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BEHIND THE DIGITAL IMAGE. PUBLIC PHOTOGRAPHS ON COMMUNITY PLATFORMS AND TWITTER AS REPOSITORIES FOR MACHINE LEARNING AND JOURNALISTIC PUBLICATIONS

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ABSTRACT | My project “Behind the Digital Image: Public Photographs on Community Platforms and Twitter as Repositories for Machine Learning and Journalistic Publications” investigates the specificities of social media and photo-sharing platforms as public image repositories, daily media practices and legal practices, and considers ethical questions relating to the digital image as both a research tool and a research object. I pursue two sub-projects, both of which are relevant to understanding the commodification and monetization of vernacular digital images. Nuclear investigations of these projects refer to the relationship of amateur photographers, also referred to as citizen photojournalists, para photojournalists or accidental journalists, and professional stakeholders within the global image market. Since the digital world is quickly changing, field work is needed to understand processes and procedures as they happen. Therefore, I use multidimensional methods, including media ethnography; digital methods; qualitative approaches, such as in-depths interviews and participatory observation, and social media analytic tools. This paper presents an overview of the proposed project and sheds light on both the preliminary results and possible areas of future research.

KEYWORDS | image rights, mixed-method, vernacular visual media, photojournalism, image repositories

Introduction

Chunks of ice pile up behind two black cars, hitting the roadside. The ice ‘bergs’ almost reach the height of the streetlamps. A man on the road raises his smartphone to face level, apparently filming or preparing a selfie. On 24 February 2019, David Piano photographs this scene and posts the aforementioned photo alongside two similar shots on Twitter. He writes: “This ice tsunami is one of the craziest things I’ve ever witnessed. Starting to bulldoze trees and streetlamps. [...]”¹ Several of the replies he receives to his tweet are from photo editors, among them CNN and AP. The latter asks: “Hi David, I’m Julie Jacobson with the Associated Press in New York City. Did you shoot these photos of the ice shove in your tweet. If so, can we use them?” Piano’s answer is short: “Yes I did. Go ahead and use with credit.”²

Conversations like this exemplary one about rights of use and underlying legal, ethical and social issues of image sharing are the subject of my research project “Behind the Digital Image: Photographs on Community Platforms and on Twitter as Repositories for Machine Learning and Journalistic Publications”. It consists of two parts, entitled “Crowd-Sourced Images – A Repository for Critical Research and Artificial Intelligence” and “A Closer Look into

Terms of Use: Photo-Editors' Use of Twitter to Retrieve Amateurs' Photographs". My project is one of twelve projects selected by the German Research Foundation (DFG) for funding under the new Priority Program "The Digital Image" (SPP 2172, DFG project number 421462167). Initiated and coordinated by Professors Hubertus Kohle, Ludwig-Maximilians-University of Munich, and Hubert Locher, Philipps-University of Marburg, this Priority Program aims to contribute to the theorization of the digital image in art, science, and culture, to foster the understanding of the digital turn as a visual digital turn, and to understand various practices of digital image technologies. The first of two three-year-funding phases started in December 2019; it includes for instance projects from the fields of art history, archaeology, ethnography, and media studies. The aim is also to examine the conditions of current digital image culture from multiple perspectives.

In my work, I perceive digital images as networked popular visual media, based on socio-cultural and socio-technical interactions while at the same time connecting technology, society, and individuals – so-called networked images.³ My project "Behind the Digital Image. Public Photographs on Community Platforms and Twitter as Repositories for Machine Learning and Journalistic Publications" focuses on media ecology, circulation and practices of image sharing, negotiation of rights of use and commodification of the digital image. These aspects are investigated through collecting and interpreting public negotiations on social media about eyewitnesses' photographic material that photo editors request for publication in journalistic media, and through photo platforms using uploaded images as material for machine learning. This paper offers an overview of my research project and its two sub-projects, with a stark focus on the sub-project "A Closer Look into Terms of Use: Photo-Editors' Use of Twitter to Retrieve Amateurs' Photographs", and a fairly short outline of the subsequent sub-project "Crowd-Sourced Images – A Repository for Critical Research and Artificial Intelligence" that will start at a later stage.⁴ Main research questions are: How do photo agencies integrate user-generated photos, some of which can be understood as citizen journalists' products, into their offerings? What purposes do photo editors, photo curators and the creators themselves pursue by participating in digital image sharing? How does non-human photo curation impact aesthetics and content of (publicly uploaded) digital images? What is the status of ethics in digital visual cultures, both for media practitioners and researchers? My aim is to collect data 'onlife'⁵, at the interplay between technology, society, and the individual. Digital images will be analyzed as representations and as objects between public-private memories, as will be shown in my case study about Twitter pictures [Twitpics] from terror attacks and the increasing interest of photo-editors in this eyewitness material. Eventually my investigation will dive into what we cannot (yet) see, namely the relevance of artificial data and machine learning in the curation of images, such as is provided by some photo-community platforms.

This paper is structured as follows: Firstly, the literature review informs about the current state of research and the state of the global (journalistic) image market and its latest developments; secondly, the sub-project "A Closer Look into Term of Use" addresses Twitter as a source for user generated visual content and presents preliminary results of the first research phase, including three different encounters between citizen photojournalists and professional photo editors, and public critique of AP's buy-out-contracts. Thirdly, the second sub-project "Crowd-Sourced Images" suggests future subsequent research. The conclusion summarizes the next steps.⁶

The Global Image Market

Globalization theorists point out that globalization does not only mean diversification but also monopolization and interconnectedness.⁷ These aspects have been dealt with for the media sector, focusing, for instance, on companies such as TV stations.⁸ However, research on the development in the global image market, including stock and news photography, and especially cooperation between image banks and photo sharing platforms, has been neglected to date. When Frosh, Bruhn and Ullrich first published their works on the global image market in the early 2000s, with their focus on stock photography, photo-sharing platforms did not yet play the role they do today: while they did not even exist then, they are nowadays considered to be an everyday practice, along with the integration of amateurs' photographic work in photo agencies and image databases.

The global circulation of news photographs has lately been investigated by media ethnographic scholars, with a focus on the competition between news photo agencies⁹, key wording routines in an international news photo production¹⁰, and the changing work practices of photojournalists in the digital age.¹¹ Media ethnographer Zeynep

Devrim Gürsel primarily frames power struggles in the global image market as “battles over visual worldmaking”.¹² She refers to intermediaries between photographers and editorial staff as image brokers; the term ‘broker’ hails from the business world, in which brokers mediate between buyers and sellers and finance themselves through commissions. Referring to the global image market, ‘broker’ emphasizes the commodification of images: The advent of digital photography puts photojournalists under pressure, money-wise and time-wise alike. The recent international mobility of photojournalists and the outsourcing of photojournalistic work to locals also has implications for content diversity. A new division of labor can be seen: “[t]here are many more local photographers producing excellent work today, and drastically reduced budgets mean personal vision is less valid in journalism at large,” says Gürsel.¹³

Research on the global image market currently focuses on creative industries and visual content providers such as Getty Images, on the global distribution of news photos, on professional field research on photojournalists in editorial organizations and foreign reporting, as well as on platform economics and visual vernacular language, for example most recently and preeminently on Instagram.¹⁴ The research project described here is located at the interface of these fields: their impact on each other cannot be clearly distinguished. Some articles already demonstrate the mechanisms and implications of monopolization and interconnectedness on the global image market with an emphasis on stock photography.¹⁵ The merger of the image banks Getty Images and Corbis in January 2016 indicates that what is needed is a close look at strategies of acquisition, including the implementation of non-professional photographs through cooperation with various photo-sharing platforms.¹⁶ Existing literature on stock photography focuses on content and topics, including “the visual politics of gender”¹⁷, and the “increasing global importance of image banks in corporate media”, also examining the Getty images of women.¹⁸ By tracing the multiple sales of the Bettmann Archive and its eventual merger into Corbis it has been possible to investigate the rise of Corbis up until the developments of 2011.¹⁹ The main literature on the global stock photography market, and on the power of stock photography and super-agencies like Getty Images and Corbis, reflect on the 1990’s changes.²⁰ At their core, some of the aspects identified in these studies remain true to this day: aesthetic guidelines based on marketability and reproducibility of recognized stereotypes; corporate expansion via the purchase of existing agencies and archives; and the invisibility of the images’ creators. Images function simultaneously as product and commodity, exchanged, and traded in multiple forms.²¹

Nevertheless, the existing literature does not investigate the relation between stock images and new images, even though they are sold by the same picture agencies. Stock images are integrated in journalistic online media without the readers being informed of the respective origin and purpose of a stock image.²² Furthermore, current studies do not investigate the alliances between image banks and photo agencies with photo sharing platforms like Flickr. The users who engage with these vernacular photo communities can be considered as ‘producers’²³, a term intended to describe a hybrid of producer and user; the two can no longer be separated due to the daily media practices of producing and uploading content such as digital images. Axel Bruns coined the term ‘producer’ – a mix of ‘producer’ and ‘user’, following Alvin Toffler’s term ‘prosumer’, a hybrid of ‘producer’ and ‘consumer’.²⁴ The term ‘producer’ emphasizes the active role of users and will therefore be used in this paper.

My research project reflects these developments in order to improve the understanding of the – mostly invisible – mechanisms behind the digital image and its distribution infrastructure, and to promote a critical discourse on the media practice of the producer, the status of the photographer and the photographic image in the networked society.²⁵

A Closer Look at Terms of Use: Photo-Editors’ Use of Twitter to Retrieve Amateurs’ Photographs

The first eyewitness photo on Twitter that generated a major international response was taken by Janis Krums on 15 January 2009: it shows a half-sunken Airbus 320 in the Hudson River in New York City, with people sitting on the life rafts folded open at the aircraft doors. Krums tweeted a photo alongside the lines: “There’s a plane in the Hudson. I’m on the ferry going to pick up the people. Crazy.”²⁶ On the tenth anniversary of the “Miracle of the Hudson River” – the hashtag #MiracleOnTheHudson has since emerged – users shared photos on Twitter of newborn babies who would not have been born years later if the emergency landing had gone wrong, and of children dressing up as

A320 pilot Captain Sully. Krums' picture is one of the most famous posts on Twitter by an eyewitness of an event, and Krums is one of the few eyewitnesses who has become (and remained) well-known beyond the instantaneous posting of his Twitpic. Since the initial Twitpic, Krums' Twitter conversations have shown that he has been contacted by a wide range of people – for example CNBC editors requesting an interview and students wanting to use his picture in their thesis on social media.

Twitter has gained in importance as a platform for researching newsworthy photos. At the same time, new ways of dealing with the clarification of rights are becoming apparent. Visual material that eyewitnesses post, for example, of terrorist attacks (such as in Brussels, Nice or Munich in 2016), demonstrations, natural disasters such as earthquakes, floods or tsunamis, the 2020's forest fires in Australia or extreme weather situations, but also of events such as the Corona crisis, form the starting point of the research project. It can be observed that eyewitness material from private individuals triggers reactions from photo editors: They write to users on Twitter and ask for permission to use tweeted photos in journalistic publications or even for photo agencies. Sometimes the editors send along special Social Media Release Forms in which the companies declare that they recognize the copyright, want to have the temporally and spatially unlimited rights to the further distribution (and utilization) of the respective images transferred, but will not pay for their use.

These conversations arising from social media images can be found regularly, both for unpredictable large-scale events such as terror attacks, natural disasters, or extreme weather events, and events of local interest, such as helping neighbors, overcrowded subway stations and other 'everyday life' happenings. An exemplary conversation about rights of use between eyewitnesses and photo editors on Twitter goes like this: After eyewitnesses have tweeted their picture – including the location, information about what is visible in the picture and sometimes additional information such as witnessing an explosion – photo editors get in touch. Some introduce themselves with their name and professional institution. Some ask how the eyewitnesses are doing before asking for permission to use the photo in question: "May I use your photo? Could we use them?" Often eyewitnesses answer with a simple "yes", sometimes they ask for more details via direct message. In individual cases, photo editors send along declarations of consent (Social Media Release Forms), for the unlimited right of use of the photo, and for future media that are not yet known. An honorarium is not offered; on the contrary, image sharing is regarded as honorary. In general, eyewitnesses do not ask for payment – presumably because they do not consider themselves photojournalists and do not see their photo and its further dissemination in terms of usability and salability. Some reserve the right not to have their photos used for commercial publicity purposes and refuse such requests.

It is unclear whether eyewitnesses are aware of the rights of use they are conceding, and the extent to which they are conceding them. One hypothesis is that this kind of conversation and (non-) negotiation of rights of use reveals that the sharing economy exerts an influence on journalistic image communication: image sharing at the interface of amateur and journalistic visual communication adopts practices from the sharing economy, of sharing and redistributing content free of charge, which at the same time goes beyond visible social media appreciation through likes and retweets.

The corpus of material being developed consists of tweeted photos and conversations by and with photo editors. Photojournalists usually take photos of the scenes at a later stage: when editors have assessed the event as newsworthy and want to commission their own material instead of pictures from photo agencies or eyewitnesses. The corpus is based on Twitter queries, including search phrases such as "Could we use your photo", or "May we use your photo". Based on this, three (preliminary) categories or scenarios will be examined: These are, firstly, negotiation of dissemination through simple yes-no conversations and more complex social media release forms, secondly, the publication and transformation of a tweet into a story, and finally, countermovement and protests against unpaid work. These three aspects are demonstrated on found material in the following paragraphs. In a further step, producers and editors will be asked to participate in a questionnaire and interview to address research questions such as: To what extent do eyewitnesses understand the purpose of the pre-formulated consent forms sent to them, and the ensuing legal consequences? To what extent are conditions of use influenced by social media companies, photo-sharing platforms, and journalistic needs?

Scenario 1: Negotiating dissemination through simple yes-no conversations and more complex social media release forms

As previously mentioned, some photo editors tweet consent forms to which the image creators must agree without the option of negotiation. The most comprehensive is the so-called social media release form of the US news agency Associated Press (AP), describing in detail the rights the agency is interested in. The British news and sports agency PA Media provides Twitter-friendly paragraphs: “By agreeing for PA to use your content you confirm that: - You are happy for it to be distributed at any time to any national and international publishers (eg. the BBC, ITV, Guardian, Independent and MSN) - You own the copyright (ie you filmed, photographed or otherwise created the content yourself). Allowing PA to use your content does not affect your rights: you will still own the copyright.”²⁷

When comparing different social media release forms, it is remarkable that fundamental aspects are emphasized: Authors do not lose their rights of use, and certainly not their copyright. This explicit statement of a legal fact leads to the conclusion the producers are presumably not aware of the difference between copyright and rights of use. A formulation like the one quoted here can also be interpreted as a response to an anticipated “no”. The research project aims to clarify how image creators understand these social media release forms and their legal consequences. Although image sharing is globalized, there are different understandings of copyright in Europe and the USA that need to be considered in future research.

Scenario 2: Publishing and Turning a Tweet into a Story

The girl with a bun looks through a glass door. In her left hand she holds a pad or a clipboard. A man with a baseball cap kneels in front of the door. He looks back and points to a flipchart. The viewers of this photo take the position of the girl’s photographing father: Josh Anderson posted the photo on his Twitter on 28th March 2020. His text explains: “My 6th grader emailed her math teacher for some help so he came over & worked through the problem with her on our front porch. @Chriswaba9, our neighbour, MMS teacher & MHS Wrestling Coach. #KidsFirst @MadisonMSNews @Mark0sports @dakotasportsnow @dakotanews_now @stwalter20”.²⁸

Anderson shows and describes his daughter asking her math teacher for help during the Corona crisis. He reveals the teacher’s name via his Twitterhandle @Chriswaba9 – and receives the following request in response, alongside thousands of likes, from a user with the Twitterhandle @cherinicita: “Hello Josh! I work for Fox TV stations and we absolutely love this story! May we use your photo on all platforms until further notice, with a courtesy to you of course? Please let me know. Thanks so much!”²⁹ Anderson replied positively, “You sure can. Thanks for your interest. Please send me the link to your story so we can view it as well!”³⁰ A few hours later, the Fox TV employee sent a link to the website where the article had been published under the headline “Math teacher brings over whiteboard to help student through glass door”.³¹ In the first sentence, the article, whose author is not identified by name, refers to the current Corona crisis: “Even during a pandemic, some teachers are showing that they’re still willing to go above and beyond for their students.” The next five paragraphs elaborate on what Anderson already said in the two sentences of his tweet – Fox TV even knits a plot with these details: “It wasn’t a long trip for Waba – Anderson says he happens to be their neighbour.” By using phrases like “Anderson says”, Fox TV gives the impression of having spoken to Anderson. Finally, the embedded tweet and the phone number of Florida’s Covid 19 emergency center follow.

This example shows how journalistic ‘stories’ are generated from tweets that attracted the editors due to the twitpic – published with little further information or journalistic research that for instance would consist of personal interviews with the protagonists. In the context of the project, research questions arise such as: Are the image creators – if not financially remunerated – made aware of the publication via link? Are the resulting reports primarily cheap user-generated content, or do they give rise to further journalistic research?

Scenario 3: Countermovement and Protest Against Unpaid work

Some tweets show that producers who were initially positive about a publication change their minds in the course of time. One producer, for example, found the media requests too much: she had posted a photo of a broken window in her living room, which had been smashed by a Christmas tree whirled by the wind. After firstly responding positively to several media requests to use her photo, she turned down further requests for radio interviews.³² This can be interpreted as indicating that it takes relatively little time to consent to a photo release via tweeting; but also implies that producers do not want to spend more time giving interviews beyond that, possibly also because the event is only locally newsworthy.

A surprising version of non-consent can be found in a kind of informal countermovement that sharply criticizes calls from media companies to submit photos. In July 2019, CNN asked on Twitter, “Are you affected by Hurricane Barry? When it’s safe, text, iMessage or WhatsApp your videos, photos and stories to CNN [...]”.³³ A user named John Robertson commented: “Just wow. I’m making sure from now on in journalism class I teach my kiddos to say NO to ‘hello I’m from X May we use your photo with credit to you of course’ tweets. They’re a business folks, make them PAY YOU for your content they’re going to make money on.”³⁴ This tweet refers solely to journalistic media companies wanting to profit from producers’ digital image content. The user overlooks the fact that his own engagement in social media also generates revenue for Twitter. Research questions relate to the trust of producers in journalistic media versus social media companies and the appreciation of the digital image.

It should be noted that in spring 2020, several technology-oriented online publications such as DPReview and Techdirt garnered criticism from Twitter and the blogosphere about the Associated Press Social Media Release Forms, as presented in scenario 1.³⁵ Essentially, they summarize a Twitter thread by Mike Dunford – according to his Twitter bio a lawyer – explaining in detail the AP Social Media Release Form also in terms of its legal implications. Dunford formulates the core criticism in a single tweet – the planned procedure, presumably legally secured by AP lawyers, for which the AP (picture) editors were trained, the clarification of the rights of use and copyright and the written consent: “So @AP reporters and editors have clearly been trained to do three things before using anything on social media: (1) Ask for permission to use it; (2) Confirm that the person giving permission took the photo/video; (3) Get them to agree to a release presented as an image.”³⁶ In contrast to contracts in paper or PDF, it is not possible to make changes on a social media release form that is presented as a digital image, for example by crossing sentences or sections out – clearly it is not intended that authors negotiate this contract. If producers do not agree to this contract, it is more common not to reply at all than to explicitly answer ‘no’.

Dunford calls AP’s way of formulating and enforcing legal wishes “abusive and unethical”, also since the producers shall indemnify AP from any legal responsibility – if a lawsuit is filed, the producers bear all the risk. Seemingly, AP has never reacted to the accusations – presumably also out of knowledge of its own economic strength: producers can rarely set limits, for example by collectively negotiating the scope of use, royalties, and (bestseller) remuneration. As dispersed producers, who do not identify as photojournalists, they do not unionize.

Future Research: Crowd-Sourced Images – A Repository for Critical Research and Artificial Intelligence

In addition to social media platforms such as Twitter, which are known to a broader public audience and have been researched widely,³⁷ there are internet platforms specializing in photographic images, which are aimed at ambitious amateur photographers. Inspired by early photo community platforms such as Flickr, they take the idea of building a community to discuss photos further and create a business model to possibly sell select photos through distribution partnerships with globalized photo agencies and image banks. These photo platforms offer automatic keywording as well as automatic analysis of the aesthetic content of uploaded images. The keywording is usually (still) not as detailed as it would be if human beings were doing it – i.e. it mostly offers generic terms such as mountain, man, outdoor –, and it does not correspond to the keywording standards of the so-called W-questions (who, when, what, where, why etc.) in journalistic picture agencies.³⁸ Research questions here deal with the differences in aesthetics

and selection of photos by human versus non-human photo curation. Behind the visible digital image, the question arises as to whether we can still speak of image agencies and photo platforms in the future, or whether these 'photo communities' are rather technology companies focusing on collecting and monetizing data instead of 'the image'.³⁹

Conclusions

When photo editors ask producers whether they may use their image, this is done out of the necessity to secure the rights of use. The request can also be interpreted as an act of fairness towards producers, although – as it becomes clear in social media release forms – they are not considered or treated as equal business partners. The social media release forms presented correspond in essence to the buy-out contracts that media companies present to their freelancers, for example, and professional photo agencies to their photographers and models. When acquiring image material – and the requests from photo editors to Twitter users are nothing else – it can be assumed that the media companies take advantage of the producers' ignorance. The terms of use of social media companies are to be criticized in the same way: They, too, stipulate that posted images may be used without fee. On the other hand, users regard the sharing of images as an unpaid (media) practice.

Nevertheless, in the course of my research project the intention will be to discuss whether producers whose photos attract interest from photo editors see themselves as photojournalists. Tanja Aitamurto published a study on crowdfunding and new journalistic media in 2011. She concluded that it was enough for citizens to donate and they had little motivation to become journalistically active themselves in the sense of a culture of participation: "They perceive the journalist as the expert on the topic, and therefore he or she needs to do the work."⁴⁰ Based on this finding, one hypothesis of my project is that the self-image of 'citizen photojournalists' is similarly distanced: Their self-image and self-concept differs from those of (professional) photojournalists. This could be another reason why, in the data available so far, none of the producers asked for a fee. Another hypothesis is that this (non-) negotiation of rights of use reveals that the 'sharing economy'⁴¹ has an influence on journalistic image communication: 'image sharing' at the interface of amateur and journalistic image communication adopts practices of the 'sharing economy', the gratuitous sharing and redistribution of content, which at the same time go beyond the (valuation) through likes.

The research project considers the digital image as part of digital visual journalism: acquiring image material online is relevant for locally operating media companies who use citizen photojournalism to bond readers to the respective media product. Also, image sharing practices might be one result of more and more precarious working conditions in journalism in general: photo editors obtain permission to distribute and redistribute and/or sell the images (if the message is answered by producers) in quite an effective way by sending out social media release forms and receiving responses unbureaucratically with a reply tweet. When discussing rights of use, as presented in this paper, it must be considered that the requesting photo editors have a knowledge advantage due to their profession. The producers will usually not be so well versed in the production business that they are able to appreciate all the consequences that might arise from a seemingly simple "yes" as consent to the use of their photo. It is unlikely that amateur photographers will organize themselves, for example, to demand fees for the use of their images – on the one hand, because these requests may remain sporadic, and on the other hand, because producers may have come to understand that free image sharing seems to be the norm for digital images. Against the backdrop of the transformations of photojournalism through digitalization, however, this should be viewed critically: Viewing photographs in general as a free good might minimize the fees of professional photojournalists. It may make sense to think about the question of remuneration for producers and to consider new concepts, for example a kind of bestseller remuneration: if a newspaper or photo agency were to earn a lot of money with a picture, producers could share in it. However, social media release forms exclude a remuneration of photos acquired online so far.

As media spectators, consumers, and digital image creators, the producers' role is threefold. This may explain why consent to use the images is given spontaneously and generously: digital image sharing is understood as a widespread and mostly unquestioned media practice. The interplay of image sharing, internet platforms and rights of use for images that can be attributed to citizen journalism raises a multitude of research questions that could only be hinted at exemplarily in this paper. Future research can be expanded to videos and moving images, and the utilization of bots to select or request photos. It is also important to address differences in US and European copyright law.

Photo editors, photojournalists, social media professionals, and producers who experience or work with digital photo sharing practices described in this article are cordially invited to contact me to participate in the study.

NOTES

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