Witnessing in the new memory ecology: Memory construction of the Syrian conflict on YouTube

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Abstract
With the pervasiveness of mobile technologies, witnesses have the opportunity to mediate up-close and seemingly truthful recordings of events. As such, “witness videos” have become prominent in news reports and serve as authoritative resources in the construction of memory. However, once they are uploaded to video-sharing sites and popular archives such as YouTube, they are being reassembled and remixed by distinct actors, along the lines of their own ideological agendas. Focusing on the chemical attack on Ghouta, Syria, this article investigates how witness videos are represented by uploaders (ranging from established media to activists) and structured by the affordances and sociotechnical practices associated with the platform. Hence, we argue, although the future memory of the attack is constituted by witness videos, it is powerfully shaped by various actors, both human and nonhuman. These mechanisms of memory construction are empirically explored by qualitative and quantitative analyses of meta-data and (remixed) content.

Keywords
Algorithm, archive, content analysis, curation, memory, Syria, tagging, user-generated content, witnessing, YouTube

Witnesses are pivotal agents in the (re)construction of past events. Because they “have been there” and experienced moments of political, legal, religious, and historical significance, they are commonly considered credible and authoritative (Zelizer, 2007). The rise

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of mobile recording devices, which enable a new type of “citizen witnessing” (Allan, 2013), now forces scholars to rethink the role of the witness in media discourses about the past. Disruptive events such as the terrorist attacks on 9/11, the 2004 Tsunami, the 2005 London bombings, and the “Arab Spring” demonstrate that witnessing has increasingly become something one does with a camera (phone) in hand.

In this article, we analyze witness footage concerning the chemical attack on Ghouta, a suburb of Damascus, which took place on 21 August 2013 in the midst of the civil war between the Syrian regime and opposition forces. Where professional journalists are often regarded as the bearers of information, reporters were absent in the immediate aftermath of the attack. The only footage of it was created by (opposition) activists and civilians. This makes the event a case in point concerning the role and function of witness videos in a “new memory ecology” (Hoskins, 2011b). Citizen witnesses increasingly replace professional journalists as “key producers of images that linger as historical markers of disruptive events” (Andén-Papadopoulos, 2014: 148) and mediate events through video-sharing practices on YouTube.¹

Speed as well as intensity of such coverage appears to have increased tremendously in recent years. Whereas it took weeks until Iraq’s genocidal chemical attack on the Kurds in Halabja in 1988 became known and visual material was scant (Darwish, 2007), video material from Ghouta was accessible within a few hours on YouTube. This platform facilitates and enhances mass (self-)communication (Castells, 2009) and simultaneously is a massive—yet problematic—archive of audiovisual representations. Taking the “crowd-sourced video revolution” (Sasseen, 2012: 4) as a starting point, this article aims to move beyond the prevalent scholarship on transforming production practices to investigate how eye-witness accounts are remixed and curated online. Witness videos uploaded to audiovisual archives are inevitably caught in the politics of visibility and representation of a conflict. The enduring Syrian civil war has stirred international politics and the public, not in the least because of the horrific images of death and suffering covered in international news bulletins. As Pannti (2013) argues, “gaining access to the mainstream media by providing eye-witness images has been a key strategy of the Syrian opposition groups in their effort to mobilize the support of distant others” (p. 16). The Ghouta attack arguably is the deadliest use of chemical weapons that was reported after the Iran–Iraq War (1980–1988). Estimates of the death toll range from 350 to 1500 civilians killed, among them many children (Sinjab, 2014). However, until today there is no clear evidence proving who was behind the attack. The opposition and most Western commentators point toward the regime, but others, such as the Syrian regime and the Russian foreign ministry, suggest that opposition forces are to blame in an attempt to malign Assad (Abrahams, 2013).

The aftermath of the attack was filmed by pro and contra Assad activists and neighborhood residents. Such witness videos are records of what happened but are shot in line with particular ideologies. Furthermore, these videos often are placed online by various uploaders, who may or may not have altered or reassembled witness footage, yet claim truth on the basis of this material. Distinct agents shape and reshape witness videos of news events after they are uploaded on YouTube, and hence, they actively try to construct future memory of these events. Therefore, this article analyzes the (re-)presentation of witness videos
of the Ghouta attack on YouTube and, more broadly, their role and function in the construction of public memory.

To investigate the process of memory construction within digital archives and the role of various agents therein, our study is guided by two interlinked questions:

1. How do different agents (re-)present witness videos of the Ghouta attack on YouTube?
2. How do the affordances of YouTube and the sociotechnical practices associated with this platform affect memory construction of the conflict?

Our analysis consists of two steps. First, we conceptualize citizen witnessing of news events by means of video-sharing as a relatively new media practice and the witness video as an increasingly prominent cultural form within a “hybrid media system” (Chadwick, 2013). Moreover, we argue that witness videos in popular archives such as YouTube are part of a broader shift in sociotechnical practices, constituting a “new memory ecology” (Brown and Hoskins, 2010; Hoskins, 2011a, 2011b). They authoritatively shape future memory of conflicts such as the Syrian civil war, and it is therefore pivotal to understand by whom and how this material is used. Second, we argue that witness videos are only sporadically represented in their original form on the platform. In this regard, the implied promise of new media technologies to shape future memory is somewhat downplayed by realized forms and practices. YouTube’s living archive, which supports both the storage and spread of witness videos, is created and curated by its users, a diverse group ranging from mass media to activists. Uploaders, as “agents of memory” (Zelizer, 2008) edit, (re)post, comment, share, tag, title, and “like” from their own ideological positions, remixing—that is, combining and manipulating—“raw” material and thus guide interpretations of witness footage. At the heart of these curating practices lie the affordances and technology of YouTube, which to a large extent affect which videos are found and watched and are thus essential to understanding how the archive is shaped. By focusing on the forms, practices and technologies of citizen witnessing in relation to a “globital archive” (Reading, 2011, 2014), this article explores how a politically charged event like the Ghouta attack is constructed within a new memory ecology.

**New witness accounts, new memory?**

Witness accounts have always been used in news coverage (Frosh and Pinchevski, 2009; Peters, 2001; Rentschler, 2004; Zelizer, 2007), but with the rise of citizen-produced eyewitness footage, scholarly attention for its inclusion in mainstream media is growing (Allan, 2013; Andén-Papadopoulos, 2013a, 2013b; Bock, 2012; Mortensen, 2011; Wall and El Zahed, 2014). However, the role witness videos play in the construction of memory in a “hybrid media system,” in which “old” and “new” media interact and are interdependent on each other (Chadwick, 2013: 4), has so far received less attention (cf. Reading, 2009, 2011). Nowadays, agents “create, tap, or steer information flows in ways that suit their goals and in ways that modify, enable, or disable others’ agency, across and between a range of older and newer media settings” (Chadwick, 2013: 4). These new
dynamics inevitably change the “what, how, why, and when of remembering and forget-
ting” (Hoskins, 2011a: 279).

Having their own means of production, witnesses increasingly replace professional
journalists as credible providers of up-close and immediate reports. Purposively taking
out a camera-phone or a similar device and recording what is seen on the spot have
become a ritual which potentially transforms ordinary people into important actors in the
news-making process (Allan, 2013; Bock, 2012; Frosh and Pinchevski, 2009). Hence,
the observer’s subjective experience of the event (her “being there”) is seemingly objec-
tively recorded: the responsibility for what is represented is shifted “from a human prac-
titioner to the perfect recording technology of a camera” (Bock, 2012: 644). The use of
a medium (technology) by a medium (witness) makes the latter more authoritative: wit-
nessing, quite literally, is objectified, giving the witness as text as well as the witness as
person an aura of credibility (Peters, 2001: 709).

By having been there and simultaneously “proving” this by their videos, witnesses
let the world know about a “real” situation. This is the reason why witnessing with a
camera (phone) in hand potentially becomes a political act in itself. As Andén-
Papadopoulos (2013a) convincingly argues, camera-witnessing offers the opportunity
to “provide a public record of embodied actions of political dissent for the purpose of
persuasion” and to bypass official perspectives in (state controlled) media (p. 4). It
may be perceived as an evidential trace of atrocity. As in cases such as the Ghouta
attack, these recordings become “mementos of a lived, embodied experience of a criti-
cal historical occurrence and, crucially, of the photographer’s own role in this event”
(Andén-Papadopoulos, 2014: 150). The media practice concurrently is a memory prac-
tice (Schwarz, 2014): the authority of presence appears to be inscribed in witness vid-
eos. This quality is particularly powerful when witness footage is used to reconstruct
politically sensitive pasts.

The observation that witness videos are authoritative traces of a past reality prompts
questions regarding the video-sharing sites in which witness videos end up. Reading
(2009, 2011) conceptualizes these sites as “globital archives.” A conflation of global
and bit, the concept is reified in the case of the Ghouta attack: videos and photographs
were created with and saved on camera phones and other recording devices, uploaded
and categorized on platforms such as YouTube, further disseminated by news organi-
zations and watched on mobile devices and television. Correspondingly, Hoskins
(2011b: 29) asserts that today “memory is lived through a media ecology wherein
abundance, pervasiveness and accessibility of communication networks, nodes, and
digital media content, scale pasts anew.” Hand (2014), following Hoskins, asserts that
“the present epoch of potential memory in which huge numbers of traces are scattered
across proliferating media types, [produces] an unpredictable ‘living archive’ through
which unexpected ‘emergence’ of data about the self is always a possibility” (p. 2).
This memory potential is not restricted to data about the self, but leads to and is a prod-
uct of the endless remixability of resources, objects, and representations of the past:
“digital objects are also fluid, rewritable, and arguably less “fixed” or “durable” than
their analogue counterparts, meaning that traces are retrievable and also reconfigur-
able in ways that similarly problematize linear models of past and present” (Hand,
2014: 3). This leads to a confluence of classic theoretical dichotomies between
personal and collective, private and public, historical and experiential, popular and official memory. An ecological approach to memory entails examining the interplay between the different media technologies, practices, and actors that are involved in assembling, remixing, and curating (visual) content. This is especially relevant because, as the discussion above has demonstrated, witness videos are potentially powerful building blocks in the reconstruction of the past. Which sociotechnical practices, memory agents, and actors, then, are involved in this reconstruction?

**Structuring future memory: curating practices, algorithms, and visibility**

The profusion of digital material uploaded by witnesses of the Ghouta attack holds, at least in theory, the promise of various reconstructions of this event based on videos shot from every angle and told by many voices. Yet, the globital archives that constitute a new memory ecology are not neutral spaces in which every witness is equally heard. Rather, they are shaped by powerful agents, invite and require specific sociotechnical practices, and are enabled and restricted by platform-specific affordances. We argue that curating practices on YouTube—giving titles, tagging, and describing content—are essentially political practices that structure content and anticipate search behavior.

On YouTube, users are “powerful curators in the process of categorization and classification” (Gehl, 2009: 47). The “classificatory imagination” (Beer, 2009: 998) of an uploader partly determines whether or not her video turns up as a result of a search query because the algorithms—“encoded procedures for transforming input data into a desired output” (Gillespie, 2014: 167)—supporting and guiding search queries on YouTube depend on these categorizations and classifications. In fact, they are more important, in terms of search results, than the number of views or the popularity of the user who uploaded the video (Gehl, 2009). Based upon these user-provided classifications, algorithms “provide a means to know what there is to know and how to know it” (Gillespie, 2014: 167). Thus, the interaction—through curating practices—between an uploader of a video and the algorithm ultimately determines the (in)visibility (Bucher, 2012) of certain videos within YouTube’s searchable archive.

By means of their curating practices, uploaders ready their videos for the algorithm. However, YouTube itself is an active agent in this process. First, YouTube search results are sorted by relevance. Relevance here signifies how well the search terms connect to the titles, tags, and descriptions given to videos. Second, by letting uploaders choose to put their videos in predefined categories such as “news and politics,” “activism,” “people and blogs,” and “nonprofits and activism,” the platform guides the uploaders through the first step of curation of their material. Third, on the level of visibility of certain videos, YouTube “algorithmically demotes” videos that are especially gory, effectively keeping them from showing up on most-watched lists or user home pages (Gillespie, 2014: 171–172). Fourth, on the level of search, YouTube, with technical support of its owner Google, algorithmically anticipates what a user is looking for by providing suggested search terms, an automated feature called “Autocomplete” or “Google Suggest.” Finally, certain videos are automatically pushed on top search results by YouTube’s own channel, Spotlight, or by commercial partners of the platform.
Some uploaders engage with YouTube’s algorithm in more effective ways than others. Gehl (2009) makes the distinction between “curators of storage” and “curators of display.” In curating lies authority, because the curator decides which content is shown in which way. Videos are uploaded by users (curators of storage), something that is popularly viewed as an activity that is in direct opposition to the hegemonic position of mass media as content producers and disseminators. “Without user participation in building YouTube’s archive, a site like YouTube would not exist,” Gehl (2009: 47) asserts. However, the potential audiovisual memory stored in YouTube’s archive is reassembled by “curators of display and exhibition,” which often are large media companies, not “ordinary people” (Gehl, 2009: 46–47). For example, by tagging themselves to the videos they (re-)upload, legacy media increase the chance of their videos showing up in the search results.

As soon as objects enter an archive, whether it is YouTube or a traditional archive, they are “liberated” from their complexity of use and meaning in a particular context (Gehl, 2009: 49). They are inherently decontextualized. This means that, as historical traces, they are detached from the conditions and situations in which they were produced. Therefore, digital archives like YouTube are in need of authority to evaluate and display uploaded items within their “new” context. Algorithms and uploaders cooperate in rearranging and reassembling items, thus reactivating mediated memory of past events in terms of the present. The typical sociotechnical practices associated with placing a witness video on YouTube—from shooting and using footage in other videos to tagging and titling—actively determine the visibility of videos and consequently which videos are dominantly represented in the memory ecology. To scrutinize memory construction on YouTube, it is therefore pivotal to study how “these representations of the past and their unique temporality are produced by heterogeneous networks consisting of people, computers, and algorithms that aggregate and sort the contributions of different users” (Schwarz, 2014: 7–8). In the following, we aim to explore these interactions between representations, actors, and technologies.

**Research design**

**Method**

In order to empirically examine memory construction on YouTube, we conducted both quantitative and qualitative content analyses. The first part of our analysis focuses on the content of the videos, which allows us to draw conclusions about what content is actually visible on YouTube, and thus potentially constitutes future memory of the Ghouta attack. A coding scheme was developed to structurally categorize and deductively analyze both their form and content. Four variables were included: (1) Cinematic layer (which type of shots were used?), (2) Visual content (what is seen?), (3) Audio content (what can be heard?), and (4) Extradiegetic elements (uploader; number of views, likes, dislikes and shares). The coding scheme allows us to classify the videos in terms of distinct frames. Uploaders “select some aspects of perceived reality and make them more salient in the communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation and/or treatment recommendation” (Entman, 1993: 55).
They thus try to guide to reception of a video. Second, the tags, titles and descriptions—the textual results of curating practices of uploaders—were coded into open coding categories. Important to note is that although “the process of induction involves drawing generalizable inferences out of observation,” it contains a deductive element too because the researcher goes back and forth between text and codes (Bryman, 2012: 26). The titles and descriptions, as textual markers that might steer readings of the videos, were obtained from the respective sections in the YouTube interface. Because the platform does not show the tags uploaders give to videos, we searched the source code for “meta name = keywords.” Most tags are not only written in English but also in French, German, Italian, and Arab. The latter were transferred from Arab language codes into characters and translated. This search resulted in 521 tags we categorized inductively. Two weeks after initial coding, both the videos and the textual meta-data were coded again by one of the authors in order to increase validity of the results. This two-step method allowed us to analyze who uploaded the most viewed videos, what the videos show, how this information is communicated, and how these videos are curated.

Sample

A purposive sample of witness material about the chemical attack on Ghouta has been compiled. The sample includes both original witness videos and videos shared by other uploaders who used and remixed them. In the latter case, only those parts concerning the Ghouta attack were analyzed. Seven search queries were used to compile the sample: “Syria August 21,” “Syria chemical attack,” “Ghouta Syria,” “Ghouta massacre,” “Ghouta August 21,” “Syria gas attack” and “chemical weapons Syria.” The top five results—in terms of view counts—after each search were included. Videos that showed up in the results but did not relate to the topic or did not use witness material were excluded. This sampling method is partly borrowed from Burgess and Green (2009) and is inspired by their observation that popularity metrics are not only descriptive but also performative: “they make calculable and measurable a simplified and atomized model of audience engagement” (p. 41). After omitting identical videos, this sampling method resulted in a sample of 31 most viewed videos.

Results and discussion

Form and content

To understand how witnesses have documented the attack, the first part of the content analysis focuses on original witness videos, including those embedded within news reports on Ghouta. What should be noted first is that original witness videos in the sample are very factual and almost technical. The camera is used here as an objective recording device to provide evidence that a chemical attack indeed took place. The witnesses appear to count on the power of the visual; barely any comments are audible. The ones that are made are “Allahu Akbar” (God is great) or express emotion by crying. This can be considered a rhetorical strategy: by not commenting, witnesses let the images speak for themselves. Conscious choices in the processes of filming reveal political stances
toward the conflict as the videos disclose an awareness of what to film. Focusing on the effects of the nerve agent Sarin, for example, many videos aim to provide technical details of symptoms. They contain detailed shots of runny noses, constricted pupils, and convulsive, spastic bodies. Often rows of dead bodies are shown (Figure 1). Another strategy to increase the veracity and credibility of the videos is a focus on doctors helping people in the scene, or giving statements in front of the camera.

Details in the videos “prick,” thus making them more than a recording. This relates to Frosh and Pinchevski’s (2009) argument that “this is a new kind of witnessing, one that is radically inclusive since it equally registers the principal subject and the extraneous detail in the scene before the camera” (p. 9). This dimension is gruesomely illustrated by the fact that all but five videos in the sample show children who are in incredible pain and barely breathing or whose dead bodies are scattered across a floor, wet from the water that has been used to rinse the chemical agent off their bodies (Figure 2). They wear pajamas or oversized t-shirts and are apparently lifted from their beds. Showing children in this way is the ultimate strategy to prove that the attack was not staged, which some commentators claimed. Additionally, or maybe consequently, each video that explicitly shows children either in pain or dead has 500,000 to 1.5 million views.

All but four videos in the sample are shot from the point of view of the witness; that is to say, cameramen turn the camera as they walk around and are themselves part of the scene. The few videos that have not been filmed by a handheld camera are photo collages (e.g. ABC News, 2013b; Kirnéa, 2013) or show the alleged firing of the rockets during daytime (e.g. GlobalLeaks, 2013). Witnesses use close-ups and medium shots to show bodies in pain. When focusing on details, the camera is brought close to the scene, instead of automatically zooming in. This way of filming enhances the authenticity of the video: it seemingly is a direct representation of the real. Indeed, the “vérité aesthetic” of witness videos “heightens the effect of ‘realness’ and ‘closeness’ already so powerfully signified by the sense of viewing events from the involved perspective of those who lived or experienced a crisis as it was actually happening” (Andén-Papadopoulos, 2014: 154). The clips show the chaos that comes after an attack, an impression enhanced by shaky and blurred images and quick camera movement. This
leads to an immersive viewer experience which creates the sense of a present past that repositions the viewer as a witness herself.

**Uploaders and frames**

The question of how videos are framed should be preceded by identifying the main uploaders, especially with regard to a politically charged event such as the chemical attack on Ghouta. Different uploaders pick and choose available content in order to create new(s) stories. By identifying the main uploaders and the frames they apply in their remixes, we demonstrate how witness material is used to provide different accounts about this specific past. Moreover, it allows us to make claims about the presence and power of certain types of uploaders.

Four types of uploaders were identified, based on their “about” pages, websites, and the content they shared: legacy media, web-native media, activist media, and citizen witnesses. The most prominent uploader type in our sample, *legacy media*, is defined as media that have had a pre-web presence and/or use other platforms (radio, TV, paper) as their main means of communication. No distinction was made between public, commercial, and independent media. In most cases, these outlets employ professional journalists (e.g. CNN, ABC News, Al Jazeera). *Web-native media* did not exist prior to the emergence of the Internet and aim to provide an alternative to legacy media. Yet, they adopt a journalistic approach and have a (partly paid) staff (e.g. Truthloader, The Young Turks, ANAClone). Both legacy media and web-native media declare to function as objective news providers. We defined *Activist media* as strongly political media organizations or individuals who (often temporarily) pursue a political goal. Their declared function is to change views and call for political action (e.g. TheSyrianRev2011, GlobalLeaks, Eretz Zen). The fourth uploader type, *citizen witnesses*, consists of individuals who share...
either their own experiences or raw material shot by others. Results reveal that although the majority of videos were uploaded by legacy media (Figure 3), the three most-watched videos in our sample were uploaded by web-native media (ANAChannelEng, 2013; The Young Turks, 2013; Truthloader, 2013).

While one clip in the sample uploaded by a citizen witness has by now been removed from YouTube, all videos curated by legacy media and well-known and well-watched online news shows are still available a year after they were uploaded (200,000–1.5 million views). These results suggest that especially legacy and web-native media select and channel witness content to wider audiences on YouTube. Simultaneously, they fulfill a gatekeeping role in both the storage and, indeed, display of witness videos. The videos that are watched more than 200,000 times most often are compilations of original witness footage, assembled into a (online) news report. Indeed, in today’s “hybrid media system,” content spreads from medium to medium, being altered along the way (Chadwick, 2013). This supports Reading’s (2014) argument that globital archives are in constant motion and never static: due to the nature of digital content, recorded witness experiences can be remixed, deleted, and used in different contexts for distinct purposes. By contrast, our analysis shows that, while never static, YouTube’s archive concerning the Ghouta attack is partly stabilized by powerful uploaders like CNN and Al Jazeera.

Three dominant ways of telling the story of the attack through (remixing) witness videos can be inferred from the material in our sample. First, there is the questioning frame, applied by legacy and web-native media that follow journalistic norms. These uploaders adhere to a detached style and primarily ask the question, “Were chemical weapons used?” If so, who did it? These videos use witness material as visual quotation. A voiceover or presenter tells the viewer that he or she should make up his or her own mind when it comes to judging the veracity and value of the videos. For example, Cenk Uygur, The Young Turks presenter, says after one report: “You can judge what you saw with your own eyes. We don’t have any more information than that” (The Young Turks, 2013: 5, 17). Comments such as these not only show that journalists are skeptical about the footage coming from Syria but also that they shift the responsibility for interpreting witness videos to viewers themselves. The journalistic analysis is focused more on
determining the veracity of the videos than on what is seen in them, thereby leaving, for the better or the worse, space for viewer interpretation.

Second, activist media apply an *accusatory frame and an involved style*. They use footage shot by themselves, other activists or citizen witnesses in order to assert that Assad is to blame for the chemical attack. The sentence that might best describe this stance is: look what Assad did. He is to blame for our suffering. Uploaders such as The Syrianrev 2011, 1Syriatruth, and SouriaArchive:SA#14 first and foremost want to document the atrocities as to create an archive that can be used in the future to prove that Assad’s regime used chemical weapons on its own people (Syrianrev, 2011; 1Syriatruth, 2013; SouriaArchive:SA#14, 2013). The mediated witness accounts are used to illustrate the direct effects of the Assad regime’s violence on non-militant, ordinary citizens (e.g. the in-video text in Figure 4).

Third, a *moral frame* is adopted by citizen witnesses. They do not immediately point fingers, but centralize the misery of the victims and the humanitarian crisis that is the result of the attack. “Look, world,” these clips are saying, “Syrian people are suffering. I was there.” A recurring *topos* is that of a father being reunited with his children who are either dead or in shock (e.g. Fazzamin, 2013; SYMAN NOLUN, 2013; Figure 5). Videos such as these demonstrate how the daily lives of civilians are violently disrupted by the atrocities of war and provide personal accounts of the conflict that illustrate or represent the collective suffering of the Syrians.

The four types of uploaders in our sample are thus not only trying to mediate the conflict directly but are also consciously engaging with future memory to promote their interpretation of events. This can be interpreted in terms of Tenenboim-Weinblatt’s (2013) concept of “mediated prospective memory,” which describes how media have the potential to remind us of the public agenda of the past. The uploaders of the videos in our sample are concerned with creating their own version of this agenda. What is apparent

![Figure 4. Screenshot of video providing disclaimers (TheSyrianrev2011).](image)
from this research is that videos uploaded by legacy and web-native media—with their idiosyncratic frames—end up high in the search results, whereas activists and citizen witnesses do not. The next step in our analysis attempts to provide an explanation for this popularity by examining the curating practices of these uploaders and how they relate to algorithmic agency and visibility on YouTube.

**Curating**

Curating practices are not descriptive or neutral, but are steered by the professional, political, and ethical motives of uploaders. As a result, tags, titles, and descriptions reflect the purposes the footage serves, what uploaders want to emphasize, how they anticipate search behavior, and how they try to preconfigure the reception of a video. As such, the tag analysis below is an analysis of practice, rather than content. By comparing the frames used in the videos with the curated descriptive elements attached to them, we explore how witness videos are appropriated by uploaders, gain visibility on YouTube, and potentially become historical markers. YouTube requests that users upload their videos into one of the preexisting categories the platform provides. In this first step of curating, most videos in our sample were categorized under “news and politics” or “activism,” but other categories included “people and blogs,” “nonprofits and activism,” and “education.” This categorization illustrates the division in the sample: in most cases, uploaders are proclaiming either to be objective or involved. Of the 31 videos in the sample, 27 are tagged, the second step in curating. On average, each video has 18 tags. They concern (1) place, (2) weapon type, (3) military actor, (4) political actor, (5) media actor, (6) political issues, (7) type of news, (8) state of affairs, and (9) religion. Figure 6 shows the
distribution of tags. Tags such as “Syria chemical weapons” were included in two categories, in this case “place” and “weapon type.”

The tags connected to the videos uploaded by legacy and web-native media mostly reflect the questioning frame; they connect directly to what is discussed in the video (place, weapon type, media actor and state of affairs). For example, the most-watched clip “Chemical attack in Syria” by Truthloader (1.5 million views) has 29 tags, including “sarin gas” (weapon type), “Syria” (place), “Free Syrian Army” (military actor), and “Syria latest” (news type), but also “Syria chemical weapons” and “Syria chemical attack.” By providing as much tags as possible, uploaders such as Truthloader increase the chance of ending up high in the search results. The tags provided by activist media are more geared toward the apparent aggressors and military intervention, whereas those provided by citizen witnesses focus mostly on the description of place. What this shows is that mainly descriptive, rather than suggestive, tags do well in terms of search results. Also, legacy and web-native media tag themselves, a tactic by which they increase the visibility of their uploads.

The dominant frames identified in our analysis of the videos do not always correspond with the ways in which videos are tagged. The second most watched video in our sample, “Young girl affected” (ANAClubEng, 2013), illustrates well how tags diverge from the uploader’s declared professional or ideological stance. Instead of describing what is seen in the video—a young girl having difficulty breathing—the tags focus on the broader context of the attack. Tags such as “uprising,” “Assad,” and “human rights” have no denotative descriptive function but rather focus on the connotations evoked by the video: there are human rights issues at stake here, caused by the clash between a President and his people. Whether these tags reflect the political motives of the uploader or that they just anticipate the search queries of YouTube users remains unclear. However, the tags and content do show how this precarious moment of life after the attack is framed as a consequence of Assad’s decisions and therefore suggests the use of an accusatory frame (used by activist media) rather than the questioning frame applied in the video.

Titles and descriptions of the videos further establish the questioning, accusatory, and moral frames adhered to by the four uploader types. The questioning frame is supported by titles such as “Did Syria Use Chemical Weapons on Its People” (ABC News, 2013a)
and “Inside Story: Syria: Chemical Warfare?” (Al Jazeera English, 2013). The descriptions below the videos with titles like these are tentative: “In Syria, women and children were among the dozens found dead under suspicious circumstances this week” (Al Jazeera English, 2013) and “Syrian opposition claims hundreds have died in a chemical weapons attack in Damascus” (ABC News, 2013a). The descriptions that follow are either taken from existing press reports written by news agencies such as Reuters or AP or by the news organization itself. Consequently, news media offer extended and detailed reports in the description section, thereby providing extra information alongside the video and reaffirming their frames. These titles and descriptions warn users that the veracity and authenticity are to be questioned, for example:

The reports, which could not be independently verified, come as a UN team is in Syria to investigate the alleged use of chemical weapons during the two-year civil war. (Euronews, 2013)

This type of description shows an awareness of the power of witness videos in claiming truth. Journalistic skepticism is used here to contextualize them. Selecting from a vast pool of available videos, legacy media act as curators of display and by editing and providing text, they reestablish themselves as “memory agents” in globital archives. The accusatory and moral frames adopted by activist media and citizen witnesses show involvement and an explicitly subjective stance. In this case, the videos are used as rhetorical tools in the discursive battle waged on YouTube between users who either support or oppose the Assad regime. In the contra Assad camp, which uploaded most videos, both activists and witnesses of the attack share a similar goal: show the world the atrocities of chemical warfare and move a global audience into action. This is also illustrated by multilingual titles and descriptions written by activists and by unusual formatting:

► August 2013 ♀ ATROCITIES IN SYRIA ~ CHEMICAL ATTACK ~ Bashar Al Assad (Kirnéa, 2013)

Moreover, the certainty expressed in the titles and descriptions on Assad’s forces being the perpetrators behind the attack is telling:

Tarma, Zamalka and again, the Syrian regime targeted the towns of Eastern Gouta […] Other videos which show targeting civilians in the suburbs of Damascus [sic] with chemical weapons on August 21, 2013. (The SyrianRev2011, 2013)

Another activist, Eretz Zen who describes himself on his “about” page as a “secular Syrian opposed to having my country turned into a Taliban-like state” provides an alternative perspective:

This video footage that recently surfaced shows jihadi militants from the Islam Battalion that operates in the Damascus suburb of Eastern Ghouta and led by Zahran Alloush launching an operation called ‘al-Reeh al-Sarsar (Almighty Wind) on the Damascus suburb of al-Qaboun in Eastern Ghouta at the early morning of Wednesday, August 21, 2013. (Eretz Zen, 2013)
The titles and descriptions demonstrate that similar content can be used for different purposes. They may provoke particular readings, and through them the position of the uploader becomes clear. The combination of the visual and textual dimensions of witness videos appearing on YouTube “casts the audience as the ultimate addressee and primary producer, making the collective both the subject and object of everyday witnessing, testifying to its own historical reality as it unfolds” (Frosh and Pinchevski, 2009: 12). The future memory of the Ghouta attack as it is represented in YouTube’s archive changes with every addition and deletion and is therefore very much contingent upon audiences who both produce and consume witness texts.

**Conclusion**

In this article, we identified contemporary citizen witnessing and its associated practices as key components of a “new memory ecology.” In the first step of our analysis, we focused on formal and stylistic characteristics of witness videos and asked how different agents (re-)present these concerning the Ghouta attack on YouTube. Witnesses capture their experience by means of a seemingly neutral technology. The suggested objectivity of the camera-phone, or a similar technology, is a powerful element in the reconstruction of past events. At the same time, witnesses are subjectively part of the scene, as much as they are observers. This internal paradox is also apparent in the witness videos of the Ghouta attack: they convincingly demonstrate—not in the least because of the sheer number of videos—that a chemical attack took place, while both pro and contra Assad witnesses produced footage.

Different uploaders use these videos and remix them in order to support particular frames. While the witnesses who shot the videos are concerned with proving that a chemical attack took place, the most watched, remixed videos concerning the event apply a questioning frame. For better or worse, citizen witnesses are not immediately regarded as trustworthy by legacy and web-native media. In direct opposition to this are the uploads by activist media and citizen witnesses themselves, which are used to persuade publics to act, either morally or politically.

Second, we have analyzed how the affordances of YouTube and the sociotechnical practices associated with it affect future memory construction. Our analysis reveals how conscious choices and automated processes in the different stages of mediation, from shooting the video up until the moment of watching, affect the shape and content of YouTube as a global archive. Uploaders are actively engaged in increasing the visibility of their videos by tagging and curating these in effective ways. The witness video, as a persuasive narrative device, is thus used to support varying claims about reality. By doing so, actors aim to influence public debates while at the same time construct future memory about the Ghouta chemical attack.

The sharing of witness accounts might be occurring on a much larger scale and speed than ever before; yet, other factors are involved in this trajectory, ranging from mobile recording devices, affordances of the platform to search engine algorithms, and the policies regarding the nature of content that can be uploaded. New media technologies indeed provided witnesses with the means to let the world know about the Ghouta attack. Yet, which accounts are prominently visible on YouTube is determined by the logic of
the platform and curating practices of powerful actors. The future memory of the Ghouta attack is thus simultaneously influenced by actors who know how to curate effectively and by the algorithmic logic and infrastructure of YouTube.

This article has combined established methods (content analysis) with the study of meta-data (tag analysis) to analyze how witness material is used to “promote specific public understandings of the past” (Neiger et al., 2011: 19). A closer examination of web archives’ technological architectures might provide new understandings of such technologies as active agents in the new memory ecology. Moreover, analysis of the viewers’ comments can shed light on the political negotiation and meaning-making processes of audiences. Our research demonstrates that the fields of witnessing and memory concerning the enduring conflict in Syria are sites of discursive battles. Through everyday media practices such as remixing, tagging, titling and describing content, agents—whether they are large media companies or individual activists—use and frame witness videos according to existing professional and political ideologies in a struggle for meaning and attention. Our analysis shows that witness videos prove invaluable for memory work. Correspondingly, their (re-)presentation and visibility in popular archives such as YouTube should be scrutinized in any discussion of them.

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Notes

1. While witness videos from Syria were uploaded on other platforms as well, most notably LiveLeak, we focus on YouTube because it is the dominant platform for video-sharing.
2. The average length of the videos in the sample is a little under 4 minutes. However, this average is distorted by three videos of 20 minutes or longer. Most videos are in between 1 and 2 minutes in length. The average number of views of the sampled videos is 179,911. This might seem small, but the use and spread of particular content are multiplied because the same witness video footage is used in many videos. Three videos were, after closer examination, excluded from analysis because they were partly identical to other videos. One video included in the sample has been removed from YouTube in between sampling and analysis. All videos have been accessed on 27 October 2014.
3. The latter is highly unlikely because the attack took place during the night. The photos used in collages might, however, also be stills from videos.

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