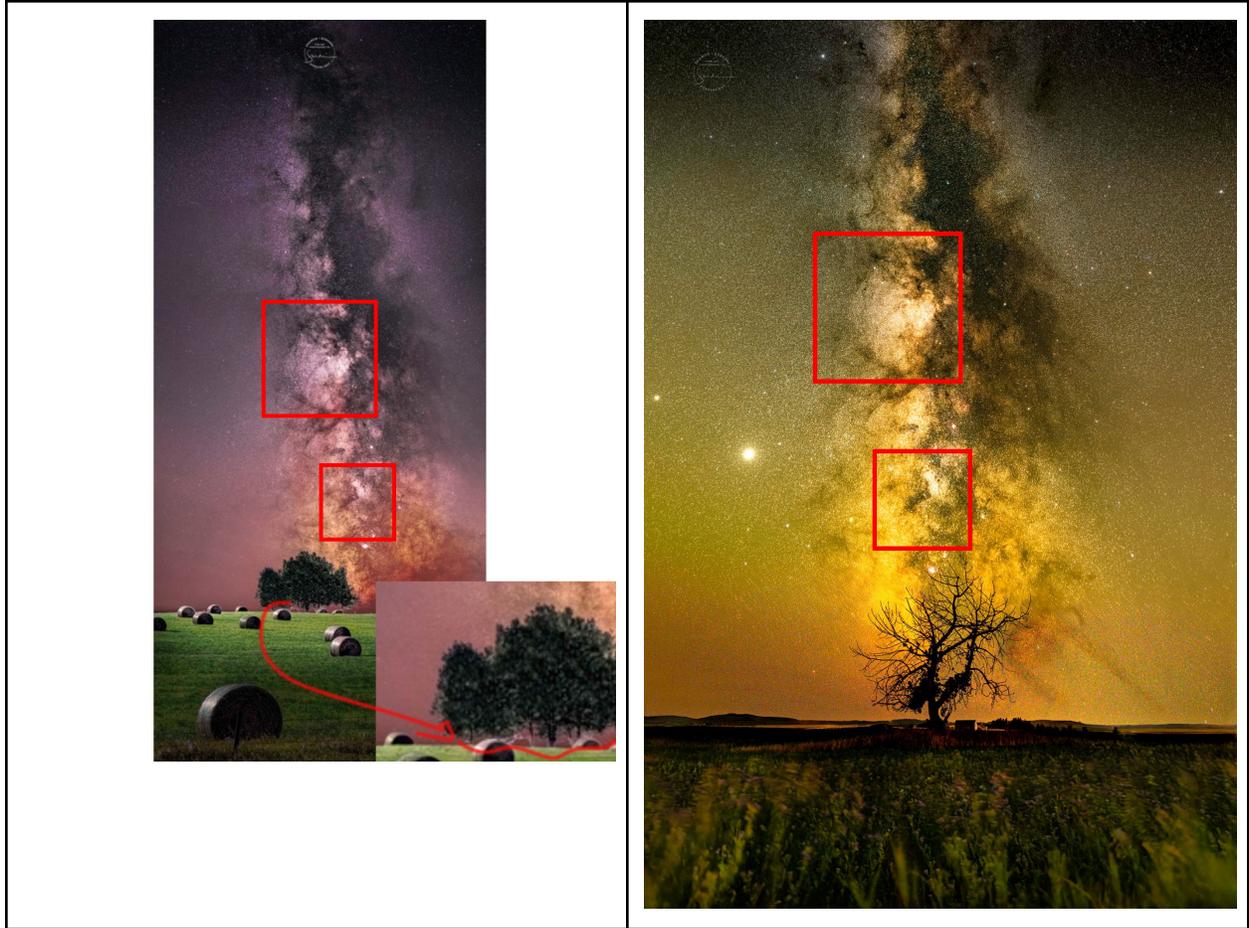
A comparison I made after performing a reverse image search revealing that the current photo on the left was composited from the previous photo on the right.

Enumerating the best practice tools in image analysis and forensics

My numerous presentations on the topic to my mentors, particularly Prof. Naho Matsuda, led to connections with two of Goldsmiths' most prestigious institutions: the Center for Investigative Journalism, the university's alternative experimental laboratory, and Forensic Architecture, a Turner Prize winner fueled by Goldsmiths.

With these two institutions, I met Prof. Tom Sanderson, Deputy Director of TCIJ, who shared with me the best practice tools in digital forensics, which include not only photographs but also videos. He stated that current tools, particularly in image forensics, do not have a stand-alone application that can analyze an image at once. It's a mash-up of other tools. Imogen Piper, a former visual investigator at Forensic Architecture, on the other hand, showed me tools and techniques in chronolocation and geolocation, two important skillsets that search for the exact location where a specific photo or video of dispute can be found using sun shadows and angle.

IMAGE AND VIDEO VERIFICATION		
type	name	description
reverse image search	InVID-WeVerify	Verification plugin to help journalists verify images and videos. Contextual data, Metadata, reverse search (Google, Yandex, Baidu), image forensic, Magnifier). @WeVerify on Twitter.
reverse image search	Google Lens / Desktop	Google Lens but in your browser - it's better than Google Image reverse search. h/t @Henkvaness
shadow analysis	SunCalc.org	Make an approximation of the time of the day using shadow direction.
metadata	metadata2go	Check metadata for both photos and videos online.
metadata	Reveal Image Verification Assistant	Forensic providing eight filters to detect still images alterations. "Web-based image tool. Also available within InVID verification plugin."
metadata	ExifPurge	EXIF Purge is a small portable application to remove EXIF metadata from multiple images at once. With the click of a button you can remove the camera, location and other technical information from a batch of photos which is embedded by the camera or the photo editing software.
misc	fdupes	Locating exact matches of duplicate files.
metadata	FotoForensics	Image forensics tool.
metadata	Forensically Image Forensics	Web-based image forensics tool. Can easily identify fake or doctored images. Public access, information not private.
metadata	Irfanview	Windows-based software to extract metadata.
metadata	Jeffrey's Image Metadata Viewer	Extract metadata, online. Only requires a web browser.
metadata	jhead	Remove EXIF/metadata.
misc	RenRot	Attempts to rename image filenames to their original name, and rotate them to the original orientation.
metadata	SpiderPig	Extract metadata. Command line interface and scriptable. Requires dependencies and knowledge of web technologies.
metadata	Splunk	Extract metadata. Report grade analysis and presentation. Not simple to setup and deploy.

facial recognition	VGG Face Finder (VFF) Engine	Visual Geometry Group and released under the BSD-2 clause. VFF is a web application that serves as a web engine to perform searches for faces over an user-defined image dataset. It is based on the original application created by VGG to perform visual searchers over a large dataset of images from BBC News.
facial recognition	PimEyes	Face Search Engine & Reverse Image Search.
image classification	VGG Image Classification (VIC) Engine	The VGG Image Classification (VIC) Engine is an open source project developed at the Visual Geometry Group and released under the BSD-2 clause. VIC is a web application that serves as a web engine to perform image classification queries over an user-defined image dataset. It is based on the original application created by VGG to perform visual searchers over a large dataset of images from BBC News.
local reverse image search	VGG Image Search Engine (VISE)	This standalone application can be used to do a reverse image search on a large collection of images.
search engine	Wolfram|Alpha	Does a load of things, including weather forecasts per day and location.
Image organization	PureRef	Image workspace; lets you arrange images in groups, organize them, etc.
deepfake detector	Sensity	Checks if faces are deepfake.
TikTok Reverse Image Search	https://search4faces.com/tt00/index.html	Search a databaes of 84 million TikTok accounts
Image Editor (object removal)	https://cleanup.pictures/	Web tool for quickly removing objects from an image.
IPVM Calculator	https://calculator.ipvm.com/	Tool for simulating camera views (for geolocations).

The Plan

Introducing the Tools for Assessment

The image design pedagogical framework intends to emphasize two primary objectives: teaching the learner to recognize image manipulation and analyzing the rationale and intent behind the manipulation. The first requires critical thinking as a preliminary step to recognize an image suspected of being a forgery and open source tools to assess technically by deconstructing an image's design elements. The second step is analytic, as it elucidates the larger context of the creator's intent, and if it is determined that the creation has caused controversy due to public opinion, the investigation must be published or shared publicly in the interest of social justice and truth.

For this project, I designed specific methods for assessing and drawing conclusions about the concept's potential using available tools. In order to assess critical thinking, I introduced learning competencies in photography to my students, which combine their creativity and skills in visualizing their lifestyle and experience. The task was to use a smartphone as a camera and execute activities that are both individual and group projects by creating selfies, creative portraits of people who have come connections to them, photo essays that show environmental issues, production-heavy studio photography that simulates popular paintings from Western Art History masters, and as a final project, "high-fashion" photography that visualizes contemporary issues that disturb today's generation.

I then created an online gallery of my work, which appears to be an online exhibition of some of the images I've taken as a visual anthropologist over the last 15 years. It's a retrospective, and I used them as assessment tools to see how well the targeted audience can distinguish between manipulated and unmanipulated images from sets that I categorize as human interest, traditions and belief systems, natural and man-made landscape images, and, finally, ad campaign product photography. I sent the survey link to 30 people ranging in age from 18 to 45 years old.

To gather public opinion from people who may not have access to social media or the internet, particularly during the writing of this independent research, I staged a posting of posters designed to entice viewers to look into them by making them look like ad campaigns. These were displayed in public waiting areas, public transportation terminals, and inside commuter vehicles.

Because critical thinking usually emerges during a conversation between viewers viewing an image, I included in the assessment a section where the audience viewing a specific photo I posted online is asked to send their question about what they think they wanted to know about the image. In order to complete this task, I chose a photo of Magdarame in Paris that I took in 2015.

The Task

Assessing Critical and Creative Thinking in Smartphone Photography

From my own experience and point of view, studying image design as the foundation for image analysis and forensics requires a lot of critical thinking. This is done by analyzing a process that one is already familiar with. The open source intelligent tools that are available online are the technical way to look into an image that might be a fraud or fake, but critical thinking is what starts the larger curiosity and speculation.

This activity showed the learner how powerful a smartphone can be by using open source APPS to retouch and improve images, with social media as the platform for visual expression. The goal was to use and make the most of the tool's capabilities as a constantly changing piece of technology that can be used for both personal and professional tasks. Part of the course's learning objectives was to show the learner how to use third-party software like the free versions of Photoshop and GIMP to experiment with editing and retouching photos. They could use these however they wanted, depending on how the image they made turned out.

The activity used the learner's personal smartphone as a learning tool, focusing on everyday objects based on individual lifestyles and people as subjects that he or she persuaded to collaborate.

The goal was to teach the students how to be responsible citizens who can figure out the social, cultural, and political contexts and effects of the visual languages brought by social media and mediated by photography, as well as how these visual languages are made and how they can be changed to make them more manipulative. This method also looked at the power of connecting networks on a global scale by using a real-time framework for mediated communication between people and the public.

The students were supposed to finish the learning activities, by the end of which they should know a lot about smartphone photography and be able to come up with creative ways to design images. They should be able to take professional-quality photos that meet industry standards and have a good understanding of how an image is made from the concept to the final product.

For each course activity, the student took a picture and posted it on social media. In this course, Facebook and IG were the platforms.

In each activity, the student had to use a smartphone to take pictures of things, people, and the place where he or she lives and works. The tool was the student's smartphone, but the projects were based on how a student normally uses the phone for visual expression and communication.

Each student has to set up an IG account as a home for the images. This account is then linked to a FACEBOOK account so that the post can be seen by a live audience. How people respond

to each post is a key factor in figuring out how the images will affect the wide range of people who use social media.

There were also a few group projects where the students made pictures based on what the group thought about social justice. This helped them learn how to decide as a group what kind of project they should do that needs attention.

The following are the learning activities implemented at the Department of Communication in Far Eastern University under the Photo 101 subject which were conducted in the year 2020.

Activity 1
Framing the Subject (A Group Project)
Learning Context
Students will learn the importance of making choices on what to superimpose in a given photography subject.
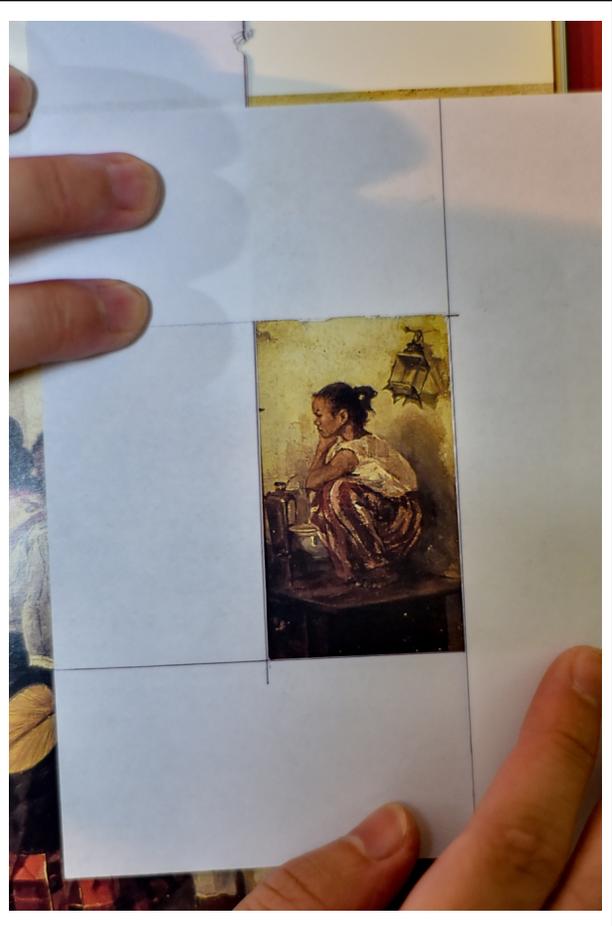
Activity 2
Choosing the Ugly and The Beautiful in a Collage through Unpicking
Learning Context
Students will learn to decide what is culturally beautiful and what has mediatized beauty against
what is considered ugly in terms of universal standards.

Activity 5 (Artificial and Ambient Light)
Shooting The Food You Eat
Learning Context (HCD)
Students will learn how to photograph food in professional quality using both artificial and natural light. Students will be tasked with photographing their usual everyday foods in order to reflect their lifestyle and ways of life.

Borguita, Anna Katrina
Sec - 2

"Nag-almusal na ako eh."

Linyang masarap ipagmayabang sa kaklase mong gusto ibahagi ang kanyang almusal umagang-umaga. Nitong nakalipas na limang araw, hindi ako pumalya sa pagkain ng almusal. Mas na-appreciate ko ang kahalagahan ng almusal dahil parang ito yung pinaka-unang accomplishment na nagawa mo sa unang araw at nagbibigay motivation para magpatuloy ka sa buong araw at hindi ka magrereklamo kapag ang dami mong ginagawa na kailangan sa araw na 'yon at sasabihing
"hala, wala pa akong kinakain ngayong araw!!! ughhh!"

Pareja, Robert, I.
Section 2

"Oh Ayan nalang Natira"

"Oh Ayan nalang natira" my mom always says to me everytime
I will eat Breakfast. These are the types of food I usually see
in our table when I wake up every morning. these are the
leftovers by my family when they eat in early morning because
im always late to wake up to go to school. The food in the
picture shows our culture that everytime that we eat it should
be always shows balance.

Activity 7 (Artificial and Ambient Light)
Shooting People's Environmental Portrait
Learning Context (HCD)
Students will learn how to shoot professional-quality portraits with both artificial and natural light. Students will learn how to shoot in close-ups and the differences in camera distances in order to create an effective and powerful visual portrait of people and their surroundings. The activity will represent a person's relationship with his surroundings.

Activity 11
Recreating A Painting Through Photography (Paintings Come Alive)
Learning Context
This is a group project. Students will learn the art of copying a popular artwork through a
combination of creative production design, art direction, shooting and photo manipulation.

Activity 11
Creating High Fashion Photography With A Cause
Learning Context
This is a collaborative effort. Students will be able to design full-production high-fashion photography sets that showcase their ideas about personal issues or larger issues such as gender, equality, politics, and culture. The relationship between religion and social justice.

BOY-FEM
PHOTOGRAPHED BY JULIUS PALISOC

DRAG QUEEN
PHOTOGRAPHED BY RAYHAAN BOGABONG
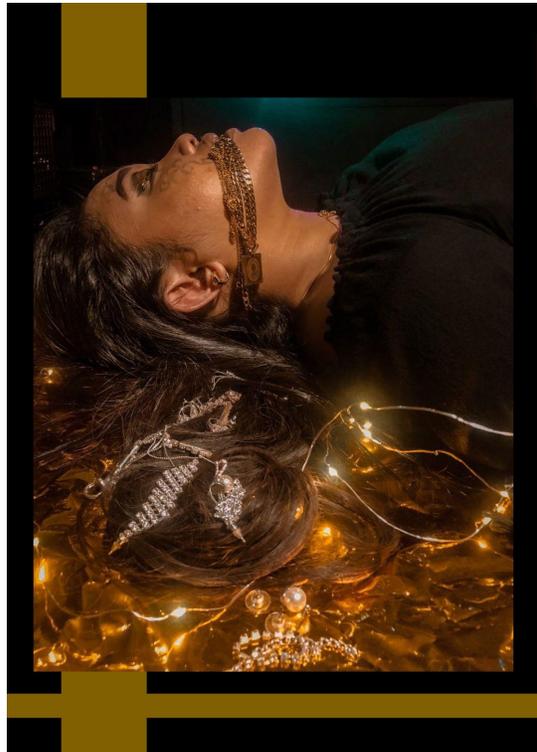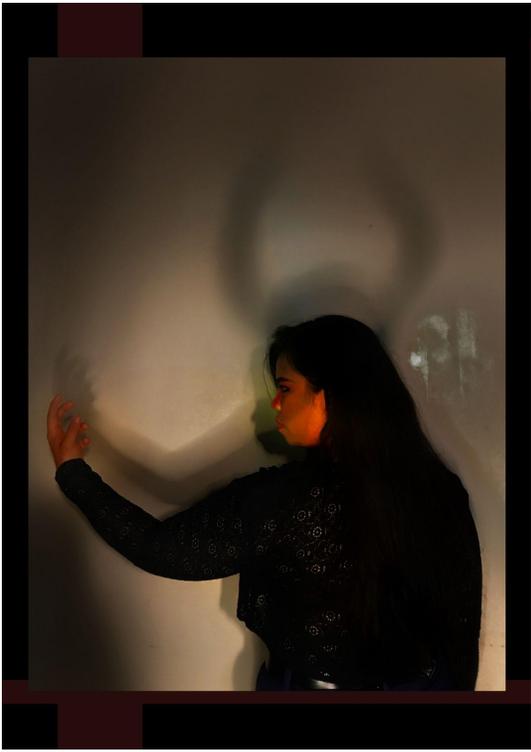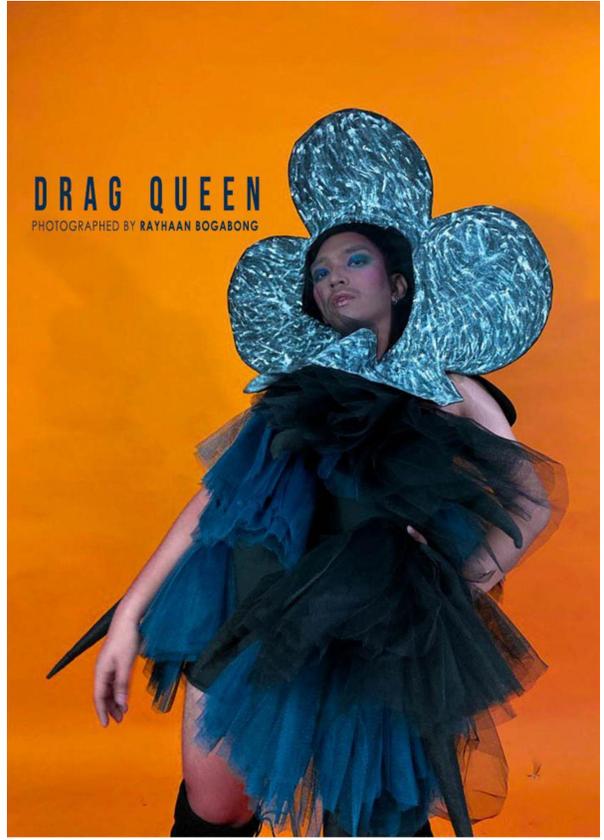
Assessing the Difference Between a Manipulated and a Non-Manipulated Image

As a social media manager, I use the system to create an email invitation in the form of a newsletter and send it to the audience as part of the task. I requested permission to collect their data and responses. Senior K-12 students, classmates in the MADE program, my co-faculty at the university, and my colleagues in the multimedia industry are included in the data sets. Of the more than 50 individuals whose contact information I included in the email blast, 30 individuals consistently responded to the newsletter requesting that they answer the questions I sent them. I also included my two professors, Prof. Naho Matsuda and Prof. Matt Ward of the Design Department at Goldsmiths, University of London as recipients to the newsletter.

The questionnaire was created in Google Form and embedded on the Imagedesign.com website. Below is the content of the newsletter:

Subject:
IMAGE DESIGN: Do you want to become an image forensics expert? Try this 5-minute test!

Body:
Image Design is a concept that studies and analyzes an image suspected of being modified or altered via an unmaking process. Unmaking is a piece-by-piece deconstruction of the design elements that comprise an image in order to clinically analyze an image's error levels utilizing a cutting-edge image analysis tool. The photos in question are propaganda images used in misinformation tactics to challenge misleading narratives about social justice.

This test will look for people who have a penchant for image forensics based on OSINT (Open Source Intelligence) and a desire to work with non-governmental groups and academics to help boost learning in media literacy. It employs the design-thinking framework, with information supplied is end-user generated.

Take this test if you want to join the community of experts and learn the best image analysis practices!

The image sets in the test are categorized into four kinds. These image sets include human interest, traditions and belief systems, product ad campaigns, and landscapes and man-made structures. You can select which of these you like by clicking on the QR code or titles below. You have the option of selecting all four.
In order to take the test, you need to sign in to your gmail account as the test form runs in Google Form. Go to this link to check out Privacy Policy.
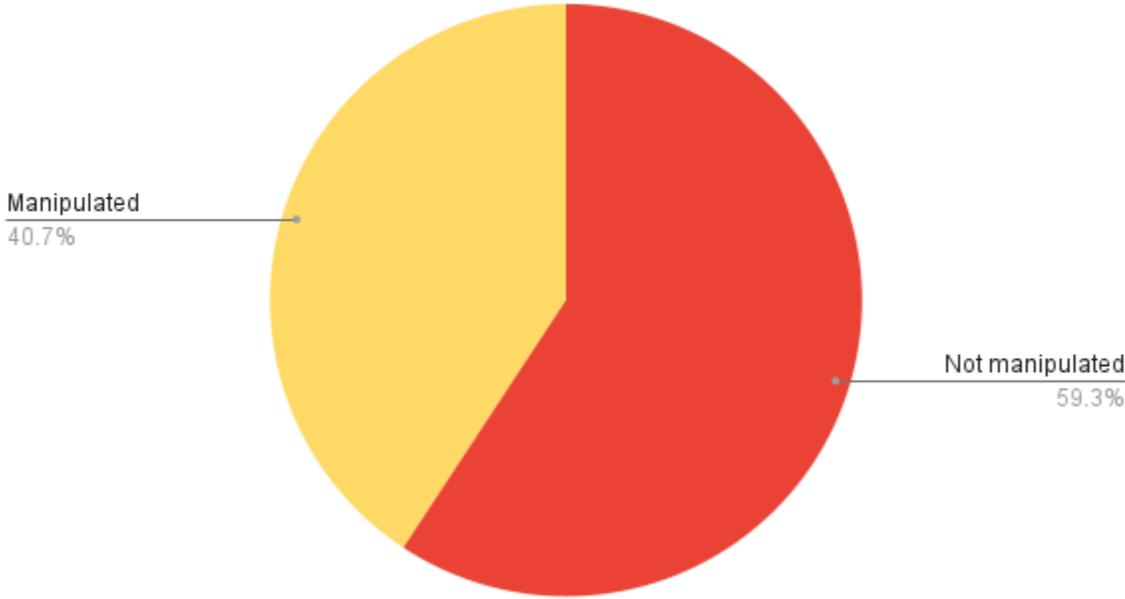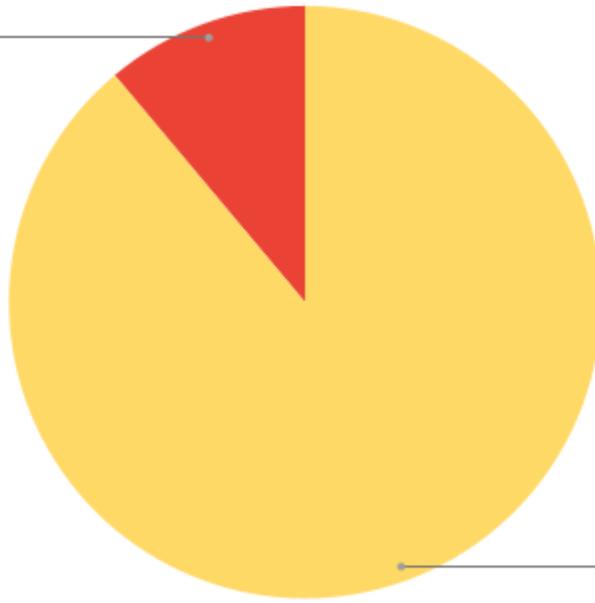
Image category: Human Interest

Abe Road: Manipulated and Not manipulated

Not manipulated
51.9%
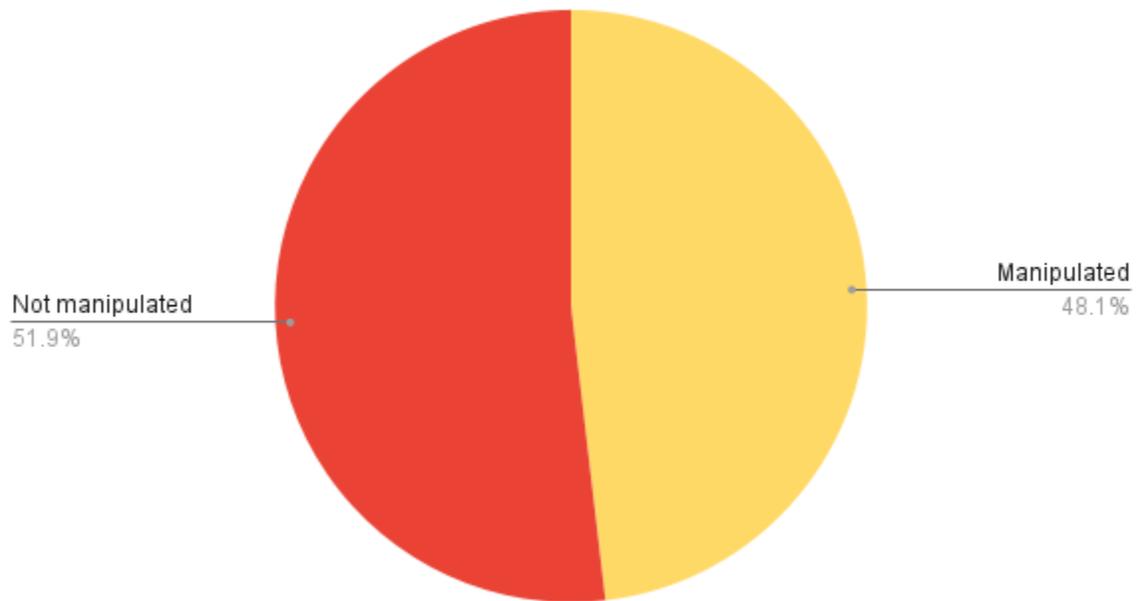
Manipulated
48.1%

Image category: Human Interest

Flagellant in Paris: Manipulated or Not manipulated

Not manipulated
33.3%
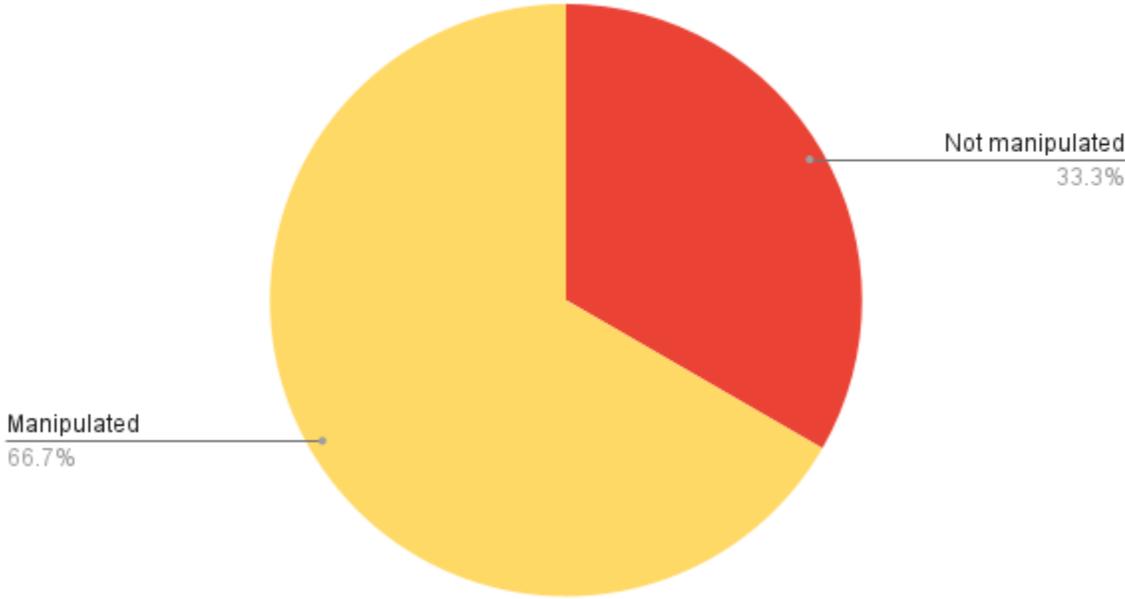
Manipulated
66.7%

Image category: Human Interest

Recontextualizing the Iconic: Manipulated or Not manipulated

Manipulated
40.7%

Not manipulated
59.3%

Image category: Human Interest

Returning to Abbey Road Manipulated or Not manipulated

Not manipulated
11.1%

Manipulated
88.9%

Image category: Human Interest

Palaspas: Manipulated or Not manipulated

Manipulated
11.1%
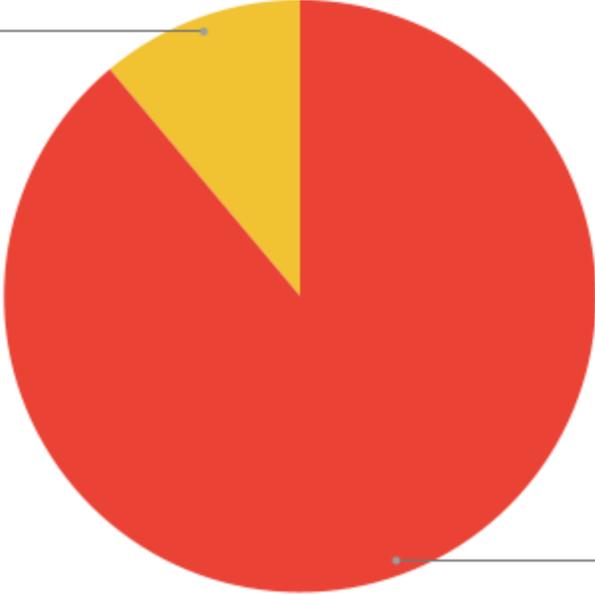
Not manipulated
88.9%

Image category: Nature and Man-Made

Burning: Manipulated or Not manipulated

Not manipulated
35.7%

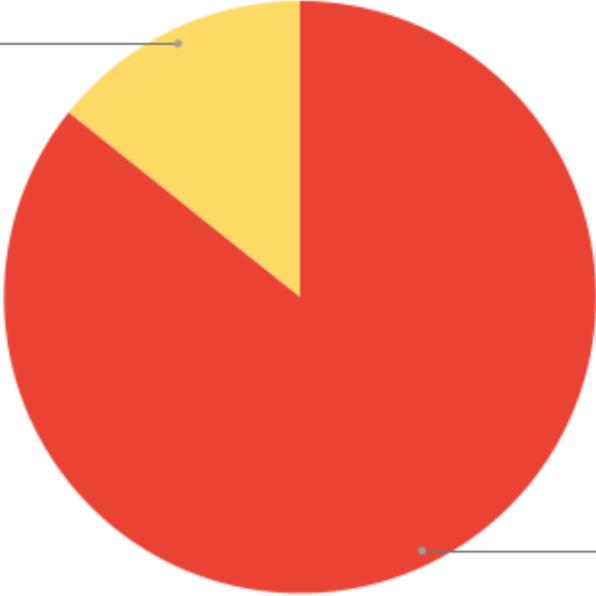Manipulated
64.3%

Image category: Nature and Man-Made

Ecopark Clouds

Manipulated
42.9%

Not manipulated
57.1%
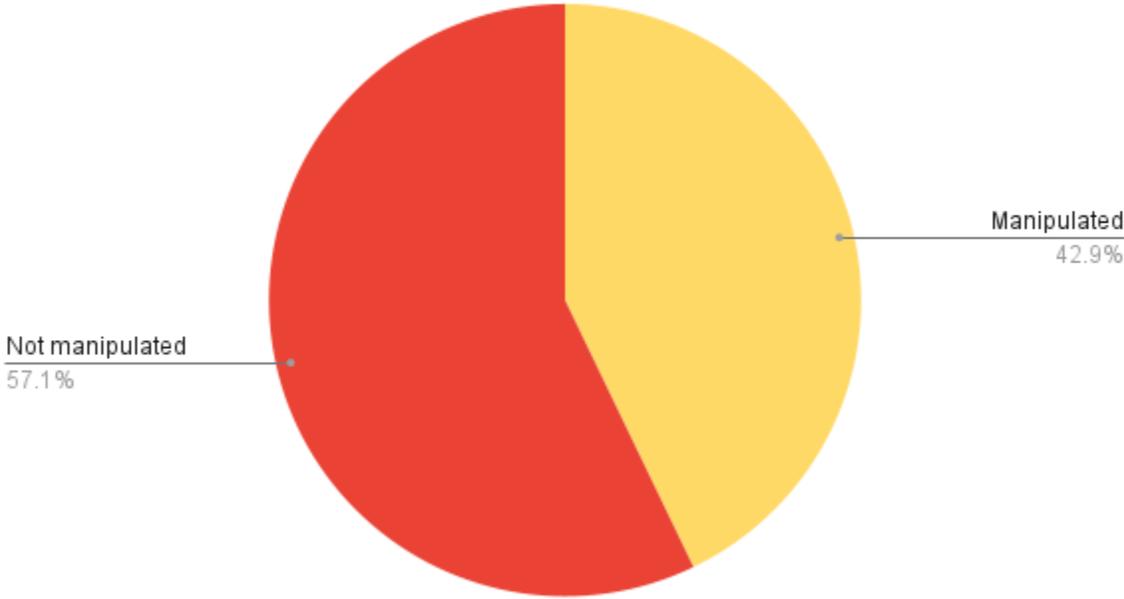
Image category: Nature and Man-Made

Ecopark in Sta. Rita: Manipulated or Not manipulated

Manipulated
42.9%

Not manipulated
57.1%
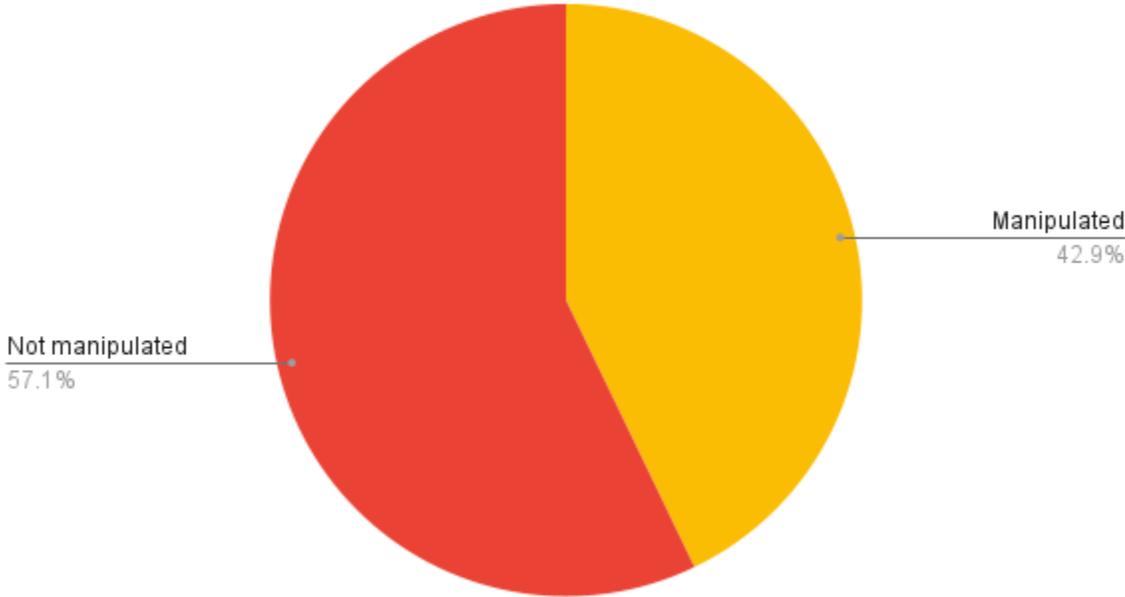
Image category: Nature and Man-Made
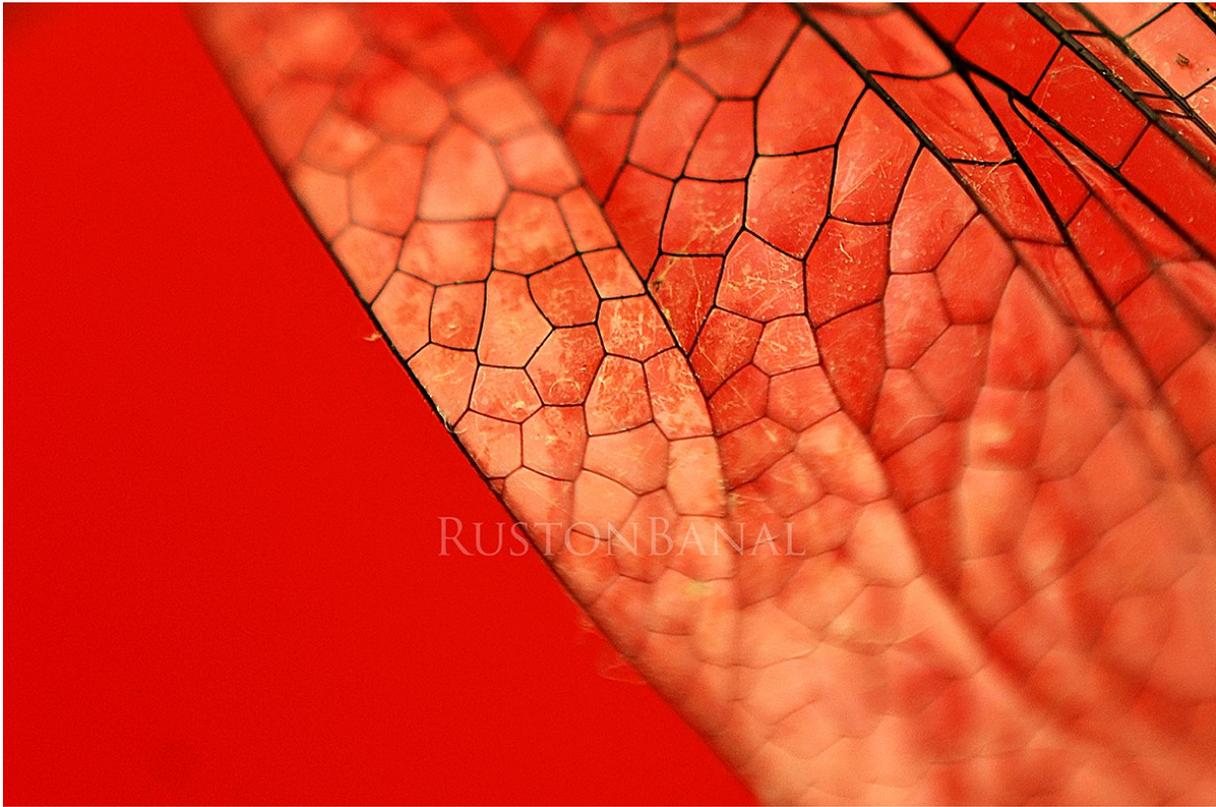
In Flight Manipulated or Not manipulated

Manipulated
28.6%
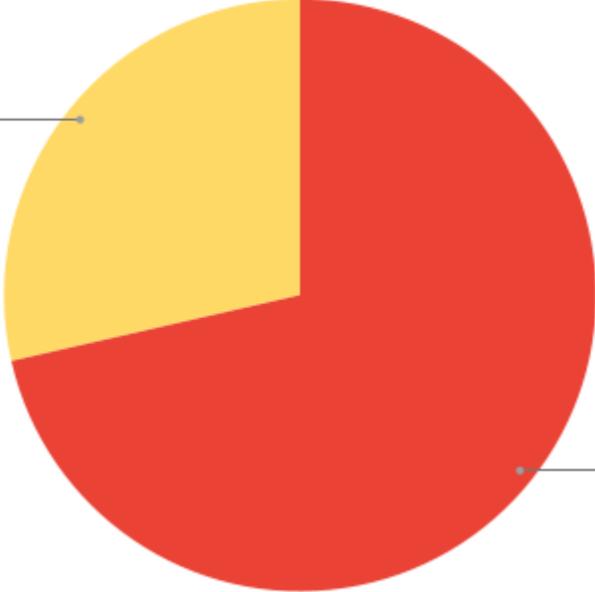
Not manipulated
71.4%

Image category: Nature and Man-Made

Burning: Manipulated or Not manipulated

Not manipulated
35.7%
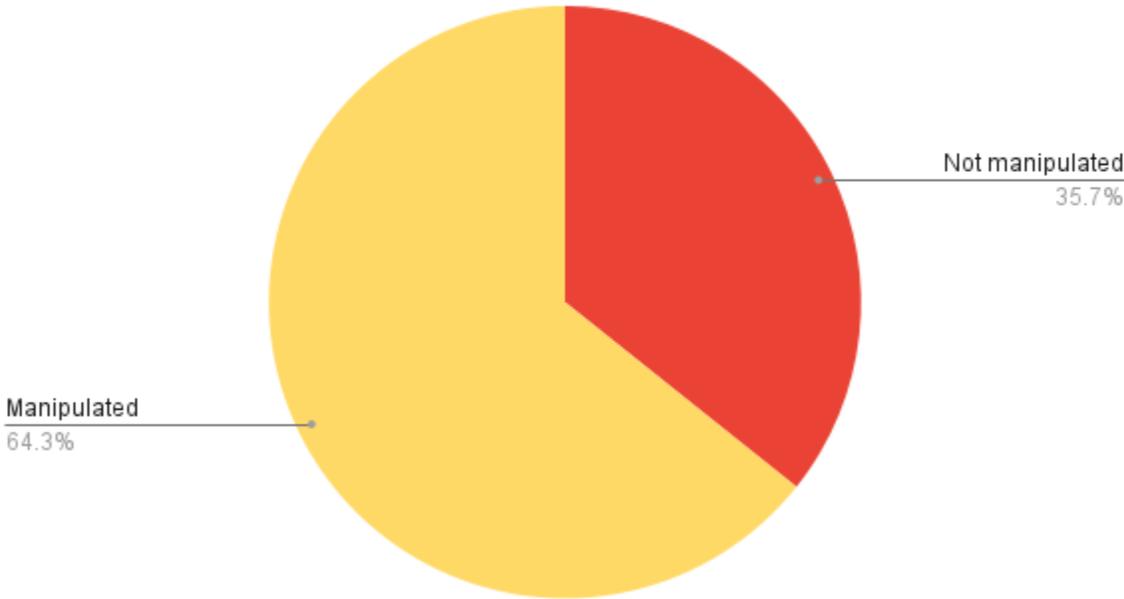
Manipulated
64.3%

Image category: Nature and Man-Made

Ripple: Manipulated or Not manipulated
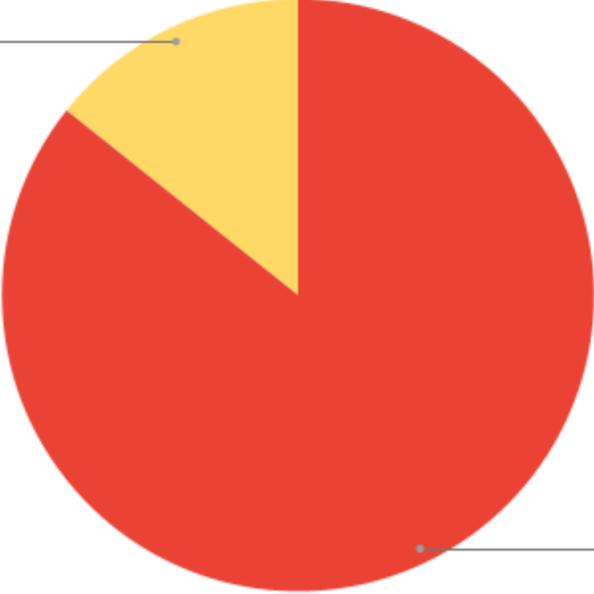
Manipulated
14.3%

Not manipulated
85.7%

Image category: Nature and Man-Made
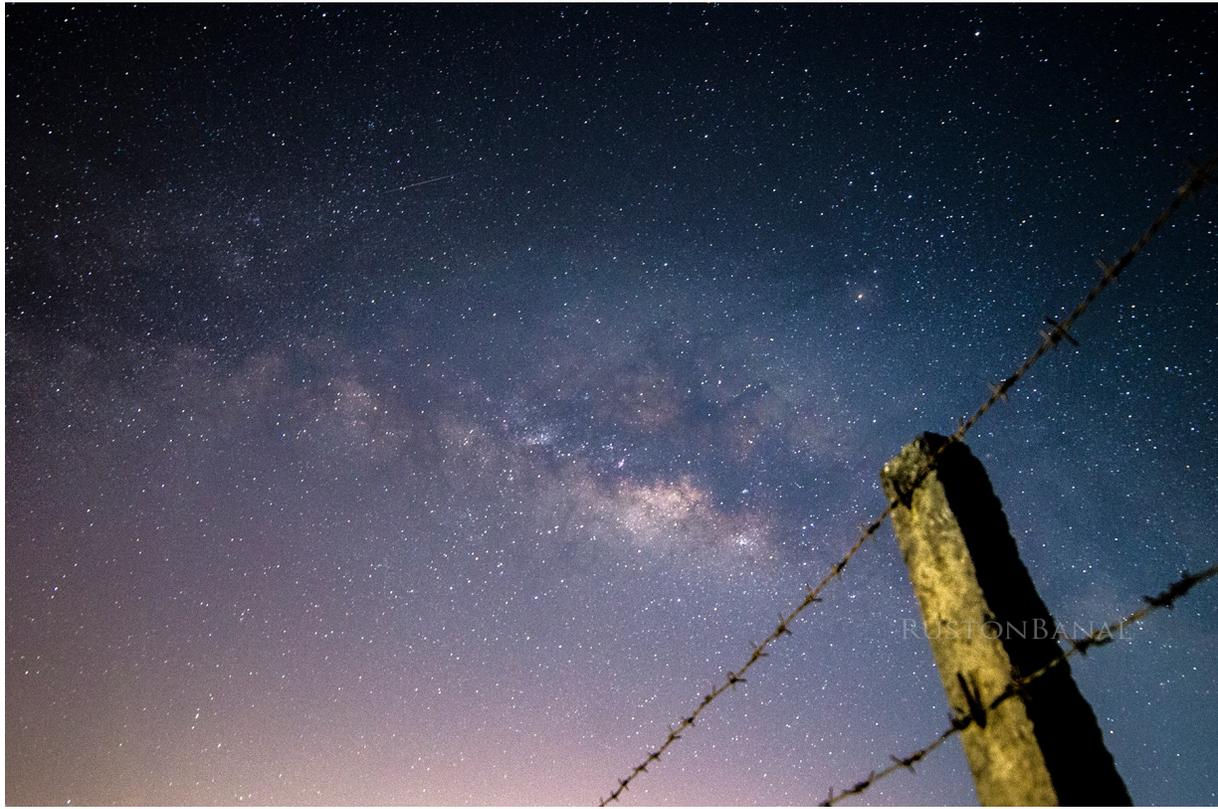
Milky Way in Betis: Manipulated or Not manipulated

Not manipulated
28.6%
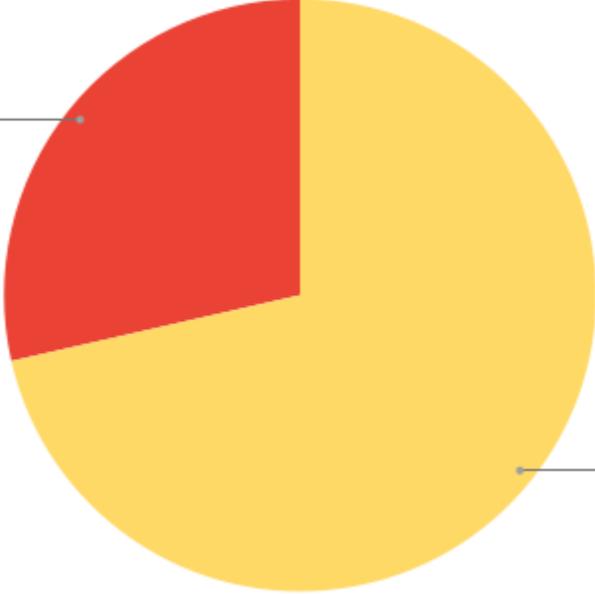
Manipulated
71.4%

Image category: Nature and Man-Made

Tower At Night: Manipulated or Not manipulated

Manipulated
14.3%

Not manipulated
85.7%

Image category: Ad Campaign Products

Lahar Lotion: 3D Render or Actual Photo

Actual photo
13.3%
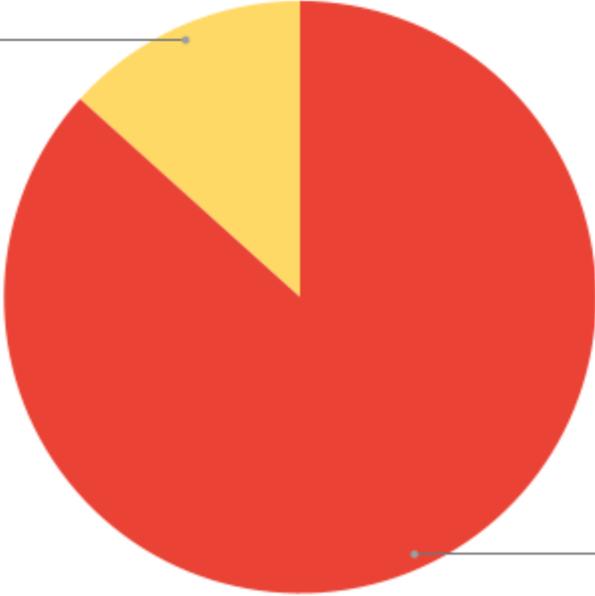
3D-render
86.7%

Image category: Ad Campaign Products

Go Pro Camera: 3D Render or Actual Photo

3D-render
13.3%
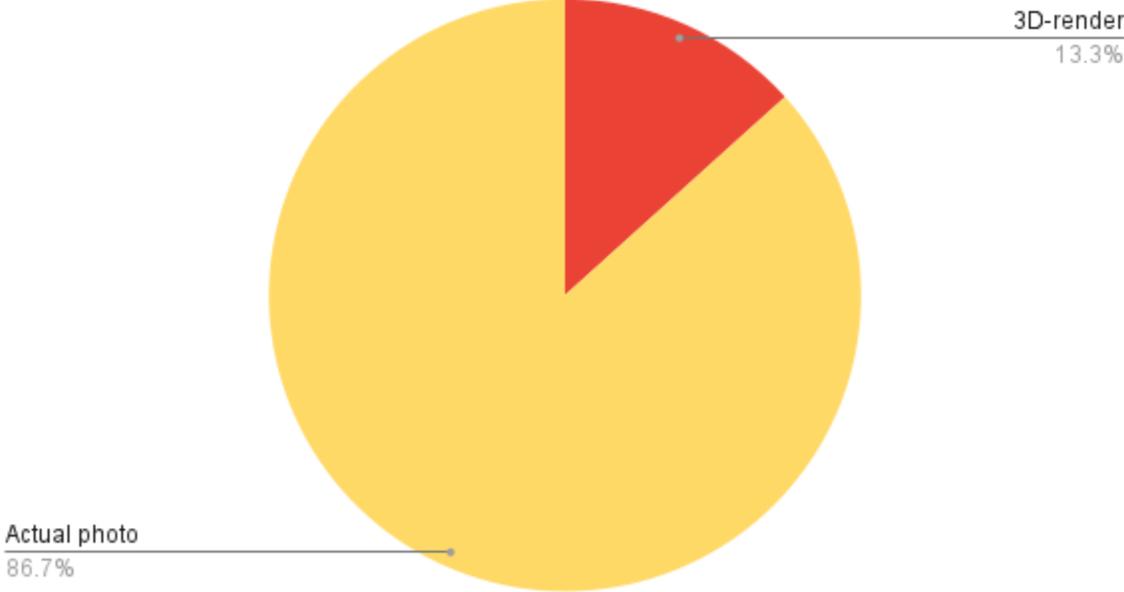
Actual photo
86.7%

Image category: Ad Campaign Products

Pubic Hair Straightener: 3D Render or Actual Photo

Actual photo
20.0%
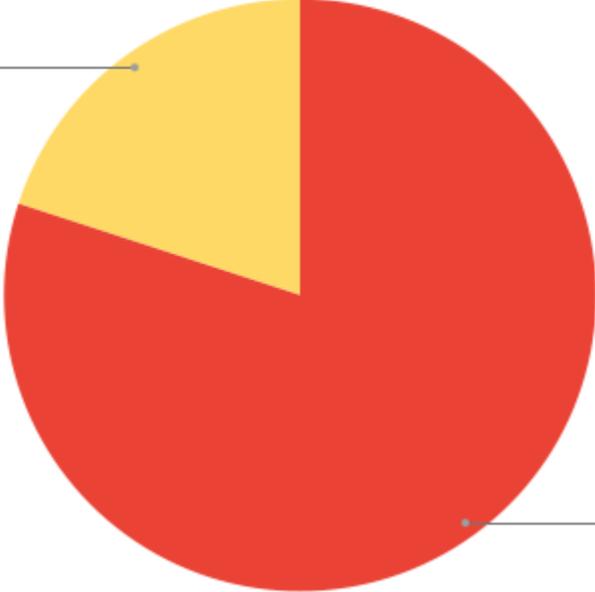
3D-render
80.0%

Image category: Traditions and Belief Systems

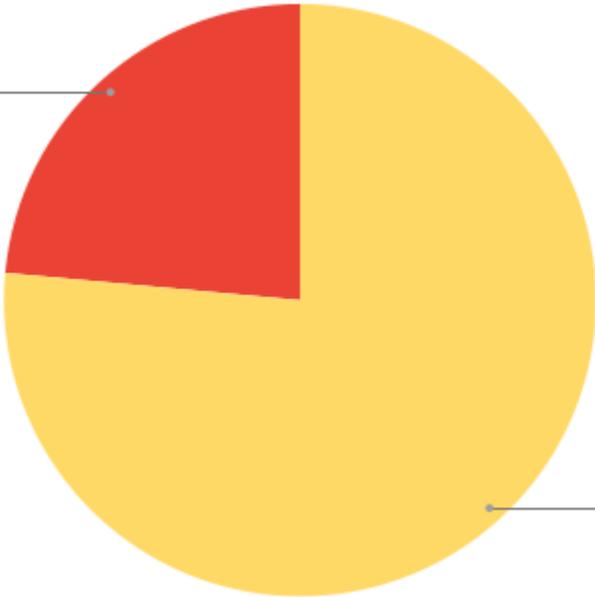Kuraldal: Raise To Celebrate: Manipulated or Not manipulated
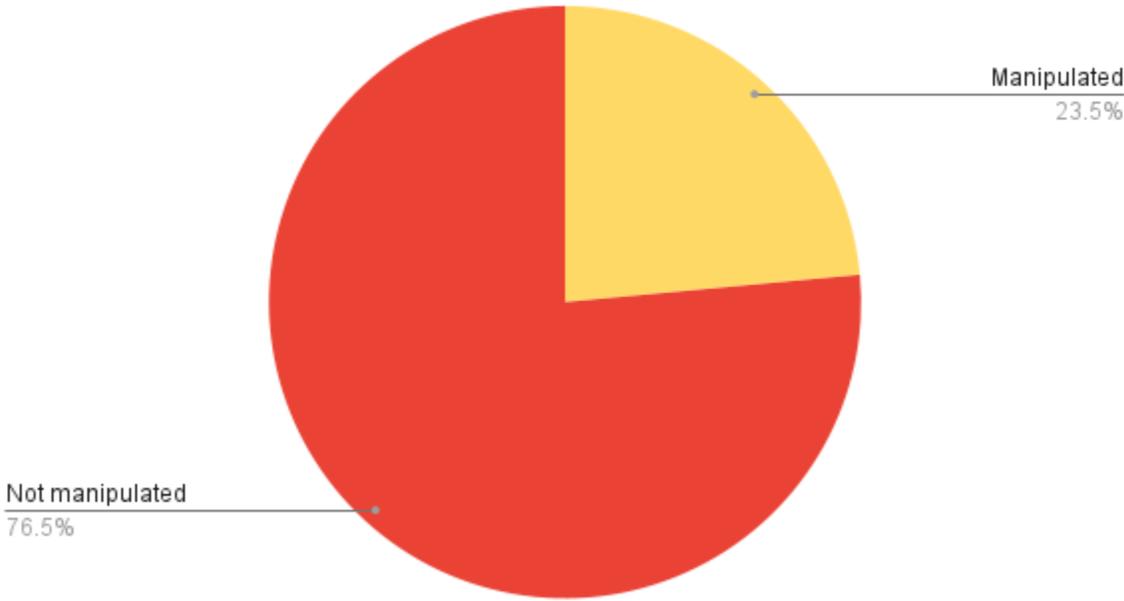
Manipulated
23.5%

Not manipulated
76.5%

Image category: Traditions and Belief Systems

Kuraldal: The Ritual Dance: Manipulated or Not manipulated

Not manipulated
23.5%

Manipulated
76.5%

Image category: Traditions and Belief Systems
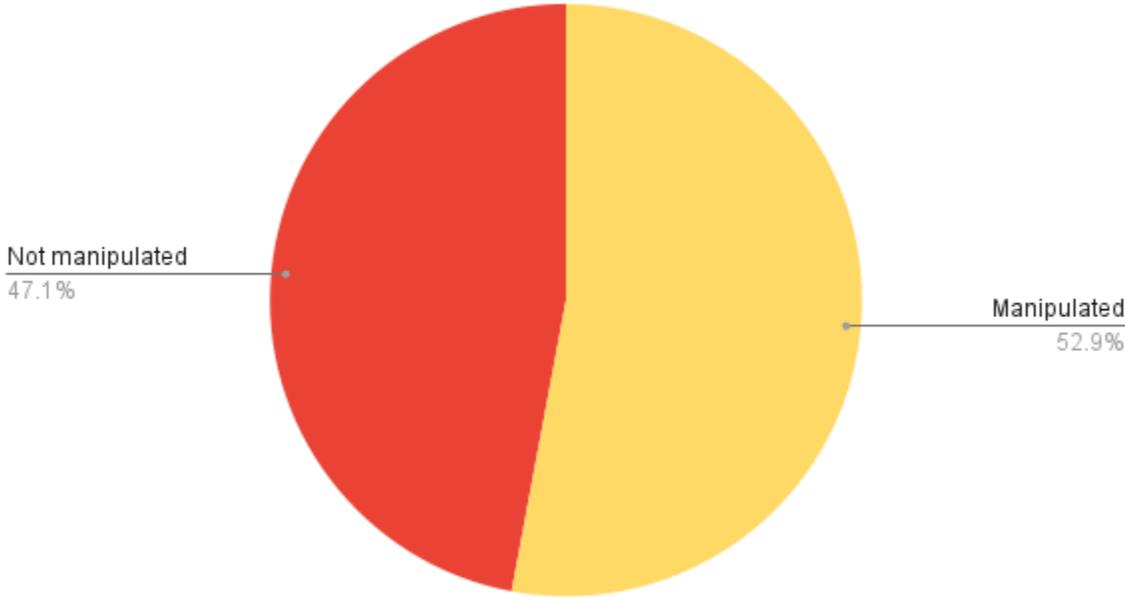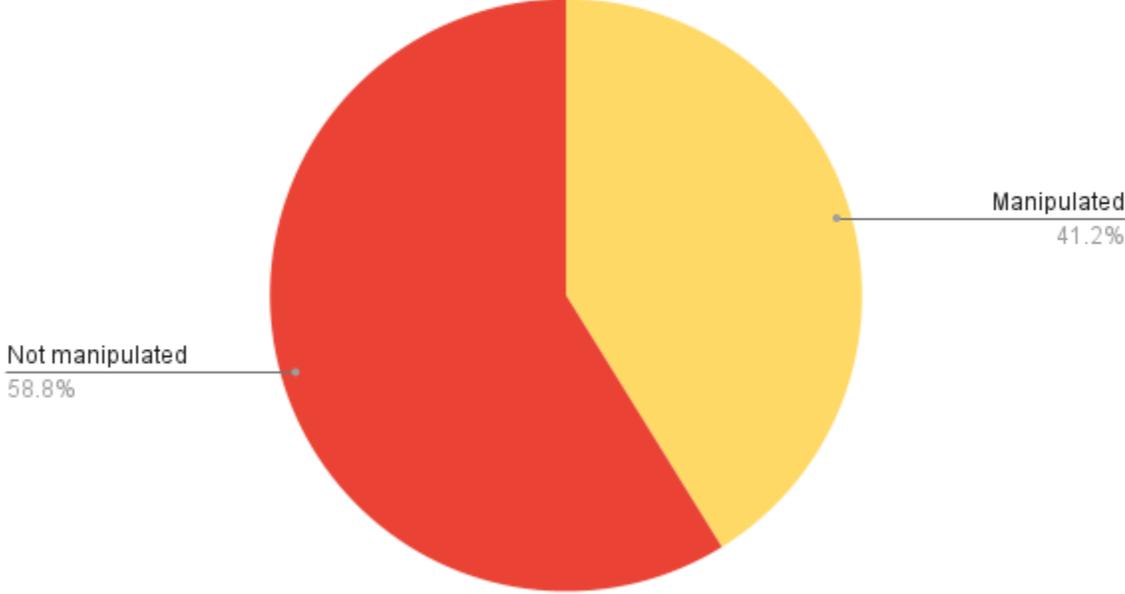

Prayers and Adoration: Manipulated or Not manipulated

Not manipulated
47.1%

Manipulated
52.9%

Image category: Traditions and Belief Systems

PHOTO: The Ritual Dance of Kuraldal
by Ruston Banal

Kuraldal: The Gathering: Manipulated or Nor manipulated

Manipulated
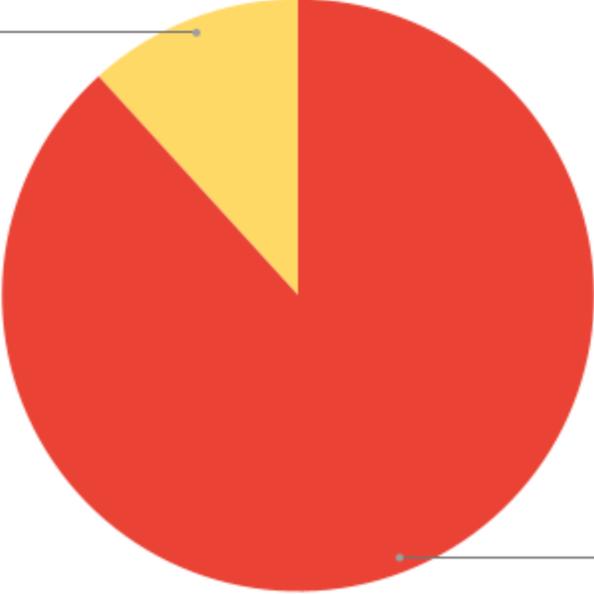41.2%

Not manipulated
58.8%

Image category: Traditions and Belief Systems

Kuraldal: The Ritual Dance: Manipulated or Not manipulated

Manipulated
11.8%

Not manipulated
88.2%

Understanding the difference between a manipulated image and a non manipulated image

This survey was only active for two days, and I deleted the Google Form as soon as I downloaded the results. While I was drafting the questionnaire before sending the email blast, I realized that my concept of a "manipulated" image and a "not manipulated image" is entirely based on the work I do as a person who manages hundreds of photographs on a regular basis in an organization that handles international photography competitions. In the customer support room, where I received the majority of the inquiries about the differences between the categories of an entrant, we define a manipulated photo as an image that underwent alteration of the element from their original situation as part of the frozen time when it was originally captured. On the other hand, a non-manipulated photo is one that remains as it was when shot and is a frozen copy of the situation it captured.

However, based on the survey results and participant responses about the difference between the two, the concrete definition I used to stage the survey appears to be something that needs to be dismantled and explored. The following are the participants' perspectives on what they consider to be a manipulated photo and a non-manipulated photo.

Gia Hasegawa	Manipulation occurs when the subject is disconnected from the environment or background of the photograph.
Donna Jane Consul	The entire image should tell a unified and natural story. If there is a disparity between the reactions or expressions of other participants in the photograph, the image may have been manipulated; shadows and lines are also indicators of real or manipulated images.
Babs Morabe	The context, setting, and narrative in photographs fall short of providing an accurate representation, resulting in a manipulated photograph.
Rochelle Aguilar	My untrained eye leads me to believe that the only photo in the set that has been manipulated is "Returning to Abbey Road." This is because the reactions of the other people in the photograph do not appear to have been manipulated.
Mykie Ibarra	For me, it is possible to tell the difference between a photo that has been manipulated and one that has not been manipulated based on my awareness of what has already been published, seen, or encountered, as well as the previous works of artists and my exposure to dozens of images, both online and in print.

Sean Patrick C. de Guzman	Lack of coherence in the exposure, shadows, and lighting. In addition, there is an inconsistent response from the people who are around the subject.
Lloyd Ericson C. Rodriguez	Photo manipulation is a broad idea. This includes basic enhancements to purposeful and creative inclusion and/or deletion of elements. If manipulation is used to deceive viewers and alter the reality the frame holds, then the image is fake.
Hernan Cabrera	The previous four images in the Human Interest category have all been manipulated. By far the most convincing image was the last one.
Mikael Reyes	Logic.
Therese Hernandez	That kind of tradition does not exist in the other locations.
Therese Claire B.Bognot	The photos depict examples that are part of the culture and were never done in any other country except the Philippines.
Van Pamintuan	When an image is manipulated, it becomes fake. As seen in one of the examples, there is no way Flagellants are in Paris.
Erin Hernandez	The location where the tradition is carried out.
Katrina S. Aguilar	A picture is fake if it is created in the moment. When an image is captured in real time, it is real.
Denise	Adjusting images' brightness, exposure, shadows, and highlights, as well as using filters or presets, renders them unrealistic, in my opinion.
Dylan Marco Aguilar	A photo's authenticity or manipulation can be determined by the presence of an out-of-place image within it.
Kyle Patrick De Guzman	It is manipulation to add elements that were not present in the original image. A manipulated image modifies the form and appearance of a given element in the original image; it is a deceptive image that alters the way it is viewed and causes the narrative it contains to be lost.
Richard Legaspi	Based on previous examples, there is a manipulation if there is a mismatch / bad perspective, inconsistent mood, and lighting.
Daniel	Certain elements in the image appear to be of lower quality than others, making them more difficult to blend into the overall image and thus making the image fake.
Christine M. Ya	Fake or manipulated images spread via the internet and social media have the potential to deceive, emotionally distress, and influence.

Jouana Umpad	Indeed, it is a forgery. Because other countries did not do that, it was not done there.
Naho Matsuda	As I'm familiar with some of the images, I knew the answers beforehand. The second image looked photoshopped, as the shadow on the street of the person crossing from the right didn't look real, but I'm unsure if it is manipulated or not manipulated and if it was manipulated for what reason. For me image manipulation and a fake image are slightly different. Image manipulation could also be an image that has been retouched or amended for aesthetic reasons. Fake image shows an image that either isn't an image (machine learning created image) or an image that shows something that didn't happen / something that isn't true. But it's a blur line
Mary Christina Bautista	Di makatotohanan ang manipulated image. Ito ay hindi nakikita o naipapahayag ang totoong pangyayari. (The image that represents something else, which cannot exist in the real world, is manipulated when it depicts something that cannot exist.)
Krista Fe Andrea V. Toledo	On the basis of the photographs that have been shown thus far, I believe that you will need to make an evaluation of the subject as well as the environment that the subject is in.

Examining the "A Flagellant in Paris" photograph's form and content by asking questions

In the previous assessment strategies, I have relied on audience members to answer questions posed by myself, or activities with learning competencies that they needed to fulfill. By having the audience ask me questions about the photo, I used a dialectics technique in reverse. The image's potential is no longer limited to what it was meant to represent, and conversations that keep questions flowing explore this potential. The questions and the names of the individuals are listed below.

Question:

If you were to pose a question about the attached image, what would it be?
Please write your response according to your preferences and at your availability. There is no correct or incorrect answer.

Name: Isabelle Dizon
Profession or what you do in life: Marketing Professional
Question: What is the event near the iconic Eiffel tower that made these men walk topless and sacrifice their bodies?

Ruston: *Actually, there was no event. This conceptual photograph I made is part of a series I produced that depicts Filipino migrants during their diaspora to other countries in search of better lives for their families.*

Name: Rogelio Pacatcatin Jr.
Profession or what you do in life: University Professor
Question: What is repentance?

Ruston: *According to the symbol, repentance means seeking forgiveness for past wrongdoing.*

Name: Vinny Elvina
Profession or what you do in life: Virtual Assistant
Question: Curious if this happened for art sake or did it happen as religious tradition same in the Philippines during Holy Week?

Ruston: *Both, is the correct response. It's a metaphor for the hardships Filipinos face when trying to make it in a foreign land, and it's also a close approximation of the process a real flagellant in the Philippines goes through to protect their loved ones from harm.*

Name: Aecy Ara Licas
Profession or what you do in life: Freelance Artist
Question: Bakit nandoon cla sa paris? Like anong puwang ng makalumang tradisyon ng Pilipinas sa makabagong mundo? Eto ba ang reason kung bakit hindi nalang tayo naunlad? Ang mga pinoy ba ay sanay gumawa ng sariling pasakit tulad ng pag boto kay Marcos?

Translation: What business do they have in Paris? Is this a metaphor for how out of touch we are with modern times, much like our voting for the son of a dictator like Marcos?

Ruston: *My mind was blown by this inquiry. Indeed, the fact that we have a propensity to punish ourselves again and again by electing a son of a dictator can be seen as a representation of how out of touch we are with changes.*

Name: Aries B. Espinosa
Profession or what you do in life: Creative content provider/writer/editor/frontman of a rock band
Question: What are the common themes running between the Eiffel Tower and the flagellants, in terms of not only spirituality, but also in history, culture, and sociopolitics?

Ruston: *According to my research, flagellants did not originate in the Philippines but rather emerged in medieval-era Northern Italy as a widely recognized religious movement.*

Name: Maria Lourdes Dorico Tonog
Profession or what you do in life: Law Student
Question: I can't think of a particular but this photo sparks a trail of thoughts on a vivid contradiction, how the Eiffel Tower as a symbol of "The City Love" Paris, before the world known as a hallmark of prestige, fashion, luxury, fancy cuisines, high-end living and all the finer things in life contrast the concept of "penitence" sin, suffering and repentance. To which leads me to the question, is Paris as a landmark of luxury, a paradox or a symbolic prerequisite to worldly desires and sins? Does the symbol actually crash with or did it actually blend with penitence?

Ruston: *Because of your inquiry, I've been giving some thought to the various angles from which I could explain this idea to you. In a sinful modern world, the image may be a call to repent and do penance.*

Name: Lea Pineda
Profession or what you do in life:Student.
Question: How do the locals of Paris interpret magdarame?

Ruston: *While we were filming, there weren't that many people around; however, some onlookers, who I'm going to assume are tourists rather than locals, snapped a photo of us in action. This, I reasoned, was probably due to the city's high concentration of unusual sights.*

Name: Paola Vianzon
Profession or what you do in life: Entrepreneur
Question: Of all places, why choose Paris as a location to shoot for this devotional practice?

Ruston: *It is one of the many well-known locations around the world where I have photographed this topic; I have also done so in Times Square, New York, and on Abbey Road, London. In the future, if I am able to save up enough money, I want to visit all of the major cities.*

Name: Jessica Baldwin
Profession or what you do in life: Legal Marketing
Question: Why is the photo so dark?

Ruston: *It's an artistic interpretation that fits the photo's theme of contrition and atonement.*

Dismantling: The process of visually representing how interpretations and re-interpretation in the form of questions can start exploratory conversations about the image by taking the pieces of the photos apart.

The Upshot

Since the success of network propaganda in influencing people's decisions has already been demonstrated, its use as a political tool will be upheld by the powerful in the Philippines so that they can maintain their position of authority. Without improving the visual literacy education of the Filipino people as a whole, these influential people will continue to control how the people of the Philippines make decisions through the use of propaganda images as the medium that keeps the wheels of social media platforms rolling.

There is not yet a robust industry or community in the Philippines where one can consult trained professionals in the field of image forensics. In the three years that I have been studying this field, neither the Cybercrime Division of the National Bureau of Investigation nor the Crime Laboratory of the Philippine National Police have ever needed to use image forensics. Considering that the Philippines leads the world in the spread of fake news on social media, it is crucial that the government of the Philippines start making investments in this area.

However, the purpose of image design is not limited to educating government agencies like the NBI and the PNP on the use of image analysis in the prevention and detection of cybercrime. Instead, it's a jumping-off point for further study into how to improve Filipinos' visual literacy, with the hope that this study will be one of many that contributes to the development of programs designed to equip students with the skills necessary to critically analyze images in social media. My research project's working title, "Image Design," is a pun on "image forensic" that I came up with to distance myself from the overly scientific connotation of the field.

While the objective of image design is to provide learners with a method for recognizing image manipulation and analyzing the intent behind its construction, I have encountered a number of contradictions in how people define manipulated versus not manipulated images. Based on the assessment tools I used, such as the survey I administered using a topology of images I took and created, the travel of these images from one viewer to another and the manner in which they were constructed appeared to have a distinct impact on how participants perceive each one. For some, what I consider to be a not manipulated image is manipulated in the sense that I cropped and adjusted the colors to achieve the desired effect. I believe that using these terms' definitions to describe an image in order to create an industry standard definition requires additional studies. The author of this project intends to conduct additional research on this topic in the future.

There is a realization that image design cannot simply be introduced as a special modular course that can be taught online or in workshop settings and from which one can become an expert in image forensics. Image Design and the critical method for recognizing an image that is suspected of being a forgery and analyzing it require a hierarchic system in a scaffolding approach in which learners' critical ability is built upon a series of learning competencies that can begin as early as preschool. In contrast to the tools available on open source intelligence websites, where a person can be technically trained in a year or two on error level analysis,

cloning, differences in the changes of the discrete cosine transform of a jpeg image, chrono location of the image, and reverse image search, critical thinking requires actual experience of situations and regular signals and information that confront the individual and make him or her a critical thinker. This was evident in the assessment procedure I used with my photography students at a university, where the photography output they were required to present for the entire semester was based on the activities in which they were connected, immersed, and involved.The end result was images that were more than just photographs; they were also visual representations of captivating stories.

My recommendation is that additional research be conducted in this area to collect more data on the activities and evaluations of students in their media literacy courses in secondary and higher education institutions. In institutions of higher education that offer photography courses, there should be an elective course that focuses solely on the study of images, in the same format that I introduced to my photography students, where smartphones and social media are a medium for creating content as output for the required photographs to be submitted. An elective course should include an activity focusing on image analysis using the most effective open source tools available online as part of the fundamental lessons in image creation or photography. Lastly, this may be aspirations, a push for a government policy that penalizes those who have been proven to have intentionally shared deceptive images with the public. **(end)**