university of groningen

University Medical Center Groningen

University of Groningen

Platforms of memory

Smit, Pieter Hendrik

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2018

Link to publication in University of Groningen/UMCG research database

Citation for published version (APA):
Smit, P. H. (2018). *Platforms of memory: social media and digital memory work*. [Thesis fully internal (DIV), University of Groningen]. University of Groningen.

Copyright
Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the “Taverne” license. More information can be found on the University of Groningen website: https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment.

Take-down policy
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): http://www.rug.nl/research/portal. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Download date: 21-01-2023

Platforms of Memory

Platforms of Memory

Cover design: Sylvia van Schie (http://www.sylviavanschie.nl/)
Lay-out and print by: ProefschriftMaken // www.proefschriftmaken.nl

ISBN (print): 978-94-034-0403-5
ISBN (electronic): 978-94-034-0402-8

Copyright © 2018, Pieter Hendrik Smit

All rights reserved. No part of this publication may be reproduced, stored in or introduced into a retrieval system, or transmitted, in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without the written permission of the author.

university of groningen

Platforms of memory

Social Media and Digital Memory Work

PhD thesis

to obtain the degree of PhD at the
University of Groningen
on the authority of the
Rector Magnificus Prof. E. Sterken
and in accordance with
the decision by the College of Deans.

This thesis will be defended in public on

Thursday 29 March 2018 at 16.15 hours

by

Pieter Hendrik Smit

born on 5 November 1986
in Groningen

Supervisor
Prof. M.J. Broersma

Co-supervisor
Dr. A. Heinrich

Assessment Committee
Prof. H.B.M. Wijfjes
Prof. A. Hoskins
Prof. J.F.T.M. van Dijck

Voor mijn ouders, zussen en broer

Dank voor alle mooie herinneringen

Contents

	Acknowledgments	8
	Introduction	10
Chapter 1	From memory to memory work	19
Chapter 2	Memory work in a new media ecology	45
Chapter 3	Between practice and materiality: Seeing memory work through the lens of practices and affordances	67
Chapter 4	Methodology: Researching digital memory work	81
Chapter 5	Witnessing in the new memory ecology: Memory work and the Syrian conflict on YouTube	97
Chapter 6	Activating the past in the Ferguson protests: Memory work, digital activism and the politics of platforms	117
Chapter 7	The limits of an 'open' past: Memory work on Wikipedia and the downing of flight MH17	139
	Conclusion	165
	Bibliography	177
	List of referenced YouTube clips	199
	List of referenced Wikipedia pages	201
	Appendix 1 – coding categories for talk page threads	203
	Appendix 2 – Time path of significant events in the aftermath of the downing of MH17	204
	English summary	205
	Nederlandse samenvatting	209
	Curriculum Vitae	213

Acknowledgments

This dissertation could not have been completed without the support from family members, friends, and colleagues. With the risk of inevitably forgetting someone, I would like to express my gratitude to some of them.

In the first place, I would like to thank my wife Iris for her continuous faith in me. Her patience, care, and proactive attitude have kept me in one piece and, without a doubt, helped me complete this dissertation in time. I truly could not have done it with her. Also, the thought of the arrival of our son Tibbe has kept me going the last nine months. Thanks, little man.

Various colleagues have been crucial in the development of this dissertation. In particular, I would like to thank my supervisors Marcel Broersma and Ansgard Heinrich. Over the last five years we have had great meetings, ranging from brainstorm sessions over coffee to email exchanges in the middle of the night, right before deadlines.

Marcel, thanks for you strategic and creative thinking at various stages in this project. Also thanks for providing me with the opportunity to teach and to do research within a phenomenal department. I owe much to you.

Ansgard, ever since you were my MA supervisor, we have had many conversations, whether they were about global politics or domestic issues. Your determination and courage, especially in the last two years, have inspired me. Thank you for that. Also thanks to Nola, whose smile is the best antidote to pensive moodiness there is.

Over the last five years, the department of Media and Journalism Studies at the RuG has become like a family to me. People have come and gone, but the culture within the department has remained the same. The department's openness, helpfulness, ambition, and high professional standard have contributed greatly to the completion of this dissertation. I'd like to thank a couple of people in this department in particular.

Frank, former roomie, HR-advisor, fellow Groninger, colleague, paranymph, friend, thanks for all the great talks in the office, at the gym, and over many beers. Never change, always stay F(f)rank (and feed me burgers when I need them most). Michael, thanks for introducing me to the DMI in Amsterdam, IPAs and Michael Stevenson studies. Stay snarky (and come back to Grunn). Robert, former roomie, master of naps and Marx, thanks for your jokes and letting me write a chapter with you when I needed to reset my mind. Anna, former roomie, sister from another mother, my favorite hippie. Please keep allowing me to draw on your white board and I'll listen to media effects mumbo jumbo. Thanks for being Anna. Marc, thanks for letting me win at squash and share what's on our *corazón*. Dana, thanks for introducing me to Latour back at one of the first RMeS events in Groningen six years ago. Everything is material.

Special thanks goes out to Scott Eldridge II for his sharp editorial eye when he proofread the introduction and conclusion of this dissertation. Keep Scottifying.

Super special thanks to Tamara. She has not only read and commented on various parts of this dissertation, but also listened patiently to my complaining and motivated me throughout the process of writing. Big hugs, Tamara.

In no particular order, thanks Sanna, Erika, Chris, Todd, Berber, Huub, Susan, Eli, Yannis, Yigal, and Sabrina for being and having been the awesome colleagues you are! Colleagues/friends from other departments that deserve to be mentioned are James and Kiki, fellow PhD-lecturers. Thanks for the coffee breaks, lunches, dinners and drinks we've shared.

This dissertation would not have been brought to fruition without the institutional support of the Faculty of Arts at the RuG, the Groningen Research Institute for the Study of Culture (ICOG), and the Graduate School for Humanities (GSH). I am grateful that I was able to fulfill the role of Lecturer-PhD (docent-promovendus) in the last five years. I am convinced that teaching while also writing this book kept me sane. Moreover, this combination gave me a vast amount of experience I will rely on during the rest of my career. By extension, I want to thank the students in the minor, BA, and MA programs in Media Studies and Journalism.

I would also like to thank the Research School for Media Studies (RMeS) for the inspiring Summer and Winter Schools they offered and for the opportunity to present my ongoing research. Moreover, I made some good friends during RMeS events, in particular Tom, Tim Niels, Alex, and Abby. Thanks for showing interest in my work and for the discussions and debates we've had.

Of course friends outside the university setting deserve a special word of thanks. They are the ones who put both of my feet on the ground and offered the necessary distractions from work. Menko, my oldest friend, thanks for the walks and talks. Jules, Thomas, and Sven, thanks for the wines and whiskeys. Koen, GJ, and Tom, thanks for the trips to Berlin and other places (and of course for the GeKoToRi app). Asing, for the trips to IMAX. Roeland, thanks for your common sense and good taste in films and books. Tim and Annemarie, Alex and Rosan, Teelkien, Alexander, Steven, and the rest of the "O&N" group, thanks for being there, also during the rest of the year, of course.

Sylvia, thanks for designing the best cover I could wish for and for being such a good friend to Iris and me.

Last but not least, I would like to thank the people to whom this dissertation is dedicated: my parents Anne and Christien and my siblings Frederiek, Sybrig, and Coen. They provided the solid base on which this study has been built: happy memories.

Introduction

> Each new medium imprints its own special flavor to the memories of that epoch. (Bowker, 2008, p. 26.)

People increasingly turn to social media platforms to share their knowledge, opinions, experiences, emotions and feelings of and about the past. They come together on Facebook to mourn or to commemorate a deceased friend or community member. Twitter can become a place to celebrate a national anniversary or to reminisce. People use YouTube both to save videos on atrocities and of their child's first steps. They save and share their photos of events on Instagram, whether they are of birthdays or national memorial days. And on Wikipedia, editors collaboratively reconstruct historical events. These diverse engagements with the past on, by, and through platforms are what I call *digital memory work*.

Memory work is as old as humankind, and it has always involved specific technologies and techniques—whether they are cave paintings, rituals, writing, or television. Memory work can be more personal, like diary writing, or more collective, as in the case of national anniversaries and commemorations. It encompasses the transfer and reconstruction of knowledge and experience of the past into the present and future. This occurs through and by specific practices, technologies, and cultural forms and, often, for specific goals. This makes memory work inherently political. Which and whose version of the past is carried into the future is the result of a continuous power struggle. Hence, I argue, the past is continually being constructed in the present by various social actors with their own goals and agendas. Nowadays, this process increasingly involves social media platforms. These platforms affect memory work—like the media technologies before them—in idiosyncratic ways. The primary effort of this dissertation is to trace how different social actors use platforms for *digital* memory work and, concurrently, how platforms enable, shape, and constrain it.

The focus on memory *work* instead of 'simply' memory is a conscious decision. The word 'memory' can mean many different things to many different people, up to the point that the term risks becoming meaningless. As cultural theorist Marita Sturken (1997, p. 1) writes: "Memory forms the fabric of human life, affecting everything from the ability to perform simple tasks to the recognition of the self. Memory establishes life's continuity; it gives meaning to the present, as each moment is constituted by the past." Like the terms nature and culture, memory is incredibly hard to grasp and may be attached to anything and everything. Memory as it is used in this study is not an object of positivistic scientific inquiry and it is not my aim to 'discover' facts and truths, naturally or socially, about it. Rather, one of the goals is to demonstrate that memory is always in a state of becoming and is never 'fixed'. It is re-affirmed, challenged, or negotiated—both as a concept, capacity and a process. Memory is, therefore, a process of "social construction" (Berger & Luckmann,

1966). Memory *work*, then, describes the *ways in which* and *the means by which* the past is constructed (Van Dijck, 2007, pp. 5-7). It describes how the past is *worked* in the present.

This study, phrased alternatively, is about the ways in which the "politics of platforms" (Gillespie, 2010) are interwoven with the politics of memory work. "At the most general level," writes Srnicek (2017, p. 43) "platforms are digital infrastructures that enable two or more groups to interact." Like all media, platforms are constituted by users, communities, practices, technological features and architecture, design, form and content. Also like media, they are not neutral intermediaries or tools. Rather, they all 'want' something from their users and, for example, what Facebook wants from its users differs from what YouTube, Wikipedia, Instagram, Twitter, or Tumblr want from theirs. They each have their own ideologies that inform how they operate and how they are operated.

Social media platforms thrive on user-generated content. They provide templates for people to share their contributions, whether as posts, wikis, videos, or blogs. Social media platforms are, in most cases, free and easy-to-use and allow people to produce content with each other and for each other (Goff, 2013, p. 17). This underlying logic makes Facebook a social media platform, but also makes Wikipedia one. Without peer-production, these platforms would not exist. As such, I argue, platforms have come to take important roles in saving, storing, archiving, interpreting, and re-presenting our personal and collective pasts. They hold peculiar types of knowledge and experiences and shape these in specific ways. Regarding personal memory, for example, past user activity results in targeted advertising, or the automated selection and re-presentation of 'memories' through applications such as Facebook's 'On This Day' or 'Friendship Anniversary'. On a socio-political level, which is the prime focus of this dissertation, these platforms influence whose voices are heard, whose perspectives on and of the past are visible, and, ultimately, whose are carried into the future.

This latter observation is, of course, not entirely new. Media that came before social media platforms have shaped and are still shaping what, how, when, and who we remember as societies and individuals and still provide versions of the past that dominate others. This idea has been most explicitly explored by Neiger, Meyers and Zandberg (2011), who developed the concept of "media memory," or "the systematic exploration of collective pasts that are narrated by the media, through the use of the media, and about the media" (p. 1). This study follows the tripartite differentiation of media memory by investigating the usage of media for memory work, narratives about media vis-a-vis the past, and how media themselves engage with the past. The study also goes beyond these authors' approach, which is mainly focused on the broadcast era, by scrutinizing *digital* memory work.

In essence, I investigate something that is in constant transformation: the relationship between media and memory. One could argue that media and memory work are intrinsically connected to each other. This is a consequence of what media are and what they do—their ontology. "Media" is a complex term that invokes a wide range of associations and can mean, like memory, many different things. The foremost complexity of the term is

its plurality: media *are*, not *is*. Television, radio, newspapers, books, cave paintings, film, Facebook, but also calendars, watches, and money, are all media. But they all have their own specific ontologies, designs, logics, uses, and discourses. Not one logic invites, guides and shapes interactions with all of them. However, "what all media entail is a process that involves senders, messages and receivers as well as a specific social context in which they operate" (Albertazzi & Cobley, 2010, p. 7). Hence, throughout these pages, media are regarded as our primary technologies of communication and social interaction, leading to increasingly *mediated*, rather than face-to-face communication.

As such, to follow McLuhan (1964), media *extend* human communication possibilities. They *enable* and *mediate* particular forms of communication and social interaction. They *record* reality and thereby *shape* our perceptions of it. Lastly, they can *transmit* knowledge and experiences across time and space and to different groups of people. However, like all technologies, media are not 'just' material means or instruments. Media are always shaped by their usage, ideas, and perceptions of them and are thus the result of specific, often commercial, ideologies. They are also not stable objects, but are continually made sense of, appropriated to fulfill certain needs, and used creatively. The same holds true for social media platforms. All media have specific reputations and are often seen to *affect* culture and society or to have an *effect* on behavior. This research project does not engage with the question whether social media have effects, but rather focuses on the question what people do *with*, *in*, and *through* social media. It asks how social media *guide* this doing. That is, this dissertation focuses on people's *practices* and the cultural forms that are produced through these practices. Simultaneously, this study takes platforms seriously as technologies that invite, shape, and limit particular practices. Simply put, people *do* and are invited to do different things with a newspaper or television than with a social media platform.

This brings me to what is new about digital memory work. Throughout the following pages, I assert that digital media technologies such as social media platforms have given rise to new expressions and practices of memory and have refashioned, or "remediated" (Bolter & Grusin, 1999), existing forms of these. Specifically, this study scrutinizes very recent practices, technologies and forms of memory, roughly within the period 2010-2015. My aim is not to provide a history, but rather a critical examination of what memory work means and involves in 'our time'. This must be seen in the light of recent calls for such academic work. As Garde-Hansen, Hoskins and Reading (2009, p. 3) state:

> The existing paradigm of the study of broadcast media and their associated traditions, theories and methods, is quickly becoming inadequate for understanding the profound impact of the supreme accessibility, transferability and circulation of digital content: on how individuals, groups and societies come to remember and forget.

Accordingly, the theoretical questions expressed in this dissertation are quite necessarily translated into empirical ones and vice versa. The "longing for memories, for capturing, storing, retrieving and ordering them," the elements of a digital memory culture, according to Garde-Hansen, et al. (2009, p. 5), require both empirical observation and critical scrutiny. Platforms may enable new forms and practices of memory work, yet, these media are also socio-technical assemblies with their own set of rules and protocols, affordances, and design that allow for new forms of participation in memory work. Concomitantly, this participation is shaped by these assemblies. Memory work has always been caught between individual agency and socio-technical structure. Whenever we engage in memory work, individuals and groups alike draw on available techniques, technologies, and frameworks. In this, I argue, 'things digital' do not change our biological capacity to remember, but rather are part of the dynamic mnemonic process in which technologies, symbolic forms, and practices converge.

One way to rethink memory work in the 'digital age'[2] is to talk about "connective memory" in a "new media ecology." This latter term is used to describe our contemporary sociotechnical and communicative environments (Hoskins, 2011). At the basis of memory work in a previous 'broadcast age' stands a linear trajectory of mass communication where a powerful medium sends a message that arrives, in one piece, at a heterogeneous group of receivers. Even though aspects of this view are debatable from the start (was there ever such a thing as a passive mass audience?), it is contrasted by today's new, more active media ecology. This new media ecology is characterized by bottom-up, user-generated content appearing next to content produced by media professionals. It is populated by hyper-connected, transnational audiences using mobile media. Within a new media ecology people are therefore confronted by a constant stream of updates from all around the world and from different kinds of people, wherever they are. Potentially, they are also able to produce their own content wherever they are. This connectivity "transforms memory as being radically strung out via a continuous present *and* past. Memory is not in this way a product of individual or collective remembrances, but is instead generated through the flux of contacts between people and digital technologies and media" (Hoskins, 2011, p. 272).

Hence, researchers often describe digital memory work as being less institutional and more bottom-up. It is theorized as fluid, diffuse, easily revocable, and more accessible (Hoskins, 2009, p. 41). In this view, anyone with the appropriate (digital) tools at hand can construct and spread *their* versions of the past, which may ultimately lead to new voices being heard and the previously invisible being made visible. This dissertation, however, aims to nuance this slightly utopian perspective by scrutinizing the newly emerged power dynamics within digital memory work. There may very well be an increased participation

2 The 'digital age' is a notoriously vague demarcation of a historical period that spans from the early 1970s, the introductory period of the personal computer, until the present. It describes the current period characterized by networked telecommunication technologies and global use of the internet. Similar terms include: 'information age', 'network society' and 'digital culture'.

in memory work. It is undeniable that people engage in practices such as the recording and uploading of pivotal historical moments on YouTube. They come together to mourn and commemorate on Facebook. They produce accounts of historical events outside mainstream media and institutions on Wikipedia. However, these practices are as much restricted by these media technologies and their associated communities as they are enabled by them. Like all (media) technologies before them, social media platforms and their users leave their marks on the memory work of our time. As the case studies following in this dissertation aim to demonstrate, memory work is re-institutionalized, re-stabilized, re-centralized, re-structured, and closed in. This occurs through the dynamic interactions between users and platforms themselves.

Why study memory work in the digital age? Why is studying history or the social production of knowledge not enough? Why should there be an academic and public agenda for the study of memory and memory work? These are legitimate questions in a time in which the humanities and social sciences (my disciplinary backgrounds) are criticized for not producing research that is immediately applicable or economically exploitable. The answer lies in the politics of memory work. If memory work involves, from the onset, social context, practices, and technologies, then it is related to the dynamics of power. Politics and power, here, are understood not as institutional—even though they might very well be—but as distributed and pertaining to everyday life. Along these lines, Eagleton (2007), following Foucault, writes that "power is not something confined to armies and parliaments; it is, rather, a persuasive, intangible network of force which weaves itself into our slightest gestures and most intimate utterances" (p. 7). To bring this reasoning into the public realm: *what* is visible and *whose* voices are heard are increasingly steered by platforms that present themselves as neutral intermediaries, but in fact heavily influence the "social construction" or "assemblage" of the past in the present.

Bearing this latter observation in mind, I add a New Media Studies perspective to Memory Studies and a Memory Studies perspective to New Media Studies. The chapters do so by scrutinizing the technological procedures, practices, and cultural forms associated with specific social media platforms. In other words, this study takes seriously how platforms operate and what they want from their users. These two factors shape how users engage in memory work and also how platforms *themselves* engage in memory work. Thus, I see memory work as being distributed amongst people and technologies and I trace the various human and 'nonhuman' agents involved in it. As chapter two will show, 'traditional' media have been taken seriously as agents or technologies of memory, yet social media platforms have only scarcely been studied as such (cf. Kaun & Stiernstedt, 2014; Hajek, Pentzold & Lohmeier, 2016). What is more, detailed empirical studies into digital memory work that take into account the communities, technological design and procedures, and practices associated with platforms are even scarcer. One of the aims of this study is to help fill this gap. Increased general dependence—for information, communication, ar-

chiving and remembering—on these and other companies (and nonprofit organizations, in Wikipedia's case) begs critical academic engagement. This makes research into these platforms not only relevant, but also necessary.

Ultimately, the goal of this dissertation is to trace the agency of and interactions between platform users and platforms themselves. YouTube, Facebook, and Wikipedia—the platforms analyzed in the empirical chapters—can, I contend, be regarded as platforms of memory. I view platforms of memory as those social media sites that allow and are appropriated for memory work and which at the same time shape it in medium-specific ways. They are media, but also living archives and they re-present and re-construct the past from these archives. On these platforms, personal, collective, private, public, political, and cultural memories connect, converge, and collapse. This is a messy, dynamic, and unpredictable process. Yet, there is order in this mnemonic chaos: certain versions of the past become more popular and visible than others, and are then carried into the future.

Following this line of thinking, the main research aim guiding this dissertation is to theorize *how memory work is performed in the new media ecology*. Yet, in order to investigate this new media ecology and its implications for memory work, it is crucial to shed light on the issue at stake on three analytical levels: practices, technologies and cultural forms. What should be kept in mind, however, is that this is a heuristic construct. Practices, technologies, and cultural forms affect each other and concomitantly constitute memory work. In line with this, this study addresses the following sub-questions: On the level of practice it asks, *how are power and agency negotiated and redistributed in memory work on platforms*? This question relates to how users use and appropriate a platform for memory work. It is also geared toward answering how norms and values emerge within memory work and how communities are shaped through practice (and how communities shape practice). On the level of technology, this study explores the following question: *how do the technological affordances, mechanics, and operational procedures of platforms enable, shape and constrain memory work on them*? This question pertains not only to how platforms structure human memory work, but also how platforms themselves engage in memory work. The third question relates to the outcomes of these practical and technological interactions: *Why are certain versions of the past re-presented and transferred into the future on and by platforms*? By answering these questions and relating each back to the others, I aim to paint a holistic picture of the dynamic interactions between human and 'nonhuman' actors in digital memory work.

Chapter structure

Beginning with an overview and assessment of established theories and histories of the relationship between media and memory, this thesis moves toward three detailed empirical case studies. The concepts on media and memory work expressed in previous pages have a long history in academic research. Yet, as the first three chapters will show, they are

mainly human-centered and not well-suited for studying the hybrid spaces of communicative interactions social media platforms offer. These first chapters are therefore devoted to mapping and critiquing existing theory, while also situating this dissertation within it. The three case study chapters that follow after build on these theoretical explorations.

In chapter one, I develop the concept of memory *work*, as a means to counter the many ontological debates about what memory *is*. Rather, this chapter focuses on how memory is always in a process of becoming: it is practiced, performed, constructed, *worked*. The chapter embeds this line of thinking in a rich academic tradition which finds its roots in (social) psychology, media studies, philosophy, cultural studies, sociology and history. Also, the chapter provides a brief historical overview of memory work. The three main questions that guide this chapter are: 1) *How has memory been conceptualized in different academic fields?* 2) *How has memory been practiced and performed throughout history?* 3) *How can we rethink memory in a way that clarifies and renders the concept more productive for research in a new media ecology?* This chapter thus functions as a literature review, while also laying the foundation for the theoretical framework that follows.

In chapter two I build up the theoretical framework further by introducing and critically engaging with three theoretical constructs that are key in discussing contemporary memory work. These are: media as technologies of memory, the mediatization of memory, and memory in a new media ecology. The chapter sets out to address the question *how these concepts can help understand the dynamics of memory work in a media-saturated world*. The chapter thus provides three theoretical "panoramas," a term borrowed from Latour (2007), which are broad overviews of socio-historical and technological changes in relation to media and memory. As such, panoramas show much from a distance, yet at the same time provide no details. As Latour (2007) asserts: "panoramas gives [*sic*] the impression of complete control over what is being surveyed, even though they are partially blind" (p. 188). Nevertheless, they are helpful in positioning a phenomenon in a broader framework of scholarship: "They collect, they frame, they rank, they order, they organize; they are the source of what is meant by a well-ordered zoom" (Latour, 2007, p. 189).

In chapter three I move from grand panoramas to theories on practices, materiality and affordances. Here, I treat memory work as the product of both individual agency and sociotechnical structure and as the result of practical engagement with material environments. Memory work is something people *do* with objects and technologies, that each have their own perceived set of possible uses, or, in other words, affordances. At the same time, objects and technologies may engage in memory work themselves too. They may remember *for* us (Stiegler, 2010). The chapter asks: *How do materiality, technology, and practices relate to one another in terms of digital memory work?* The chapter thus further operationalizes the ideas offered in the first two chapters.

Chapter four forms the bridge between the first three and last three chapters by discussing the methodology of the case studies. The methods employed in the cases are discussed here in terms of their strengths and weaknesses and rationales are given for

why these methods were chosen in the first place. Textual analysis stands at the basis of the case studies. However, it is amended by critical analysis of the platforms' features and operational procedures, an approach loosely defined as 'platform analysis'. Lastly, the case studies themselves are introduced here. The first case study, chapter five, focuses on the chemical weapons attack on Ghouta, Syria. It investigates the memory work of witnesses and uploaders on YouTube. The second case study examines the dynamics of memory work on the Facebook page *Justice for Mike* Brown. The page was set up a day after the shooting of Michael Brown, which inspired the protests in Ferguson, Missouri, against racialized police brutality.[3] The third and last case study analyzes the memory work of editors of the Wikipedia page on the downing of flight MH17.

Within each of these case studies, I regard platforms as simultaneously enabling, shaping, and partaking in memory work, due to their specific technological design and features, community dynamics, ideologies, and associated practices. These three platforms were chosen primarily because they are the most popular platforms for video storage, sharing and watching (YouTube), social networking (Facebook), and general knowledge production (Wikipedia). The specific events were chosen because they are politically highly contentious. They, therefore, incited heated debates about how they should be re-presented and remembered. The case studies are instrumental for answering the broad research questions posed. Yet, they are also stand-alone empirical research projects with their own specific research questions. Each case study, therefore, poses a set of questions that pertains to that specific case study. The generally inductive approaches used also allow theory-building, which amends and engages in conversation with existing research.

In the concluding chapter, I relate the findings of the case studies back to the theoretical observations in the first three chapters. I also outline theoretical challenges and methodological roadmaps that can be applied in future research on digital memory work. What does it mean when memory work is done on, by, and through social media platforms? How does it differ from previous "media memory"? I argue that what is at stake are our pasts, and with these our futures. When we engage in memory work on social media platforms, or when much of our memory work is done *by* social media platforms, we trust our pasts partly to them. We should not forget that social media platforms are guided by specific (often commercially-driven) ideologies which will, in the future, come to shape contemporary memory. In line with the epigraph by Bowker at the beginning of this introduction, platforms imprint their own unique flavor to the memory or our time. Ultimately, we lose some part of control over our pasts and futures whenever we share something on and with a platform. As much as platforms remember, they also forget.

3 Chapter five was published as: Smit, R., Heinrich, A., & Broersma, M. (2015). Witnessing in the New Memory Ecology: Memory Construction of the Syrian Conflict on YouTube. *New Media & Society, 19*(2), 289-307. Chapter six was published as: Smit, R., Heinrich, A., & Broersma, M. (2017). Activating the past in the ferguson Protests: Memory work, digital activism, and the politics of platforms. *New Media & Society*. Advance online publication. doi: https://doi.org/10.1177/1461444817741849

1

From memory to memory work

Memory has been perceived as a wax tablet, a book, a sheet of paper, a labyrinth, and a loom. As the philosopher of psychology Douwe Draaisma (2010) has eloquently demonstrated, throughout history, metaphors have been applied as heuristic devices to make sense of what memory is. Dominant metaphors have also been derived from the natural environment (clay and dirt, in the Christian Bible), hydraulic engineering, complex machines with springs and gears (as is apparent in the writings of Descartes and Hobbes), electricity and chemistry, and telecommunications (Draaisma, 2010; Epstein, 2016). However, since 60 years or so, the most persistent metaphors to describe what memory is have come from the field of computing (e.g. storage, overwriting, search, retrieval, input, output, etc.). This is no coincidence, writes psychologist Robert Epstein (2016, para. 16), "each metaphor reflected the most advanced thinking of the era that spawned it." Metaphors about memory both enable but also restrict thinking about it. Especially the research into cognition has not only perceived but also treated memory as an essential part of the human "computer" called the brain. However, as Epstein (2016) critically remarks, our minds are not computers. This is something we should not forget when we talk about memory.

Is it possible to think about memory in a way that does not cloud, but enrich our understanding of it? Memory, both as a concept and capacity and process in the human brain and body, is slippery, something that can never be fully grasped. Hence, it might not be fruitful to conceive of memory as something that *is*, but rather as something that is practiced, performed, produced, and constructed in the present. This train of thought will be the focus of this chapter's first section. In the second section, I present the concept of 'memory work' as a more productive way of thinking about interactions with the past. Memory work is defined here as *the engagement with the past through and by specific practices, technologies, and cultural forms*. This broad definition thus clearly locates memory as something distributed and as a site of action which concerns the present and future as much as the past. Moreover, it is an *inclusive* definition, meaning that any*one* and any*thing* can potentially and unintentionally engage in memory work.

Memory work is of all times and all places. However, it is affected by the social, cultural, and technological contexts of these times and locales. The third part of this chapter therefore provides a short overview of the state and status of memory work at different times in history. The goal in this part is to show how different practices, technologies, and cultural forms shape memory work, while they are also *part of* it. Conversely, it also engages with the question how ideas about memory—the value and status attached to it—affect memory work. Fourth, the chapter embeds this dissertation within a wider range of scholarly work and traces some of the guiding insights about thinking of memory as an active construction in the present back to their academic roots. The focus of this chapter is therefore setting the scene by focusing on the ontology, history, and epistemology of memory. Memory's connection to media will be the focus of the next chapter.

Can memory *be*?

> There is no such thing as memory, because there is wide variety of different things we mean by memory.
> (Olick, 2012)

> Indeed, every fiber of our bodies, every cell of our brains, holds memories—as does everything physical outside bodies and brains, even those inanimate objects that bear the marks of their past histories upon them in mute profusion.
> (Casey, 1987, p. xix)

What do we mean when we use the word 'memory'? This question has intrigued and frustrated many philosophers. For example, Aristotle already noted that personal memory (a universal human faculty) can be simultaneously perceived of as a neuro-biological capacity (*mnēmē*, memory) and a process (*anamnesis*, recollection) (Nikulin, 2015, pp. 7-8).[4] In this dualistic conception, the former pertains to the brain and body, the latter to the mind. Recollections, essentially, are mental representations of a past experience or something that was communicated to us. Memory is therefore closely linked to imagination (Pickering & Keightley, 2012). However, memory and recollection cannot be pried apart from each other; that is, they only exist apart from each other heuristically and lexically, like notions such as brain and mind, nature and culture.[5] Without memory, recollection is not possible and when we 'access' our memory, we always recollect. There is no such thing as 'pure' memory, because the moment it is called upon it is being '(re)written'—a popular, yet problematic metaphor as we will learn later—in terms of the present.

This dual nature of memory is important to note, because it shows that memory is an *internal* as well as an *external* process. Notwithstanding the fact that memory is a neurobiological, universal human trait, it is embedded within linguistic, technological, cultural and social contexts that change over time and differ per place. Not only does this context provide the subject matter for future recollection (the things we actually remember), the moment and circumstance of recollection is *situated* in this context. "Each recollection," write psychologists Merck et al. (2016) "is built out of not only an internalized potential to remember but also external factors, including social factors. As a result, memories are not stored in the head, encoded in some yet understood way in neurological tissue. Rather,

4 A similar distinction in Dutch is made between *geheugen* and *herinnering* and in German between *Gedächtnis* and *Erinnerung*. Competitors in memory contests train their memory so that the areas in the brain tasked for recollection work more efficiently (Foer, 2012).

5 Terry Eagleton, for example, in *The Idea of Culture* (2005) eloquently argues that it is in our nature to have a culture and that our culture affects our nature. Likewise, memory as a capacity and process in the brain enables remembering, yet simultaneously 'blank' memory does not exist, not even as a MRI visualization on a computer screen.

they grow out of the interactions between the internal and external" (p. 285). This is also acknowledged by social psychologists Middleton and Edwards (1990) who observe that, in remembering, "significance and contexts are intrinsic to the activity, constitutive of it and constitutive by it, rather than casually influential upon some other thing called 'memory'" (p. 42). Memory, therefore, can be regarded as a process of social construction.

What does it imply to say that memory is a process of social construction? For one, the phrase suggests that knowledge of the past that is recalled—reconstructed—in the present is affected by the social, cultural, historical, and technological environment of the remembering individual. When people remember, they do so with the building blocks provided to them by language, socialization and interaction with the world surrounding them. The philosopher of science and information Geoffrey Bowker (2008) pointedly critiques approaches to memory that focus on internal processes in the brain:

> We don't analyze the movements of icebergs by studying the bit that appears above the surface of the sea; nor should we study memory in terms of that which fires a certain set of neurons at a determinate time. We as social and technical creatures engage in a vast span of memory practices, from entirely non-conscious to the hyperaware. (p. 8)

This observation is recognized in many disciplines that investigate memory, ranging from psychology (learning and development) and philosophy (being and the human condition) to law (witnessing) and neuroscience (structures in the brain) (Roediger & Wertsch, 2008).

Human memory can be said to not only be socially constructed, but also materially distributed. Since the advent of molecular biology, French philosopher Bernard Stiegler (2010, pp. 73-74) asserts, the dominant scientific view is that there are two types of memory in living beings: that of the species (located in the genome, DNA) and that of the individual being (located in the central nervous system; the memory of experience). Humans, however, have the "possibility of transmitting individually acquired knowledge in a non-biological way" (Stiegler, 2010, p. 74). Human memory, therefore, involves practices and technologies of recall and inscription and externalization of the present into the future (which can be media). Memory is an *associative* and *ongoing* process that is *distributed* among other people, things, and places that are historically *situated*. A remembering individual is always embedded within a constantly changing network of interaction between people and things, while, at the same time, memory would not be possible without a body that remembers.

The social materiality of memory is repeatedly stressed in contemporary studies of memory, from psychology to history to sociology. Summing up their comprehensive history of memory and memory studies, Olick et al. (2011) state that:

> The new insight of memory studies is thus not merely that memory is omnipresent but that it is at once *situated* in social frameworks (e.g. family and nation), *enabled* by changing media technologies (e.g. the Internet and digital recording), *confronted* with cultural institutions (e.g. memorials and museums), and *shaped* by political circumstances (e.g. wars and catastrophes). (p. 37, emphasis mine)

The fact that memory is situated, enabled, confronted, and shaped by external forces and circumstances—i.e. that it cannot be disconnected from unique contexts—suggests its fluidity and malleability.

Recent studies in neuroscience and cognitive psychology underwrite philosophical and social constructivist approaches to memory as being changed or forged anew in each new associative context, because of the changes in our brain formed by new experiences that came after the event that is reconstructed mnemonically[6] (Merck, et al. 2016; Hoskins, 2016b; Bourtchouladze, 2002; S. Johnson, 2004; Finkenauer et al., 1997; Prager, 1998; Van Dijck, 2007). This blurs the line, often drawn in the literature on memory, between personal or individual and collective or social memory. In the words of Misztal (2003):

> Such a perspective, by pointing out that individual memory is socially organized or socially mediated, emphasizes the social dimension of human memory, without, however, necessarily being a straightforward projection of the shared remembering […] [While] it is the individual who remembers, remembering is more than just a personal act. (pp. 5-6)

The past is not simply stored as a coherent, chronological film in our minds, but rather "it must be articulated to become memory" (Huyssen, 1995, p. 3). Memory is consequently formed through a blend of practices, technologies, and cultural forms—whether they are language, a ritual, a film, a tweet, a YouTube clip, a Wiki, or a Facebook post—and is thus connected to not only self but also others. This idea will be the focus of the next chapter, which dives deeper into the relationship between memory and media.

The 'social'—in 'social construction'—could thus be used inclusively and actively: individuals interact with the people and objects surrounding them, which shapes memory. *Association* might thus be a more suitable term than social interaction (Latour, 2007, p. 8). Actors, both human and 'nonhuman' change 'the social' itself in and through each interaction. This also leads to the observation that memory is caught in the dynamics of power. The what, when, why, how, who of memory is informed and shaped by actors with which they associate. These actors range from national institutions and historians

6 Whenever the term mnemonic is used in this text it should not be mistaken for having to do with "memetics" or "memes." Mnemonics are the strategies and tactics people use to remember while memetics is a developing field within social biology and cognitive science that attempts to describe processes of cultural transmission of ideas and practices.

to political activists and media. Besides "social," the word "construct" implies action and practice, something people *do*, using the resources available in their environment, while simultaneously this environment affects their very *doing*. As a result, "memory is a matter of how minds work together in society, how their operations are not simply mediated but are structured by social arrangements" (Olick and Robbins, 1998, p. 109).

Consequently, groups actively shape memory and memory can shape groups. Whenever memory is externalized—that is, practiced, expressed, or performed in one way or another—it enters into the public realm by drawing from it and feeding into it. Many names have been given to the type of memory under consideration here: collective, cultural, communicative, social, public, and popular memory are just a few. Memory in the form of invented traditions is essential to the functioning of societies (Hobsbawm & Ranger, 2012) and every family, class, or religious community actively shapes a memory of its own (Halbwachs, 1992). This affects the form and content of individual memory. "'Nation,' 'tribe,' 'society' are general names whose sole substance lies in their actual members who share common myths, traditions, beliefs, etc." (Gedi & Elam, 1996, p. 35). In this sense, collectives do not have a mind or will on their own. Rather, the individual actors within collectives adhere and live by the idea or image of the collective. They "imagine" their community (Anderson, 2006).

This does not mean that these abstractions do not have any real-world effects. A sense of a shared past may also act as a resource for present action. Individual and collective actions often rely upon ideas and feelings that are the result of memories of belonging to a group. For example, political action relies on shared memory of discontent in order to take place (cf. chap. 6). The imaginative group can instigate individual action; for example, people fight for their nations, celebrate the anniversaries of tribes, or live according to society's norms and values. The idea of the existence and belonging to a bigger group is a force with considerable strength. Shared memory may bring people together or separate them. 'Collective' memory, like 'the social' or 'society', is therefore not fixed but a process of contestation and (re)negotiation. Collectives do not possess a memory of their own; rather, the idea of the collective is carried, (re)constructed, and expressed by individuals within a social framework who uses certain objects, symbols, technologies, rituals, practices, and techniques of remembrance. Consequently, the idea of shared past experience or knowledge functions as a common denominator that may inspire (political) action and interweave with personal memory.

In summary, memory comprises the capacity and process of re-constructing and representing the past in the present, or preserving the present for future recall. It is a *process*, because it is never fixed, static, or finished. It is a *reconstruction*, because it utilizes and requires various resources, practices, techniques, technologies, and experiences. It is a *representation*, which implies that it is encoded with meaning, decoded, and recoded within existing cultural contexts. It is a *capacity* of the individual human body and mind, yet it is social through and through, because it is never *just* a capacity. It is always in a process

of becoming, connected to and associating with the outside world. Memory is therefore always partly personal, partly collective. The ontology of memory—its *being*—is fluid. We will never quite grasp what it actually *is*. Like the past, as soon as we 'fix', 'label' or 'capture' memory, or use metaphors to describe it, we disregard or do not do justice to another aspect of it. We therefore need a different lens through which we can make sense of our engagements with the past. To this end, this dissertation employs the concept of memory work.

Memory work

Connecting the words 'memory' and 'work' is a fruitful exercise because it shifts our attention toward memory's dynamic, interminable, and performed nature, instead of seeing memory as a static 'thing' that 'is'. The word 'work' has a number of meanings and different connotations that are relevant with regard to memory. According to the dictionary, work may mean an activity "in which one exerts strengths or faculties to do or perform something" or that an individual "engages in regularly to earn a livelihood" (Work, n.d.). It might mean "effective operation," something "produced or accomplished by effort, exertion, or exercise of skill" or "something that results from a particular method of working, operating." Work could also be "energy expended by natural phenomena" or the "result of such energy," as in "dunes are the work of sea and wind." In plural form it might mean "a place where industrial labor is carried on," "the moving parts of a mechanism," a "performance of moral or religious acts" and when something is "in the works" it is "in process of preparation, development, or completion." Work in each of these definitions connotes dynamism, interminableness, practice, and performance.

Memory work can be more personal or more collective, but always simultaneously involves individual agency and societal structure, just like any type of 'work'. On a *personal* level, when we engage in memory work, we exert our faculty to remember in order to construct the past in the present. Memory work involves the body and mind and might therefore be the result of bodily energies and efforts. Memory work might require skill and exercise of skill, or involve particular methods or operating procedures. On a *societal* level, some people engage with the past in order to earn a livelihood; they are professional memory workers, such as archivists, curators, or historians. They help carry certain interpretations of and reflections on the past into the future. Memory work might be performed industrially or following industrial logics, as in the case of the 'nostalgia industry', which includes cultural forms such as films, books and TV-series. What is true on both levels is that memory work always involves a process of preparation, development, and completion. Yet, when a past is 'completed' through memory work it is ready to be broken down again and to be built upon; new pasts are always in the works.

The term memory work has been employed across disciplines, but despite its casual use, it has only sparingly been theorized and not one, unequivocal definition or application of

the term dominates academic discourse. Most discussions on the concept, though, see memory work as something strictly human and as something intended, purposive, and conscious. Annette Kuhn (2010, p. 303), for example, suggests that memory work is a "conscious and purposeful staging of memory" and that it is an "active practice of remembering that takes an inquiring attitude towards the past." Correspondingly, the past, and memories thereof, is "material for interpretation, to be interrogated, mined, for its meanings and its possibilities" (Kuhn, 2010, p. 3). Memory work, or memory-work, is also a social science research method developed by feminist scholar Frigga Haug and others in the 1980s (Onyx & Small, 2001; Haug, 1987). The method helps explore "the process whereby individual women become part of society, and the ways in which women themselves participate in that process of socialization" (Onyx & Small, 2001, p. 773). It thus uses participants' individual memories of lived experience in order to reflect on and critically examine how they socially construct their identities. Most explicitly, Lohmeier and Pentzold (2014, p. 778) conceive of memory work as "bundles of bodily and materially grounded practices to accomplish memories." As such, memory work "involves purposive practices in and through which the past is expressively and consciously represented, interpreted, reflected and discursively negotiated" (Lohmeier & Pentzold, 2014, p. 779).

Even though memory work *can* be purposive human engagement with the past, this dissertation argues that memory work is not only restricted to humans and not always purposive. Rather, objects, things, technologies, places, forms and content can be part of and engage in memory work too. That is, agency in memory work is not only reserved for humans, but is distributed among people and things. Objects, cultural and symbolic forms, and technologies may 'steer' and shape memory in peculiar ways, may contain it, and may remember for us.

This latter thought is inspired by actor-network-theory (ANT) and the work of Latour. In ANT, what is meant by 'social' differs from common usage of the term, both in academic and popular discourse. As Latour (2007) writes: "In most situations, we use 'social' to mean that which has already been assembled and acts as a whole, without being too picky on the precise nature of what has been gathered, bundled, and packaged together" (p. 43). That is ANT is "based on the assumption that 'reality' as we encounter it, is the product of complex interactions between human and non-human actors (e.g., technologies and artefacts)" (Van Loon, 2008, p. 114). Controversial in this theory is that agency is not reserved for human beings, as Van Loon (2008) writes:

> Actors can be humans, animals, technologies, angels and gods. That is, the nature of an actor is not predefined, it is simply linked to act, which in turn solely depends on whether the impact of its actions has consequences for other actors. Action is thus not tied to intentionality. (p. 115)

In ANT, the social itself is deconstructed and not taken for granted as an essential structure or force. Latour (2007) argues that "there is no society, no social realm, and no social ties, *but there exist translations between mediators that may generate traceable associations*" (p. 108, emphasis in original). These mediators translate, that is, they transform, distort, or alter the meaning or elements they transport within the network (i.e. they are not neutral) (Latour, 2007, p. 39). By treating actors and 'nonhuman' actants as mediators, social ties are problematized, yet simultaneously made less abstract and not taken for granted. Mystifying notions such as "social force" and "social dimension" are thus broken down. Likewise, memory work is a 'social' process wherein connections are made, and continually remade, between mediating and associating people, technologies, objects, and ideas.

What is meant by this is best illustrated by an example. Consider the following scenario: In January 2013, Queen Beatrix of the Netherlands announced she would abdicate the throne in favor of her son, then Prince Willem-Alexander. Together with my wife, I watched the Queen's address to the nation on TV. Millions of people watched it with us. We agreed that we saw Beatrix as a nice grandmother and exchanged our personal memories of her. We showed each other pictures of last year's Queen's Day on our phones. I sent a WhatsApp message to my mother, who is a royalty fan, and asked what she thought about the abdication. She said she was touched and told me how her just deceased father was a supporter of the royal family. I looked at my Facebook Newsfeed and concluded that joking memes were already being created. Much more happened during and right after the address, but this small amount of information provides more than enough material to make the point clear: the memory of Beatrix was reconfigured and reassembled collectively at the moment of her abdication, by people (Beatrix, my partner, me, my mother), by groups (the Dutch nation, me and my partner, Facebook users, cameramen), and materials (TV, memes, photographs, phone). Each of these nodes within this particular network of interaction, reassembled—some to a higher degree than others—my own memory of Beatrix, other individuals' memory, and that of various groups.

The materiality of memory, or, rather, the intricate connections and translations between technologies of memory and actors engaged in memory work, begs more illustration in order to lure it out of abstraction. In a provocative essay, Katrina Schlunke (2013) asserts that material objects can produce ever-changing "memory effects" and that they are therefore active in the translation and mediation of the past into the present:

> To think memory as also material, and so as memory effects, provides us with a more telling idea of why memory constantly exceeds any easy division between individual and collective and between the unconscious and conscious—for 'effects' are not divisible into any binary nor curtailed by any linear order of time. (pp. 253-254)

The physical and temporal dimensions of objects "order" or "structure" memory. Schlunke illustrates this by two different technologies of memory, in terms of physicality and temporality, concerning Captain Cook. One is a matchbox copied on which is displayed a miniature version of E. Phillips Fox's painting *Landing of Captain Cook at Botany Bay, 1770*. The other is a huge statue of Cook in Cairns, Australia. Both objects produce different effects in different times: where once the statue stood proud, it is now producing a memory effect that is no longer wanted: colonial oppression (2013, p. 259). In the case of the matchbox Cook is "inscribed in the ordinary"; miniaturized, Cook is to be played with and "no longer doing the national historic work of being an iconic and untouchable symbol of colonial control" (2013, p. 255). What becomes apparent in Schlunke's examples is that the material, in its mere presence, is capable of changing our ideas and attitudes towards the past.

The insight that agency in memory work does not only lie in humans changes the way we can think about intentionality in memory work. A cultural object might be designed with a specific purpose in mind, but it might have unintended mnemonic effects. For example, a statue of a historical figure whose name we do not know might trigger a host of unexpected memories and associations. What is more, an object or symbolic form that was not intentionally designed or produced to carry particular knowledge or experience from one point in time and place to another might just do that. Van Dijck (2007, p. 7) describes these varying degrees of intentionality well:

> We can take a picture just for the sake of photographing or to later share the photographed moment with friends. While taking a picture, we may yet be unaware of its future material form or use. However, any picture—or, for that matter, any diary entry or video take—even if ordained to end up in a specific format, may materialize in an unintended or unforeseen arrangement.

This dissertation follows Van Dijck's (2007, p. 5) definition of memory work as involving "a complex set of recursive activities that shape our inner worlds, reconciling past and present, allowing us to make sense of the world around us, and constructing an idea of continuity between self and others." Van Dijck thus points at the dynamic and relational aspects of memory work—involving a set of practices, cultural forms and technologies—and at its function of bridging past and present.

Following this line of thinking, memory work always involves processes of mediation and association on a number of levels. First and foremost, memory work mediates, on a temporal level, between past and present and between present and future. On the one hand, the past is reconstructed in the present through memory work, which may include selection, interpretation, and meaning-making vis-à-vis the past. On the other, memory work designates the transference of the present and past into the future. Whereas documenting and registering the present are aimed at future recall, commemorating and reminiscing go back in time, linking the past to the present and vice versa. On a relational level, memory

work involves processes of mediation between people, between individual and group, and between people and 'nonhuman' things. On both the temporal and relational levels, this mediation can be done by the communication technologies we call media, but it is important to remember that memory work may involve (and always has involved) a vast range of mediators.

Conceptually, memory work comes close to remembering. However, using the phrase 'memory work' instead of 'memory' or 'remembering' is not a mere semantic trick. While remembering is often perceived of as the personal act of bringing something to mind again, memory work, from the start, involves practices, technologies, and cultural forms—it is socially embedded, materially distributed, shaped culturally, and mediated. The concept of memory work immediately points at the 'social' aspects of engaging with the past in the present, or carrying it, in specific form, into the future. The concept emphasizes the procedural character of engagements with the past. By employing the idea of memory work, this dissertation clearly demarcates the terrain under investigation, instead of getting lost in all the different ways we might think of memory and remembering. Memory work, instead of 'memory' or 'remembering', immediately indicates the past as something 'under construction' by not only individuals and groups, but also technologies and objects, who are socially and culturally embedded. Memory work is of all times and places, but is shaped by historical circumstances. The next section will explicate this idea by providing a short history of memory work.

A short history of memory work

Memory work has taken different shapes throughout human history. Technologies, practices, and cultural forms differ per time and place and have affected the shape of memory work. Simultaneously, memory work shapes these technologies, practices, and cultural forms. This section aims to show that memory work has always involved processes of mediation and association between people, things, ideas, places. Moreover, the goal here is to demonstrate that the past has always been an assemblage in the present and that technologies (especially media) have always imprinted their specific characteristics on memories they carry and transfer into the future.

Such an overview is necessary in order to show that digital memory work—the focus of the rest of this dissertation—is a product of evolution, rather than revolution. Simultaneously, it allows investigations into what is new about digital memory work, how it differs from previous eras in which different media were dominant. That is, how digital memory work can be seen as constitutive of a new era of memory. Throughout the below, the goal is not to answer the question what memory is in terms of the internal workings of the human brain and its cognitive functions. The goal here is to show that memory work is constituted by practices, technologies, and cultural forms, ranging from the oral tradition and mnemotechniques to the book and electronic and media today. In memory work,

political forces and power structures in the present as well as the past continue to affect what knowledge and experience is transferred and reconstructed but also how and why: "the past […] is not a dry, neutral record of what went before but an ideologically inflected cultural resource that communicators draw upon in their interactions with others" (Blair, 2006, p. 57).

An excellent guide for this short but necessary trip through the history of memory can be found in the work of Annales School historian Jacques Le Goff (1992). Le Goff (1992, p. 54) distinguishes four phases in the history of memory that lead up to a fifth, the contemporary "overflowing" of memory: "(1) ethnic memory in societies without writing, called 'primitive'; (2) the rise of memory, from orality to writing, from prehistory to Antiquity; (3) medieval memory, in equilibrium between the oral and the written; (4) the progress of written memory, from the sixteenth century to the present." Le Goff's historical periodization is based upon the work of French paleontologist Leroi-Gourhan, who divided up the history of memory according to dominant forms of communication: "oral transmission, written transmission with tables or indices, simple file cards, mechanical writing, and electronic sequencing" (cited in Le Goff, 1992, p. 54).[7]

Although Le Goff´s approach to the history of memory discusses dominant attitudes toward the past and memory work, these phases are not cleanly separated from each other but flow into each other, both in space and time. Of course, we *still* orally transmit knowledge and experiences of the past. However, our *dominant* means of transferring the past into the future have radically changed. Instead of "memory specialists" such as historians of the court, elders, and priests, who would authoritatively pass on what was important for society to remember, contemporary societies use semi-automated, technology-supported means of memory work. These shifts have had implications for the power dynamics at play in memory work. Whereas the power to interpret and re-present the past lay, for the largest part of human history, in the hands of the socio-political élite, it has gradually come to involve different and more actors. However, to say that memory work has been truly liberating throughout history is a fallacy: certain actors have had and will have a stronger voice in memory work than others, depending on their capital (economic, cultural, social), practices and access to and use of resources and technologies.

Le Goff first discusses societies that did not have a system of writing. These societies (constituting the greater part of human history) consisted of small, closely-knit and often tribal groups who transmitted their pasts from generation to generation through oral histories. These "ethnic memories" often had a genealogical character and were infused with

7 What must not be forgotten is that Le Goff's classification of memory is focused on Western culture and history. Nevertheless, his approach is useful to provide a structured overview of the state and status of memory throughout history. The goal of this section is therefore not to provide an in-depth discussion of the various periods of memory, but rather to demonstrate that the state and status of memory differ and are dependent on dominant sociotechnical and communicative arrangements of societies in time. Even though Le Goff's work will be central in this section, it will be amended by views from other historians of memory.

myth (Le Goff, 1992, p. 55). A group's past was carried by elders and was therefore "living," in a sense that it was not, or barely, archived or stored (Hutton, 1993, p. 17). Thus, memory was also granted "more freedom and creative possibilities"; it was free and vital (Le Goff, 1992, p. 57). Therefore, Daniel Lowenthal (1985) writes in an important study, for people living in these societies "the past was not a foreign country but their own" (p. 13). Ancestral spirits played a role in the everyday lives of people within societies with oral traditions. At the same time, the past had to explain present events and relationships. Memory work was instrumental in this; it was central to judging current and past events and it legitimatized social order in the present (Evans-Pritchard, 1986, p. 105). Key in this mnemonic social cohesion were habit, ritual, custom and performance, which structured the knowledge of the past and were prompted by "the felt need to reiterate the wisdom bequest by the past" (Hutton, 1993, p. 17). Memory was highly valued because these cultures without script depended on it to be the keeper of custom, tradition, and rules, but also, the basic knowledge of the practices of everyday life (Carruthers, 2008, p. 12). Therefore, Rose (2003, p. 70) writes, "people's memories, internal records of their own experience, must have been their most treasured—but also fragile—possessions."

The second phase in the history of memory Le Goff (1992) distinguishes is that of societies in which literacy existed but was far surpassed by individual memorization as a technique of keeping the past. Memory work in Antiquity was more a matter of *technique* than *technology*. In Greek and Roman antiquity, memory as human capacity was highly valued and treasured among philosophers and the intellectual élite. For example, Plato (427-347 BC) remarks that all "knowledge is but remembrance" and Cicero (106-43 BC) states that memory is "the treasury and guardian of all things" (qtd. in Misztal, 2003, p. 31). Memory work was seen as an art on which a life of learning was based. Cicero saw individual memory as something that needed to be trained in order for one to become a good orator and before him the Greek poet Simonides of Ceos (c. 556-468 BC) developed a technique of mental image-places, memory palaces, in which mnemonic objects could be placed for later retrieval (Le Goff, 1992, p. 65; Hutton, 1993, pp. 27-28).[8]

The ancient philosophers were skeptical of using writing for memorizing. Plato—writing down the thoughts of his teacher, Socrates—makes this point clear in his famous allegory of the God Teuth who exhibits his invention of writing to the king of Egypt, Thamus. The latter, unimpressed, reacts:

> Those who acquire it will cease to exercise their memory and become forgetful; they will rely upon writing to bring things to their remembrance by external signs instead

8 Today, this technique is still used by participants in memory contests, as Joshua Foer demonstrated in his bestseller *Moonwalking with Einstein*. Additionally, an incredible amount of self-help books concerning mnemonics also exists. Apparently, memorizing has become gimmicky in our present societies, in which mass digital storage and recording has replaced our efforts to remember by heart.

> of on their own internal resources. What you have discovered is a recipe for recollection, not for memory. (Plato, 1973, p. 96)

Writing, especially in ancient Greece, was regarded subordinate to memorizing things internally. The technique, or art, of memory was seen as the basis of all learning and all true knowledge and, therefore, was thoroughly studied and esteemed, whereas the technologies of memory, for example the wax tablet and writing on paper, were reluctantly used (Hacking, 1995, p. 203). Writing did enable commemoration and documentary recording to emerge as mnemonic practices, but on a small scale (Olick & Robbins, 1998, p. 114).

Behind the technique of remembering advocated and practiced in the ancient world lay a deeper mode of thinking. The paradigm through which thinkers and orators made sense of the world was wholly based on this systematic training of individual memory. Memorized knowledge was the master key, the *clavis universalis*, to understanding of the universe (Hutton, 1993, p. 29). The memory places or palaces described above functioned as the prime technique of memory work for some 2000 years. It was considered an art, *Ars Memoriae*, and was explained in books such as *Rhetorica ad Herennium*, Cicero's *De Oratore*, and Quintilian's *Institutio Oratoria* (Yates, 1966; Carruthers, 2008). Historian Frances Yates (1966) shows that the art of memory has been used for different purposes and through different philosophical lenses, from the ancient Greeks to the Renaissance Neo-Platonists.

In his *History as an Art of Memory*, Hutton (1993) extends Yates's thesis by arguing that the early Neapolitan historian Giambattista Vico (1670-1744) reinterpreted the art of memory as a "technique to uncover forgotten origins understood as lost poetic powers," an idea that resonated in the poems of the Romantics (Hutton, 1993, p. 35). Early written texts formed Vico's body of study, as he tried to unveil the mysteries and truths about the oral tradition. Ultimately, Hutton (1993, p. 51) argues, Vico's approach to the history of memory was an art of memory in itself, "for it enabled historians in the modern age to unlock memories hidden in the recesses of a distant past in which ideas and images were directly connected." Hutton shows that the art of memory has transformed throughout history and has been used for different purposes within changing societal, scientific, and philosophical paradigms. One of the most important factors in the changing faces and uses of memory was writing, something Vico has also argued.

However, not until the third phase within the history of memory Le Goff (1992) describes, a growing balance between literacy and internal memorization can be found. Even though oral traditions and trained memory practices were still important and highly valued in pre-modern European societies, written materials about the past were increasingly being spread which resulted in a "tension maintained between those two forms" (Innes, 1998, p. 3). Like societies with an oral tradition, memory in medieval peasant communities was local and familial, rather than national (Fentress & Wickam, 1992, p. 153). Memory work revolved around Christianity, from being structured by the church calendar to being shaped by religious education (Le Goff, 1992, pp. 68-72). Moreover, "[i]n the Middle Ages, memory

enjoyed a high status not only because it was valued enormously as a container of virtues and an instrument of thought, but also because of concerns about loss of knowledge" (Misztal, 2003, p. 36). In similar vein, Carruthers (2008, p. 14) states:

> The choice to train one's memory or not, for the ancients and medievals, was not a choice dictated by convenience: it was a matter of ethics. A person without memory, if such a thing could be, would be a person without moral character and, in a basic sense, without humanity.

In her fascinating work on memory in the Middle Ages, *The Book of Memory*, Carruthers (2008) argues that "medieval culture was fundamentally memorial" and that training of memory was the basis not only of learning but also of "character, judgment, citizenship and piety" (pp. 9-11). Books, which were valuable and often not in possession of the scholar, were used to memorize from, instead of being used as a reference. Memory, or *memoria* as Carruthers (2008) describes mnemonic culture, was much more than just a technique of memorization; it was a "rich complex of practices and values" (p. 16). Thus, individual memory acquired through training was still, like in Antiquity, trusted over the externalization of it through writing. During the Renaissance, the ancient art of memory was, like the arts in general, reborn and gave rise to a renewed interest in the past (Hutton, 1993, p. xiii).

The fourth phase within the history of memory roughly emerges around the time of the introduction of the printing press. Elizabeth Eisenstein (2012) argues that the use of the printing press ushered in subsequent standardization and increased dissemination of the text. This resulted in the gradual stability of a vision of the past. On multiple levels, but very apparently so on that of commonly held beliefs and knowledge, the printing press was an agent of change. This period was marked by a new type of text-based historical consciousness and shared memory which "depended on the readers' awareness of temporality, and this in turn led to the recasting of mnemonic schemes, previously conceived spatially, onto timelines on which historical events served as places of memory" (Hutton, 1993, p. 19) and the realization that "knowledge, even the most important parts of it, could no longer be held in memory" (Yeo, 2001, p. 78).

Important to note is that this process of change from memory based on an oral tradition to textual literacy was a gradual process affected by many historical actors, both emergent and residual. Innovations converged with traditional ways to re-present the past, capture the present, and transfer it into the future. For example, Eisenstein (1966) notes that "the mythical and historical remained blurred for a full two centuries after printing" (p. 51). Le Goff's (1992) distinction of the different historical modes of memory are similar to Hutton's (1993) linking of changing modes of communication to historical perspectives on memory: "orality with the reiteration of memory; manuscript literacy with the recovery of lost wisdom; print literacy with the reconstruction of a distinct past; and media literacy with the deconstruction of the forms with which past images are composed" (p. 16).

The widespread use of the printing press and subsequent rise of print culture steered a number of historical factors that cumulated in the emergence of a national consciousness and the imagined community of the nation (Anderson, 2006; Gellner, 1983; Hobsbawn; 1990). Memory work played an important part in this from the 19th century onward. Gellner (1983) and Anderson (2006) argue that the national language of print instigated a common and stabilized language in which common national denominators could be expressed. In other words, citizens could "think the nation," something that was impossible before the existence of a common print culture and a capitalist system of production and dissemination that supported it (Anderson, 2006, pp. 44-46). Anderson (2006) takes the formation of the United States of America at the end of the 18th Century as an example. He argues that "pilgrim creole functionaries and provincial creole printmen played the decisive role" in the struggle for independence from the old world and the creation of the image of the nation, not economic interests, Liberalism, or Enlightenment (p. 65).

New world bureaucracies and the creation and spread of local newspapers, which represented local and regional imagined communities, were economically beneficial for businessmen of the new world—printer-journalists had a good market in the colonies—but it was the content of these newspapers that created a sense of colonial community that differed greatly from a continental one. In the colonies' footsteps, during the early 19th Century in Europe, with rising literacy rates, starting among the Bourgeoisie, "it became easier to arouse popular support [for the Revolutions], with the masses discovering a new glory in the print elevation of languages they had humbly spoken all along" (Anderson, 2006, p. 80). Language is crucial in imagining a community and building "particular solidarities" upon which nationalism is constructed, but "[p]rint-language is what invents nationalism, not a particular language per se" (Anderson, 2006, pp. 133-134).[9]

With the spread of nationalism came the idea of expressing the nation in historical terms. Great men and glorious battles were the "pearls strung along a thread of narrative" of an invented ancient national past (Anderson, 2006, p. 109). In the writing of coherent national narratives in 19th century Europe, the resurrection and appropriation of historical figures and events for the uses of the present becomes apparent (Hobsbawn, 1990, pp. 52-57). For example, past leaders who did not even speak the language of the imagined nation they historically represented were used for the construction of present nationhood, or a specific date coupled to an event was chosen as the founding of a nation (Anderson, 2006, pp. 109, 137). In modern nations, historical heroes are remembered, but their specific historical contexts and existences are forgotten (Anderson, 2006, pp. 201-203).

Especially Anderson's treatment of imagined communities can be extended beyond the context of the nation and the rise of nationalism. His ideas about history, memory, and forgetting are crucial in the coherence and unity of the ideas about a group's past

9 However, what Anderson calls the "Last Wave" of nationalism was able to bypass print-language through new means of communication, thus reaching literate and illiterate masses simultaneously (p. 140).

and their identity (Broersma & Koopmans, 2010). Communication technologies, like the printing press in Anderson's case study, can help produce and disseminate ideas about an imagined group present and past existence. Doing so, they can temporarily fix and stabilize a certain people's associations with each other in the present and to an imagined past that helps strengthen these associations. Group identity can be formed through these stabilized associations between people and past and present, like Anderson shows in terms of the nation.

The idea that there have been clean historical and cultural discontinuities in the types, ways, places, and forms of memory work throughout the past is an artificial, yet helpful, construction. Today, people still visit museums, libraries, and archives, watch the eight 'o clock news, celebrate national memorial days, write personal diaries, and still take pictures for individual use only. *Simultaneously*, however, they share memoires on their Facebook pages, visit memorial websites, write blog entries, link to each other's and televised stories, and edit and spread iconic news photographs that help shape particular group memories. In other words, the types, ways, practices, places and forms of memory work change alongside media and communication technologies. Media, as technological carriers of information, change: some are forgotten, influence each other, given new meaning and some are invented anew. This leaves its marks on memory work. The present and past are made sense of and used both in 'old' and 'new' ways, and by mixes of ways. This has been true throughout the past. As we have seen in this section, from oral cultures through print culture to today, techniques, and technologies played an instrumental role in memory work and the status of memory at different historical moments. Insights such as these have a long history in sociology, cultural studies, history and what has fairly recently been called memory studies. The next section will therefore delve deeper into the epistemological ground laid under the concept of memory work.

A short history of memory studies

Any history of memory work is a history of memory studies. The historians of mnemonic practices, objects and forms are themselves embedded within intellectual environments and traditions that are specific to their times. Whereas the first three sections of this chapter developed the idea of memory work and its variations throughout history, this section will trace the intellectual lineages of the idea. The goal of this section is not only to show how theorists have thought about the "social dimension" of memory and memory work, but also how theoretical concepts such as "collective memory" (Halbwachs, 1992) and "cultural memory" (Assmann, 1995, 1997) are products of their time and require updating and rethinking in the digital age. How memory work can be "rethought" is the topic of the next two chapters and the short history of the field that follows in this section provides the basis for these chapters.

In the example of the rise of nationalism, memory studies' own historical context becomes ostensible. Since the 19th century, which saw a rapid increase in scientific research and academic activity, the scientific and philosophical inquiry first into history and then into memory was starting to become more popular. With the spread of nationalism in this century came monuments, national holidays and an increased interest in national histories (Anderson, 2006, p. 194; White, 1973, pp. 135-143). The studies of memory in the nineteenth century that were the result of this interest were not detached from research in biology and natural science, but were seen as extensions of it (Olick et al., 2011, p. 12). Examples of this are studies by Jean-Baptiste Lamarck, Ewald Hering, Samuel Butler, and Richard Semon who used insights of (evolutionary) biology to explain cultural traits, using terms like "species-memory" and "mnemes" (Olick et al., 2011, pp. 11-12). It was not until 1902, however, when the term "collective memory" was first used by Austrian novelist Hugo von Hofmannsthal who wrote of "piled up layers of accumulated collective memory," but this was a poetic rather than an academic use of the phrase (qtd. in Olick & Robbins, 1998, p. 106).

With the formal institutionalization of sociology at the end of the nineteenth century a rather new approach to memory emerged. In the 1920s and 1930s, historian Marc Bloch used the term collective memory in his studies of feudal society; art historian Aby Warburg applied the term social memory to art as repositories of history; and pioneering psychologists Pierre Janet and Lev Vygotsky approached memory in the light of the experience of time and as being wholly influenced by culture (Olick & Robbins, 1998, p. 106). A student of both philosopher Henri Bergson and sociologist Émile Durkheim, Maurice Halbwachs published his landmark study *Social Frameworks of Memory* in 1925, which still is considered to be a foundational text in collective memory studies. Halbwachs developed his theory of the social frameworks of memory while he worked at the University of Strasbourg. Here, his ideas were shaped in a rich and progressive intellectual climate. Halbwachs sparred intellectually with historians such as Lucien Febvre and Marc Bloch, but also with psychologist Charles Blondel (Coser, 1992, pp. 5-6). This is important to note because especially his *Legendary Topography of the Gospels of the Holy Land* is very much a response to these intellectuals who attacked Halbwachs for his Durkheimian approach to the social.[10]

Halbwachs's *Social Frameworks of Memory* is often quoted throughout the literature on memory, but is sparsely discussed at length. While it is not the aim here to thoroughly critique Halbwachs, his work has been highly influential in studies of memory and memory work. His basic point is that "one may say that the individual remembers by placing himself in the perspective of the group, but one may also affirm that the memory of the group realizes and manifests itself in individual memories" (Halbwachs, 1992, p. 40). In other words,

10 Lewis Coser's introduction to *On Collective Memory* describes how Halbwachs was part of a young and aspiring group of interdisciplinary scholars in France right after the First World War. The discussions these intellectuals had are very similar to academic debates over interdisciplinarity today.

"memory is a collective function" (p. 183). This implicates, explains Pentzold (2009, p. 258), that:

> Memory is constructed in the individual during communication with other members of a given social constellation. It lives and sustains itself in communication processes. Moreover, memories act like social order parameters or frames (*cadres socieaux*). An individual places his/her thoughts in given frameworks and therefore participates in a collective memory so that he/she is capable of the act of recollection.

Without others, or the social frameworks subjects are formed by and interact with, there is no structure or coherence in memory, Halbwachs argues: memories are "recalled to us through others even though only we were participants in the events or saw the things concerned. In reality, we are never alone," he writes (1992, p. 23). People cannot think about a past event without using a structuring language. "Discoursing," Halbwachs calls this and to discourse "means to connect with a single system of ideas our opinions as well as those of our circle" (1992, p. 53). Consequently, memories are collective even though others might not have shared them. "It suffices," Halbwachs (1992, p. 53) writes, "that we cannot consider them except from outside—that is, by putting ourselves in the position of others—and that in order to retrieve these remembrances we must tread the same path that others would have followed had they been in our position."

Halbwachs continues deliberating three important social institutions that constitute social frameworks of memory in his time: the family, the religious group, and social class. He discusses rules, codes, and conventions in each of these social settings that guide interaction and structure feeling, which in their turn direct a certain worldview and sense-making. Additionally, he shows that through traditions, ceremonies and rituals the specific group is held intact and reaffirms a subject's place in it. Through these processes a "traditional armor" is created that shows to which group a certain person belongs and simultaneously carries around and is reminded of (Halbwachs, 1992, p. 59). Pivotal in this idea is that:

> There is no point in seeking where they are preserved in my brain or in some nook of my mind to which I alone have access: for they are recalled to me externally, and the groups of which I am part at any time give me the means to reconstruct them, upon condition, to be sure that I turn toward them and adopt, at least for the moment, their way of thinking. (Halbwachs, 1992, p. 38)

Halbwachs repeatedly tells his readers that underlying the mechanisms of the institutions he discusses are the deeper structures of society. This is also the case for collective memory. Even though groups reconstruct the past "with the aid of the material traces, rites, texts, and traditions left behind by that past," but simultaneously, and maybe more

importantly, “with the aid moreover of recent psychological and social data, that is to say, with the present” (Halbwachs, 1992, p. 119). Halbwachs argues against Freud’s ideas on memory that had become popular around that time. Freud (1966) believed that all memories were unconsciously stored as in an encyclopedic archive and could actively be retrieved through psychoanalysis. Halbwachs, by studying his own dreams, argued that in the unconscious state of sleep it is impossible to remember coherently and, consequently, a social framework is needed to do so (Coser, 1992, p. 23; Halbwachs, 1992, pp. 41-42; Hutton, 1993, p. 78).

At this point, it is vital to remind that Maurice Halbwachs was heavily influenced by Émile Durkheim’s ideas on sociology and society. Durkheim has often been criticized of his conceptualization of society as an abstract, metaphysical being that is disconnected from the individual subjects that collectively constitute it. Historians Gedi and Elam (1996) are right in stating that “all ‘collective’ terms are problematic—and ‘collective memory’ is no exception—because they are conceived of as having capacities that are in fact actualized only on an individual level, that is, they can only be performed by individuals” (p. 34). In Durkheim’s sense, social forces and deep social structures steer society and its individuals, rather than the ever-shifting associations—that can be located in symbols, representations, documents, institutions, working practices, artifacts, talk, etc.—between individuals that are called groups or collectives (cf. Tarde, 2000; Latour, 2007; Olick et al., 2011, p. 20). Halbwachs is more careful than Durkheim in his distribution of social power in societies, but it is crucial to note that there is the danger of hyperbole when it comes to the description of collective memory and thus making it otherworldly. Gedi and Elam (1996) go as far as to argue that “the inconcreteness of ‘collective memory’ is the stumbling block in Halbwachs’ theory” (p. 38). Indeed, collective memory is constructed by people, materials, practices, institutions, and places; or, to put it simply, memory is made of ‘stuff’ that can be tracked, traced, and studied. It is not mystical or placed outside the associations between individuals, things, and organizations.

These associations do, however, influence ideas and actions and *why*, *what*, *where*, *when* and *how* individuals in collectives engage in memory work. Consequently, there is always a political or ideological layer to memory work. After Halbwachs, and especially from the 1980s onwards, a host of memory researchers have rightly focused on the materiality, politics, and ideology of memory, lifting the mystical aura of collective memory to show that “collective memories do not exist in the abstract” (Neiger et al., 2011, p. 3). Nevertheless, Halbwachs laid the foundation for these socio-political inquiries into memory.

The early work by Halbwachs, other Durkheimians, and the (social) psychologists of the first two decades of the 20th century was followed by a relatively quiet period in the history of sociological inquiries into memory, but it is a myth that Halbwachs’ work was largely forgotten, only to be rediscovered during the late 1980s (Olick and Robbins, p. 107; Olick et al. p. 139, p. 157). Halbwachs’ empirical study of collective memory, *La topographie légendaire des évangiles en terre sainte*, translated as *The Legendary Topography of the Gospels*

in the Holy Land was published in 1941, four years before his death in a Nazi concentration camp.[11] The heritage of his thoughts can be found in studies by sociologists and anthropologists such as Claude Lévi-Strauss's *The Savage Mind* (1962), Lloyd Warner's *The Living and the Dead* (1959), E.E. Evans-Pritchard's famous book *The Nuer* (1940) and maybe most explicitly in Roger Bastide's *The African Religions of Brazil* (1960). These landmark studies use the foundation of Halbwachs's work in order to further examine memory work and the function of the present in the shaping of the past.

Although an in-depth examination of the theories expressed in these works is out of reach here, it is essential to note that these authors all reevaluated the concept of time in relation to memory. Their case studies of religious, city, and tribal communities focus on the rituals and traditions with regard to the past and veneration of ancestors. Memory is reinterpreted as myth, often religious, and is considered to be a well of timelessness, tapped into and kept alive through rituals and traditions whose origins are lost, but at the same time have a present social function to keep the group intact. Simultaneously, living memory, that is, the memory of living generations passes into myth over time and the markers and places that carry memory are dependent on the present socio-geographical situation of the group. Therefore, collective memory of a specific group can only survive "insofar as they can insulate themselves in the existing frameworks of society" (Bastide, 2011, p. 162). Bastide and his contemporaries wrote their studies of tribal memory in a time in which the broadcast media, and especially television, gained influence within the media landscape. Media theorists started to analyze in what ways electronic media influenced society and cultural practices therein. From the 1970s onward this type of investigation also turned its critical lens toward memory, which cumulated in the so-called 'memory boom' of the 1980s and 1990s. Some of the most important concepts developed in this new surge of research are part of what Le Goff (1992) has called the "contemporary revolutions" of memory.

Research into the politics of identity and ideology and the social construction of knowledge and society were—and still are—pivotal to the understanding of memory work in these terms.[12] In their excellent delineations and histories of the field of memory studies, Olick et al. (2011) and Olick and Robbins (1998) show that the interest in collective memory has its roots in new ways of examining issues of power, identity, ideology, and other matters of social organization. The conception that "identities are projects and practices, not properties" and that they are socially and historically constructed within the dynamics of normalization and contestation has been extended to the realm of memory (Olick & Robbins, 1998, p. 122). Olick et al. (2011) write:

11 A short biography of Halbwachs can be found in Lewis Coser's introduction to *On Collective Memory* and here (in German): http://www-classic.uni-graz.at/sozwww/agsoe/lexikon/klassiker/halbwachs/22bio.htm

12 Countering the surge of cognitive studies into memory at the end of the 1980s, John Shotter (1990), for example, eminently argues for social constructivist approaches to memory.

> We now take for granted 'constructionist' approaches that emphasize the ways images of the past distort, are deployed for instrumental purposes, propagate myths, and so on. In the process, however, we should not forget the novelty and power of such perspectives, nor should we reduce them to a version of 'lies my country told me.' (p. 42)

This insight led to studies of memory that focused on practices, (social) institutions, places, and objects and their relation to overarching themes like identity and ideology. For example, well-known studies that examine the socio-historical construction of the nation in terms of national memory are Nora's (1989) inventory of French sites of memory (*Lieux de mémoire*) and similar projects in other countries like the United States, Germany, the United Kingdom, and the Netherlands (Loewen, 1995, 1999; François and Schulze, 2005; Winter, 1995; Van Vree et al., 2010). These large projects can be connected to the "intense and widespread interest" to the linking of memory and national identity and the contemporary memory industry (Kammen, 1991, p. 3). On the topic of American Presidents, themselves emblems of the American nation, Thomas Johnson (1995) and Barry Schwartz (2000), respectively, argued how the image of Nixon and Lincoln has been remodeled under the hammer of time.

Jan Assmann (1995, 1997) developed the influential term "cultural memory," in order to tackle the difficulties of memory with regard to the individual and the collective, ideology and identity, and contestation within groups and society at large. Refining and updating Halbwachs's theory, Assmann (1995) defines collective memory as "a collective concept for all knowledge that directs behavior and experience in the interactive frameworks of a society and one that obtains through generations in repeated societal practice and initiation" (p. 126). He distinguishes cultural memory from communicative memory which is constituted by "those varieties of collective memory that are based exclusively on everyday communications" (p. 126). As such, the latter form is non-specialized, role-reciprocal, thematically instable and disorganized. Moreover, communicative memory has a moving temporal horizon of three to four generations, or about 80 to 100 years, as it is dependent on living, communicative subjects and has no fixed or binding point in time (pp. 126-127). Communicative memory can, however, pass into objectivized culture, for example texts, monuments, and rites. In this process of transition, the link to the group creating this reference is not lost, Assmann (1995) contends, because through this "concretion of identity" groups derive "formative and normative impulses" that reproduce their identity (p. 128).

The subsequent cultural memory that emerges from this process of transition *has* a fixed point and is marked by a distance from everyday communication. In this sense, cultural memory is transcended 'lived' memory that is maintained through cultural forms (texts, rituals, buildings) and institutional communication, which leads to the "culturally institutionalized heritage of a society" (Assmann, 1995, p. 130). The stabilization of cultural memory through objectification supports a clear demarcation of the group and thus cre-

ates a sense of belonging and identity. This does not mean that cultural memory cannot be reconstructed in order to relate to the present. Here, the archive of stored objectifications of the past acts as a "total horizon" of uses of the past and it enables a "mode of actuality" (p. 130). Of course, this is a process of institutionalized selection, specialization, and cultivation and it generates a "clear system of values" and attributes different degrees of importance to certain symbols (p. 131). The last point that Assmann makes in his description of cultural memory is its inherent reflexivity. Common practices are made sense of and given meaning through proverbs, rites, values, etc. Moreover, cultural memory "draws on itself to explain, distinguish, reinterpret, criticize, censure, control, surpass" information about the past (p. 132).

Assmann's model of cultural and communicative memory can be critiqued in the light of digital technology. Zierold (2008), for example, asserts that "recent memory processes in fact cannot be discussed as part of 'cultural memory,' as this is defined as referring to founding myths of an absolute past" (p. 401). The vast pool of electronically and digitally recorded memories of the past 80-100 years—the timespan of communicative memory Assmann identified—cannot be regarded in these mythic terms. Therefore, Zierold (2008) argues, "a more abstract, non-normative concept of memory which accepts that the forms of social memory change together with the development of the media broadens the horizons and brings into focus just those kinds of contrary and paradoxical developments we experience today" (p. 402). Moreover, the constant hyperlinking, sharing, friending, liking, online can be seen as active practices with both a communicative and a cultural dimension that help shape our understanding of the past—as will be discussed more in depth later.

In response to Assmann's model, Marita Sturken (1997) defines cultural memory as "memory that is shared outside the avenues of formal historical discourse yet is entangled with cultural products and imbued with cultural meaning" (p. 3). Thus, Sturken shows how the meaning of individual memory changes when it is shared publicly and how cultural texts and objects are intertwined with history. She also stresses the importance of popular culture in the formation of cultural memory. Sturken's idea of cultural memory is similar to popular memory, a notion first introduced by Michel Foucault. Popular memory, closely related to Foucault's notion of counter-memory, is the historical knowledge of a group that is placed outside official historical discourse (Foucault, 2011, pp. 252-253). Today, this popular memory is being reprogrammed by television and cinema, "[s]o people are shown not what they were, but what they must remember having been" (Foucault, 2011, p. 253). Being concerned with power and control throughout his work, Foucault argues that the control over what people watch and thus remember about themselves is a powerful tool in politically positioning groups: "if one controls people's memory, one controls their dynamism. And one also controls their experience, their knowledge of previous struggles" (p. 253).

Foucault's concerns were shared and methodologically extended and applied by the Popular Memory Group, a research team at the Birmingham Centre for Contemporary

Cultural Studies, between 1979 and 1980. Looking at popular memory as a "dimension of political practice" the Popular Memory Group (1982) examined oral histories and media texts (p. 211). They underwrote the importance of telecommunications in the construction of collective forms of memory, something that will be further elaborated on in the next chapter. They stated: "of all parts of the historical apparatus the electronic media are perhaps the most compelling and ubiquitous" (Popular Memory Group, 1982, p. 209). By the 1980s, television and, more broadly, visual culture, had become one of the key popular providers of information about the past, which led to studies of popular memory such as George Lipsitz's *Time Passages* (1990) and Edgerton and Rollins's edition *Television Histories* (2001).

The abovementioned authors are all primarily concerned with the relationship between popular conceptions of history, shared 'unofficial' memories, and the mediation of the past through cultural object and technologies. They focus on identity politics, resistance to dominant ideologies, social power and control through memory work. The past, in these views, is very much the battleground of present interests. This dissertation ascribes to these insights, but also aims to update and appropriate them to the study of contemporary memory work. What happens when memory work takes place in a media-saturated world? How do our pasts change when our practices, cultural forms, and technologies that are used to express and carry it are increasingly digital? And, how is the power to shape our pasts re-distributed within a society in which media are omnipresent and pervasive? Have we entered a "fifth stage" of memory, as Le Goff (1992) would phrase it? And, if the answer is yes, how do the dominant media of our time enable, shape and partake in memory construction? Such questions will be the focus of the next chapter.

2

Memory work in a new media ecology

> We do know that the media do not transport public memory innocently. They shape it in their very structure and form.
> (Huyssen, 2003, p. 20)

The previous chapter conceptualized memory work as the engagement with the past through and by specific practices, technologies, and cultural forms. This chapter expands this conceptualization by scrutinizing the role of media in memory work. Media are seen here as our primary, material technologies of communication. They enable and shape specific practices and produce particular cultural forms. Technology in this sense is regarded in terms of usage and practice, not as something static. Technologies are supportive but also adaptive; they can be strategically used to certain ends and play an active role in the recording of the present and the reconstruction of the past. Therefore, media can be described as technologies of memory with particular characteristics that enable, shape, and restrict memory work, yet are themselves altered through their use.

Technologies, however, are never "merely" material instruments. They are supported and produced within industries, have an institutional basis, and are surrounded by particular discourses. A vast range of norms, values, and social practices are connected to technologies: they have a social and cultural status and reputation. This is especially true for the technologies we call media. Media, while technologies, are also organizations that help construct reality by representing it. Moreover, they exert influence over other social institutions, ranging from politics to sports, and they shape practices of everyday life. This makes media powerful actors in the ways in which societies are organized and cultures operate.

Following this line of thinking, media not just contain or transfer our past but actively shape it. For one, media may create the sense of a shared past. They also allow individuals to share past experiences with others. In both cases, they help carry particular experience and knowledge of the past into the present and future. In other words, media are technologies of memory (Huyssen, 2003; Van House & Churchill, 2008; Sturken, 2008), an idea that will be developed in the first section of this chapter. The second section introduces the panoramic theory of mediatization, a highly debated term that, described simply, aims to fathom the consequences of the increasing pervasiveness and infiltration of media in everyday life and other social institutions. The question that this sections sets out to answer is how mediatization theory can help us make sense of contemporary memory work. The third section peruses the notion of ecology, both in discussions of media and memory. An ecological approach to media and memory may be helpful in studying their relationship after what Hoskins (2011a, 2011c) has called "the connective turn," the shift towards mobile, participatory, and personal media that foster and monetize connectivity (Van Dijck, 2013). The chapter thus moves from theories pertaining to broadcast media to those relating to digital platforms. However, the chapter attempts to show continuity next

to emergence. Indeed, as Gitelman (2008) has shown, new media are never truly new, nor is the memory work associated with them.

Media as Technologies of Memory

One way we can think of media is as the technological means that enable, facilitate, disseminate, and preserve communicative forms and symbolic content. Communication here is seen as the foundation of culture and society. It is the process that is the basis of all socialization and the social construction of reality (cf. Williams 1958, 1981). Media as carriers and enablers of communicative forms and content are therefore essential in the meaning-making process. Their disseminative quality supports communication within and beyond groups and helps create new ones. Media are both material technologies—such as video cameras, books, or phones—and social organizations and they idiosyncratically support and shape particular kinds of communication within different social settings. Furthermore, this section argues, they can be active agents in the shaping of memory work as technologies of memory: “what is remembered individually and collectively depends in part on technologies of memory and the associated socio-technical practices, which are changing radically” (Van House and Churchill, 2008, p. 296).

What should not be forgotten, however, is that media are not just vessels that *carry* memories. Even “memories” captured by recording media are actively given meaning and negotiated by its consumers. Moreover, writes Marita Sturken (1997), following Foucault, “technologies are social practices that are inevitably implicated in power dynamics” (p. 10). Certain versions of the past are more powerfully communicated by these technologies than others and might have higher cultural credence. Sturken eminently demonstrates how cultural objects—which she calls technologies of memory—can be appropriated for mnemonic means. These can be as far-ranging as memorials, souvenirs, ribbons, television images, or the body itself. Especially in today’s visual culture, memory is “produced by and through images,” which are highly mobile and changeable technologies of memory (Sturken, 1997, p. 11). In short, technologies of memory *mediate* the past and are *part of* it. They are not mere carriers or represent stable visions of the past: they are actively used and renegotiated in the present. The technologies we call media are specifically designed to transfer cultural and communicative forms and content in time and space, which makes them highly viable as technologies of memory.

This latter thought can be unpacked further. Garde-Hansen (2009) argues that to regard media as technologies of memory is to acknowledge that media produce archives, are technical archiving tools, are “self-archiving” phenomena, and are creative archives for remixing (p. 72). First, media can be institutionalized and professional producers of memory. As such, media organizations produce and select from an archive representing historical and subjective knowledge of a certain topic. Second, media can be seen as the technical means that capture a present that will be a past at some point in time. They are the mate-

rial dimension of memory, ranging from cave paintings to IPhones. Third, media can be self-archiving and self-referential: "they use themselves to remember themselves" (Garde-Hansen, 2009, p. 72). Fourth, they provide the resources, both technically and discursively, for creative remixing. These can be scrapbooks, photo albums, or mash-ups on YouTube. In all these dimensions media technically *mediate* the past; they come in between sender and receiver and, consequently, shape, and add to the communicative act.

Media organizations and producers may select from and present the past in certain ways. This process of selection is highly political since it involves deciding what is important and relevant in terms of the present:

> With little adaptation, it seems fair to suggest that struggles over power in social groups often are waged under the sign of memory—what the group will choose to remember, how it will be valued, and what will be forgotten, neglected, or devalued in the process. (Blair, 2006, p. 57)

This memory work performed by media has been studied extensively in relation to historical atrocities. Scholars have especially focused on media's memory work pertaining to the Holocaust, instigated by the numerous re-presentations of it since the 1970s. Before, during and after the appearance of landmark productions such as the TV miniseries *Holocaust* (1979), the documentary *Shoah* (1985), and the film *Schindler's List* (1993) intense debates over the question how to represent the unrepresentable were held.[13] Also, it has been argued that the period right after the War was a period of forgetting, resentment, repression, latency, trauma and looking towards the future (Bauman, 2000; Améry, 1986; Novick, 2000). Marianne Hirsch (1996) argues that, in the case of memories of the Holocaust, people who live in a world dominated by the traumatic histories of the time before they were born are inspired to "secondary, or second-generation, memory, 'postmemory'" (p. 662). In somewhat similar vein, Alison Landsberg (2004) demonstrates that certain versions of the past represented in film and television can act as "prosthetic" memories which replace or alter personal memories of events or create a sense of having experienced them and, consequently, can lead to better understanding of, for example, Holocaust survivors and the families of the victims (pp. 111-156).

As Hirsch (1996) and Landsberg (2004) show, media possess the ability to influence perceptions of reality, feelings of lived experience, and senses of authentic memory. Television, cinema, newspapers, and other media of mass communication continuously represent the past and present in different—and also often remarkably homogenous—ways and thereby alter accounts and experience of events in time, whether they are personal or public, hap-

13 This issue has been addressed throughout the literature on the topic. A good starting point might be Miriam Bratu Hansen's essay *Schindler's List* is not *Shoah*: The Second Commandment, Popular Modernism and Public Memory.

pened in a distant past or just now. People *can* be "haunted by the traumas that others have experienced" (Kammen, 1995, p. 259). Hirsch's term postmemory and Landsberg's idea of prosthetic memories can help explain how "deep memory," as opposed to "ordinary memory," can be instilled in people who did not live through or directly experienced a critical incident and this memory cannot be detached from a sense of self and belonging (Langer, 1991). Ideas like these are powerfully explanatory in the discussion of individual agency in memory work: media, as technologies of memory, allow individuals to connect and relate their experience and knowledge of the past to mediated re-presentations, or may share and spread this by means of media.

Important media events have provided ample material for research into the dynamics of memory in the late twentieth and early twenty-first century. They can prompt so-called "flashbulb memories," a concept drawn from psychology (Finkenauer, et al., 1997). As Brown and Kulik write in 1977:

> Flashbulb Memories are memories for the circumstances in which one first learned of a very surprising and consequential (or emotionally arousing) event. Hearing the news that President John Kennedy had been shot is the prototype case. Almost everyone can remember, with an almost perceptual clarity, where he was when he heard, what he was doing at the time, who told him, what was the immediate aftermath, how he felt about it, and also one or more totally idiosyncratic and often trivial concomitants. (p. 73)

From the 1990s onward, many studies have focused on the role of important media events in public memory. For example, Michael Schudson (1992) has investigated the shape, place and function of the Watergate scandal in American memory; Barbie Zelizer (1992), as examined memory work in relation to the televised and heavily covered Kennedy assassination. Because its brutal yet distant reality is very easily disrupted and altered, war has provided inspiration for many studies into memory and its relation to media. For example, Arthur Neal (1998) interpreted war and other national events and its impact on society through the concept of national trauma; Sturken (1997) demonstrated how personal and mediated collective memories of the Vietnam and Gulf Wars proliferate in commemorative spaces and mediated texts; Maltby and Keeble (2007) devote a chapter of their book to the processes of remembering and forgetting war; and Hoskins (2004) argued that a collapse of memory has occurred which can be demonstrated by the examples of the Gulf War, 9/11, and the 2003 Iraq War and, together with Ben O'Loughlin (2010), that war, like the memory thereof, is currently diffuse.

A recent reconceptualization of the relationship between media and memory comes from Neiger et al. (2011). These authors define "media memory" which suggests a three-way exploration of media: as producers of memory, as tools to produce memory, and as historical objects of study and critique in memory studies. Through these different angles,

media can be seen as memory agents (how is the past shaped by different media?), operating within certain social and cultural settings (how do specific social, historical and political circumstances shape media memory and vice versa?) that change over time (Neiger et al., 2011, p. 2).

Of course, the specific ontologies and epistemologies of different media at different moments in time must be taken into account in these modes of analysis. Radio's role and impact as a technology of memory today is not what it was 60 years ago and comparing a news website on the same scale, in terms of material and social conditions of memory work, with a pamphlet distributed in the 18th century glosses over the specificities of historical context. Like there is no such thing as *the* media, there is no such thing as *a* media memory. However, "there can be no 'collective memory' without public articulation" (Neiger et al., 2011, p. 3). The understanding of the past that flows out of the (public) interaction between producers and users and, increasingly so, "prosumers" (Bruns, 2009) of media memory, should be seen, it is argued in this dissertation, within the broader material and social networks of symbolic creation and interaction. Technologies of memory and memory work, in whatever forms, never emerge in isolation, but are conditioned by their time and place, which are, increasingly, pervaded with media. This requires theories that help explain the contemporary context in which memory work takes place. One such theory is mediatization.

The Mediatization of Memory?

When memory work increasingly involves media, can we speak of the mediatization of memory? Mediatization[14] is a highly debated term within contemporary media studies. Social psychologist and media scholar Sonia Livingstone (2009b, p. x) describes the phenomenon as follows: "'Mediatization' refers to the meta process by which everyday practices and social relations are historically shaped by mediating technologies and media organizations." Mediatization can therefore be seen as a panoramic, sensitizing concept that attempts to grasp the role of media in shaping social processes and institutions. Using the example of the most important institutions in the process of socialization of young people, Friedrich Krotz (2009, p. 21-22) shows that over the last thirty years the family, peer group, and school have come to involve media up until the point that "we should speak now of new mediatized forms of socialization and growing up in or into a mediatized society."

Indeed, at least in modern, 'Western' societies many areas of social life are permeated by media. In such societies, reality is increasingly constructed in the media and through the use of media. Moreover, many aspects of our culture and society involve media—rang-

14 In the original sense, the term mediatization was used by Fredric Jameson (1991), who wrote of a "process whereby the traditional fine arts are *mediatized*: that is, they now come to consciousness of themselves as various media within a mediatic system in which their own internal production also constitutes a symbolic message and the taking of a position on the status of the medium in question" (p. 162).

ing from our love lives to religion. This is not to say that the social shaping of reality is *determined* by media, but rather that they 'set the stage' for communicative interaction. Mediatization theory holds that practices, institutions, work, group formation, socialization itself have come to involve media and that they leave their marks on these aspects of everyday life (Krotz, 2009, p. 24).

Mediatization is commonly regarded (cf. Altheide & Snow, 1979) to be "a distinctive and consistent transformation that […] can be understood properly only if seen as part of a wider transformation of social and cultural life through media operating from a single source and in a common direction, a transformation of society by media, a 'media logic'" (Couldry, 2008, p. 376). However, as media sociologist Nick Couldry (2008) argues, the influences of media on (the institutions of) daily life are too intricate, various and complex to reduce to a single language or logos, "as if they all operated in one dimension, at the same speed, through a parallel mechanism and according to the same calculus of probability" (2008, p. 378). This highlights the problem of the term: it covers too many transformations and is too heterogeneous to fully account for media influence on social organization, the practice of everyday life and communicative (inter)action.

In his *Cultures of Mediatization* media scholar Andreas Hepp (2013) brings together insights from various studies into media and society in order to elaborate on the phrase "media cultures." He argues that much of the work done in cultural and media theory makes simultaneously too grand and too poor claims about the role of media in daily life today. Hepp (2013) defines media cultures as "those cultures whose primary resources are mediated by technological means of communication, and in this process are 'moulded' in various ways that must be carefully specified" (p. 5). Avoiding extremes and simplifications, Hepp argues that these cultures are "omnipresent, but not a mass culture," "marked by a medium, but not dominated by one media," "constitutive of reality, but no integrative programme," and "technologized, but not a cyberculture" (pp. 8-28). Consequently, media cultures are not simply standardized and mass produced, but openly contested, contradicted, and negotiated (p. 11). They are not confined and guided by the dominance of one medium, but rather produced through multiple forms (pp. 16-17). Such cultures do not simply distort our perception of reality or have an effect on behavior (as in media effects research), but rather house many contradictory and dysfunctional elements that confuse a one-directional process of socialization (pp. 22-23). Lastly, contemporary media cultures are not digital utopia achieved, nor are they left unaffected by the influence of digital or internet culture; rather, the influence of networked media and life on screen should not be overestimated nor underrated in research into contemporary media cultures (p. 28).

Hepp (2013), together with many authors writing about mediatization, quotes Thompson's seminal work *The Media and Modernity* (1995):

> By virtue of a series of technical innovations associated with printing and, subsequently, with the electrical codification of information, symbolic forms were produced, reproduced and circulated on a scale that was unprecedented. Patterns of communication and interaction began to change in profound and irreversible ways. These changes, which comprise what can loosely be called the '*mediazation of culture*', had a clear institutional basis: namely, the development of media organizations, which first appeared in the second half of the fifteenth century and have expanded their activities ever since. (p. 46, emphasis mine).

Thompson shows that technological innovations in media provide the means for the distribution and dissemination of (locally) produced symbolic forms—whether they are language, ways of dress, norms and values, etc.—to a wide and broad audience. In similar vein, Hjarvard (2008) contends that "once an abstraction, community has, thanks to media, become concrete experience" (p. 128). Hjarvard elaborates on the "common experiential frame of reference" that is created by media, meaning that mass communicated messages enable individuals to experience the world from perspectives that are not necessarily connected to his or her subjective time and space.[15] Moreover, as Nick Couldry (2003) argues, media provide ideologically infused categorical lenses through which people view the world (p. 29). This process, which Thompson calls mediazation and Hepp mediatization, appears in historical waves, is not historically specific to the digital age, and transforms not just media, but also the symbolic forms and ways of communication attached to them (Hepp, 2013, p. 31). Fundamentally, the study of mediatization is about the "theorization of a highly complex communicative relationship between actors standing one with another in direct communication, which relationship then alters when media become part of this mediation process" (Hepp, 2013, p. 34).

This latter point shows that mediatization is a conceptual troublemaker; where does mediation stop and where does mediatization begin? Mediatization and mediation do not describe the same thing. Both concepts can simultaneously exist, as Hepp (2013) writes:

> While mediation is suited to describing the general characteristics of any process of media communication, mediatization describes and theorizes something rather different, something that is *based on* the mediation of media communication: *mediatization seeks to capture the nature of the interrelationship between historical changes in media communication and other transformational processes*. (p. 38, emphasis in original)

15 This has been part of the general "dissembedding" of social structures that is one aspect of modernity, as theorized by Anthony Giddens in *The Consequences of Modernity*.

This distinction between the different processes both concepts try to cover is also expressed by Stig Hjarvard (2012):

> Mediation denotes the concrete act of communication by means of a medium and the choice of medium may influence both the content of communication and the relationship between sender and receiver. The process of mediation itself, however, usually does not change culture and society. By contrast, mediatization refers to a more long-lasting cultural and social transformation, whereby society's institutions and modes of interaction are changed as a consequence of the growth of the media's influence. In short, mediation is about communication and interaction through a medium, mediatization is about the role of media in cultural and social change. (p. 32)

Mediatization, in Hjarvard's sense, is a "new social condition" in which media form an institution on their own and simultaneously affect social institutions (or 'fields' in Bourdieu's sense) through medium-specific features and power dynamics (Hjarvard, 2008, p. 105). For example, media may today partly set the political agenda or politicians take into account the *modus operandi* of media, ranging from emphasizing their personal lives to anticipating deadlines and the news cycle (Hjarvard, 2013, pp. 43-44). Media have become so ingrained in the daily lives of people that they cannot be seen as located outside other cultural and social institutions; they are not separate but integral to cultural and social life.

Hjarvard (2008) calls for an empirical and concrete analytical application of the theory of mediatization in specific cases that clearly demonstrates how "various institutions" and "spheres of human activity" are affected by this process (p. 113). The "media logic" that is applied in interaction and communication between people in diverse situations—whether these are institutional or personal—guides the sender, shapes the content, and directs the receiver of messages in whatever form.[16] However, the term media logic might misleadingly be seen as "a *unitary* logic 'behind' the media" (Hepp, 2013, p. 45). Moreover, the phrase suggests a uniform and "specifically institutionalized social system charged with the function of public communication" (Hepp, 2013, p. 45).

To counter this problem, Hjarvard (2008) comes up with two modes of mediatization, *direct* and *indirect*. Both forms play a role in the media logic that permeates other social fields than the media (p. 114). For example, a game of chess is *directly* mediatized when it is played on a computer rather than a chess board. The rules of the game stays the same, but a whole range of new options open up: the game can be played with an opponent from a distance, the game can be played against a computer, and matches can be saved.

16 As Hjarvard duly notes, mediatization is mostly a process that appears in highly industrialized, modern, and chiefly western societies. However, it has a global outreach that rapidly spreads via worldwide communication networks and a global media culture. In this sense, mediatization is related to globalization (Hjarvard, 2008, p. 113)

This, in turn shapes new practices and experiences of playing chess. When other institutions, such as sports of politics, play according to the rules of the media, they are *indirectly* mediatized. Hjarvard's uses the example of eating a burger at Burger King or McDonald's. A visit to these fast-food restaurants does not only consuming a burger but also consuming media: "the cultural context surrounding the burger, much of the attraction of visiting the restaurant, and so forth have to do with the presence of media, in both symbolic and economic terms," writes Hjarvard (2008, p. 114). Hjarvard approaches media as producing effects in social spheres, thus explaining what is meant by the term media logic. Additionally, mediatization is described as being embedded within the particular contemporary historical conditions of this day and age: media today form an autonomous institution that is interconnected to other institutions and exert power in this relation (Hjarvard, 2008, p. 110). Seen in this light, it makes sense to talk about media as a social institution whose logic steers other domains of social life in particular ways, yet research needs to specify and unpack what this logic entails.

Media theorist Mark Deuze (2012) goes beyond Hjarvard's, Hepp's and Couldry's theoretical exploration of mediatization: "If anything, today the uses and appropriations of media can be seen as fused with *everything* people do, *everywhere* people are, *everyone* people aspire to be" (p. x). Deuze does not argue that media guide our every step—that would be technological determinism—or that humans are today left unaffected by the natural realities of the body and the environment. Rather, he proposes that media have become an integral part of the practices and perceptions of everyday life. At least in urban settings around the world, screens surround us and communication devices are carried around intimately. However, to live *in* media suggests more than "just" watching hours of television, spending years of a lifetime texting, messaging, and phoning. The phrase suggests that it redefines our very look on the world and every act and interaction. In other words, we "are always already tied up in media" (Deuze, 2012, p. 5). Deuze's work assumes or takes for granted a society *in* media, whereas the primary concern of mediatization theory is how it is getting there or has gotten there.

What usage of mediatization is most appropriate for the argument here and why should it play a role in the discussion of memory work in the digital age? Most authors writing on the term see mediatization as a metaprocess. The term, then, fits in a line of conceptual constructions such as individualization, globalization, and commercialization (Hepp, 2013, p. 47). These concepts are not readily measurable, but help the researcher to generalize processes. A theory of mediatization, therefore, is not empirically verifiable in its entirety, yet it tries to provide a general theoretical construction that rests in part on empirical findings (Hepp, 2013, p. 49). Flowing out of this is the idea that mediatization is not just an academic concept but also something that is experienced (through practice) in daily life, both on the level of institutions as in the individual. Being a "panorama of a sustained metaprocess of change," mediatization requires *empirical* investigation in specific settings and of specific media in use (Hepp 69).

Although the debate on mediatization is still very much open-ended, a number of conclusions can be drawn from the literature. For one, mediatization describes the historical process of how media increasingly set the parameters of communication, enable particular forms of communication, and create possible spaces of communicative interaction. As a result, they shape (in medium-specific ways) the social institutions that rely on communicative interaction, ranging from politics to religion, leisure to work. Furthermore, our everyday lives have come to involve not only more media, but also those media have shaped our practices in it. Mediatization can be properly studied on precisely this level, because practice is the bridge between individual agency and social structure (see chapter 3). At the same time, we should not forget that we shape the tools that shape us. In other words, while we practice media we shape media as much as media shape our practice.

What does the theory of mediatization bring to the study of memory? As was argued earlier, memory is distributed, articulated, expressed, externalized, or *mediated* by and through technologies. It is part of a process of communicative interaction, which is, in essence, social. Memory is always *worked*, under construction in the present. Moreover, the same process operates *vice versa* as well: externalized, mediated memory finds its way to the internal worlds of its recipients. Here, we may talk about the *mediatization* of memory, a process in which the technological, institutional, and organizational aspects of media shape knowledge of the present and past in particular ways. This goes beyond mediation, not only because technical and institutional media are central to this process (and not "mere" face-to-face communication) but also because it can alter, affect or even replace experienced reality (cf. Landsberg's prosthetic memory).

Researching memory work in mediatized culture and society requires researchers to unpack the procedural logics of media. How do both their specific technological design and their reputations as institutions enable, shape, and restrict memory work? In other words, what happens to our pasts when media pervade personal, everyday life and, simultaneously, as social institutions, powerfully interact with other fields of cultural production? Memory work has always been involved a process of *mediation* in order to be publicly expressed or socially transmitted. However, the *mediatization* of memory goes beyond the "mere" transmittance of a message through a medium. Certain memory schemata guide reconstructions of the past and these are "at the very least informed by the mass media who themselves build up repertoires of images and narratives" (Hoskins, 2009c, p. 38). On an instrumental and functional level, technical media afford, enable and allow specific types of memory work: a monument communicates the past differently than a historical documentary. Hence, to combine the theory of mediatization with the theory of memory is asking a seemingly easy question: what role do media—both as social institutions and material technologies—play in memory practices when they saturate our daily lives to such a degree that "everything" is mediated (Livingstone, 2009a). Or, to borrow from Hepp (2013), how do media "mold" memory work and how does this process affect understanding of the past?

This latter question is even more important to ask in the face of 'new' media's "more immediate and extensive interpenetration with the everyday on an individual, social, and continual basis" (Hoskins, 2014, p. 667). These media may "transcend and transform that which is known, or thought to be known, about an event" (Hoskins, 2014, p. 669). Illustrative examples of this are the emergence of new video material, nine months after the MH17 disaster, showing a BUK rocket launcher near the crash site; or, the way activists in Syria purposively document everything that is happening in Syria for future recall (see empirical chapters below). The next section will move closer to this dissertation's object of study—digital memory work—by amending mediatization theory with and 'ecological' approach to new media.

Structural components of a new media ecology

Where mediatization theory is mostly concerned with the gradual transformation of culture and society under the influence of media, a 'media ecology' approach asks how people and media technologies are connected to each other and co-constitute an environment of interaction. Media ecology is therefore a universal approach to the associations between human beings and their technologies and techniques of communication; humans have always existed in media ecologies. Therefore, we might argue that media ecology comes before mediatization; it is about our intricate connections with and dependence on infrastructures of communication. The concept allows us to reassess our relation to media today, when our media are deeply, intimately, and often visibly interconnected with us, not just as prostheses of our communicative capabilities, but also as environments (Postman, 1970, p. 161). What does an ecological approach to media imply for the study of memory today? And: what does the *new* entail in "new memory ecology"?

To regard media as environments means taking their structuring agency toward culture and society seriously. As Hoskins (2011c, p. 24) writes:

> Media ecology is then the idea that media technologies can be understood and studied like organic life-forms, as existing in a complex set of interrelationships within a specific balanced environment. Technological developments, it is argued, change all these interrelationships, transforming the existing balance and thus potentially impacting upon the entire 'ecology'.

A statement like this can be seen to lean toward technological determinism—the idea that technology *directly* changes society and behavior therein. However, as in natural ecologies, environments shape the individuals and groups as much as these individuals and groups shape environments. Likewise, media ecologies consist of a vast array of interlinked people, technologies, and practices that mutually shape each other. Also, as in natural ecologies, when one of the elements within an ecology changes, this might affect the other

components. Related to media ecologies, this means that "at the time of the introduction of a new medium there is always a period of adjustment, or settling down, or appropriation of the established by the emergent," writes Hoskins (2016a, p. 15).

This section is devoted to what I regard as interlinked, *structural* aspects, or environmental conditions, of a *new* media ecology that shape the environmental conditions for contemporary memory work. It is important to stress, though, that "new" media did not emerge out of thin air, nor do I argue that "old" media like television or radio are dead. There might very well be a new golden age of television due to streaming technologies; radio is resilient due to its adaptive qualities; and newspapers are still central in the production and dissemination of news. Furthermore, as media philosopher John Durham Peters (2015, p. 15) asserts:

> Compared to mass media, digital media did seem like an enormous historical rupture. But if we place digital devices in the broad history of communication practices, new media can look a lot like old or ancient media. Like 'new media,' ancient media such as registers, indexes, the census, calendars, and catalogs have always been in the business of recording, transmitting, and processing culture; of managing subjects, objects, and data; of organizing time, space, and power.

Thus, the current media ecology is—like natural ecologies—the result of evolution, rather than revolution. New media are never fully new, but are remediated forms of older media (Bolter & Grusin, 1999; Gitelman, 2008). Scrutinizing a new media ecology means investigating how new media record, transmit, and process culture in *specific* ways; how they manage subjects, objects, and data idiosyncratically; and how this new environment organizes time, space, and, ultimately, power.

According to Lievrouw (2011, p. 7), new media are "information and communication technologies and their social contexts." As such, they contain the three interlinked components that characterize all media:

1) The material *artifacts* or devices that enable and extend people's abilities to communicate and share meaning.
2) The communication activities or *practices* that people engage in as they develop and use those devices; and
3) The larger social *arrangements* and organizational forms that people create and build around the artifacts and practices.

Obviously, all communication systems contain these three components. Therefore, Lievrouw (2011) identifies four features of new media that distinguish them from "older" media. First, new media are hybrid or recombinant technologies, meaning that they "resist stabilization," due to the fact that they are a combination of older systems and innova-

tions. Second, new media are formed by and are part of networks of individuals, technologies and organizations. This is in direct opposition to the linear path of communication followed by mass or broadcast media. Third, on the level of outcomes for culture and society, new media encourage ubiquity. Notwithstanding the existence of a “digital divide” in the world, new media are everywhere and pervade every aspect of our everyday life, ranging from the sharing of ultrasound images of unborn children on Facebook to playing multiplayer games while taking a sanitary stop. These last examples also exemplify the fourth characteristic element of new media, namely their interactivity, which is stimulated by their immediacy, responsiveness, and social presence (pp. 6-16).

A second, related process Lievrouw (2011) calls *reconfiguration*, or users’ modification and adaptation of “media technologies and systems as needed to suit their various purposes and interests” (p. 6). That is, media can be tactically used for purposes that were not thought of by their designers. New media respond to how they are used in practice. The reason why we can keep calling new media new is, according to Lievrouw (2011) that they “are the product of the continuous interweaving of innovative activities, services, systems and uses that blend or even eliminate familiar distinctions” (p. 7). In other words, media remain new because they are adaptable and adaptive, never stable, in constant and rapid flux, which, to large extent, is related to their digital nature. Their adaptability, ubiquity, non-linearity, and mobility make it possible for them to move into every nook of everyday life.

Following Lievrouw (2011), it is argued here that the current, new media ecology is marked by a number of related, fundamental evolutionary steps away from a former media ecology that might be called the broadcast era: 1) the shift from analogue to digital media technology; 2) the move from top-down, centralized production of media content to peer-to-peer and distributed production; 3) the emergence of digital, ‘living’ archives; 4) the emergence of connective, “social” media that capitalize on user activity and steer flows of information and data, collectively called Web 2.0; and 5) the shift from centralized “static” media to highly mobile, networked technologies such as smartphones and tablets. A new media ecology is thus constituted by networked technologies and ubiquitous mobile and digital media that allow for bottom-up production of media content stored in archives that are partly curated by users. However, this new environment is no utopia achieved. Rather, a relative small number of companies are at the top of the food chain and shape this environment in powerful ways. These companies thrive on the user input, up to the point that they cannot exist without it (Gehl, 2011). Below, each of the components of the new media ecology is discussed in terms of their consequences for memory work. Digital media, digital archives, peer-to-peer production, mobile and networked technologies, and ‘social’ media stand at the basis of *digital* memory work.

Digital media technology

Firstly, a new media ecology mainly consists of *digital* technologies and content. Fundamentally, our everyday communicative exchanges, ranging from private conversation on Whatsapp to watching the latest news, are packaged into binary code that can be unpacked by computational technology and made readable to users again through graphical user interfaces. Media theorist Lev Manovich (2001) identifies five fundamental aspects of digital media that make up the "language of new media." First, all digital media objects are "composed of digital code" and are therefore "numerical representations"; accordingly, any digital object can be described formally in a mathematical function and, due to algorithmic manipulation, is programmable (Manovich, 2001, pp. 27-30). Second, new media are modular, meaning that every element of a media object can be taken apart because it is independent from the whole (pp. 30-31). Third, the first two principles allow new media content creation, manipulation and access to be automated by steering programs or algorithms (pp. 32-36). Fourth, new media objects are subject to variation, because their programmability and modularity enable (even automated) recreation and remixing of components in databases (pp. 36-45). The fifth and last principle is that computerized media are a transcoded form of cultural logic into computer logic and vice versa. Both layers, as Manovich calls these logics, influence each other through usage and give rise to a "new computer culture" (pp. 45-48).

Manovich's principles of digital objects, whether they are html code, a social media platform, or a digital film, are far-reaching. Together, they constitute a language which provides the basis of interaction between humans and digital media and, as the latter become more prominent in our daily lives, this language becomes the *lingua franca*. For example, the meanings and actual practices of copying, cutting and pasting, saving, sharing, searching, and deleting are drastically changed in a digital media environment. Consequently, the language of new media underlies technologies of memory and memory work. To name just a few varying examples: conversations on various platforms, from WhatsApp to Weibo become recorded memories of communicative practice; iconic images are resurrected and appropriated (e.g. photoshopped) by social movements on social networking sites; people create memorial websites and open up digital spaces for condolences and remembering; and witnesses record and store their experiences in immense databases that can be tagged and searched. Manovich's principles—numerical representation, modularity, automation, variability, and transcoding—underlie and make possible each of these practices.

Media production by and in 'networked' publics

Digital media allow for the relatively easy (re)creation by and spread of content among networked groups and individuals. This signals a shift in the production model of media content and results in a renegotiation of power relations between "old" and "new" media producers. In a post on his weblog, media scholar William Merrin (2008) attempts to grasp these changes. The *post*-broadcast era he characterizes in the following way:

> In place of a top-down, one-to-many vertical cascade from centralised industry sources we discover today bottom-up, many-to-many, horizontal, peer-to-peer communication. 'Pull' media challenge 'push' media; open structures challenge hierarchical structures; micro-production challenges macro-production; open-access amateur production challenges closed access, elite-professions; economic and technological barriers to media production are transformed by cheap, democratised, easy-to-use technologies.

Hence, digitally networked technologies force us to rethink concepts such as audiences and consumers. Mizuko Ito (2008) sees "networked publics" as an alternative to terms such as audience or consumer. It "references a linked set of social, cultural, and technological developments that have accompanied the growing engagement with digitally networked media" (Ito 2). According to Ito, publics "foregrounds a more engaged stance," emphasizing that it consists of "reactors, (re)makers and (re)distributors" (p. 3). Four elemental aspects of networked digital media enable networked publics to emerge. First, accessibility to the digital tools of production and networking are essential. At least in industrialized areas in the world (but also increasingly globally) content is being produced on sites such as Flickr and YouTube and on SNS (social networking sites) new and old connections are made. Second, the open "end-to-end (E2E)" architecture of the Internet allows the new forms of "peer-to-peer (P2P)" and "many-to-many (M2M)" distribution to emerge (p. 7). This causes a decentralization of communication networks and information exchange, hence challenging top-down and mass communication models. Third, these two changes lead to value being created at "the edges," meaning that "niches, peer cultures and special-interest groups" are served in networked publics. While previously unheard voices are potentially heard now, this trend also may lead to a "fragmentation in common culture and standards of knowledge" (p. 11). Fourth, a new infrastructure of aggregation has developed, creating pockets of specialized and personalized information (p. 11-13). Recommendations on websites and personalized advertising are vivid examples of how the market responds to a fragmented, yet interconnected consumer. Accessibility, P2P and M2M distribution, value at the edges, and aggregation have changed the face of the audience. The notion of networked publics encapsulates these new possibilities for the audience (how exactly, will be further explained in chapter 3).

Digital archives

Digitization (converting non-digital objects into digital form) and the omnipresence of digital content, technologies, and practices (and the subsequent emergence of a digital culture) have inspired scholars to rethinking the role of the archive. Echoing the work of thinkers such as Jenkins (2009), much of the emergent literature on memory work in a digital new media environment is optimistic about its democratic and participatory potential. For example, in her book *Rogue Archives*, De Kosnik (2016) perceives a shift in the

preservation and re-production of cultural forms and content within a new media ecology. "Media users have seized hold of all of mass culture *as an archive*, an enormous repository of narratives, characters, worlds, images, graphics, and sounds from which they can extract the raw matter they need for their own creations, their alternatives to or customizations of the sources" (De Kosnik, 2016, p. 4). Memory in the digital age, in De Kosnik's words, has "gone rogue." Rogue archives—freely accessible online archives produced and managed by 'amateurs'—therefore enable "vast quantities of cultural content to be preserved and made accessible"; it allows "subcultural and marginalized groups to have archives of their own"; it empowers mass audiences to "invert the sociocultural hierarchy that places them at the bottom of the power structure of media"; and it permits "memory-based making in the mode of repertoire—that is, an everyday making, an individualized and personalized style of performance, a holding-in-common of all culture as shared resource and property" (2016, p. 10). As De Kosnik shows in her book, fans create their own archives holding their remixes and productions. This has, within each 'amateur' community, been the case. However, what happens to the cultural productions and remixes uploaded to platforms that can today be said to be mainstream?

Social media platforms are not only media but are also archives: they systematically order and represent content that is produced and often tagged, titled, described, and/or referenced by their users. Databases—stored collections of information—are "not in themselves archives," writes Robert Gehl (2011, p. 13). Yet, especially in the case of social media platforms, users organize material by "affectively processing" it (Gehl, 2011). Online users share content, make connections, rank cultural artifacts, and produce digital content and, moreover, they are engaged in curating these connections, artifacts, and content, thereby readying these for automatized selection, filtering, and presentation by algorithms. Hence, these platforms, in collaboration with their users, structure data sets into archives. By means of this process, some materials become more visible than others, up to the point that power and authority over our archives is centralized in new ways "hidden away beneath the abstractions of the smooth Web 2.0 interface" (Gehl, 2011, p. 13). As a result, many digital media produce popular, dynamic, *living* archives. Platforms like YouTube, Facebook, and Wikipedia are hybrid technologies that combine aspects of traditional media (e.g. television, diary, and encyclopedia, etc.) and archives. They are media because they come in between a sender/producer who encodes a text in a specific way and a receiver/consumer who decodes (and recodes) this text. Digital platforms are, however, not merely media that come in between sender and receiver, but are also vast, interconnected archives of mediated material and user data. Users are not only actively invited to contribute content, but are also part of the categorization of it, readying it for storage.

Schwarz (2014) develops the metaphor of "neighborly relations" to describe how in a digital culture in which the database—unlocked by search and guided by algorithms—is central: users easily (re)connect to representations of the past at unexpected times and

in unexpected places. Consequently, authorship and ownership of representations of the past become fluid. Instead of possession, Schwarz (2014) argues, we should conceptualize our encounters and interactions with memory objects in digital networks and media as "neighborly" (p. 12). Indeed, the language traditionally associated with neighbors when it comes to object-centered interaction—sharing and borrowing—"fit" in a digital media environment. In a sense, what Schwarz (2014) describes can be seen as the postmodern phenomenon of the free-floating signifier: cultural forms and content (Schwarz calls this "memory objects") stored in digital databases are essentially detached from what they signify, what they refer to. The meaning of memory objects—and which and whose past they refer to—may change in different contexts and interpretative communities. Even though this process may have historically always been the case, this "play" with meaning, reference, and signification is more present than ever; it is intrinsic to digital culture.

Web 2.0

The shift toward bottom-up production (advocated in early Web communities) of the many is embraced within the ideology and design of what Bill O' Reilly (2005) has called Web 2.0. Web 2.0 is characterized by 1) folksonomies (the free classification of information, e.g. affective processing of data), 2) rich user experience (dynamic, interactive websites such as Google Maps), 3) user as contributor (users are invited to review, evaluate, and comment), 4) long tail (offering a broad range of niche products and content), 5) user participation (users help create content) 6) basic trust (a legal principle that allows the easy sharing, reusing, redistributing and editing of content), and 7) dispersion (the delivery of content through multiple channels.

The Web 2.0 paradigm in website design has had enormous consequences for what the Web looks like today. Kaplan and Haenlein (2010) write that the direct results of such thinking are social media, "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content" (p. 60). Social media can take many forms, but underlying them all are the characteristics of Web 2.0: Blogs, microblogging sites (e.g. Twitter), social networking sites (e.g. Facebook), collaborative websites (e.g. Wikipedia), content communities/creative works sharing sites (e.g. YouTube), business networking sites (e.g. Linkedin), social news and bookmarking sites (e.g. Reddit), social gaming and virtual worlds sites (e.g. Eve) (Goff, 2013, p. 19).

The concept of networked publics and the rhetoric, technologies, and practices of Web 2.0 fit very well with the language associated with memory. Garde-Hansen, Hoskins, and Reading (2009) demonstrate, that, opposed to history, memory "is more *peer-to-peer* [...] in its dissemination. Families and friends form close *networks* and *share* memories, both personal and collective. Likewise, it is *participatory*, as mourners visit graves, monuments and memorials. It is *accessible* not elitist" (pp. 8-9, emphasize mine). Indeed, the media technologies within a new media ecology, but also a broader participatory culture (Jen-

kins, 2007), may lead to bottom-up memory work. Such views should be placed in their intellectual context as well. During the first decade of the 2000s many authors were hopeful of the democratizing aspects of the Web and digital media, also regarding memory, in the sense that more people could engage in representing the past (cf. the above quotation). In the short period of about ten years, the media ecology has been colonized by a handful of extremely large companies that capitalize on peer-to-peer production, networks, and user participation. How this recent development affects the dynamics of memory work, however, remains relatively unanswered in the literature. One of the goals of the empirical chapters is tracing these shifting power dynamics.

Mobility

The increase of Web 2.0 platforms and peer-to-peer, bottom-up production goes hand in hand with the omnipresence of mobile media technology, whether they are tablets, smartphones, smart watches, or smart glasses. The mobile phone is simultaneously a personalized physical archive, a means of communication, and a technology that can capture and record reality. Anna Reading (2009a) argues that it contributes to an emergent form of digital memory, namely the memobile: "Mobile digital phone memories or memobilia are wearable, sharable multimedia data records of events or communications. They are captured on the move, easily digitally archived and rapidly and easily mobilized" (p. 81). Because a mobile phone is portable and allows direct connection to others, mediated experience potentially has direct impact on the ways events are remembered: "the mobile phone is accelerating our ability rapidly to transform our personal impressions into public memories independent of the individual" (pp. 90-91). For example, as Reading's research has shown, the mobile phone is used in creating digital witness videos that can be altered or remixed, shared with others in different places and made public on social media platforms (pp. 88-89). This happens in time and place (synchronous digitally shared spaces) and through time and place (using old materials for new purposes).

"As material devices," writes Martin Hand (2014, p. 15) smartphones "are mobile, connected, practically and emotionally to bodies, and have the capacity to capture and distribute an extraordinary range of personally produced visual, locative, and textual data." These "persistent traces," however, require further memory work to become memory objects or memories themselves. Smartphone users, as Hand (2014) shows, might actively engage with their digitally produced material by remediating, curating, changing, or deleting it (pp. 11-13). This does not take away, though, from the *potentiality* of traces to be reactivated by users or companies alike at unexpected times and places (cf. Schwarz, 2014). Because smartphones and similar devices are carried on the body, the variety of potential memory traces is enormous and this can range from the quantification of everyday life and self to the recording of world-changing events. Hence, new connections between personal and collective memory become possible, from visualizations of past user activity at certain times and places, to a personally recorded video "going viral."

Memory work in a new media ecology

Mobile, digital, and networked media create an environment in which connection is central. In *The Culture of Connectivity*, José van Dijck (2013) demonstrates how the interconnectedness of social media platforms has given rise to a new "ecosystem of connective media" that reshapes sociality into a "platformed" sociality (p. 4-5). In other words, digitally networked, and especially "social" media redefine ("engineer" in Van Dijck's terminology) what it means to be social up to the point that it equals connecting to others and products through socio-technical practices such as liking, following, and sharing. The subsequent connectivity of individuals has become a resource that can be sold to third parties. The "culture of connectivity" is a culture in which is it the norm to be connected to social media platforms, all the time, during each activity; it is a culture that binds people to platforms and platforms to platforms.

The culture of connectivity also changes our memory work. In a series of articles and chapters, Hoskins (2004, 2009a&b,&c; 2011a&b; 2013; 2016a&b) even argues that connectivity radically transforms memory itself, as it is "strung out via a continuous present *and* past. Memory is not in this way a product of individual and collective remembrances, but is instead generated through the flux of contacts between people and digital technologies and media" (2011a, p. 272). Thus, Hoskins (2016a) later explains, memory is "made and lost through an ongoing dynamic trajectory of hyperconnections rather than being merely residual (in brains, bodies, media) and also inevitably in decline" (p. 18). Hoskins argues that digital and networked media environments change not only our conception of what memory is, but also its very being.

Autobiographical, personal, collective, cultural, and media memories entangle in a new media ecology. The internet and its wide range of technological advances have transformed "the temporality, spatiality, and indeed the mobility of memories" (Hoskins, 2009, p. 93). Hoskins (2001) describes this type of digital memory as "new" memory because "[t]he 'collective', that is, the consistent pivotal dynamic of memory forged in the present of today, is manufactured, manipulated and above all, mediated" (p. 334). In a new media ecology memory is still located in and interacted with using objects, exhibitions, or museums, which "stand in" for memory, but also much more by tactical practice, namely the shaping, adding, and editing of memories individually and collectively. As can be read above, memory has always been practiced, embodied, or performed, yet the scale, visibility, speed and diversity with which institutionalized forms of memory are reshaped and contested characterize this "new memory."

This dissertation consciously avoids stepping into the discussion whether or not the *matter* and *ontology* of memory *changes* under the influence of media as to avoid both technological determinism and thinking in media effects. As the previous chapter has shown, memory has never been "merely residual," never finished and always dynamic, it is the product of constant engagement, of work. We might never know what memory *is* or how it *changes* under the influence of media. Rather, it might be more worthwhile to

study how memory is *worked*, *practiced*, and *performed* in societies and cultures in which media permeate. In other words, how do people engage with the past for present or future-oriented goals in a new media ecology?

The pervasiveness of networked, digital, archival, and mobile technologies and the widespread use of connective media characterize a new media environment. This ecology shapes the ways in which we interact and communicate with each other to the point that it redefines what is meant by sociality. If memory work is, from the start, a process of social construction within specific groups, externalized, distributed, and, entangled with places, objects, media, and others—our ecologies of life—then we need to ask how these ecologies affect this construction. Schwarz (2014) correctly typifies the past not as a "stable *object* that lies within the individual (an archive, file drawer or wax tablet), but rather as an *achievement*, produced by the interactions between humans and non-humans and the practices that regulate these interactions" (p. 8).

However, what happens when media technologies and media-related practices increasingly *shape* the subjects of our memory work, *steer* our engagements with the past, *hold* specific understanding and experience of the past, and in the process progressively become *part of* memory work? Can we still speak of memory as an achievement? Or, is memory increasingly achieved *for* us? In an ironic turn of events, have the very technologies that meant to "liberate" us from top-down media institutions and inspire bottom-up participation instead given rise to a mnemonic culture in which certain versions of the past (still) dominate others? These questions, which flow out of the literature on the new media ecology, will be addressed in the empirical chapters. The next two chapters, however, will revolve around the question *how* to answer such questions in the first place.

3

Between practice and materiality: Seeing memory work through the lens of practices and affordances

> Technologies may constrain, but they do not determine […] Technologies lead double lives.
> (Silverstone, 2003, pp. xi-xii)

> The matter, nature, and function of memory never changes as a result of technology; rather, the concomitant transition of mind, technology, practices, and forms gradually impinge on our very acts of memory.
> (Van Dijck, 2007, p. 49)

The previous chapters discussed rather 'grand theories' of the relationship between memory work and media. In this chapter, I introduce two approaches or 'middle-range theories' that take us a step closer to the empirical analysis of this relationship: practice theory and affordance theory. Practices are the bridge between individual agency and societal structure, since they comprise individual, yet shared patterns of action. Practice theory allows us to see memory work as something people *do*—with or related to media—within a broader space of social interaction in which certain norms and values emerge. The second section discusses affordances as a dimension between practice and technology. Affordances are theorized here as the perceived possibilities for interaction with technology. As such, affordances both invite and shape certain practices vis-a-vis technologies such as media. At the same time, affordances also leave open the possibility for unintended practices to emerge. The third section brings practices and affordances together and locates memory work as situated in between practice and materiality and *realized* in cultural forms.

Media and memory practices

Both media and memory work are tied to practices, which are, according to Schatzki (2001, p. 11), the "embodied, materially mediated arrays of human activity centrally organized around shared practical understanding." Similarly, anthropologist John Postill (2010, p. 1) defines practices as "the embodied sets of activities that humans perform with varying degrees of regularity, competence and flair." Practice suggests action and creation on the part of the individual, but also on the part of the group as ritualized and/or normalized behavior. Practice, as a definer of self and being, is a strategic concept that bridges individual agency and societal structure. It also allows for a concretization of the theories of mediatization and media ecology, since it is on the level of practice that these becomes apparent: *practices* such as playing, reading, consuming, sharing, and learning increasingly have come to involve media or take places within mediated spaces. This is also true of the practices associated with memory work, ranging from mourning and memorializing, to curating and documenting.

Nick Couldry (2004) proposes to view media "as an open set of practices relating to, or oriented around, media" (p. 117). Regarding media *as* practice, Couldry (2012) argues,

brings about four advantages in researching the topic. First, practice is concerned with a "regularity of action" (p. 33). In other words, when media are used repeatedly, at particular times and in specific ways, a certain practice evolves from that. Media practice is intertwined with our routine and it partly defines our lifestyle. Second, practice never takes place in isolation; it is social: "Practices are not bundles of individual idiosyncrasies; they are social constructions that carry with them a whole world of capacities, constraints and power" (Couldry, 2012, p. 34). Practices take place in contexts and contexts are affected by practices. Practices thus can be seen as socialized and socializing action. Third, practice is intrinsically connected to what is dominantly considered as "need" (p. 34). In that regard, media as practice are *needed* in various kinds of interaction and coordination within groups and communities. Additionally, in the context of Western modern democracies and global capitalism, media practices are shaped under pressure of assumed "basic needs" such as freedom and trust (p. 34). Fourth and last, seeing media as practice guides us into discussions about how we *should* live with media. Here, the question of normativity concerning media practices arises. Norms appear through socializing action in the form of practice and when practice is standardized, it needs to be legitimized within a collective of practitioners. Underlying the practice approach to media is one seemingly simple question: "*what are people doing that is related to media?*" (p. 35).

In a reaction to Couldry's view of practice, anthropologist Mark Hobart (2010) prefers to "think of practices as those recognised, complex forms of social activity and articulation though which agents set out to maintain or change themselves, others and the world about them under varying conditions" (p. 63). This broad definition of practices invites a classification or categorization of "media-related practice," rather than media as practice. Hobart clearly delineates what he means by his approach to media-related practice by an example:

> In answer to the question 'Is television viewing a practice?' we cannot decide a priori, but must inquire about kinds and degrees of viewing, for what purposes and according to whom. I consider my flopping in front of the television after a hard day at work an activity, but a practice if I am critically watching an ethnographic film. So accounts of (usually) men watching news as part of making themselves informed citizens might be considered a practice in some situations, as might the couch-potato life of the British TV series, *The Royle Family*, where television watching is constitutive of their social life and roles. (p. 72)

Hobart's example shows that not every media-related activity is a practice. Hobart's view suggests a certain purposive engagement with media and its content and the resulting change in the lives of their users. This also includes "women cooking their meals so the family can view favourite programmes; family decisions about capital investments in radio, television or computers" (Hobart, 2010, p. 63).

A problematic conceptual phrase such as the "mediatization of everyday life" can be reified on the level of media-related practice. The question is here: how do everyday practices change because of the existence and implication of ubiquitous media? This is not to say that action, practice and behavior are steered by a mediated center; media can very well be at the peripheries of practice yet do exert influence over that practice, for example when children 'play' their favorite TV-characters, when families have TV-diners, or when students study while listening to Spotify's 'study music' playlist. As a result, research is currently shifting from focusing on moments of viewing, reading, listening, and interpreting media to practices of remixing, sharing, talking about, being a fan of media and to the more "ephemeral 'moments' of audience activity" (Bird, 2010, p. 88). Thus, media-related practices can be "more deliberative and conscious" (e.g. fan practices), the result of an "unconscious performance of mediated scripts" (e.g. weddings become like weddings in a film), or simply emerge by chance (e.g. trivial media content "goes viral") (Bird, 2010, p. 100).

There is room for play in practice, however. Couldry's analysis of practices does not account well for imagination, improvisation and spontaneous practice to appear—characteristics of a new media ecology in which people carry their media on their bodies and spontaneity and play are interwoven with everyday media practice. Couldry's analysis of practice is informed by two assumptions, argues Ursula Rao (2010): "firstly, practices are ordered; and secondly, this order is transparent and can be understood through (academic) reflection" (p. 149).

Resistance to everyday ordering mechanisms of practice can powerfully be theorized as tactics, as introduced by Michel de Certeau (1988). De Certeau (2009) calls a "*strategy* the calculation (or manipulation) of power relationships that become possible as soon as a subject with will and power (a business, and army, a city, a scientific institution) can be isolated" (pp. 35-36). A tactic, on the other hand, is a "calculated action determined by the absence of a proper locus" and it comes into being as a "guileful ruse" (De Certeau, 1988, p. 37). In De Certeau's original sense, individuals use tactics of bricolage, assembly, and customization in order to negotiate the strategies set out for them by institutions such as businesses, the government or city planners. In order to appropriate things and surroundings for personal use—to make them "habitable"—individuals employ different tactics. De Certeau uses the example of the city in order to illustrate his point: cities are designed and planned strategically in particular ways. Yet, when a person moves about in the city she uses short-cuts, a favorite route instead of the fastest or runs a red light. Thus, she tactically engages with the environment strategically planned for use (De Certeau, pp. 91-110).

This theoretical lens can be adopted and adapted to the analysis of media practices, and more specifically to the new media ecology in which content production springs not only from the hands of the powerful and the few. Audiences have the possibility to creatively interact with media content or create their own content, hence practicing media tactically.

Bottom-up production and remix might be added to De Certeau's tactical toolbox of bricolage, assembly, and customization:

> People are playfully engaging in media production practices in different ways and with different motivations, including political activism, fun, fame, creating social bonds or even the pleasure of playing with the media system itself [ ] The point is here that media produced by ordinary people must be considered a constitutive part of media practices that are rooted in creative production processes from the very beginning, not as secondary practices [ ] but as primary sources. (Ardèvol et al., 2010, p. 261)

Remixes, peer-productions and other interactions with media texts are practices that are tactical expressions of the audience vis-à-vis institutionally mediated texts and society at large. They are "appropriative practices" that enable audiences to make media their own (Ardèvol, 2010, p. 266). This argument comes close to what De Certeau (1988) calls "poaching": an individual audience member takes from any text what she wants and uses it for her own benefit. However, De Certeau was writing before the digital era and he calls these poaching practices "quasi invisible" (p. 31). At least in part, this changed with the rise of digital spaces in which appropriative practices have become increasingly visible and part of "the media."

Even though De Certeau's distinction between strategies and tactics is still valuable in the discussion of practice, his theory might need amendment when applied to the new media ecology. Basing his argument on *The Practice of Everyday Life*, Lev Manovich (2009) asserts that, on the level of practice within the Web 2.0 paradigm, "the logic of tactics has now become the logic of strategies" (p. 324). Institutional strategies are today explicitly developed to facilitate customization of any kind and therefore strategies and tactics are linked interactively (Manovich, 2009, p. 323). In other words, technological design of new media explicitly promotes bricolage, assembly, customization, remix and user-generated-content. Thus, bricolage and play has been appropriated and incorporated by new media owners and designers. This view curbs some of the (academic) enthusiasm about spontaneous and affective production springing from imagination and creative practice.

What does a practice approach bring to the study of memory work? As could be read in chapter one, memory work has always involved practice, whether it is training of the mind (memory techniques) through memory exercises or rituals such as dances, sacrifices or celebrations (memory performances). Yet, today, memory practices have increasingly become media-related or taking place within media(ted) environments. On a functional and conscious level, for example, people *store* information on their personalized media for later usage and *write* blogs for autobiographical purposes. Memory practices have also become scripted by media images and events; mass-broadcasted media texts such as historical documentaries and televised funerals or anniversaries steer audiences in

certain directions of remembering events and persons; they provide schemata or frames of remembrance (Irwin-Zarecka, 1994). To remember, to mourn, to indulge in nostalgia, to discuss and talk about the past, to reenact it, and to challenge it involve media in implicit and explicit, direct and indirect ways. Moreover, we increasingly use media to remember *for* us, or to capture, save, and archive recorded experience.

Investigating practices involves studying the dynamics of power on the level of people's sayings and doings. In terms of memory practices, this comes down to scrutinizing what 'right ways' of remembering are, what is remembered and when and where. Thus, Sturken (2008, p. 74) argues:

> The concept of memory practices allows for an emphasis on the politics of memory, precisely because of the ways in which the production and construction of memory through cultural practices has as its foundation the notion that memories are part of a larger process of cultural negotiation. This defines memories as narratives, as fluid and mediated cultural and personal traces of the past. A practice of memory is an activity that engages with, produces, reproduces and invests meaning in memories, whether personal, cultural or collective. Thus, an emphasis on practices, rather than objects or sites of memory, highlights the very active aspect (and hence the constructed nature) of memories.

A question that flows out of Sturken's observation is how media affect memory work. That is, how do they exert influence over how memory is *practiced*. In his landmark study *How Societies Remember* Paul Connerton (1989) differentiates between incorporating and inscribing practices, as two different types of practices by which humans remember and transmit knowledge about the past. Incorporating practices like smiling, gesturing, and handshaking require the presence of a body to communicate a certain message. Inscribing practices entail the storing and retrieving of information through devices such as media. Connerton (1989) is primarily interested in incorporating practices, when he writes: "culturally specific postural performances provide us with a mnemonics of the body" (p. 74). In a mediatized culture, however, incorporating and inscribing practices increasingly conflate and convergence. For example, the practice of recording, inscribing, an event or an action immediately has become the thing one *does*; it has become a gesture, a postural performance in and of itself, with its own mnemonic functions and goals.

Affordances and materiality

A practice approach to media and memory has a strong focus on the sociological dimension of action. Agency, in most practice theory, is located within human beings alone. The technological or material dimension of action is somewhat at the periphery in practice theory. However, materiality matters within social organization, especially when we regard

media as technologies of memory, since "the material properties of artifacts are precisely those tangible resources that provide people with the ability to do old things in new ways and to do things they could not do before" (Leonardi and Barley, 2008, p. 161). New media invite and enable new practices. Simultaneously, they shape and limit them. This insight is particularly important when rethinking the relationship between media technologies and memory work within a new media ecology, in which our environments are inhabited by technologies that shape our communicative interactions. In much research literature within the field of media studies, the concept of affordances has been applied in order to scrutinize the relationship between media users and media technology. This section presents some of the most important insights into this term and relates them to memory work.

Environmental psychologist James Gibson (1979) first coined the term affordances. He described it in the following way: "An affordance is neither an objective property nor a subjective property; or it is both if you like […] It is equally a fact of the environment [artifact] and a fact of behavior [action]. It is both physical and psychical [social] […] An affordance points both ways, to the environment [artifact] and to the observer" (pp. 129-130). Put differently, *"technology affordances* are action possibilities and opportunities that emerge from actors engaging with a focal technology. Affordances are rooted in a relational ontology which gives equal play to the material as well as the social" (Faraj & Azad, 2012, p. 238, emphasis in original). This means, write Faraj and Azad (2012) that "an object in the environment will offer different possibilities of action depending upon the actor's abilities" (p. 251). Notwithstanding the term's wide usage, the term 'affordances' is applied in many different ways and in many different disciplines.

In an attempt to clarify the major positions in the study of the social shaping of technology, sociologist Ian Hutchby (2001) further elaborates on the concept: "Affordances are functional and relational aspects which frame, while not determining, the possibilities for agentic action in relation to an object. In this way, technologies can be understood as artefacts which may be both shaped by and shaping of the practices humans use in interaction with, around and through them" (p. 444). This position Hutchby calls a "third way," in between the constructivist view on technology, which favors human agency in shaping technology, and a realist view, which emphasizes the "constraining power of technical capacities" (p. 444). This makes the concept of affordances useful as a middle-range theory for communication and media researchers that can "bridge observations about technology use with our broader understanding of technology at individual, group, and organizational levels" (Evans et al., 2017, p. 37). This is in line with Van Dijck's view on technology (most explicitly argued in *The Culture of Connectivity*) but also with De Certeau's (1989) theory of strategies and tactics.

Affordances are where strategic design meets tactical usage. Technologies are designed, developed, configured, programmed, as well interpreted, decoded, and used. Both stages, design and use, are subject to negotiation: designers take into account and adapt to

perceived needs and desires, whereas users and consumers make sense and appropriate the designed object. This is as true for automobiles and bicycles as it is for television and Facebook. Obviously, different things can be done with an automobile than with Facebook and this is where affordances come in. Affordances "constrain the ways [technologies] can possibly be 'written' or 'read'" (Hutchby, 2001, p. 447). Empirically, this dynamic and fluid relationship between writing and reading technology can be examined on the level of practice, because it is on this level that the negotiation between prescribed (or, better, inscribed) use and actual use takes place.

When applied to media, affordances "*facilitate, limit and structure communication and action*" (Hjarvard, 2008, p. 121, emphasis in original). That is, media invite certain uses and practices and restrict them at the same time. Affordances are the potential and perceived uses of an object, depending on whether or not it "matches" with the user's physique and needs (Hjarvard, 2013, pp. 27-28). It is important to stress, though, that technological features or design of media are not the same as affordances. Features are rather static, yet adaptable, whereas "affordances are dynamic, emerging from the relationship between the user, the object, and its features" (Evans et al., p. 40). Faraj and Azad (2012) explore this idea further: "If features are defined as technical attributes and ways of working inscribed in the artifact by technology designers, then affordances represent possibilities of using select features or combinations of features in a way meaningful to the user's goals, abilities, and lines of action" (p. 254). The implication of such thinking is "to abandon the talk of generic users or to think of technology as bundles of features. Context such as user intent, abilities, social, environment, as well as the specifics of the situation will matter even more" (p. 255).

For example, "follow" and "like" buttons are features, while the affordance is connectivity (the ability to connect with a person or brand). Pertaining to memory work, the options to tag, title, and describe a video on YouTube are technological features, while the affordances here could be archiveability or searchability. Whether or not the technology is used in this way depends on the user's intent, context, background, and perception of that technology. Designed or implied usage might not correspond with actual usage, or the relation a user has with a particular technology. Therefore, as Faraj and Azad (2012) point out, "[w]e will also need to abandon the view that affordances are about a technology or an object. They are about actions in the world that involve technology" (p. 255). Affordances, then, are not only about the material technology or object itself, but as much about user's actions, perceptions, and actual usage of that technology or object. Therefore, Evans, et al. (2017) regard affordances as a relational structure "between an object/technology and the user that enables or constrains potential behavior outcomes in a particular context" (p. 36). The concept is analytically useful because it allows research into "the attributes and abilities of users, the materiality of technologies, and the contexts of technology use," which are often dynamic (Evans, et al. p. 36).

An affordance perspective on media further validates the view that they are not static, unchanging technologies. An implicit, yet excellent application of the concept of affor-

dances to media comes from a study by Lisa Gitelman. She (2008) argues that *the* media do not exist because this suggests a natural, stabilized body, while media and their attached protocols, rules and uses continuously change according to the historical circumstances—time and space—in which they are being used. In *Always Already New*, Gitelman (2008) consciously chooses to work from her case studies because media "are very particular sites for very particular, importantly social as well as historically and culturally specific experiences of meaning" (p. 8). Therefore, she defines media as

> socially realized structures of communication, where structures include both technological forms and their associated protocols, and where communication is a cultural practice, a ritualized collocation of different people on the same mental map, sharing or engaged with popular ontologies of representation. As such, media are unique and complicated historical subjects (Gitelman, 2008, p. 7).

By showing how phonographs were described in the discourse surrounding the new technology, Gitelman demonstrates the "multifaceted process of design and domestication" (p. 64). In Gitelman's case study of the phonograph, media affordances are clearly explained. The *intended* usage—inscribed in the design—differs from *actual* usage. While intended for office usage, the affordances of the phonograph invited other uses and served a certain cultural need. "Like the discursive lives of those later media, the discourses making sense of recorded sound formed a matrix of heterogeneous, changing, and even contradictory messages" (p. 68). The Edison Speaking Phonograph Company targeted intended users in business, but the device was appropriated for entertainment and home use. Moreover, the medium was new in a society that was marked by a rapidly growing middle class and changing role perceptions of women. The phonograph fitted well in what Gitelman calls the "domestication of mechanical reproduction" at a time in which the woman was "the arbiter of musical activity within the home" (pp. 68, 74).

What does an affordance perspective bring to the study of memory work in a new media ecology? Media scholar danah boyd identifies four affordances that emerge out of networked public's engagement within digital environments. These are essential for the construction of memory in a new media ecology (boyd, 2011, p. 46):

> Persistence: Online expressions are automatically recorded and archived.
> Replicability: Content made out of bits can be duplicated.
> Scalability: the potential visibility of content in networked publics is great.
> Searchability: Content in networked publics can be accessed through search.

With persistence, boyd means that while spoken interaction is ephemeral, technologically mediated interaction is not: communication is saved, recorded, and archived.[17] The written word gradually changed the way literate peoples around the world communicated and thought and internet technologies are firmly located within the long line of other innovations within media history. The replicability of content is not new in media history, yet the scale and ease with which bits and bytes are copied make boyd argue that "copies are inherent" in networked publics. Print culture enabled vast dissemination of ideas: the scale and visibility of revolutionary thought in colonial America, for example, demonstrated the efficacy of the written word in the public sphere (Warner, 1990). The notion of scale in digital spaces also is about the potential of texts and ideas (in whatever form) reaching a large and broad audience. However, "scalability in networked publics is about the *possibility* of tremendous visibility," not the guarantee of it (boyd, 2011, p. 48). A text "goes viral" only when it enthuses the collective. Lastly, the ease with which persistent and replicated content can be searched might be the most radical departure from previous media systems such as print and broadcast cultures. Especially since the popularization of mobile information technologies, online searching has become a practice that is ingrained in daily life.

The affordances relating to digital communication in networked publics—persistence, replicability, scalability, searchability—are key in understanding memory work today. Persistence makes any communicative act and text online—in whatever form—a potential mediated memory; replicability makes it possible to duplicate and alter these stored or archived texts and creatively engage with digital content; scalability allows content to be potentially distributed widely and thus to be consumed and reconstructed more broadly; and searchability makes memory work "less a question of remembering and more a matter of where to look" or let the looking be done for you by a search engine (Hoskins, 2009c, p. 29).

Additionally, digital media's principles as described Lev Manovich (2001)—programmability, modularity, variability—permits code, text and audiovisual material to be "frequently modified or remixed." Also, "while remix is politically contentious, it reflects an active and creative engagement with cultural artifacts, […] amplifying ongoing efforts by people to make mass culture personally relevant by obliterating the distinctions between consumers and producers" (boyd, 2011, p. 54). Additionally, the present and past in digital spaces are subjectively, affectively and virtually produced and made sense of at the same time, or rather *in* and *through* time (Keightley & Pickering, 2013). This "possibility of simultaneity" reconfigures the tensions between institutionalized history and cultural memory, broadcast and new media, but also, on a broader philosophical level, individual experience and collective images, and space and time (Garde-Hansen et al., 2009, p. 8). In similar vein, Mark Deuze (2012) asserts that "space and place are best understood as under

17 This, of course, does not hold true for technologies such as Snapchat.

permanent construction (like any site online): something continuously and concurrently made, sustained, remixed and taken apart by the very people and things that make up that ecosystem" (p. 15).

Media affordances concomitantly invite and steer certain forms of communication as much as they leave room for alternative applications, practices and employment. The theory of affordances allows for a tension to exist between planned, ideal, and intended use and appropriated and actual use. This suggests creativity, surprise, chance, improvisation, play, and a sense of freedom when it comes to using media. Affordances also bring into question the place of agency of the user and the technology concerned. Both human and non-human actors are active in constituting digital memory work.

Trisecting digital memory work: practices, technologies, cultural forms

What are the implications of the theoretical insights provided above for the study of digital memory work? First, *digital practices* are viewed as those practices inseparably connected to digital technology or those taking place within the digital environment of the Web. Such practices may be platform-specific, such as tagging or describing a YouTube video, liking or commenting upon a Facebook post, or editing or referencing a Wikipedia entry. Second, broadly speaking, *digital technologies* are those technologies that can hold and produce information represented in binary code—ones and zeroes, bits—that can be read by computational systems. Social media platforms will be the main digital technologies under scrutiny in the following chapters. *Digital cultural forms* are seen here as artefacts and objects produced with digital technologies and within digital environments. The word 'form' is used here to indicate a culturally recognizable category that may contain different modalities of communication—text, image, audio, or video. Examples of digital cultural forms are: memes, selfies, Facebook profiles, wikis, or emoticons. A danger of trisecting memory work, however, is that its components are seen as separate categories while, empirically, they are inseparable: they produce and mutually shape each other. When people engage in practices in their material environments, they simultaneously interact with technologies and produce and make sense of cultural forms, whether they are internet memes, online memorials, or wikis.

This latter remark requires somewhat more explanation before an answer can be given to the question *how* to analyze digital memory work. Memory work is *practiced* in the sense that it involves the sayings and doings of people in their interactions with the past. Out of these practices flow certain norms and values regarding memory work which are continually contested and renegotiated socially. Vice versa, norms and values underlie practices. Not only do 'right' or 'convincing' ways of representing the past in the present emerge in memory work, also the ways in which the past is transferred into the future is subject to normative struggle. The previous two sections have demonstrated that practices and technological affordances are relational: affordances are activated through practical en-

gagement with technological artefacts. Technologies may be inviting, enabling, shaping, and restricting practices and cultural forms in memory work.

Following Baym (2010, p. 44), this dissertation holds that "the consequences of technologies arise from a mix of 'affordances'—the social capabilities technological qualities enable—and the unexpected and emergent ways that people make use of those affordances." As such, people (and their practices, cultural forms) and technologies are "interrelated nodes in constantly changing sociotechnical networks, which constitute the forms and uses of technology differently in different times and places for different groups" (Lievrouw, 2006, p. 250). Practices, as ways of doing, and affordances, as perceived possibilities for action and engagement, relate to the material environment in which people live. Practices are about what people *do* with and within their material environment, affordances concern what people *perceive* they *can do* with and within their material environment (Nagi & Neff, 2015). Practices are as attached to technologies as technologies are to practices.

Cultural form and the content captured in that form can be seen as the result of people's *practical* engagement with their social and material environment, which might include technologies. Practices produce, often with technologies, cultural forms. For example, the practice of cooking, which might involve knives and a stove, results in producing the cultural form of a meal, which contains particular dishes. The practice of photographing, which involves a photo camera, results in the cultural form of a photographic image which contains a particular depiction of a moment in time. Practices, in this regard, are *inscribed* in cultural forms. At the same time, however, cultural forms may shape practices as well. They can inspire action or change culturally held norms and values.

Cultural forms carry symbolic content and meaning that may be transported *in* time, across different locales and contexts and *through* time, across generations. However, Hall (1998, p. 449) reminds us:

> The *meaning* of a cultural form and its place or position in the cultural field is not inscribed inside its form. Nor is its position fixed once and forever. This year's radical symbol or slogan will be neutralized into next year's fashion; the year after, it will be the object of a profound cultural nostalgia. (emphasis mine)

This implies that meaning is encoded, decoded, and recoded differently in time and through time, depending on the socio-cultural context in which recipients encounter cultural forms. Thus, technologies involved in memory work are regarded here as the *means* by which cultural forms are contained and realized through practice, yet the 'unpacking' of cultural forms is an enduring meaning-making process.

Moreover, it is important to stress again that this dissertation does not view technologies as neutral intermediaries in digital memory work. They are as much *part of* digital memory work as are cultural forms and practices. Obviously, without digital technologies there would be no digital practices and cultural forms, let alone digital memory work. As

a peculiar kind of technologies, social media platforms invite, enable, shape, and restrict communicative interaction and practice. Users can do different things with Facebook than with YouTube or Wikipedia and these platforms do different things with their users and the content they share on it as well. At the same time, users might use these platforms in ways unexpected by their designers. Therefore, this dissertation investigates *realized* practices on these platforms that are inscribed in cultural forms.

Additionally, memory work as performed on social media platforms is a type of mediated interaction, which "should be seen as a new and eclectic mixed modality that combines elements of face-to-face communication with elements of writing, rather than as a diminished form of embodied interaction" (Baym, 2010, p. 51). The cultural form and content produced and shared in digital spaces is immediately saved and stored. Studying cultural forms online can thus be said to automatically involve studying practices and technologies and vice versa. Digital memory work involves the constant interactions between people, technologies, and the symbolic content these concomitantly produce. In summary, when we study memory work, we investigate how the past is communicatively constructed through practices, technologies, and cultural forms employed by various actors for particular goals. Memory work is, therefore, a particular discursive construction that is the result of a constant power struggle between the various actors involved in it.

4

Methodology: Researching digital memory work

As the previous chapters have argued, memory work, the object of study of this dissertation, can heuristically be dissected into three components: practices, technologies, and cultural forms. This chapter sets out to operationalize the phenomenon of *digital* memory work into empirical research. This means answering three interlinked questions: What human and 'nonhuman' actors are involved in memory work on platforms? How do platforms *themselves* engage in memory work through their procedural logics and mechanics? How do platforms shape the practices and cultural forms users employ in memory work and, vice versa, how are platforms shaped by this? These questions aim to show the dynamic and complex interactions between platforms and users.

In order to answer these questions, different types of textual analysis (discourse and content analysis) are employed and amended with a critical approach toward platforms and their operational logics and mechanics. In this chapter, I outline how and why these two methods can be combined in order to operationalize research into digital memory work. In the second part, the three case studies are introduced and rationales are given for these choices. This is also the part in which the three platforms under investigation are briefly introduced: YouTube, Facebook, and Wikipedia. The methodological approach taken might be best described as a *mixed method case study design*, because, per case study, a single and specified phenomenon and period of time is under scrutiny, using a set of methods which suit the case. The case studies and their respective methodological approaches are outlined in figure 4.1.

	Case study 1	Case study 2	Case study 3
Event	Chemical weapons attack on Ghouta, Syria	Shooting of Michael Brown and the protests in Ferguson	The downing of MH17 in Ukraine
Date	21 August 2013	9 August 2014	17 July 2014
Platform	YouTube	Facebook	Wikipedia
Primary human actors	Witnesses, uploaders	Protesters, page administrator, page visitors	Wikipedians, one-time editors, sock-puppets
Primary technologies	YouTube's interface and search algorithm, recording devices, editing software, camera phones	Facebook's interface and algorithm, recording devices, editing software, meme generators, camera phones	Wikipedia's interface, text processing software, Wikipedia's CMS, editing software
Primary practices	Video-witnessing, uploading, tagging, titling, describing	Sharing, posting, commenting, liking	Editing, selecting, writing, referencing, debating
Primary cultural forms	Witness videos, video mash-ups, photo slideshows	Videos, photos, memes, written posts and comments	Wikis, talk page entries

	Case study 1	Case study 2	Case study 3
Methods	Qualitative and quantitative content analysis Platform analysis	Critical discourse analysis, interpretative repertoires Platform analysis	Critical discourse analysis Platform analysis

Figure 4.1 – outline of case studies

How to study digital memory work?

How can we operationalize theoretical ideas into research on memory work on, by and through social media platforms? Platforms *invite* different medium-specific practices. These are socio-technical, since users interact with a platform's technological design and architecture whenever they tag, describe, like, comment, share, reference, or edit online. They also *structure* mediated material in so that the past is *re-presented* in specific ways and that certain *reconstructions* of the past become more *visible* than others on them. At the same time, people may use platforms in ways unforeseen by their designers. As a consequence, memory work is studied in this dissertation as *practiced* in interaction with *technologies* and realized in *cultural forms*. Hence, the case studies revolve around the outcomes of interactions with the platforms' technological design, their interfaces and features. That is, empirical chapters study 1) the traces users leave and 2) the content they produce on platforms: texts. One important methodological assumption of this dissertation is that research can investigate practices and the outcomes of interactions with technologies by studying text.

The cases thus require methods that allow analysis of memory work on the level of practice, technology, and cultural form and content. The primary research approach taken in the case studies is qualitative. Qualitative inquiry is "an umbrella term used to describe ways of studying perceptions, experiences or behaviors through their verbal or visual expressions, actions or writing" (Salmons, 2016, p. 3). Brennen (2012, p. 15) also stresses the interpretative work qualitative researchers conduct: "Qualitative researchers understand that while words and concepts have important denotative meanings, they also have connotative interpretations that are important to consider." Qualitative projects, thus, traditionally, have a human-centered focus. However, as has been argued before, research has to take technology seriously as an actor within a broader network of interaction and association. Technology enables, shapes, and restrains perceptions, experiences, and behaviors, and assists and extends verbal and visual expressions, actions and writing. A weakness of a technology-based approach, Van Dijck (2013, pp. 26-27) writes, is that it "pays scarce attention to content and cultural form as a meaningful force in the construction of technology and users. In the context of social media, content and form are a significant factor." Therefore, the empirical chapters view human and nonhuman actors as mutually shaping each other and their memory work.

In order to trace both the agency of human and nonhuman actors in digital memory work, two main methods are employed: textual analysis and platform analysis. The rest of this section explains why these methods were chosen and how they were generally employed in the case studies. An obvious critique of the choice of either methods that cover mediated content or media themselves is that they do not engage with people directly. Is this dissertation not investigating memory, something that is located as much in individuals, as it is in groups? A reply to this critique might be that this study is interested in the role of media, as specific technologies of communication, influencing memory work, something that is increasingly mediated and involves media. Analyzing the media content and the materiality of media technologies allows researchers to draw conclusions about particular representations of the past and the role of technologies in shaping those representations. Important to remember is that this section means to give a broad overview of the approaches to research taken in the empirical chapters. Per case study chapter, specific methodological tools and steps will be discussed, as well as the limitations.

Platform Analysis

While not fully committing itself to its agenda and procedures, this dissertation borrows elements from what has loosely come to be labeled as platform analysis. Stemming from software studies, platform analysis is a yet developing critical approach and theory geared towards the study of social media platforms. A consequence of its relative novelty, platform analysis offers not a clearly defined methodological roadmap, but instead adopts a political-economic and critical-theoretical stance towards the design features, affordances, and operational logics of social media platforms. These characteristics are informed by platforms' ideologies and business models. Platform analysis basically asks: what do social media want from their users in order to generate financial, social, and/or cultural capital?

What do we analyze when we analyze platforms? An answer is provided by Van Dijck's (2013, p. 29) definition of platforms:

> Technologically speaking, platforms are the providers of *software*, (sometimes) *hardware*, and *services* that help code social activities into a computational *architecture*; they process (meta)data through *algorithms* and *formatted protocols* before presenting their *interpreted logic* in the form of user-friendly *interfaces* with *default settings* that reflect the platform owner's *strategic choices*. (emphasis mine)

A platform-analytical approach can therefore focus on any of the components of platforms emphasized above. This dissertation concentrates primarily on interfaces, default settings, and the procedural logic of platforms, because these aspects actively invite, steer, and shape memory work on platforms to the extent that they are *part of* it. Following this line of thinking, the case studies scrutinize the ways in which the respective platform invites

and shapes specific user practices and content creation. This ranges from curating a video on YouTube, to commenting on a Facebook post, to editing a Wiki (see fig. 1). Especially interfaces (what do users *see* when using a platform) and technological features (what can users *do* with a platform) are important in studying memory work on them. The interface, writes Patelis (2013, p. 120), is a "non-neutral entity," a "cultural text that aspires to power and that frames specific forms of interaction." Interfaces are designed with a specific goal in mind. They are the perceived affordances from the designer's perspective (reflecting their "strategic choices") and users interact with them in ways that may follow intended usage or deviate from it.

Social media platforms are highly templated; that is, users are given boxes to be filled in by them. Facebook asks "what's on your mind?" Twitter asks "What's happening?" Google and YouTube ask you to search or upload material. And Wikipedia would not exist without the continuous effort of its editors. Social media platforms continually ask for input that can easily be "read" by their owners, by means of, for example, algorithmic processing. Also, with Wikipedia as the notable exception, "social media have a congenitally double nature: on the one hand they are the loci of fulfillment of communications that are central to the functioning of democracy, indeed, for society as a whole; while on the other hand, they must realize profits" (Patelis, 2013, p. 118). They have been designed "on the basis of specific values and with the aim of specified interaction" (Patelis, 2013, pp. 119-120). This makes social media platforms ideological through and through. This latter thought drives this dissertation's critical outlook on social media platforms.

Besides scrutinizing the technological and economic-ideological aspects of platforms, platform analysis might also involve so-called "digital methods." Digital methods, writes Rogers (2013, p. 1) form a particular "methodological outlook for research with the web" that studies and repurposes "methods embedded in online devices" (p. 1). For example, algorithms determine visibility of content and "search engines author new orders of things in the sense that they rank sources for any topic" (Rogers, 2013, p. 6). Interpreting the hierarchies in search results (what shows at the top of search results?) can, therefore, be a form of social research itself. In the case study chapters on YouTube (chapter 5) and Wikipedia (chapter 7) some basic digital methods support the main methods employed. More generally, this dissertation follows digital methods' stance that social processes such as memory work can be 'read through' the lens of the device (or platform, in this case). This does not mean that social scientists need to become computer engineers. They can, however, investigate the outcomes of interactions with them, or how their procedural logics and interfaces present reality to their users. This is also noted by Bucher (2012) in her article on Facebook's now-defunct algorithm EdgeRank, which ordered users' Newsfeed. She writes, "what is important is not necessarily to know every technical detail of how a system works, but to be able to understand some of the logics or principles of their functioning in order to critically engage with the ways in which systems work on a theoretical level" (p. 14).

This dissertation follows Bucher's way of thinking regarding the procedural logics of platforms, yet it also moves beyond a focus on the medium itself. The central analytical focus in the case studies lies on the outcomes or products of user engagement with platforms: text. However, one of the methodological arguments here is that, on social media platforms, text and technology are inseparable: whenever users engage with social media they produce text and vice versa. This is the reason why, in the case studies, textual analysis is amended by platform analysis as a means to make sense of realized practices.

Two types of textual analysis

Texts, writes Brennen (2012, p. 193) are "things that we use to make meaning from" and as such they "provide traces of a socially constructed reality." Texts may reveal the "social practices, representations, assumptions, and stories about our lives" and through critical scrutiny and interpretation by the researcher these might be revealed (Brennen, 2012, p. 194). 'Texts' on social media platforms are seen as 'data' or 'content' by platform owners; they constitute the material that is produced, changed and shared by users. This material can be used and/or monetized in specific ways, depending on the platform. In this dissertation, texts are treated as culturally *meaningful* objects that take shape in particular cultural forms and are carried and re-presented through mediating technologies, in this case social media platforms.

A "text" can be any type of cultural content (e.g. spoken, written or visual), as Rose (2012) writes. Textual analysis, therefore, can be mixed well with platform analysis: where the latter focuses on the carrier, the former focuses on the carried. Two types of textual analysis are applied in this dissertation: critical discourse analysis (CDA) and content analysis (CA). Below, both methods will be discussed in terms of their broad theoretical underpinnings. In the case study chapters, the procedural steps taken will be discussed in more detail. A downside of using texts, or "extant data" as Salmons (2016, p. 33) calls online written or visual text, is that it might not fully reflect people's full points of view or experiences. The point in studying textually realized memory work, though, is that this will be carried forward into the future, rather than the potentially ephemeral acts of face-to-face communication, for example.

Critical Discourse Analysis

In this dissertation, I employ a specific strand of discourse analysis, c*ritical* discourse analysis (CDA). This form of textual and contextual analysis sees language as social practice through which power relations are (re)established and performed. This aspect of CDA makes it an appropriate method as to reveal how different actors aspire to power through their textual interactions and products. Fairclough (1995), one of the founders of CDA, defines discourse as "(i) a language text, spoken or written, (ii) discourse practice (text production and text interpretation), (iii) sociocultural practice" (p. 97). Practice is, in this view, *inscribed* in text. CDA thus allows an analysis of practice *through* textual analysis. Similarly,

Wetherell and Potter (1988, p. 169) write that people "do things with their discourse." In other words, discourse *functions* toward particular goals such as explaining, justifying or blaming but also, more broadly, ideological effects that are legitimizing certain worldviews.

This is an important addition in the light of the object of study here, memory work. In essence, CDA revolves around the question how discourse "relates to and is implicated in the (re) production of social relations—particularly unequal, iniquitous and/or discriminatory power relations" (Richardson, 2007, p. 42). As chapter one to three argued, what *is* re-presented in the present and carried into the future is the result of a continuous power struggle. CDA, as it is applied in this dissertation, aims at revealing this struggle. As such, CDA is both a theory and method and is used to study the dynamics of power—particularly pertaining to questions of voice and inequality—within particular discourses. This is pivotal, since I conceptualized memory work as a particular type of discursive practice, which is concerned with interpreting and re-presenting the past in the present, and carrying it into the future.

CDA, however, is not only concerned with how these power dynamics play out *within* a text. The method also concerns itself with the "social processes and structures which give rise to the production of a text, and of the social structures and processes within which individuals or groups as social historical subjects, create meanings in their interaction with texts" (Wodak, 2001, p. 3). This aspect of CDA makes it a suitable approach to, for example, show how a community of practice emerges within the context of Wikipedia. Through what people *do* and *say* on Wikipedia, a specific set of norms, values and hierarchies emerge, which, in turn, affect other Wikipedians' doings and sayings, as chapter seven will further demonstrate.

Another reason why discourse analysis is a well-suited method for analyzing textually realized memory work is given by Brennen (2012, p. 197): "[t]he use of the term discourse analysis reminds researchers that it is through our use of language that our reality is socially constructed." Memory work is preeminently a process of social construction that involves language or another semiotic system of signification. As the first two chapters have demonstrated, we can only make sense of or attach meaning to our pasts through such systems; they are the building blocks for the social frameworks of memory, as Halbwachs would say. They guide the interpretations of and reflections on the past. As a method that focuses on language and text, discourse analysis is suitable to unpack the explicit and implied meanings and assumptions within memory work, specifically on the level of text.

This latter aspect relates to an important concept in CDA: intertextuality. Intertextuality, writes Rose (2012, p. 191) "refers to the way that meanings of any one discursive image or text depend not only on that one text or image, but also on the meanings carried by other images and texts." Intertextuality, therefore, gives meaning to texts and practices, next to contexts of production and interpretation. As a range of discursive practices, memory work relies heavily on intertextuality. In the rich symbolic environment of platforms and the Web in general, intertextuality is key. Cultural forms that are important for memory work, such

as iconic images or phrases, are encoded with meaning that can only be decoded (and re-coded) by others sharing the same cultural frame of reference. CDA allows for the tracing of such meanings in relation to how social actors struggle for power in and through memory work.

Despite its established research agenda, argue Wodak and Meyer (2009), "rigorous 'objectivity' cannot be reached by means of discourse analysis, for each 'technology' of research must itself be examined as potentially embedding the beliefs and ideologies of the analysts and therefore guiding the analysis toward the analysts' preconceptions" (pp. 31-32). This constructivist remark is important, yet it must not be seen as hindering the analysis but instead as enabling it. It liberates the analysis from strict methodological confines and allows associative and inductive theory-building.

In the chapters in which CDA is applied (6 and 7), I operationalize the method in different ways. The main reason for this is that I analyze specific platforms which enable, shape, and constrain specific cultural forms and content. Also, chapter 6 (on Facebook) revolves around multimodal forms of discourse (written text, images, and videos), whereas chapter 7 (on Wikipedia) is concerned with only written text. These differences require a tailor-fitted application of methods. I will elaborate on the specifics of these approaches in the methodological sections of the empirical chapters.

Content analysis

CDA can be assisted by the counting of particular categories in the content of archives, or the occurrence of words and images in them. This tells the researcher more about the occurrence and co-occurrence of themes and issues within memory work on platforms. In chapter 5 (on YouTube and Syria) and in chapter 7 (on Wikipedia and MH17), CDA is amended by such basic "content analysis." According to Bryman (2012), "content analysis is an approach to the analysis of documents and texts (which may be printed or visual) that seeks to quantify content in terms of predetermined categories and in a systematic and replicable manner" (p. 289). It is, therefore, a quantitative, deductive method that tests theories, rather than generates them, even though there are also forms of content analysis that are qualitative (Mayring, 2000). Bryman (2012) writes that "the process of analysis is one that means that the results are not an extension of the analyst and his or her personal biases," but rather that "once formulated, the rules can be (or should be capable of being) applied without the intrusion of bias" (p. 289). Questions asked in content analyses are often relatively easily operationalizable: who, what, where, and how much (Bryman, 2012, p. 291). Content analysis can thus focus on different kinds of units of analysis, ranging from significant actors (who, what), words (how, why), subject and themes (how much, what, where, how), and dispositions (what, how, why) (Bryman, 2012, pp. 295-298).

Content analysis employs coding schedules and manuals that allow other researchers to replicate the analysis. Reliability is guaranteed through inter-coder reliability tests (between different coders) and/or intra-coder reliability tests (testing the consistency of an individual

coder). The advantages of content analysis are that the method is very transparent, allows longitudinal analysis, is unobtrusive (that is, the researcher has minimum influence on the collected data), is highly flexible, and can generate conclusions about groups that might be hard to reach or analyze in real life (Bryman, 2012, pp. 304-305). Some disadvantages of the method are that it is impossible to have a coding manual that is completely free of researchers' interpretation—they are themselves embedded within cultural contexts. And, most importantly, why-questions are hard to answer (Bryman, 2012, pp. 306-307). Content analysis is applied in chapters 5 and 7 mainly to assess the dominance of certain *types* and *forms* of texts.

Introducing the case studies

Three platforms will be the focus of attention in the empirical chapters: YouTube, Facebook, and Wikipedia. These platforms were chosen because each of them has a dominant position within the new media ecology, up to the point that, at least in 'Western' countries, they have become ingrained in everyday life. These platforms inform us about the world and allow us to share our own perspectives about it. YouTube is the go-to platform for video watching and sharing, Facebook for social networking, and Wikipedia for consultation and production of general (and sometimes specialized) knowledge on a wide range of topics. These platforms are different from 'broadcast' or 'legacy' media in the sense that their content is produced by users; without user input, they would not exist. This does not mean that they are disconnected from these 'older' media. Platforms and legacy media use each other. All three platforms under scrutiny present themselves as neutral intermediaries in the types of communication they enable. They all, however, have their own idiosyncratic ideologies, histories, and technological features and affordances, which this dissertation studies separately in order to demonstrate their roles in digital memory work.

YouTube, Facebook, and Wikipedia are, besides social media platforms, also massive archives containing user-generated content, which is ordered and structured in specific ways. The content on YouTube is archived and made searchable by the curator-practices of users; Facebook re-presents and orders content on individual Newsfeeds and groups according to the principles of personalization and interaction with content; Wikipedia is a vast encyclopedia which contains lemmas on, among others, historical events, places, and people and is constantly updated and rewritten by its community of editors. All three are major platforms in the new media ecology: they attract many users and are important filters of information. In the following sections, brief descriptions of the platforms are provided, followed by a short introduction and rationale for the specific case. They are more thoroughly discussed in terms of their operational procedures in the case studies.

Even though the case studies are separate research projects, they are connected. They aim to show how specific human actors engage in memory work on social media platforms. Witnesses, activists and protesters, and Wikipedia editors construct the past in specific ways and often for specific goals. They share their versions and interpretations of and on

the past and actively strive to carry these into the future. Simultaneously, though, the goal is to demonstrate that these platforms themselves possess agency in these processes as well. Ultimately, the intention of these case studies is to show that both humans and platforms are concurrently involved in the politics of memory.

YouTube

On April 23, 2005, the first video was uploaded to YouTube. "Me at the zoo," shows one of the platform's founders, Jawed Karim, standing in front of the elephants at the San Diego Zoo and commenting on their long trunks. As in a classic dotcom success story, Karim and the other founders, Chad Hurley and Steve Chen, became multimillionaires a year and a half later, when Google acquired the company (Snickars & Vondereau, 2009, p. 9). Less than a decade after Karim's original post was uploaded, YouTube grew out to become a culturally significant and economically profitable platform. Monthly, it has over 1 billion unique visitors, together watching over 6 billion hours of video. It operates in 56 countries, is available in 61 languages, and 70% of the material on it originates from outside the US, making YouTube a global phenomenon (Youtube Statistics, n.d.). According to web traffic data site Alexa, the website is the second most-visited globally, right after its mother company Google.

A video-sharing platform, YouTube aims to provide "a forum for people to connect, inform, and inspire others across the globe and acts as a distribution platform for original content creators and advertisers large and small" (About YouTube, n.d.). Beyond its economic success and corporate aims, however, YouTube hosts a rich cultural archive. The site's first slogan, "Your Digital Video Repository," rather than "Broadcast Yourself" captures its essential function, namely being an archive produced and curated by users (Van Dijck, 2013, p. 149). YouTube's particular affordances, regulations, architecture and the practices related to them enable, support and shape this function. This makes the platform an essential part of not only the new media ecology, but also the new *memory* ecology. As the case study contends, the platform does not only provide a gateway to the past, but also actively filters it through its algorithmic processing, which is partly based on users' curating practices.

The academic work on YouTube is growing steadily, but remains quite small in the light of the daunting figures stated earlier. The first book-length studies, *YouTube: Online Video and Participatory Culture* (2009) and *The YouTube Reader* (2009), provide critical readings of the platform as a key player in today's media ecology. Both books point at the methodological issues that arrive when analyzing an unstable research object like YouTube. Not only does the content (archive) of YouTube change, but also the interface and its uses vary. One strategy to face the problem of how to study YouTube is to focus on what its technological underpinnings are that invite and shape certain uses and practices. The affordances that make YouTube a success mainly relate to the archiveability and spreadability of its content. YouTube's archival content is spreadable, because it is easily accessed, linked to, shared

and discussed. Jenkins, Ford and Green (2013) argue that the platform's easy-to-use embed option, for example, makes content spread across the internet (p. 6). Automated embedding of YouTube clips on Facebook timelines and ready-to-copy embed codes allow for seamless diffusion of content from the platform to other places online.

The chemical weapons attack on Ghouta

Besides millions of hours of pet and prank videos, YouTube's archive also contains videos of politically significant events, many of which are made and uploaded by witnesses of these events. One such politically contentious event that was filmed by witnesses was the aftermath of the chemical weapons attack on the neighborhood of Ghouta, Damascus, on August 21, 2013. More details will be provided in chapter five, but what is important to note here is that much uncertainty ruled about whether or not it was actually a chemical weapons attack and who were the perpetrators behind it. An important reason why this case was chosen is because professional reporters were not on site during or after the attack. The only footage available was produced by activists and civilians and hence provides an opportunity to investigate what happens with witness videos in a media ecology in which such material provide records of disruptive historical events.

The event and its circumstances are thus a case in point regarding the politics of memory work: the videos and their uploaders make powerful truth claims about what occurred during and after the attack. Moreover, the case study explores the visibility of videos made by witnesses—a cultural form I call witness videos—of this atrocity in YouTube's archive. Not only does the chapter investigate how these witnesses have recorded their experiences in specific ways and have made conscious choices about what to film, but also, importantly, how they made their videos findable in YouTube's archive. Witnesses, after they have uploaded their videos on YouTube, make choices about how to tag, title, and describe them. The stages of memory work involved in this process—from filming to curating videos—are the central focus of this case study. Although the future memory of the attack is constituted by witness videos, it is powerfully shaped by various actors, both human and nonhuman.

This is, however, not where the analysis stops. Witness videos may be found by others who take parts of these videos and mix them with other scenes from other videos and curate these 'remixed' videos in ways that might make them more easily findable than their 'originals'. On the level of recording, we can analyze practice by looking at the camera movement and angle and ways in which witnesses add to the veracity of their recordings, for example by focusing on details. On the level of curating, tagging, titling, and describing are important practices that are traceable in YouTube's metadata. This gives insight into users' realized interactions with YouTube's interface and features. These mechanisms of memory work are empirically explored by qualitative and quantitative analyses of metadata and (remixed) content.

Facebook

Facebook has come a long way since it launched as thefacebook.com from founder Mark Zuckerberg's Harvard dorm room on February 4, 2004. According to Internet World Stats (2016), as of June 30, 2016, Facebook has 1,679,433,530 subscribers worldwide. According to Alexa, per June 2017, Facebook is the third most-visited website in the world. Zuckerberg and the Facebook's co-founders Eduardo Saverin, Dustin Moskovitz, Andrew McCollum, and Chris Hughes first designed Facebook as a service for Harvard student to create profiles and look each other up. Within months, the service spread to other elite US schools. By 2006 it was available to everyone with internet access and by 2008 it was available in Spanish, German, and French (Brügger, 2015). Where Facebook first started as a social network, it quickly grew into a platform where people can *share* what they are doing or "what's on their mind" (as it now asks).[18] User can share material on their personal pages or those of their friends (per default settings), or within closed and open group pages.

Facebook has been a commercial enterprise from the beginning, when users were confronted by banner advertisements. Today, the platform essentially is a data-gathering company. The more Facebook knows about its users, the more precise the data it sells to third parties is. These third parties are mainly advertisers who use user data to personally target Facebook users. To this end, Facebook stimulates users to make connections in the forms of so-called 'likes'. It's principle of *connectivity* is still there, but connecting to products, places, and other media is now as much part of it as is 'friending' (Van Dijck, 2013, p. 47). This technology-supported form of connectivity impacts what users see and do not see when they visit Facebook. Facebook actively filters information—on the basis of the principle of personalization—which is then presented on users' homepages, or 'Newsfeed'. Another aspect that determines visibility of content is their 'weight'. Weight is determined by the level of interaction (likes, shares, and comments) there is with content (Bucher, 2012; cf. chapter 7). Thus, Facebook actively mediates information about the world, whether this is an update from a friend or a news story, to users on the basis of past behavior.

Justice for Mike Brown

The second case study investigates how Facebook users engage in memory work on the page *Justice for Mike Brown* and how the platform plays an active role in it. The page, set up a day after the police shooting of the African-American teenager Michael Brown on August 9, 2014, aided in organizing and spreading information during the protests in Ferguson, Missouri. More contextual information will be provided in chapter 6, but the main reason why this case was chosen is because the page invited different types of memory work to emerge, ranging from commemorating Brown to appropriating iconic symbolic material from previous protests. Hence, this chapter rethinks the role of memory work within contemporary digital activism.

18 For a comprehensive overview of the various stages in Facebook's short history, see Brügger (2015).

Protest repertoires—the strategies, symbols, and practices protesters employ to achieve their goals and to construct their identity—have come to increasingly involve platforms. Memory work is an important part of this, especially in the case of protests against racial injustice in the US, which draws from the Civil Rights era. The chapter argues that this memory work provided the means through which protesters could identify with the movement, but simultaneously that Facebook's technology leads to representing events within a minimum of reductive narrative frames. Protesters and activists have always been engaged in memory work, but what happens when this takes places on a platform such as Facebook?

Wikipedia

Created in 2001, Wikipedia, owned by the Wikimedia Foundation, is the oldest platform investigated in this dissertation. The platform is a collaborative encyclopedia created by and for users. Wikipedia's About page reads that the English version houses nearly 5.5 million articles and over 38 million articles in total, written in over 250 languages. As of May 2015, the general website has 16.5 billon and the English page 7.9 page views per month (Wikimedia Report Card, n.d.). According to Alexa, per June 2017, Wikipedia is the fifth most visited site globally, right after Google, YouTube, Facebook, and Baidu. The platform was founded by Jimmy Wales and Larry Sanger, as a branch of their presently terminated project Nupedia, an encyclopedia exclusively produced by experts. Wales and Sanger strived to create a system that was open to anyone and that was quickly filled with entries, unlike Nupedia, whose production process was tedious. This followed the principle of the wiki—"a website on which users collaboratively modify content and structure directly from the web browser" (Wiki, n.d.).

Like traditional encyclopedias, Wikipedia helps to transfer knowledge of past events, people, things and places into the future. Also like traditional encyclopedias, its contributors select what does and does not belong in it. Unlike traditional encyclopedia, however, anyone can, in principle, contribute to it. This makes the platform interesting in terms of memory work, especially regarding historically and politically significant events. By means of their practices, Wikipedia editors (Wikipedians) construct specific versions of events. This case study dives into the group dynamics behind these practices by investigating the archived talk pages—the space in which Wikipedians discuss and debate articles and their fellow editors' choices. Talk pages provide insight into the process of memory work, because here editors engage into debate about how the past is re-presented in a wiki. Moreover, talk pages show how hierarchies play out and norms and values are shaped and negotiated. On the basis of this hierarchy, access is granted to technologies that can prevent or reverse editing. This is important in terms of memory work, because these technologies effectively silence alternative voices that do not fit within dominant discourse or do not comply with Wikipedia's community ideology.

The downing of MH17

The third case study concerns the downing of flight MH17 on July 17, 2014, and the wiki that was created after it. The downing of MH17 has been, up until this date, a contentious event that is intrinsically connected to broader geopolitical tensions between Russia and its allies on one side and, broadly speaking, the European Union and the United States on the other. This most visibly plays out in global media coverage, where facts and fictions collapse and converge. Russian media coverage, especially that of RT (Russia Today, Russia's state-financed news network) and state-owned press agencies, told significantly different stories about the events surrounding the downing than American and European media did. Moreover, there is evidence that Russia employed its "troll army"—paid bloggers and commentators that purposely disrupt online discussion—to spread misinformation on social media and throughout the Web (Sienkiewicz, 2015, pp. 213-215). On the other side, American government officials and news outlets were quick to point fingers at the Kremlin as being (in)directly responsible for the atrocity. Because Wikipedia entries are primarily based on mediated content, this debate was also visible in the talk pages. Unlike the chemical weapons attack on Ghouta, video and photo material concerning the downing was scarce. Therefore, Wikipedians were extra vigilant about the sources that were used by fellow editors to verify information on the disaster. Wikipedians' memory work regarding the downing of MH17, then, revolves around the inclusion and exclusion of information and its selection and appropriation in a form that fits Wikipedia's standards and community guidelines. Before we turn how these power dynamics within memory work play out on Wikipedia, however, the next chapter investigates how they take place on YouTube.

5

Witnessing in the new memory ecology: Memory work and the Syrian conflict on YouTube[19]

19 This chapter was published as: Smit, R., Heinrich, A., & Broersma, M. (2015). Witnessing in the New Memory Ecology: Memory Construction of the Syrian Conflict on YouTube. *New Media & Society 19*(2), 289-307. No other changes were made other than replacing “this article” with “this chapter.”

Witnesses are pivotal agents in memory work. 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 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 chapter, witness footage is analyzed 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, p. 148) and mediate events through video-sharing practices on YouTube.[20]

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, p. 4) as a starting point, this chapter 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, p. 16) 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." 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 1,500 civilians killed, amongst 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 towards the

20 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.

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, such 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 chapter analyzes the (re-)presentation of witness videos of the Ghouta attack on YouTube and, more broadly, their role and function in memory work.

To investigate the process of memory work within digital archives and the role of specific mnemonic agents, this case 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?

The analysis consists of two steps. First, the chapter conceptualizes citizen witnessing 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, the chapter argues 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, the study argues that witness videos are only sporadically re-presented 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—i.e. 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 chapter explores how a politically charged event like the Ghouta attack is constructed within a new media ecology.

New Witness Accounts, New Memory?

Witness accounts have always been used in news coverage (Rentschler, 2004; Peters, 2001; Zelizer, 2007; Frosh & Pinchevski, 2009), but with the rise of citizen-produced eyewitness footage, scholarly attention for its inclusion in mainstream media is growing (Wall & El Zahed, 2014; Mortensen, 2011; Andèn-Papadopoulos, 2013a, 2013b; Allan, 2013; Bock, 2012). 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, p. 4) has so far received less attention (cf. Reading, 2009a&b, 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, p. 4). These new dynamics inevitably change the "what, how, why, and when of remembering and forgetting" (Hoskins, 2011a, p. 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 record what is seen on the spot, has become a ritual which potentially transforms ordinary people into important actors in the news-making process (Frosh & Pinchevski, 2009; Allan, 2013; Bock, 2012). Hence, the observer's subjective experience of the event (her 'being there') is seemingly objectively recorded: the responsibility for what is represented is shifted "from a human practitioner to the perfect recording technology of a camera" (Bock, 2012, p. 644). The use of a medium (technology) by a medium (witness) makes the latter more authoritative: witnessing, quite literally, is objectified, giving the witness as text as well as the witness as person an aura of credibility (Peters, 2001, p. 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, p. 4) 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. 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 critical historical occurrence and, crucially, of the photographer's own role in this event" (Andén-Papadopoulos, 2014, p. 150). The media practice concurrently is a memory practice (Schwarz, 2014): the authority of presence appears to be inscribed in witness videos. 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 (2009a&b, 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 organizations, and watched

on mobile devices and television. Correspondingly, Hoskins (2011c, p. 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, p. 2), 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." This memory potential is not restricted to data about the self, but leads to and is a product 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 *reconfigurable* in ways that similarly problematize linear models of past and present" (Hand, 2014, p. 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. This chapter argues 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, p. 47). The "classificatory imagination" (Beer, 2009, p. 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, p. 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, p. 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, pp. 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.' Lastly, 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, p. 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, pp. 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, p. 49). They are inherently decontextualized, meaning 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, pp. 7-8). In the analytical sections, this chapter explores these interactions between representations, actors and technologies.

Research Design

Method

In order to empirically examine memory construction on YouTube, this chapter conducted both quantitative and qualitative content analyses. The first part of the 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?) 4) Extra-diegetic 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, p. 55). They thus try to guide the 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, p. 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, the source code was searched for for 'meta name=keywords.' Most tags are 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 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, p. 41) 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.” 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 the witness videos themselves, including those embedded within news reports on Ghouta.[21] 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 detail of symptoms. They contain detailed shots of runny noses, constricted pupils, and convulsive, spastic bodies. Often rows of dead bodies are shown (figure 5.1). 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.

21 The average length of the videos in the sample is a little under four minutes. However, this average is distorted by three videos of twenty minutes or longer. Most videos are in between one and two 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 is 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.

Figure 5.1 – Screenshot from video showing detailed shot of eye (AFP)

Details in the videos 'prick,' thus making them more than a recording. This relates to Frosh and Pinchevski's (2009, p. 9) 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." 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 (fig. 5.2).

Figure 5.2 – Screenshot from video showing rows of dead children (VexZeen)

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; Kirnéa) or show the alleged firing of the rockets during daytime (e.g. winfama1; GlobalLeaks).[22] 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 "verité 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, p. 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, this chapter demonstrates 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 the 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, ANAChannel). Both legacy media and web-native media declare to function as objective news providers.

22 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.

Activist media we defined as strongly political media organizations or individuals that (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 5.3), the three most-watched videos in the sample were uploaded by web-native media (Truthloader, ANAChannelEng, The Young Turks).

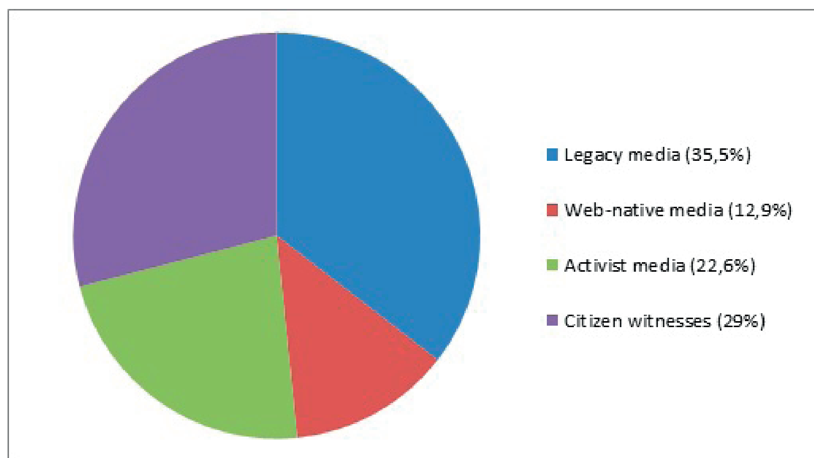

Figure 5.3 – Types of uploaders in sample

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, the 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 the 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: 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 TheSyrianrev2011, 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. 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 fig. 5.4).

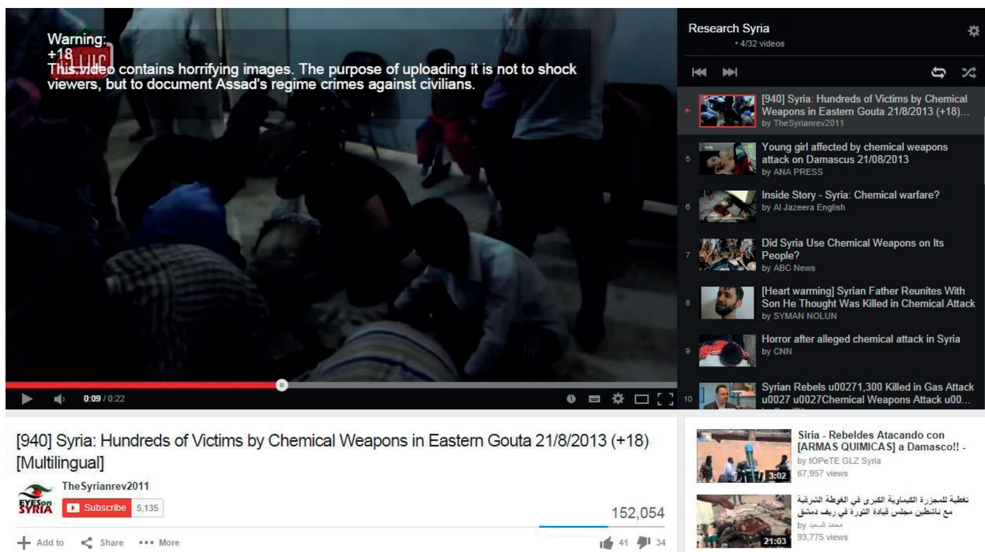

Figure 5.4 – Screenshot of video providing disclaimers (TheSyrianrev2011)

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

Chapter 5

recurring *topos* is that of a father being reunited with his children who are either dead or in shock (e.g. fazzamin; SYMAN NOLUN; figure 5.5). 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.

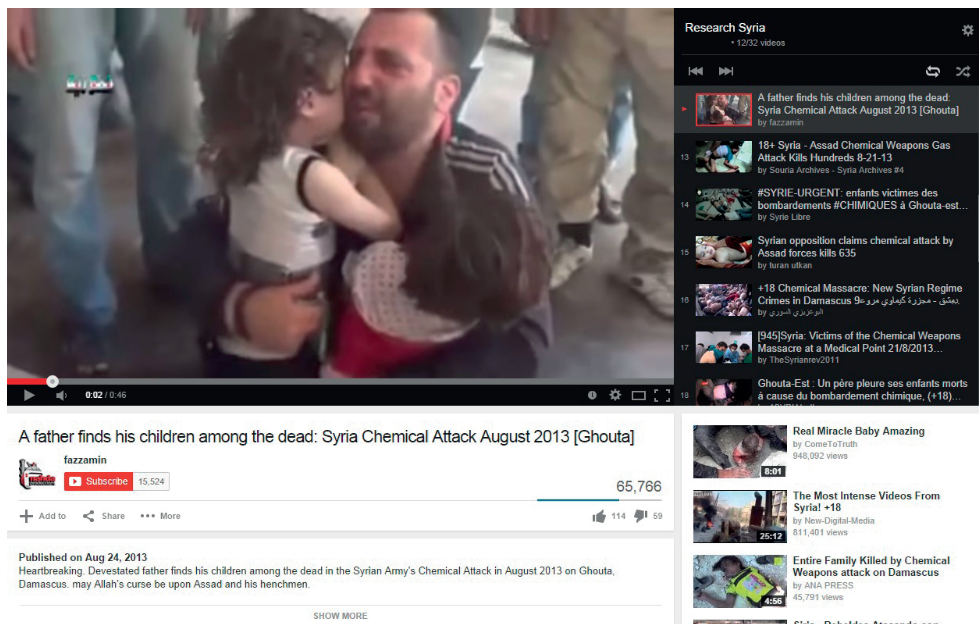

Figure 5.5 – Screenshot of video showing father holding his dead children (fazzamin)

The four types of uploaders in the 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 the sample are concerned with creating their own version of this agenda. What is apparent 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 the 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, I 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 curation, most videos in the 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 5.6 shows the distribution of tags; tags such as 'Syria chemical weapons' were included in two categories, in this case 'place' and 'weapon type'.

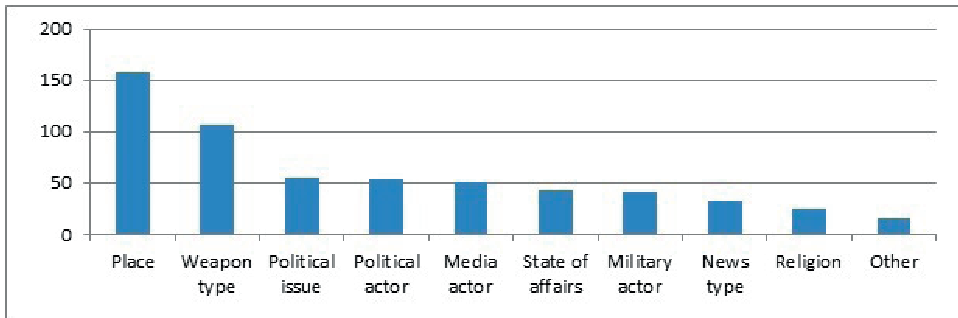

Figure 5.6 – Frequency of tag types in sample

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 the analysis of the videos do not always correspond with the ways in which videos are tagged. The second most watched video in the sample ('Young girl affected' by ANAChannelEng) 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) and 'Inside Story: Syria: Chemical Warfare?" (Al Jazeera English). 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) and "Syrian opposition claims hundreds have died in a chemical weapons attack in Damascus" (ABC News). 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)

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)

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 Damascusv [*sic*] with chemical weapons on August 21, 2013. (The SyrianRev2011)

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)

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 & Pinchevski, 2009, p. 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

This chapter identified contemporary citizen witnessing and its associated practices as key components of memory work in a new media ecology. The first step of the analysis 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 trustful 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, the chapter analyzed how the affordances of YouTube and the sociotechnical practices associated with it affect memory work. The 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 glo-bital 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 constructing 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 chapter has combined established methods (content analysis) with the study of metadata (tag analysis) to analyze how witness material is used to "promote specific public understandings of the past" (Neiger, Meyers, & Zandberg, 2011, p. 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. The 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. The 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.

6

Activating the past in the Ferguson protests: Memory work, digital activism and the politics of platforms[23]

23 This chapter has been published as: Smit, R., Heinrich, A., & Broersma, M. (2017). Activating the past in the ferguson Protests: Memory work, digital activism, and the politics of platforms. *New Media & Society*. Advance online publication. doi: https://doi.org/10.1177/1461444817741849

On August 9, 2014, the shooting of 18-year old Michael Brown sparked civic unrest in Ferguson, a suburb of St. Louis with a large African-American population and a long history of racial tension (Teague, 2014). Brown was killed on the spot when he fled after a struggle with Darren Wilson, a police officer who wanted to arrest him for stealing a box of Swisher Sweets cigars worth $48. The African-American teenager turned out to be unarmed.[24] Police response to people taking to the streets was aggressive. Militarized forces patrolled the roads, tear gas was used and at least 155 people were arrested (Keating, Rivero & Tan, 2014). The protests and violence re-escalated when, on November 24, a grand jury decided not to indict Wilson and a few days later another grand jury judged similar in the case of African-American Eric Garner who was killed by a New York cop after holding him in a prohibited chokehold.

These events instigated massive press attention (Hayes, 2014, p. 4). Not only in Ferguson, but also in other major cities in the US people demonstrated against racialized police violence. Decentralized protests, mainly organized via social media, emerged. Using mobile technologies such as smartphones, citizen witnesses recorded and shared their experiences of the protests, next to the extensive coverage by the mainstream press. Social networking and microblogging sites—mainly Facebook, YouTube, Instagram, Tumblr, Vine and Twitter—served as public spaces in which people could commemorate Brown, vent their opinions, inform others about new developments, organize rallies, connect with similar-minded people, and aggregate and comment upon mediated material. Social media thus allowed individual protesters and activists to connect to each other and ideas *in time*, across different locations, something that recent scholarship devoted to digital activism has noted (Lim, 2012; Bennett & Segerberg, 2012; Gerbaudo, 2015).

This chapter argues that, simultaneously, a temporally oriented discourse emerges within and surrounding protests, that connects the present to the past, *through time* (cf. Bonilla & Rosa, 2015). This occurs through protesters' memory work. As was discussed, memory work is a discursive process—comprised of practices, cultural forms and technologies—wherein the past is shaped and constructed in the present and carried into the future. It can be highly intentional and purposive, as in the case of documenting and recording for future recall (Lohmeier & Pentzold, 2014), or the conscious appropriation of historical figures and symbols for present goals (Jansen, 2007). Other cultural objects and practices, however, can produce unanticipated mnemonic effects. A photo, phrase or meme then come to 'stand in' or represent a moment in time and particular narratives or personal stories might take hold publicly (Gerbaudo, 2015). Potentially, all practices, cultural forms and technologies can thus perform memory work. But in practice not all do, because certain interpretations of and engagements with the past have more currency in the present than others. Within protests, memory work may help mobilize individuals

24 This is based on the witness reports, evidence and grand jury testimonies that were released in November 2014. See: http://apps.stlpublicradio.org/ferguson-project/evidence.html

into action, legitimize their cause, historically situate their struggle, and create a collective identity.

To tease out the connections between digital activism, memory work and social media platforms, this chapter analyzes the memory work performed on the Facebook page *Justice for Mike Brown* (*JfMB*). This page was set up a day after the shooting and administered by Derk Brown, a Ferguson resident not related to Michael. The page, liked by 50,683 people as of November 2015, was initially set up as an activist platform aimed at direct action. Yet, it also offered a space for users to engage in memory work. This ranged from affective and personal practices such as mourning and condoling, to rational and political practices such as the sharing of purposively documented instances of police violence during the protests, which aimed to construct an agenda for the future, or “mediated prospective memory” (Tenenboim-Weinblatt, 2014). Moreover, the page helped spread and amplify particular repertoires, images and icons that made the protests recognizable in and through time.

Consequently, the page invited memory work on different temporal and relational levels, either as a goal in itself or as a rhetorical resource. It functioned as a space in which private and public, individual and collective memories connected and converged. The resultant “connective memory” is “generated through the flux of contacts between people and digital technologies and media” (Hoskins, 2011, p. 272). Although memory work is highly dynamic on the page, this chapter argues that the page administrator, users and Facebook’s operational logic concurrently helped popularize particular narratives and representations, and stabilize them in repertoires.

These theoretical observations lead to two questions that guide the research. First, how is memory work performed and shaped on *JfMB*? This question is geared toward revealing the interplay between humans and technology in representing the past and preserving the present on Facebook. By means of Critical Discourse Analysis (CDA) of 180 posts, and more than 5000 comments, reply threads, images and videos, the chapter provides a typology of memory work. Secondly, the chapter analyzes which “interpretative repertories” (Potter & Wetherell, 1987) are employed in this memory work. This shows how memory work was used to reach rhetorical goals and shaped understanding of events that occurred after the shooting.

These questions move beyond an instrumental approach that views social media as mere tools for mobilizing, organizing, and coordinating (Castells, 2015, p. 257). Rather, *JfMB* is a formalized space that shapes interaction and is therefore *part of* the memory work done within digital activism. Consequently, the chapter provides an analysis of cultural forms, practices, and technologies, since these are inexorably linked on Facebook—or on any social platform for that matter. Therefore, this chapter rethinks the role of memory work within contemporary digital activism, wherein the controversial death of an individual ultimately inspired action against systematic injustice.

Facebook's operational logic

Facebook thrives on the affective interactions its users have with the platform, other users, products, and the content shared on it (Van Dijck, 2013). *Sharing* is the imperative on Facebook: not only does the platform constantly ask its users to share, it also selectively shares what it deems important for its users. Users mediate activities, texts, ideas, feelings, relationships, memories, and places to "friends" but also with a company that makes its business out of this information. Moreover, users are engaged in the "affective processing" of data: Facebook expects people to connect, select, rank and produce digital content (Gehl, 2011).

Facebook users who are interested in specific topics, people, places or causes can connect with pages about these by "liking" them in order to receive updates on the personalized News Feed and to interact ("like," share, comment, reply) with it (Bucher, 2012). Hence, by liking and engaging specific content becomes part of unique informational diets. The more a user likes, shares and comments, the more visible the page becomes on the newsfeed. This also implies that Facebook's algorithmic favoring can "hide" important news stories. Moreover, certain types of posts and comments are preferred by Facebook; for example, visuals (photos and videos) do well in terms of visibility, whereas plain text does not (Corliss, 2012). Accordingly, users are encouraged by Facebook's architecture to post content that attracts interaction. Popular material thus becomes "most relevant" and therefore most visible on the platform, which in turn attracts more interaction.

Facebook's black-boxed communication interface is governed by hidden protocols and algorithms that, to a certain extent, have become part of our "technological unconsciousness" (Thrift, 2004). The underlying structure, architecture, and affordances of networked technologies "steer" (van Dijck, 2013) social interaction in a seemingly natural way. Taking this "engineered" or "platformed" sociality (van Dijck, 2013, pp. 3-18) into account, direct connections to memory work can be made. Facebook's affordances and technological architecture prefer certain creative practices over others, semi-automatically value certain objects higher than others, and steer particular interpretations of mediated material. Its multiplier effect has come to determine popularity and visibility within the new media ecology and it partly explains why certain objects "go viral" (Gerlitz & Helmond, 2013).

The commercially driven operational logic of Facebook does not only shape everyday interaction with the platform, but it also affects engagement with the past by, on and through it. That is, the agency within memory work is distributed on Facebook. It ranges from the highly conscious and intentional memory work of users, to the 'algorithmic' memory work of the platform, which selects and re-presents digital objects that are highly interacted with. Moreover, because each post, comment and reply is saved on Facebook, these might emerge again unexpectedly and might shape public discourse in unintended ways. In other words, Facebook pages—especially public Facebook group pages like *JfMB*—can be seen as spaces wherein memory of events and people is continuously assembled by both human and nonhuman actors.

Consequently, when Facebook users engage in memory work, besides other engagements, they do so within a techno-discursive space that is ultimately driven by a commercial strategy revolving around visibility and “the new.” How do these “politics of the platform” (Gillespie, 2010) entangle with the politics of memory? This question becomes even more pertinent when memory work plays a pivotal role in the internal dynamics of protests concerning highly contentious issues such as racialized police brutality. The procedural logic of Facebook may help, together with its users, lead to the legitimization, popularization, and normalization of a certain mnemonic discourse. In other words, Facebook’s operational logic may help stabilize connective memory’s unpredictable and dynamic trajectories. Research into discourse within digital activism—of which memory work is an important part—thus needs to take into account how both platforms and their users shape this.

Research design

When we examine a Facebook group and memory work within it, we are essentially examining discourse as it is presented within a formal technological environment. Consequently, “just” critically analyzing this discourse is not enough; it is produced, interpreted and practiced in interaction with Facebook’s interface and underlying mechanics. Which norms, attitudes and standards vis-à-vis memory flow out of this interaction between users and between users and the platform? To answer this question, this chapter situates a critical discourse analysis (CDA) within the operational logic of Facebook. CDA is both a theory and method (Wodak, 2001) and is used to study the dynamics of power—particularly pertaining to questions of voice and inequality—within particular discourses.

To tease out the discursive functions of memory work the chapter employed the concept of interpretative repertoires, “recurrently used systems of terms used for characterizing and evaluating actions, events and other phenomena” (Potter & Wetherell 1987, p. 203). Hence, interpretative repertoires can be viewed as the building blocks of discourse, being the frameworks of language that people employ both strategically and unconsciously to construct meaning. Each interpretative repertoire is the result of different memory practices and discursive units (tropes, metaphors, etc.). The uses of discursive units are manifold; that is, there is *variation* within interpretative repertoires that enables contestation (Potter & Wetherell, 1987, p. 172). Identifying these discursive units within the memory work done on *JfMB* revealed how the past is used rhetorically to assert particular ideological stances—how *types* of memory work emerged.

While the chapter conducted a CDA, it also paid attention to the technological features and operational logic of Facebook as to explain why certain posts and comments became dominant and visible. In critical approaches to platforms (Patelis, 2013; Kennedy, 2013), the interface is viewed as an important part of the content: “It is a non-neutral entity, as a cultural text that aspires to power and that frames specific forms of interaction” (Patelis,

2013, p. 120). Even though a thorough analysis of Facebook's mechanics is beyond the reach of this study, it did investigate the ways in which users employed and appropriated Facebook for memory work and the dominant cultural forms and content that flowed out of this interaction. Thus, it demonstrates how the platform's logics of visibility and sharing affected the popularization of particular interpretative repertoires and discursive units.

Sample and data analysis

Data collection and the discourse analysis followed nine iterative-inductive steps (Fig. 6.1). In the first step, all posts, comments and replies between 10 August 2014, when the page was created, and 15 March 2015, when posting activity stopped (8 months), were read, which helped to familiarize the researcher with the data.[25] This resulted in an initial data set of 180 posts by the page administrator and more than 5000 comments and replies. The latter were all anonymized for ethical reasons. Also, observational notes were made during this phase to indicate important moments and events and the emergence of dominant themes and narratives. Secondly, screenshots were made of posts, comments, and reply threads 1) that *purposively* engaged with the past for present or future-oriented goals, 2) were highly interacted with (through likes and replies) and thus more visible on the page, and 3) contained repetitive and recognizable content (recurrent images, narratives, etc.). For example, a post that called for a rally was not included in this step, yet a *documentation* of this rally to show its non-violent nature was.

Steps three, four and five revolved around describing and categorizing those posts and comments selected in step two. First, the *types* of memory work were identified by asking what memory practices were supported and realized by these posts and comments. For example, a comment might *commemorate* Brown, while another *historicizes* his death. Some posts and comments are examples of *intentional* memory work, for example those that aimed to "set the facts straight" about Brown's death, while others *unintentionally* became important symbolic markers or part of the narrative surrounding his death. Step four consisted of identifying discursive units and connecting them to the specific types of memory work (step three). For example, posts that drew parallels between past and present (memory work) often used the trope of the "raised fist" and commemorating Brown (memory work) often involved portraying him as a martyr (trope). After these steps, tentative interpretative schemes were formulated based on the inductive categorizations.

The last four steps concerned the formulation and clustering of discursive questions that the memory work and content of the posts and comments aimed to answer. For example, in a mourning comment, Brown could be portrayed as an average teenager. The discursive questions connected to this would be: who was Mike Brown and what did he stand for? The consecutive interpretative repertoire (steps eight and nine) connected to this would be "Michael Brown's identity." Alternatively, a shared recording (memory work) of peaceful

25 The entire page was saved as an html file for offline reading.

protests (trope) answered the question how the protests should be represented and would be ascribed to the "protest identity" repertoire.

Procedures	Steps
Gathering and selecting the data	**1.** Gathering all posts, comments, and replies **2.** Selecting posts, comments, and replies that *explicitly* engage with the past for present or future-oriented goals: memory work
Describing and categorizing the data	**3.** Inductive categorization of type of memory work (mourning, documenting, historicizing, etc.) **4.** Identification of tropes, narratives, symbols within memory work **5.** Development of tentative interpretative schemes
Formulating discursive questions and identifying interpretative repertoires	**6.** Identification of questions that the memory work aims to answer discursively **7.** Clustering of these questions, memory work, tropes etc. **8.** Identification of regularities and patterns in use of repertoires **9.** Identification of dominant repertoires

Figure 6.1 – Overview of procedural steps

It is important to note that the process of inductive theory building, which CDA ascribes to, is iterative and interpretative. It is "not a matter of following rules and recipes; it often involves following up hunches and the development of tentative interpretative schemes which may need to be abandoned and revised over and over again" (Potter and Wetherell, 1987, p. 177). Consequently, throughout the analysis the aim was to provide a typology that demonstrates the complexity and untidiness of mnemonic discourse.

Justice for Mike Brown

Before the typology is presented, *JfMB* requires further introduction. The page was originally set up as an activist platform to rally support for punishment of police officer Darren Wilson, who shot Brown. As the first post demonstrates, the "cause page" was created "to gain awareness and bring Justice to Mike and his family, what the cops did was just senseless!!!!!! So angry at police right now.... #JusticeForMike#RipMike" (August 10, 2014). The phrase "Justice for" was popularized in the (social media) protests in the wake of the 2012 shooting of Trayvon Martin and alludes to the principles of equality embedded in the foun-

dational history of the US.[26] Hence, the online and offline protests against racialized police brutality were immediately linked to the past: the shooting was interpreted as the result of systemic injustice and inequality towards African-Americans. The profile image used for the page is a photo of Michael Brown's stepfather, Louis Head, holding up a cardboard sign that reads "Ferguson police just executed my unarmed son!!!" (fig. 6.2). The cover photo shows the street in which Brown was shot—his body lies just outside the frame—and the hashtag #justiceformike is placed over it. The hashtag plays a pivotal role: not only does it link this page to the hashtag stream within Facebook, it also connects the page to the larger online presence of the diffuse protest movement, most notably microblogging sites Twitter and Tumblr. The page's description reads: "18 year old 'Mike' was gunned down by police shot 10 times and he was unarmed. He was heading home with his friend. Justice for Mike!"

Figure 6.2 – The *JfMB* "About" page

As this text, the profile and cover photos indicate, the page was clearly created to invoke affective responses. Increasingly, whenever a disruptive event occurs, people actively seek out spaces that provide them with more information. They share their thoughts and feelings online and engage with other people's thoughts and feelings. Such alternative socially networked public spheres provide fertile ground for discussing race-related issues

26 The phrase "justice for all" is widely used in American cultural memory: …*And Justice for All* (1979) is a courtroom film starring Al Pacino. A 1988 album by Metallica has the same title.

and performing racialized identities (Florini, 2014; Sharma, 2013). In the week after the shooting, while a protest group grew in both size and (online) visibility, the page became a central space for information, to organize activities, vent frustration and anger, share grief, and engage in discussion.

Because *JfMB* is a Facebook *page* and not a *group* it is visible and accessible to anyone with a Facebook account. Page administrator Derk Brown, however, was the only one with full control over posting activity.[27] He also had the power to ban users, thereby effectively silencing those who comment or reply in offensive (racist) ways. Indeed, traces of bans were found in the comment threads. In the posts in which he spoke directly to page users he thanked them for the support (while users repeatedly thanked him for his work), provided additional (practical) information or corrected users. He also often asked about the visibility of his posts on individual timelines: "If you can see this post please comment (YES)" (January 16, 2015). Moreover, Derk Brown energetically covered the protests in Ferguson by writing weblog-like reports and by "live streaming" marches and road shutdowns.[28] He also actively included user's documenting protest actions or events such as rallies, sit-ins and so-called "shut-it-down" actions (the closing-off of roads and shops). Brown was, therefore, an important agent for memory work on the site. He consciously set the agenda by providing the topics for discussion, moderating and deleting material, and drawing from experience or selecting from the vast amount of available (social) media content.

A typology of memory work

The chapter now moves on to present a typology of memory work on the page and a discussion of the interpretative repertoires applied in this. Even though memory work on the page differs on relational, geographical and temporal levels, it can be viewed as *functioning* toward political goals. It is a means to comment on institutional politics, to increase awareness of the structural problem of racialized police brutality, or to provide a "just" depiction of Michael Brown and the protests for future recall. Particular contentious discursive questions are answered by means of the employed discursive units, for example: how should the protests be represented and how does the shooting fit in US history? The comment in Fig. 6.3 adequately summarizes the memory work on the page.

27 Unfortunately, page administrator Derk Brown did not respond to requests for an interview.

28 Facebook introduced the live stream option in 2016, after the protests in Ferguson. Derk Brown used www.livestream.com and linked to his page on *JfMB*.

- Do not forget Michael Brown
- Do not forget how the media dehumanized him and tried to justify his murder
- Do not forget how peaceful protests were painted as savage riots
- Do not forget police armed with military grade weapons terrorized and arrested black civilians
- Do not forget Darren Wilson being awarded over $400,000 in fundraiser donations for murdering an unarmed black child
- Do not forget that this system was not built to defend us, but to control us
- Do not forget Ferguson

Figure 6.3 – screenshot of comments by a user on February 10, 2015

The phrase "Do not forget" signals that Michael Brown's death and its aftermath should be remembered alternatively and in contrast to "mainstream" portrayals of Brown and the protests, which focused on riots and material damage. A comment like this shows how protesters and their supporters positioned themselves against a monolithic Other that did injustice to Mike Brown, and by extension, to a social group. This is in line with Van Dijck's (2007, p. 5) conception of memory work as something that allows us "to make sense of the world around us, and constructing an idea of continuity between self and others." Consequently, the memory work on the page was aimed at "getting the facts straight" about who Brown was, the injustice within "the system," and providing an alternative to mainstream media's coverage of the protests and other police violence. Discursively, the past is thus used rhetorically, and as something to be actively shaped in the present.

As figure 6.4 demonstrates, four distinct interpretative repertoires can be discerned in the memory work on *JfMB*. These will be discussed in the following sections.

Interpretative repertoires	Memory work	Discursive units (tropes, narratives, symbols)	Discursive questions
Michael Brown's identity	Mourning Commemorating Memorializing Condoling Paying tribute	The saint The son The graduate The teenager The martyr The victim The thug	Who was MB? How should MB be remembered? Where did MB stand for?
Facticity of the case	Selecting official documents Re-mediating media content Updating information	The innocence of MB Wilson as guilty Racist Ferguson police Prejudiced jury Reports as proof	What did really happen on August 9? Why was MB killed? Why was DW not punished for his crime?
Protest identity	Documenting the protests Creating and appropriating memes and icons	"Hands up, don't shoot" "I am Michael Brown" #Blacklivesmatter Protest as non-violent Aggressive response by militarized police	What forms should the protests take? How should the protests be represented? Which symbols carry weight and should be used?
Systematic injustice	Historicizing Drawing parallels Contextualizing Remediating icons	Other police violence Racial injustice "Look how far we've come" Raised fist Black leaders	How does the shooting of MB fit in US history? Is MB shooting the result of a racist system?

Figure 6.4 – Typology of memory work and interpretative repertoires

Michael Brown's identity

Many discussions, especially in *JfMB*´s early stages when personal information and updates on the shooting were scarce, revolved around the question who Mike Brown was and how he should be remembered in the "right" way. Through mourning, commemorating, memorializing, condoling, and paying tribute, page users constructed Brown's identity. In borderline or explicitly racist comments, some users would call him a thug or worse, whereas especially family and community members would sanctify the young man, making him a martyr who died for a grander cause. Illustrations of these ambivalent depictions are an image portraying Brown with angel wings on his shoulders and another showing him intimidating the convenience store owner (fig. 6.5).

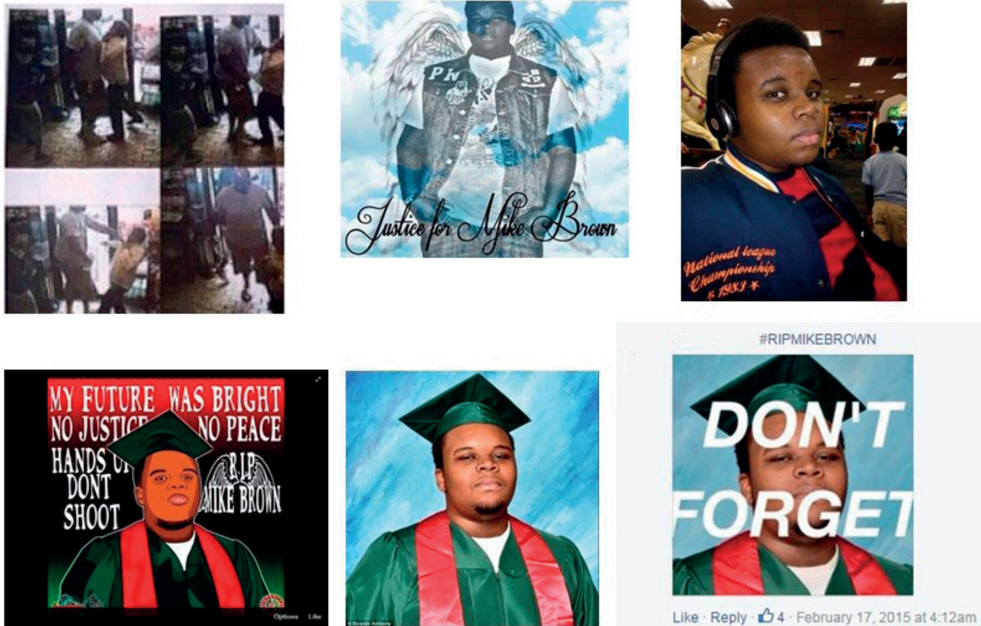

Figure 6.5 – A compilation of popular depictions of Michael Brown

This type of affective "impression management" is common on Facebook memorial pages (Marwick & Ellison, 2012). On *JfMB*, page visitors mainly depict the teenager positively. Most personal details and renditions of Brown's image stress his kindness and good nature. Two visual tropes became especially dominant: Brown as an ordinary teenager and as a high school graduate (fig. 6.5). These photos were posted on the page and other social media platforms shortly after Brown's death and were also often used in news reports. The photos highlight that what happened to Brown could have happened to any black teenager. Moreover they have high templatability (Rintel, 2013); that is, they are easily used as the basis for creative remixes and they are easy to identify with. As figure 5 shows, the high school portrait was appropriated for rhetorical effect. 'Playful' interaction in memory work is also stressed by Kuhn (2010, p. 3): the past, and memories thereof, is "material for interpretation, to be interrogated, mined, for its meanings and its possibilities" (Kuhn, 2010, p. 3).

Posts by people who knew Brown during his lifetime stabilized this public identity further. For example, a post by Brown's old kindergarten teacher was shared by the administrator (fig. 6.6). She called Brown "one of the kindest kids that I have taught." This post is representative of the personal memorial work done on the page that affectively shaped Brown's public identity as an innocent teenager with a bright future ahead. This, in turn, had implications for the tone and subjects of more political discussions: how could it be that such a kind-hearted teenager was killed? Writing from the position of someone who knew Brown well, the kindergarten teacher's claim that attacking a police officer was "NOT his nature" gains in authority. Through commemorative posts like these, Brown's public

persona is being managed: who Michael Brown was perceived to be in life served as a means to criticize both police brutality and the violence and looting that took place during the protests.

I'd like to take this opportunity to tell MY story about Michael Brown. I taught Michael when he was in Kindergarten. Michael was one of the kindest kids that I have taught. Michael was quiet, yet funny. He had an infectious smile. Some things I remember most was how Michael's grandfather or dad picked him up from school every day. His mom, dad, and extended family were fiercely protective of Michael and at that time, his only sister, Déjà. They were active in every aspect of his education, conferences, school performances, et al. I hadn't seen Michael in some time and in June, I saw him walking in our school parking lot with a friend. He asked me, "Mrs. Sealey, do you remember me?" I answered, "Yes, Michael Brown, but I am amazed at how tall you've gotten." He gave that shy grin and informed me that he had just graduated and had intentions of attending Vatterott. I asked about his mom and sister and he told me that they were well, and he went on his way. Each of my colleagues, who had the opportunity to teach Michael, have echoed my sentiments. I guess this is why it is so very hard to fathom that Michael's demeanor would change so suddenly as to wrestle with an armed police officer. While I am unsure of all of the details of Michael's untimely death, I can answer with certainty, that this was NOT his nature. Those of you who watched the interview with Michael's mom and dad, you saw a glimpse of Michael's demeanor in his dad, very quiet but proud. I saw the man that Michael will never get to be. I saw his mom two weeks ago and she was excited about his future.She has ALWAYS been her children's biggest cheerleader. I ask that we continue to keep Michael's family in prayer. I understand the anger. But, please don't allow anger to turn into bitterness. Out of anger comes CHANGE, bitterness destroys. Please stay in Peace.

Figure 6.6 – Re-posted post from Michael Brown's kindergarten teacher

One depiction that incited much debate, on the page and elsewhere, shows Brown's body lying in the street, the blood from his wounds visible. It was the first photograph that was shared on *JfMB* (fig. 6.7). To many, this picture was appalling and disrespectful to Brown's family and his memory. This is understandable especially given the knowledge that his body had been on the street for over four hours—another point of discussion on the page. Others, however, argued that it was key to showing the human tragedy of the shooting. Kern, Forman and Gil-Egui (2013) found that on most Facebook memorial pages pictures of the deceased dead body are taboo. The fact that this photo is represented on the page demonstrates that its memorial quality served political goals. It was a means to show what "really" happened and to spark public debate, well beyond the page itself. The finality of the picture stands in stark contrast to the pictures of him taken when he was alive. Coming together, they evoked strong affective and emotional responses.

Figure 6.7 – The scene of the shooting

Sharing photos of the (improvised) Michael Brown memorial at the location of the shooting became a popular way to memorialize and pay tribute (fig. 6.8). After some time, it even became a fad to take selfies at the scene and share these on *JfMB* and other platforms. Here, we see how Facebook users actively engage with the platform's features in their memory work. Pictures were placed on personal timelines, but made public by the place-tag "Michael Brown Memorial," a Facebook feature to indicate a "historical place." The physical place was interwoven with a digitally networked space, which increased its symbolic meaning for the protesters. Therefore, reactions were furious when a police report referred to the improvised memorial as a pile of trash (posted December 25, 2014) and when a person drove through it on purpose with his car (December 26, 2014).

As these examples demonstrate, a highly mediated and networked display of affect and support emerged in the aftermath of the shooting. Following the vernacular Web logic of "sharing is caring," these affective practices, that are simultaneously offline and online, were highly visible on the page. The off- and online distinction is even further blurred in a post with a picture of Michael Brown's mother, Lesley McSpadden, crying, while two young people, presumably relatives, hug her (fig. 6.8). Her white hat shows the picture of her son with angel wings (fig. 6.5). The comment, selected as "most relevant" by Facebook and therefore pushed to the top, emphatically expresses the tragedy of losing a child. Integrated within this post are practices of affective processing (Gehl, 2011). Users are encouraged to affectively interact with the post by liking, sharing and commenting. "One Like = One Hug" reads the post. Moreover, they are afforded to connect to the broader protest network by three hashtags that are immediately visible: #JFMS (Justice for My Son) in the picture, #Ferguson, and #RIPMikeBrown. Memory work in the form of mourning, condoling, commemorating, memorializing, and paying tribute thus actively shaped Michael Brown's identity, both online and offline, and offered people to connect affectively to the protest cause.

Figure 6.8 – Compilation of two posts showing convergence of online and offline memory work

Facticity of the case

A less prominent, yet important repertoire concerns facts about the shooting. What did really happen on August 9, 2014? *JfMB* can be regarded as a collaborative space in which numerous "gatewatchers" provided updates on the basis of personal or community interest. Aimed at constructing "prospective memory" (Tenenboim-Weinblatt, 2014), this aggregated material is used to set the agenda for the future and to achieve "justice for Mike Brown." The memory work connected to this involves selecting and posting official documents, re-mediating media content and updating or correcting previous information. Administrator Derk Brown plays an important part in concomitantly shaping the current narrative and public memory: next to filming the protests, sharing this type of information is one of his main page activities. He regularly reminds page users of a recording in which a witness said "he had his hands up and he wasn't no threat" (March 5, 2015). Users also posted material from professional journalists and government reports claiming that Brown was murdered in cold blood. This became an important narrative that took hold within the protest movement. Three other important, regularly raised points of contestation were the role of prosecuting attorney Robert McCulloch in the non-indictment of Wilson, the veracity of the witness accounts used in the Grand Jury hearing, and Darren Wilson's own testimony.

Although Facebook does not provide means for users to clearly order and index material, *JfMB* functions as a distributed, yet specialized archive. As a living archive, Facebook favors the communicative aspect of memory work and the present over the past; it makes sharing and connecting easy, while the only way to curate is by integrating hashtags in posts. Facebook's technology supports this in an idiosyncratic way: through #Ferguson, #ShawShooting and #JustForMike, posts appear in hashtag streams, and on personalized newsfeeds of "likers" and users of the page. In other words, *archival* material—physically stored on Facebook's servers—becomes part of the *repertoire* of page users (Taylor, 2003). The memory work regarding the facticity of the case—selection, re-mediation, and updating of information—allows users to further justify the protests and support truth claims about 'what really happened'.

Protest Identity

JfMB also became a space to document and share videos and photos of protests and to create icons that made the protests recognizable in the present and future. What forms should the protests take? How should the protests be represented? And: which symbols should be used? The page, for example, facilitated the emergence and spread of internet memes: "units of popular culture that are circulated, imitated, and transformed by Internet users, creating a shared cultural experience" (Shifman, 2013, p. 367). These "multimodal symbolic artifacts" (Milner, 201, p. 2359) are connected to memory work in three overlapping ways. First, they are the products of the "remix culture" of digital media (Bayerl & Stoynov, 2014, p 3). They intertextually feed off of cultural resources from the past. Secondly, memes can become mnemomic building blocks for the identity of protest movements. They are easily recognizable and can be put to powerful political use (Milner, 2013; Bayerl & Stoynov, 2014; Shifman, 2013). Finally, memes create simple narratives about the past that avoid nuance. They can inspire action, mobilization and creative activity, but may concurrently lead to polarized and antagonistic representations of the past.

On *JfMB*, memes not only enhanced the protest movement's visibility within social media networks, but also became important symbolic markers that signified the broader protest movement against racialized police violence. They were used to document and shape peaceful protests and thus became *part of* the movement. They became indicators of a collective identity by inviting people to contribute and take part. The protests' non-violent character and the aggressive police response were continuously highlighted on the page, making it an important part of how protesters were represented and saw themselves. As symbolic artifacts, memes carry the short-term memory of movements and make it recognizable as such: the meme is an important cultural form and social practice through which protesters can engage in memory work.

One of the first protest phrases to emerge on *JfMB* was "Hands up, don't shoot." It alludes to the witness reports claiming that Michael Brown held up his hands before he was shot. It became a hashtag on social media, a gesture that signaled allegiance to the protest

movement, and a cue for creative practice because it was easy to adopt and to adapt. The stark contrast between unarmed people holding up their arms and heavily armed police forces aiming their guns at them provided photogenic moments. The phrase and gesture persisted and spread in TV news, newspapers and, most prominently, on social media. It further gained prominence when four US representatives made the gesture during a House floor meeting and when the St. Louis rams held up their arms before a NFL match (fig. 6.9).

Figure 6.9 – compilation of “Hands up, don’t shoot” images

On *JfMB*, t-shirts with the phrase were sold (fig. 9) for charity purposes, users started to use “raising both” emoticons and people posted pictures of themselves, friends and family holding up their arms. Others restaged the photograph taken of Brown’s dead body lying in the middle of Canfield Drive. Even a mobile application, *Handsup4Justice*, was created—and promoted on the page—to record encounters with law enforcement (cf. handsuptheapp.com). These bodily performances became recognizable, non-violent means to support the movement. Both practices also directly allude to narratives and tropes concerning Brown’s identity (non-violent, innocent, victim) and the disrespectful treatment of his deceased body. These examples further show that the distinction between online and offline action, or at least the display of sympathy, were blurred during the protests.

The view that Brown’s fate could have been any black teenager’s was an important source of inspiration for activity on the page. The phrase “I am Michael Brown” was used in many comment threads and posts. This phrase also connects to other, earlier protests, for example “We are all Khaled Said” (2011 Egyptian Revolution) or “I am Charlie Hebdo” (2015 terror attack). “I am Michael Brown” and “Hands up, don’t shoot” became recognizable symbols that referred to an activist attitude, a socio-political movement, and a historical moment. They became the memorable means by which individuals could easily connect, from a distance, to the protest movement. This conscious engagement with the past through documenting the protests and creating memes out of previously mediated material can be viewed as a type of memory work that allowed the page administrator and users to negotiate the identity of the protest group.

Systematic injustice

A fourth repertoire apparent in the memory work was used to interpret Michael Brown's death and the aggressive responses to the protesters as forms of systematic and historic injustice against African-Americans. This type of posts and comments links the present with the past by juxtaposing, comparing and contrasting current and past events, and re-mediating iconographic imagery. Especially the time of the Civil Rights Movement became a historical era to draw from. For example, a Charles Moore picture from a *Life* magazine photo essay about the 1963 Birmingham Civil Rights protests (Spratt, 2008, pp. 86-87) was juxtaposed with a current picture (fig. 6.10). By using Moore's photo, users link up to a common journalistic and historical discourse because it has come "to represent and explain an important chapter in American mythology and collective memory: the valiant struggle for civil rights by a people who were suppressed, segregated, and abused by the dominate White power structure" (Spratt, 2008, p. 102). This is communicated in the photographs through a now familiar trope: white men in powerful positions (holding dogs) and a powerless African-American crowd.

On *JfMB* recognizable icons are both popular to use as well as heavily interacted with in comments. Stripped of their original meaning and specific context, historical photos are visual symbols that span time and history. They become freely floating, mostly "empty signifiers"; that is, "signifiers without signified" that are easily identified with and therefore provide ample materials for political statements and identification with a group or cause (Gerbaudo, 2015, p. 921). This makes the historical picture ambiguous. It does provide the means for the quick transmission of allegiance within the political realm. However, the use of an icon also reduces the complexities and idiosyncrasies of the current political issue, which may stand in the way of nuanced understanding and solution of the problem. This ambiguity of historical imagery in protest movements is maybe clearest on *JfMB* when it comes to the usage of symbols from the Black Power and Black Panther movements (fig. 10). The "Liking" of these images of previous protests reaffirmed their status as symbolic markers within cultural memory.

Another common practice on *JfMB* was to use iconic images in personal statements about race and the events in Ferguson for rhetorical effect (fig. 10). Martin Luther King's *I have a Dream* speech, for example, is used to support a personal view on the destructive behavior of some protesters. The speech and the image are thus taken from their original context and placed in a new one. This type of cultural "hijacking" of meaning—or "textual poaching" as Jenkins (1992) calls it—is common and is often taken as an insult. Iconic words of important African-American leaders like King are treated as having a mythical status. When used and appropriated in the "right" sense—as support for the movement against racialized police brutality—they were highly "liked," were deemed "most relevant" by Facebook in comment fields, and spread quickly. In these instances, we see how Facebook's technology is co-supportive of the popularization and visibility of particular historical appropriations.

Figure 6.10 – Compilation of historical imagery re-used and appropriated on *JfMB*

The ownership of history and the right to use it in order to comment on the present is highly central to political interaction on *JfMB*. A "White opinions bingo" makes this explicitly clear (fig. 10). Comments like "this isn't what your ancestors fought for" and those using Martin Luther King Jr. quotes are considered "wrong"—that is, typically mainstream and White—appropriations of history. In comments like these, the iconic is seen as a racial cliché that glosses over the experience of being black. Seemingly friendly comments such as "it doesn't matter if you're black, white, etc." and "we all need to come together" are insulting to the more protest-minded users on *JfMB*, who strive for recognition of the systemic problem of racialized police brutality and what they see as inherent racism in American society. Thus, by historicizing, drawing parallels, contextualizing, and remediating and appropriating icons, users of *JfMB* engage in a type of memory work that shows the continuity of racial injustice in the present, while simultaneously linking present protest with past protest.

Conclusion: towards a model of memory work in digital activism

This chapter has demonstrated that memory work in digital activism is simultaneously personally affective and consciously political. It allows protesters to connect personal experiences and interpretations of the past as a means to express discontent and advocate for change, now and in the future. Notwithstanding the particularities of national and geographical contexts, protests are fed by lingering tensions and often spark into being by an atrocious event. This is especially apparent when this involves the tragic death of an individual, as in the case of Brown. A wide variety of memory work—from mourning and condoling to documenting and historicizing—then becomes politicized. Today, these practices increasingly take place and are mediated through social media platforms to show allegiance to causes that involve the violent deaths of individuals and the system that produces these.

Although rooted in a specific case, the here provided typology theorizes general dynamics of memory work in the context of digital activism and protests and provides a tentative model for future research. Four stages that are characterized by different interpretative repertoires, memory practices, and discursive units (see Fig. 4) can be distinguished. First, a shocking event such as the violent death of an individual inspires individual and shared affective commemorative engagement, fueled by grief and anger. This results in the creation of a publicly remembered image of this individual and what he/or she stood for, in the case of Michael Brown an average African-American teenager. Second, protesters and activists contextualize this event within broader societal and historical trends through memory work. That is, the atrocity is framed as part of systematic injustice, in this case racialized police violence. Thirdly, these two first steps inspire and legitimize present action, wherein the present is continually being connected to the past, or, in the case of recording and documentation, the future. Fourth, present action helps stabilize certain discursive units by repeated use of them. This, in turn, may be picked up again within future protests. In this case, the past on *JfMB* is constantly 'worked' through the dynamic interactions between the page administrator, users and Facebook's operational logic. The resultant memory of Michael Brown, his death, the protests, and systematic injustice are indeed "connective" (Hoskins, 2011) in the sense that it is in a constant state of flux due to people's constant visible interactions with it. Yet, as the analysis has shown, even connective memory 'settles' to a certain extent.

Memory work functions as a particular kind of discursive practice that connects personal action frames and provides the building blocks for collective identity formation. For example, the memory work on *JfMB* invites identification, which involves "a process of projection of the individual into various symbols of collectivity that could act as sort of rallying points for otherwise divided individuals" (Gerbaudo, 2015, p. 921). This, however, is a double-edged sword: while memory work on social media enables people to connect to each other, causes and ideas, it simultaneously leads to a dynamic in which the complexities of the issues at hand are transformed into what Lim (2012, p. 244) describes as "a

simpler, more tangible narrative that [resonates] with everyday experience." This is partly the result of the guiding technology and commercial logic of platforms like Facebook. The iconicity, representability, and visibility of images intermingle with the sociotechnical practices of social media users (clicking, liking, sharing, commenting, posting) and the procedural logics of social media platforms (algorithms, code, interface, design).

This, in turn, may lead to a further polarization of stances in contentious political issues such as racialized police violence. In the highly mediated public discourse on the shooting of Michael Brown, facts and fictions blended and provided the rhetorical resources for heated politicized debates. Additionally, Brown's public image became the subject of controversy: some called him a thug, while others sanctified him, effectively making him a martyr. Michael Brown thus 'stood in' for other African-American teenagers and became a symbol in the broader social movement against racialized police violence in the US, most notably *Black Lives Matter*, which emerged a year before Brown was shot. Linking today's problems to those of the past, old debates of racism and police violence were reinvigorated. Consequently, memory work helped activate the past in the present, but also to spread present concerns to other protests and into the future.

7

The limits of an ‘open’ past: Memory work on Wikipedia and the downing of flight MH17

> When it comes to historical reliability, Wikipedia is not to be trusted.
> (anonymous editor, 6 July, "Pro-Ukrainian Bias," Archive 23)

On July 17, 2014, Malaysian Airlines Flight MH17, flying from Amsterdam to Kuala Lumpur was shot down over Hrabove, Donetsk, Ukraine. All 283 passengers and 15 crew members were killed which made it the deadliest case of a commercial airliner shoot-down in history. A large part of the passengers consisted of families, with eighty children under 18. Also on board were top researchers and delegates of the 20th International AIDS conference in Melbourne. Most of the deceased were Dutch (196), Malaysian (43), and Australian (27) (Dutch Safety Board, 2015, p. 23).[29] Unsurprisingly, the tragedy sent a ripple of grief throughout the world and the Netherlands in particular. A national day of mourning was announced and Dutch public broadcaster NOS covered live the ceremonial repatriation of the bodies. Together with the grief, however, came expressions of anger that culminated in two questions: What happened on that day in July? And: Who should be held accountable for this tragedy?

These questions were hard to answer due to the complex political situation in Ukraine. The country was in the midst of an enduring military conflict after the exile of the pro-Russian Ukrainian President Yanukovich and the consecutive Russian annexation of the Crimea. Pro-government (Euromaidan) forces and pro-Russian separatists, the Lugansk People's Republic (LPR) and the Donetsk People's Republic (DPR), battled heavily against each other. However, Western media soon reported that an S-11 BUK missile, which is produced and used by the Russian Army, had been used to shoot the plane out of the sky (Sienkiewicz, 2015, pp. 208-209). In response, the Russian government denied any involvement and pointed fingers at over-active Ukrainian fighter pilots (Davidson & Yuhas, 2014; AFP, 2014). The Ukrainian government argued that the incident was a case of aggression toward Ukraine by Kremlin-backed separatists, following the shooting of military aircraft in the days before (Finley, 2014; Sienkiewicz, 2015; Dutch Safety Board, 2015).

Against this backdrop of political tension and doubtful information, a Wikipedian with the nickname "Reedy" started the English Wikipedia page "Malaysia Airlines Flight 17" ("Page information"). On the day of the tragedy, also 73 pages in other languages on the event were started (Wikidata, 2016). The English page alone had over a million page views within three days of its creation, according to Wikipedia article traffic statistics (2016). This illustrates that Wikipedia functions as a "mediated center" and is one of the main turn-to information providers within the "networking communication model" (Bilić 2015, p. 1259). This is not to say that Wikipedia editors quickly agreed on what had occurred. The contentiousness of the event can be traced in the page's metadata. In two years' time, as of June 23, 2016, it was edited 6,113 times (75% major edits) by 1,017 users, including bots and anonymous users (Wikihistory, 2016). This high editing is in line with the finding that

29 The Dutch Safety Board (DSB) was the primary official investigative body regarding the downing.

Chapter 7

traumatic events are amongst the most-edited pages in Wikipedia (Ferron & Massa, 2011, p. 1326).

This chapter investigates how the politics of Wikipedia as a platform (Gillespie, 2010) coalesces with the politics of memory work. Similar to science and journalism, the online encyclopedia strives to provide truthful reconstructions of reality. Its editorial policy is based on a set of values revolving around objectivity, verifiability and neutrality. I argue, however, that Wikipedia is anything but a neutral space of knowledge production. Rather, I demonstrate that another value, "openness," offers an ideology that guides and constitutes the platform's technological design, guidelines, and the practices of its contributors (Tkacz, 2015). Although openness suggests that anyone can participate, entries are never finished, and editing Wikipedia is fully transparent, Wikipedia editors paradoxically have to adhere to strict rules and guidelines. These are created, amended, and enforced by editors high up in Wikipedia's hierarchy who have access to tools that can prevent others from editing. As a result, the ideology of openness is continually contested and redefined among editors.

This leads to the question how the ideology of openness shapes memory work on Wikipedia. On the platform, the process of memory work involves the practices of gathering, re-assembling, combining, paraphrasing, critiquing, and quoting sources on a given topic, using mediated, second-hand material. It is a *collaborative* endeavor which implies co-creation, discussion, debate, and disruption. Three defining interlinked traits of Wikipedia that are shaped by the ideology of openness will be scrutinized: the interactions between editors, the platform's policies and guidelines, and its technological features.

I first discuss Wikipedia's ideology of openness, which is inscribed in the platform's policies, technology, and ideals. I zoom in on the community dynamics and hierarchies of the platform, while regarding Wikipedians—registered and active contributors to the platform—as a "community of practice" that simultaneously interprets and reinforces this ideology. I then move on to show how Wikipedia functions as a key platform of memory within a new media ecology. Whereas all platforms present themselves as open, neutral, egalitarian, and progressive (Gillespie 2010), I will outline how Wikipedia's distinctive set of practices, its community dynamics, politics and technologies shape memory work on it. Concurrently, these produce idiosyncratic representations of contentious past events.

This theoretical lens is then used to analyze the creation process of the MH17 wiki and the themes of controversy within it. By means of a critical discourse analysis (CDA) of the wiki's archived talk page where discussion about edits and sources takes place, I scrutinize the discursive strategies that Wikipedians use to settle disputes, value sources, and edit the page. I identify three overarching discourses that editors use to *legitimize*, *position*, and *politicize* their memory work: 1) objectivity and neutrality, 2) reliability and verifiability, and 3) technological access and authority. Within the ideology of openness, what counts as objectivity and neutrality, reliability and verifiability, and ultimately, access and authority within Wikipedia is constantly renegotiated and reasserted. Scrutinizing these mechanisms allows us to understand how Wikipedia filters the past, and thereby stabilizes it. Especially

concerning politically contentious past events, such as the downing of flight MH17, this limits the possibility of an 'open' past.

The ideology of openness: rules, guidelines, and hierarchies

Wikipedia makes a firm claim that "anyone with Internet access can write and make changes" (About page). This ideology of openness resonates among commentators and scholars alike. Since its launch in 2001, the platform has been praised for its "communal evaluation," "fluid heterarchy," "ad hoc meritocracy" and "open participation" (Benkler, 2006; Bruns, 2008, pp. 24-26). A wiki (from *wikiwiki*, meaning fast in Hawaiian), the name of a Wikipedia entry and the guiding principle of the platform, is viewed as open, incremental, organic, tolerant and transparent (Cunnigham, 2007; Pentzold, 2009). The platform's modularity and granularity would allow for "collaborative production" (Shirky, 2008) to quickly complete large projects, while a self-correcting "soft security" (Pentzold, 2008) secures quality standards. Some scholars even argue that Wikipedia's participatory nature has far-reaching consequences. Sullivan (2009, p. 10), for example, asserts that the platform does not "merely announce a new kind of dissemination of existing knowledge, but a change in the very nature of knowledge itself" because it is rooted in bottom-up, peer-produced knowledge, based on merit instead of institutional authority.

The origins of this overt optimism can be traced back to Wikipedia's proclaimed ideology of openness. In principle, anyone can write and edit wikis, which are thus open-ended. However, Wikipedia's proclaimed ideology of openness is ambiguous. It invites participation; yet, it also heavily guides and restricts it. As Tkacz (2010, p. 50) argues, the success of Wikipedia "is not because everyone is free and there are no rules, norms or pressures, but precisely the opposite." Wikipedia's guidelines and content policies "form the core of the organizational process on Wikipedia" (Bilić, 2015, p. 1264) and reify its ideology. Even though they have been discussed elsewhere (e.g. Tkacz, 2010, 2012, 2015; Van Dijck, 2013), it is therefore worth to reassess them in the context of memory work.

Wikipedia outlines five "pillars" on which the platform is built. It considers itself an *encyclopedia* that is written from a *neutral point of view* and based on *free content* that anyone can use, edit, and distribute. It is a place *without firm rules* where editors treat each other with *respect and civility*. Next to these pillars Wikipedians should adhere to three principles when adding content ("core content policies"). First, there is the principle of neutral point of view (NPOV), which implies "representing significant views fairly, proportionately and without bias." Second is the principle of verifiability (VER), meaning that all information "must be attributed to a reliable, published source". And third, there is the principle of no original research (NOR), which means that articles may not "contain any new analysis or synthesis of published material that serves to advance a position not clearly advanced by the sources." These core policies and goals the Wikimedia foundation outlines, aim at aiding contributors to reach consensus. This "does not mean unanimity (which, although

an ideal result, is not always achievable); nor is it the result of a vote. Decision-making involves an effort to incorporate all editors' legitimate concerns, while respecting Wikipedia's policies and guidelines" ("consensus").

Wikipedia's rules and guidelines shape the platform's community of practice (O'Sullivan, 2009). That is, editors form a group that pursues these ideals and preferred actions which shape the content of wikis. At the same time, these principles are continuously reinterpreted: What belongs in the encyclopedia? What is a neutral point of view? What are legitimate concerns in reaching consensus? The answers to these questions are not set in stone. Rather, certain norms emerge out of editor's sayings and doings. As Pentzold (2010, p. 716) points out, Wikipedians "primarily understand their collective as an *ethos-action community* tying community membership not to admission procedures but to the personal acceptance of a set of moral obligations and rules of conduct." Editors are constantly being evaluated, rewarded, and punished by their peers. On the platform "every action" is a "monitored performance" (p. 714). That is, every edit is tracked and saved, and users can build up trust by adhering to the ethos of the community. As a consequence, "the right action and the right thinking then become crucial for determining the community's boundaries" (Pentzold 2010, p. 716). This relates back to the concept of practices as a performed, organized set of "sayings and doings," which are mutually shaping each other (Nicolini, 2017, p. 21).

These ideals, moral obligations, right ways of thinking, and principles are enforced through Wikipedia's highly hierarchical organizational structure and the distribution of access to technological tools. They "serve as guidelines for contributors, instruct the algorithmic logic of bots, and anchor the encyclopedia's quality standards" (Van Dijck, 2013, p. 140). Rules and hierarchies are inscribed in the platform's design, making it a sociotechnical system that distributes "permission levels to types of users [and] imposes a strict order on decision making over what entries to include or exclude, what edits to allow or block" (Van Dijck, 2013, p. 136). This comes down to granting certain users more power over/than others. However, to describe "Wikipedians in bipolar categories of humans and nonhumans doesn't do justice to what is in fact a hybrid category: that of the many active users assisted by administrative and monitoring tools, also referred to as 'software-assisted editors'" (Van Dijck, 2013, p. 139).

User access levels are determined by three factors: whether or not the user is logged into an account, whether the account has a certain age and number of edits, and whether or not certain rights are provided manually to an account, which can only be done by users with appropriate authority ("User access levels"). While in theory anyone can become a Wikipedian, the process of building up authority and acquiring higher permission levels and access to technological tools is actually interminable and complex.

Experienced editors with good standing in the community can become "Administrators," which grants them additional rights (see fig. 7.1). Users can only be promoted to this after consensus is reached in community discussion and through the process "request for admin-

ship." Additionally, users can be granted special "flags" such as Oversight (hide revisions) and Checkuser (check accounts and editing activity of IP addresses). These are only given when users have confirmed their identity and signed a confidentiality agreement with the Wikimedia foundation. Hence, the allocation of tasks and rights is a combination of merit (making good and many edits), proper standing, and strict adherence to Wikipedia's rules and policies. In most cases, users with a higher permission level can overrule users lower in the hierarchical structure of Wikipedia (see Fig 1). They can do so because these editors receive access to technological tools that allow them to ban users, protect articles from editing, or create and implement bots that co-construct wikis.

Permission level	User group	Tasks and rights
Low	Blocked users	Edit their own ID/talk page
	Unregistered users	Not logged in ("IP users"); edit not protected or semi-protected pages
	New users	Editing
	Registered (or auto-confirmed) users	Editing, send emails to other users, add pages to watchlist, set preferences
Medium	Bots	Minor editing, monitoring, blocking, spell-checking, policing, banning
	Administrators	Editing monitoring, (un)blocking, spell-checking, policing, banning, page deletion, page protection, access fully protected Wikis
	Bureaucrats	Promoting users to administrators or bureaucrats. Remove users from admin and bot user groups
	Stewards	Full access, right to change user rights and groups, battling vandalism
High	Developers	Maintaining software
	System administrators	Server access, full permission

Figure 7.1 – a schematic overview of Wikipedia's hierarchical structure

(based on: Van Dijck 2013, pp. 136-137, Niederer and Van Dijck, 2010, p. 1372, Meta-Wiki—Wikipedia about Wikipedia)

Wikipedia's community rules, policies and ideology do not remain undisputed. The combination of Wikipedia's hierarchical structure and its use of bots, makes some users "worry about their site becoming a semi-automated, impermeable operational system that prohibits discord and favors consensus at the expense of a variety of opinions" (Van Dijck, 2013, p. 139). Similarly, O'Sullivan (2011) critiques the platform's "increasingly bureaucratic 'policing' of its content, as for example with NPOV, means it is in danger of merely mirroring the typical knowledge economies of the West" (p. 48).

Next to administrative roles, Wikipedians with high authority can be on special committees and advisory boards like the Arbitration Committee, which resolves serious disputes among Wikipedians. Also, Wikipedians can reward each other with Barnstars and other digital prizes for good behavior and work (e.g. "the random act of kindness barnstar," "the civility barnstar," "editor of the week," "the barnstar of diplomacy"). Likewise, users can be given indicators of bad behavior. These rewards and indicators show on the individual user's page (fig. 7.2).

Figure 7.2 – screenshot of user RGloucesester's user page

Wikipedia's hierarchy and punishment and reward systems are means to discipline and control the community of practice. Ultimately, this shapes and steers interaction and content creation, according to specific interpretations of factuality, consensus, objectivity and neutrality and on the basis of hierarchy and acquired authority. Accordingly, emotion, interpretation, and subjectivity are not advocated within the community.

The "real wisdom of Wikipedia," writes Van Dijck (2013, p. 136) can thus be found "not in its crowds but in its crowd *management*." Likewise, Tkacz (2015, p. 49) notes: "Wikipedia is collaborative not because it has no hierarchies, but because it has policies that mediate between different and, indeed, often conflicting views, seemingly absorbing different perspectives into a single frame." In the end, "[d]ecentralized organization can only exist if certain principles are especially forceful" (Tkacz, 2015, p. 85). Wikipedia is the encyclopedia that anyone can edit, but, paradoxically, this can only be the case because the freedom to edit is limited. Openness on Wikipedia, therefore, is more an ideal than something that is practiced. These tensions are an important aspect of the discursive construction of what counts as "truth" and "facts" on Wikipedia. Norms about what counts as an objective fact about or how to truthfully reconstruct the past are constantly debated among editors.

Wikipedia and memory work

Memory work is central to Wikipedia's community of practice and as a platform itself. Through Wikipedians' practices and the platform's digital archive, the past is re-presented and carried into the future in specific ways. Wikipedians gather, re-assemble, combine, paraphrase, critique and quote sources on a given topic. They use mediated, secondary material and annotate and re-present this in the cultural form of a wiki. These are essentially collages of existing bits and pieces of mostly online material that is collaboratively pieced together in a coherent way. Wikipedians are also encouraged to archive the websites used as references in their articles via the Internet Archive's Wayback Machine. This prevents dead links and allows users to revisit the original website of the source ("Wikipedia: citing sources").

The information in wikis originates from multiple sources throughout the Web. It is de-contextualized from its origin and re-contextualized on the platform. At the same time, the platform is highly linked—through millions of hyperlinks—which allows it to emerge at the top of search results. This allows for a more abstract way of seeing Wikipedia as an important node within an information network stored in digital memory. "Googling something" often ends up in reading a Wikipedia article. The platform ends up high in the Google results page and receives 60 percent of its traffic through Google searches. The close bond between the two organizations was also demonstrated when Google in 2010 donated $2 million to the Wikimedia foundation. "Wikipedia's success," writes Van Dijck (2013, p. 153), "is highly dependent on its frictionless compatibility with mainstream big players."

However, this is not where Wikipedia's compatibility to the broader media ecology begins or ends. Even before Google came to dominate the Web with their services and platforms, Wikipedia heavily relied and *still* relies on the output of so-called legacy media. Next to reports and official sources, broadcast media and newspapers are widely referenced on the site (something that will come back in the analysis below). Consequently, a large part of the information we find through Google search can be traced back to news media, institutional and government sources.

Another important aspect of Wikipedia pertaining to memory work is that it offers a vast archive of all edits in wikis and the discussions about them. Wikipedia's talk pages (discussion board) is a "place where the negotiation of different, and sometimes contrasting, interpretations of the past takes place" (Ferron & Massa , 2014, p. 37). The archived revision history and talk page of an article show, in a transparent way, what was included and excluded from the page and which "individual pieces of information are selected and ordered into a coherent narration, through users' discussion and active participation in remembrance" (Ferron & Massa, 2014, p. 29).

Wikipedia talk pages thus provide insight into the processes of negotiation and selection that precede the formation of a more or less stable wiki. As Luyt (2015, p. 6) writes: "by making it relatively easy for anyone to look 'under the hood' so to speak, Wikipedia allows a glimpse of collective memory at work: a messy and contingent process". Adapting

Nora's (1989) concept of "sites of memory" (*lieu de mémoire*), Pentzold (2009) theorizes Wikipedia as a global memory place which is "not a symbolic place of remembrance [as in Nora's original sense, RS] but a place where memorable elements are negotiated" (p. 264). In other words, these pages show how the messiness of communicative interaction, which stands at the root of any engagement with the past, fixates in a somewhat stable form as time progresses. What Pentzold (2009) calls the "floating gap" can be seen as "the gradual passage from disputed points of view in everyday discussions to the formalized character of an encyclopaedic article" (p. 267).

Accordingly, Wikipedia articles are both influenced by the internal political dynamics of the platform as well as the external geopolitical situation. Despite what the platform claims, they are not at all value-free. Most editors of the English language Wikipedia, for example, are as much part of Wikipedia's community of practice as they are part of a "language community" that privileges Western world views (Pentzold, 2010, pp. 714-715; Tkacz, 2015). Therefore, Luyt (2015) rightly remarks that Wikipedia is socially embedded within a "network of wider discourse" that maintains and constructs the past in the present (p. 3). The processes of assessing which sources and information are included, writing and editing, and the deliberation that underlies this memory work make Wikipedia "not only a platform to constitute and store knowledge, but a place where memory—understood as a particular discursive construction—is shaped" (Pentzold, 2009, p. 264). The mechanisms and group dynamics behind the discursive stabilization of the wiki on MH17 will be the focus of the rest of this chapter.

Research Design

This chapter focuses on the English wiki on the shooting and crash of flight MH17 and its aftermath.[30] This case was chosen because the downing is a highly controversial topic that was widely covered by the media and led to diplomatic tensions between, roughly, the countries in the EU and other "Western" countries and Russia. Although there are wikis on this event in 74 languages, the English one is the most-visited and most-edited. It is the most international and editors from all over the world were and are engaged in editing and maintaining the page. This international character allows research into what binds and divides this spatially diffuse and culturally diverse group of editors, while taking into account that Western perspectives might dominate the wiki and the talk page discussion.

Wikipedia makes it relatively easy for researchers to analyze the process in which information is assessed, accepted or dismissed, reshuffled and put together again because the revision history of each wiki is available. Moreover, the talk pages document debates on the content of wikis and the discursive strategies of editors. In these behind the scenes

30 URL: https://en.wikipedia.org/wiki/Malaysia_Airlines_Flight_17.

discourses on practices and norms editors negotiate what is legitimate knowledge and what belongs and does not belong in Wikipedia.

The main corpus for this study consisted of the wiki on the MH17 disaster and the talk page connected to it (titled "Malaysia Airlines Flight 17," version 13 June 2016). Additionally, Wikipedia guideline articles to which discussions in the talk page referred were included. Using Wikipedia's Wikihistory tool, it was determined when the page was edited most often and presumably moments of controversy emerged in the talk page.[31] This resulted in the following weeks to be subjected to critical discourse analysis (fig. 7.3):

Time period	Events
weeks 29-52, 2014	roughly the first half year after the disaster
weeks 10-16, 2015	roughly around the time a story spread through VKontakte about the use of an air-to-air missile
weeks 22-33, 2015	roughly around the disaster's first anniversary
week 42, 2015	the publication of the final report of the crash by the Dutch Safety Board
weeks 20-29, 2016	roughly around the disaster's second anniversary

Figure 7.3 – time periods with increased editing activity and the events that caused this

This sampling method follows certain discursive events, resulting in "critical discourse moments" (Carvalho, 2008, p. 173). This leads up to synchronous analysis, the analysis of discourse stemming from specific moments in time, rather than diachronic analysis, the study of discourse through time (Jäger, 2004, p. 71; Carvalho, 2008, pp. 171-172). Applying critical discourse analysis (CDA) allows us to scrutinize the ideology of Wikipedia which is "embedded in the selection and representation of objects and actors, and in the language and discursive strategies employed in a text" (Carvalho, 2008, p. 170).

Critical Discourse Analysis

Through particular "discursive strategies" (Carvalho, 2008, p. 169) such as positioning, (de) legitimizing, and (de)politicizing, Wikipedia editors entitle themselves or others to edit in particular ways, to add information or leave things out, or to (dis)credit certain sources. In this way, editors intervene in each other's memory work and, through that, build up, or re-assert their standing in the community. *Positioning* Carvalho (2008, p. 169) sees as the arrangement of social actors vis-a-vis each other that authorize them for particular practices. This is closely related to the construction of identity through discourse and practice. *Legitimization* describes the process of sanctioning and justifying actions on the basis of normative beliefs. *Politicization* is "the attribution of a political nature or status to

31 The results of which are available through the following URL (constantly updated): https://tools.wmflabs.org/xtools/wikihistory/wh.php?page_title=Malaysia_Airlines_Flight_17

a certain reality," which occurs when Wikipedians accuse each other of editing that aligned with national politics. This constant form of power-play in the arena of the talk pages ultimately affects the memory work regarding the MH17 disaster. The following analysis uses examples of these discursive strategies as to show how Wikipedians position, legitimize and politicize their practices.

In order to conduct the CDA, I will apply a "toolkit" developed by Schneider (2013) which is based on the work of Mayring (2002), Jäger (2004), and Fairclough (1995). Although this toolkit is by no means exhaustive, it does provide a structured overview of a process that is often unclear and difficult to reproduce by other researchers. According to Schneider (2013), eight analytical steps guide the process of CDA: 1) establishing context, 2) exploring the production process, 3) preparing materials, 4) coding material, 5) examining structure of the text, 6) collecting and examining discursive statements, 7) Identifying cultural references, 8) Identifying rhetorical and linguistic mechanisms.

Steps one to three have already partly been taken in the previous sections and will be expanded further below. Step four involved the inductive "tagging" of passages that are theoretically interesting and/or connect to the research questions. This process familiarized the researcher with the material and instilled theoretical sensitivity towards it. All 597 talk page threads were inductively coded for main topics and themes. These ranged from images and media coverage to the neutrality of the wiki (see appendix 1 for the overview of found categories). Next, the moments of controversy were scrutinized further, by paying special attention to issues revolving around *topic selection* (passages about the in- or exclusion of sections), *referencing* (passages on what and how to reference and what sources should be included), and *editing* (passages on who to edit and "right" and "wrong" editing). Step five, examining the structure of the text, is to large extent included with this step since it is structured by the thread titles.

Step six further inspected those coded threads that were marked as relevant to the research questions. Particularly interesting were those discursive statements that describe what Wikipedia is and what it is not, those that engage with questions of neutrality and those that cover which sources are reliable and which are not. Step seven involved the localization of intertextuality within the talk page. This is partly automated within Wikipedia by the wide use of hyperlinking (to other wikis and external pages). Step eight included the identification of specific word groups, grammatical features, rhetorical and literary figures and direct and indirect speech. This step also involved the documentation of specific modalities (normative statements) and 'evidentialities' (phrases that suggest factuality).

Sources and content of the MH17 wiki

Before presenting the results of the discourse analysis of the talk page, it is necessary to briefly discuss the content of the wiki itself and the 303 sources used in it. The first thing that is striking about the wiki titled "Malaysia Airlines Flight 17" is its length. Including the

references, it consists of more than 18,000 words. Eight main topics are discussed: the aircraft (mainly technical descriptions of it), passengers and crew, the conflict in which it took place (the section is called "background"), crash, aftermath, investigation (subdivided into initial attempts at investigating the crash, cause, recovery of bodies, Dutch safety board (DSB) preliminary report, final report), reactions, and a last section on the Russian media coverage.

What type of sources are most-used and valued in the wiki on Mh17? A simple count of sources—based on these sources' websites—reveals that newspapers are the most referenced sources in the article, followed by radio and TV websites, web-native news websites, and press agencies. This does not say anything, of course, about the ways in which the sources are used. For example, the reports by Bellingcat, a crowdsourced citizen journalism platform, are highly valued in the article. The same counts for Intelligence and information services Foreign Policy, the Levada Center, and Stratfor. The practice to use newspapers as reliable sources is explained by the Wikipedia guideline on the topic:

> "News reporting" from well-established news outlets is generally considered to be reliable for statements of fact (though even the most reputable reporting sometimes contains errors). *News reporting from less-established outlets is generally considered less reliable for statements of fact* [ ] Editorial commentary, analysis and opinion pieces, whether written by the editors of the publication (editorials) or outside authors (op-eds) are reliable primary sources for statements attributed to that editor or author, but are rarely reliable for statements of fact. *Human interest reporting is generally not as reliable as news reporting*, and may not be subject to the same rigorous standards of fact-checking and accuracy (see junk food news). ("reliable sources," emphasis mine)

These guidelines signal that on Wikipedia, objectivity and the provision of multiple points of view are valued as high as in news reporting. The italicized parts show that Wikipedia is skeptical about new players in the media ecology and has a somewhat traditional, normative view on what "good" journalism is. Hard news from well-established outlets is valued most in the wiki.

The wiki's introduction describes what occurred on July 17, 2014, on the basis of information mainly provided by American intelligence and government sources, the Dutch Safety Board, and citizen journalistic organization Bellingcat. This part reads that the plane was shot down by pro-Russian insurgents, using a BUK missile launcher, while the Russian government blamed the Ukrainian government for the crash. Thus, immediately, the tone is set for the rest of the article. Interesting is the prominent place of Bellingcat in the introduction as a reliable source, something that was not undisputed (see below). The sections titled "Aircraft" and "Passengers and Crew" are technical and factual. Relevant to mention, though, is that in these first parts it is mentioned twice that the crash is "the

deadliest airliner shootdown incident" to date, which is factually correct, but, because of its rhetorical weight, criticized for inclusion among editors.

The section "Background" sketches the context in which the downing occurred, the Ukrainian conflict. Again, the article takes it as a fact that the plane was brought down with a missile by pro-Russian separatists. This part discusses the (inconsistency of the) Russian media, which are treated on a meta-level: the article talks about them instead of using them as reliable sources of information. The section called "Crash" is mostly based on flight data and is supported by maps and also specifies that a fireball on impact was captured on video and that bodies fell into crop fields and houses. This level of detail is consistent throughout the article which is within Wikipedia seen as a sign of quality. In the Aftermath part, a remark is made about a video that was shot shortly after the crash that shows "Russian-backed rebels" ransacking the wreckage.

The section "Investigation" is the most extensive and it mainly follows the findings of the Dutch Safety Board. Throughout, the article never directly dismisses Russian claims, but rather lets other sources debunk them, for example: "In the report published by the Dutch Safety Board, an air-to-air missile strike was ruled out." Even though claims such as these are seemingly neutral, they are placed at the end of paragraphs that describe Russian point of views, thereby rhetorically silencing them. The section "Reactions" provides an overview of official statements by world leaders and involved organizations. Important to note here is that Australian Prime Minister Abbott is said to immediately connect the shooting to Russia, but that other world leaders' reactions were diplomatic and not outspoken. In the last section, "Russian media coverage," claims by Russian media are covered, including plots to assassinate Russian President Putin and mass murder Russian citizens. Although these claims are not refuted in the wiki, the fact that there is a special section on Russian media coverage shows that Russian media are treated suspiciously.

Talk page discourses

Three sets of overarching discourses emerge in the MH17 talk pages. Firstly, there is a discourse on *objectivity and neutrality* that mainly revolves around the inclusion of alternative viewpoints, tone of the article, and emotional and subjective content. Secondly, *reliability and verifiability* were discussed, which involved the assessment of sources and facticity of information. Thirdly, a discourse on *technological access and authority* can be distinguished. This stems from internal debates on editorial access and the ability to block and ban editors, and protect the wiki from further editing.

These discourses, unpacked below, are essentially about what a good wiki should look like and what Wikipedia ought to be. They reveal in what form the past should be represented in Wikipedia and which versions of it should be carried into the future. Moreover, these discourses reveal how certain editors legitimize, position and politicize their own and others' practices. In other words, they show what 'good' memory work is, according to

authoritative editors. The discursive battles here are not fought on equal ground. Certain editors have more authority than others, based on a combination of experience, merit, good standing, and national and cultural background. Descriptions of these user characteristics will be given throughout the analysis, based on user pages.[32] In the three sections below, each discursive theme is discussed through the analysis of concrete examples of discursive statements, cultural references, and rhetorical mechanisms during moments of controversy (steps 6, 7 and 8).

Objectivity and neutrality

What constitutes neutrality and objectivity is one of the most prominent issues in the talk pages of the MH17 article. Neutral Point of View (NPOV) is a policy to adhere to, an ideal at the core of Wikipedia. As a tag, it is also a rhetorical weapon at the disposal of every editor, which can be pointed at others: being accused of non-neutrality is insulting for editors. A particularly persisting issue concerning NPOV revolved around a perceived anti-Russian, pro-Western bias in various edits of the article. To many editors, the "information war", comparable to that of the Cold War era, led to biased reporting in news media. Avoiding biased sources, therefore, became a prime concern within the talk pages. For example, editor Kudzu1[33] writes on September 10, 2014, that the inclusion of official Russian statements regarding MH17 in the article is a source of frustration for him: "If the Kremlin announced that the seas are made of chocolate pudding, I'm convinced a small army of Wikipedia editors would insist on adding that claim to [the] Ocean [wiki]." However, editor Cla68[34] dryly responds: "as long as it is made clear that it is a Russian claim, and not put in WP's voice, I don't see the problem" ("Ukrainian air traffic…" archive 15). This exchange exemplifies how discussions about neutrality are resolved: as long as statements are made by major parties and attributed to them, the inclusion of these statements is perceived neutral and objective.

Language use (word choice and phrasing) and the application of quotes and viewpoints are continuous topics up for debate in the context of assessing objectivity and neutrality of the article. Regarding language, an illustrative debate ensued after editors used the words "terrorists," "rebels" and "separatists," especially in combination with the prefix "pro-Russian," in order to describe the perpetrators behind the downing: "Through the way we are including the word 'terrorist' in our paraphrase, we are creating the impression that

32 Even though users write their own user pages, awards like barn stars or community memberships only appear when awarded or confirmed by other editors, which increases the reliability of the user pages. Moreover, user pages provide valuable insight into how users perceive their role in Wikipedia.

33 User Kudzu1, according to his user page, has been working on Wikipedia for over a decade, is American and has been awarded numerous editorial barn stars.

34 According to Cla68's user page the user is "generally disillusioned with Wikipedia," due to "activist ownership in certain topic areas" and because of its current system and culture.

our sentence presupposes the fact that they indeed are terrorists, which is clearly problematic," writes editor Future Perfect At Sunrise[35] on 20 July, 2014. Rgloucester[36] responds:

> Using 'terrorist' is in line with the Manual of style. WP:TERRORIST would beg to differ. As Fut. Perf. says, sources carry a POV. It isn't our job to reflect that POV. We must adhere to WP:NPOV, unlike such journalistic sources […] All it does is add pathos." ("terrorist," archive 5)

A consensus is reached in the matter through reference to the guidelines on NPOV and the special wiki on the use of the word terrorist. Terrorist is deemed too charged with connotative meaning. The article now uses the words separatists, rebels and insurgents interchangeably.

Objectivity and neutrality in the context of Wikipedia is achieved through critical distance. Emotive language and details that might lead to affective responses are seen as indications of subjectivity and "point-of-view" and are therefore warded from the page. In a discussion on July 22, 2014, editor RGloucester responds to another editor's decision to include the number of deceased children in the article: "What's relavent [sic] depends on perspective. There is too much pathos in this article as it stands. Wikipedia is not a memorial" ("why do people keep removing," archive 7). Wikipedia is a place for detached interpretation and reflection on the past, according to this editor. It is a place where memory work should be "factual," but what counts as such is not set in stone. For example, later, in another thread, RGloucester asserts that specifying the number of dead children is an "attempt at sensationalism." Instead, he argues, "we should remain neutral and encyclopaedic" (archive 7, "80 children"). The discussion that follows this post is illustrative for the type of reasoning behind the inclusion or exclusion of information in the wiki:

> I'm not "trying to appeal to people's emotions about "children". I'm adding facts. But I'd disagree with you, that "Children are no different than anyone else. They are just people." I think that's a fundamentally wrong view, for all sorts of reasons. Martinevans123

35 This user is a highly decorated user with Administrator status, according to the user page. Interestingly, the user is also part of the community of Rouge Admin group, who are committed in their efforts to increase verifiability of sources in Wikipedia.

36 RGloucester is an active and influential editor of the MH17 wiki. According to his user page, the user has been editing Wikipedia for over five years and has accumulated numerous editing awards, culminating in the service award "Senior Editor III." Also illustrating is that RGloucester is a member of Association of Wikipedians Who Dislike Making Broad Judgments About the Worthiness of a General Category of Article, and Who Are In Favor of the Deletion of Some Particularly Bad Articles, but That Doesn't Mean They Are Deletionists (AWWDMBJAWGCAWAIFDSPBATDMTAD). This is a club of around 500 Wikipedians committed to judge suitability of wikis for inclusion.

> Why is it a fundamentally wrong view? Is there any difference in terms of dignity, value of life between a child and an adult? What else, apart from pathos, does it evoke to say that "children, women are hurt"? As if killing an adult is somewhat less culpable than killing a child? As if a child's life is even more valuable than that of a renowned (male) surgeon who saved hundred [sic] of lives? As if the value of life is decreasing when one grows older? Psychologically you can accept whatever the media is feeding you about the "children" and "women", and be my guest if you want to cry over the fallen leaves of Autumn, but wikipedia is [not] a place to write In Search of Lost Time.128.189.191.60 (Archive 7, "80 children")

By alluding to Proust's novel, the IP address editor clarifies that anything that comes close to emotion and experience does not belong in Wikipedia. Also notable is the way in which this editor responds to Martinevans123's[37] comment, who does not provide strictly rational arguments for his position in the matter. Ultimately, the issue is resolved on the basis of the fact that the ratio of deceased children is high compared to other crashes, but the word "children" is replaced by a detached phrase: "At least twenty family groups were on board the aircraft, and eighty of the passengers were under the age of 18."

Some viewpoints are given more weight than others. As editor Geogene[38] explains in a comment on July 30, 2014, if Wikipedians would report on every minority viewpoint, that, ironically, "would violate neutrality because then we'd be giving them more coverage than was warranted" ("neutrality of media coverage section," archive 10). But even this is up for discussion, as an anonymous IP editor demonstrates on November 19, 2014:

> With the help of Google Translate I have checked every version of this article in other languages. Nearly every big article in other language covers this event considerably better than the English version. Namely, no single party is blamed and alternative theories/viewpoints are discussed. The English version is pretty much an exception and I believe it is due to its editor's POV pushing and reluctance to accept non-Western theories. ("this article in other languages," archive 19)

By claiming that the English wiki on MH17 is "pretty much an exception" the editor effectively dismisses the page as being non-neutral and therefore unreliable. Proportionate attention and balance are said to be highly important values. However, most of the sources

37 This user is ranked number 417 on the list of Wikipedians by number of edits and is Master Editor III.

38 Geogene's user page shows the user's discontent with the platform's alleged politics: "As the Wikipedia Foundation has joined a pointless and overtly political lawsuit against the US Government, [Wikimedia v. NSA], I'm suspending my activity here until it's resolved. I'm interested in writing an encyclopedia, but I don't care at all how Wales and the WMF interpret the US Constitution, and I'm **not** interested in strengthening user:Jimbo Wales' bully pulpit to pursue the Libertarian internet cause *du jour*. Unfortunately it is not possible to do one without also doing the other."

used in the article stem from major English-speaking countries. Ironically, the discussion that follows the post above is settled by comments made by authoritative editors such as: "[t]he bottom line remain [*sic*] that Wikipedia in whatever language is not a reliable source" (Arnoutf) and "crowd-sourced sources are generally not reliable" (Volunteer Marek).[39]

A last example of how conflicts about bias are resolved is a thread called "neutrality." In it, editor Sceptic1954[40] initiates the discussion by arguing that the wiki is not neutral because the cause of the crash was not known yet then, while the wiki claimed pro-Russian separatist using a BUK system were to blame, based on early German and American intelligence reports. Instead, the editor argues, "[t]he first thing [the wiki] should be saying [is] that the cause is under investigation" (August 3, 2014). A number of solutions is proposed and the discussion is ultimately settled by the most authoritative editors:

> The solution is to remove almost all the media and political claims and speculation. *We cannot know what is true*, and each of us is probably going to be influenced in our judgements by our own prejudices. By including it *Wikipedia becomes a player in the propaganda war* that began long before this plane crashed. HiLo48 (talk) 08:24, 3 August 2014 (UTC)
>
> As I suggested above, would it be worth creating a section to *outline all points of view*, possibly split into mainstream, Russian, and other theories? CSJJ104 (talk) 09:59, 3 August 2014 (UTC)
>
> I don't think there needs to be any speculation in the article. *Let's stick to the facts* that we do know and wait for the commission to finish investigation. *Wikipedia should not be used as a weapon in information war*. rampa (talk) 04:54, 8 August 2014 (UTC)
>
> Not everything is "propaganda," HiLo. It's the propagandists who want you to think so since that muddies the waters.--Brian Dell (talk) 16:12, 3 August 2014 (UTC)"
>
> Contrary to your assertion the Russian POV is included in the article and it is labeled as statements of the Russian government. *The article talk page is not the place to pontificate about politics or carry out polemics*. Quite simply, *we use reliable sources.* That's it. Volunteer Marek ("Neutrality," archive 13, emphasis mine)

39 User Arnoutf, a "consumer behavior researcher and associate professor at Wageningen University, the Netherlands," is a highly active and decorated Wikipedian. Likewise, user Volunteer Marek is an authoritative "Master Editor III."

40 Sceptic1954 does not have a user page, which means the user is not part of a community and does not have rewards.

The italicized parts in the thread above indicate discursive statements with which editors explicitly *position* Wikipedia as something *outside* "mainstream" media and political discourse. This imagining of Wikipedia as something different and better than "the biased media" is used to settle disputes about bias and statements such as the one above. It also allows editors to locate Wikipedia outside the so-called "information war" and label it a haven of neutrality. However, this claim of neutrality is simultaneously applied by those in favor of including Russian views and those opposed to them, thereby actually drawing Wikipedia *into* the information war. This particular exchange thus demonstrates that the norms regarding objectivity and neutrality are flexible in terms of their interpretation. However, as this thread also shows, the interpretation of the guidelines by authoritative editors ultimately becomes the rule. Instead of consensus, hierarchy determines the outcome of the debate.

Reliability and verifiability

Verifiability can be argued to be the most essential policy on Wikipedia. Simply put, without reference to outside, reliable sources (RS) Wikipedia would not exist. This is why Wikipedians have lengthy debates in the talk pages about what reliable sources are, especially in the light of the many speculative reports that emerged after the crash.

Because a cloud of uncertainty surrounded the crash and the responsibility for it, conspiracy theories started to materialize all over the Web in the days after the downing. Most experienced Wikipedians are avid combatants of the spread of conspiracy theories on "their" platform. "This is not a forum," writes Dbrodbeck.[41] He continues: "and, this is especially not a forum for crazy conspiracy theories" (19 July 2014, Cui Bono, archive 3). Wikipedians have developed an effective strategy to cope with these "fringe theories," an Essay[42] to which experienced editors often refer to in the talk pages:

> A Wikipedia article should not make a fringe theory appear more notable or more widely accepted than it is. Statements about the truth of a theory must be based upon independent reliable sources. If discussed in an article about a mainstream idea, a theory that is not broadly supported by scholarship in its field must not be given undue weight, and reliable sources must be cited that affirm the relationship of the marginal idea to the mainstream idea in a serious and substantial manner. ("Fringe theories")

41 Dbrodbeck, according to his user page, is a psychology professor and has been editing Wikipedia for more than ten years.

42 "Essays, as used by Wikipedia editors, typically contain information, advice or opinions of one or more Wikipedia contributors. The purpose of an essay is to aid or comment on the encyclopedia and not any unrelated causes. Essays have no official status, and do not speak for the Wikipedia community as they may be created without approval. Following the instructions or advice given in an essay is optional. There are currently about 2,000 essays on a wide range of Wikipedia related topics." ("Essays")

One persistent theory held that the actual target of the perpetrators was President Putin, who was flying back in a private jet coming from Brazil. Another argued that flight MH17 contained the dead bodies from another Malaysia Airlines flight (MH370) that disappeared months before MH17 was shot down. Both theories were repelled from the wiki on the basis of the fringe theory policy.

Using the fringe theory guideline—fringing—to battle the spread of conspiracy theories is not an uncontested strategy. For example, critical, yet active editor Geogene (93 major edits to the MH17 wiki) writes on 21 July, 2014:

> My understanding is that WP:FRINGE is more about who advocates a position rather than the oddness of it. The plane-full-of-dead-bodies conspiracy theory was championed by the leader of the militia that controls the crash site, so it is notable no matter how ridiculous it is. Internet conspiracy theories not attributed to stakeholders in the investigation should continue to be disregarded. ("conspiracy theories," archive 6)

Interestingly, some editors proposed to start a wiki on conspiracy theories regarding the MH17 disaster (similar to the page "Malaysia Airlines 370 unofficial disappearance theories"), because of their prominence in the global media, but the only mention of conspiracy theories in the wiki on MH17 at the moment of writing is in the Russian media coverage section:

> Large number of fakes and various conspiracy theories were distributed in Russian mass media in due course, their appearance usually coinciding with updates from the Dutch Safety Board. For example, on 15 November 2014, Russia's Channel One reported on a supposedly leaked spy satellite photo which shows the plane being shot from behind by a Ukrainian fighter jet. ("Malaysia Airlines Flight 17")

In general, collectively labeling a view a fringe theory instead of a conspiracy theory is an effective strategy by Wikipedians to silence alternative voices. Labeling a view or theory a conspiracy would immediately *politicize* the discussion. Fringing, instead, is a practice based on a specific interpretation of the verifiability principle, which allows authoritative editors to quickly settle disputes.

In addition to the treatment of fringe theories, the introduction of (the emerging) crowdsourced citizen journalism platform Bellingcat as a reliable source is illuminating with regard to discussions of verifiability and reliability on the platform. Bellingcat uses open source and social media investigation for their reports. It was founded by Elliot Higgins, who formerly worked on uncovering the use of chemical weapons in Syria under his pseudonym Brown Moses. Its first major investigation traced the BUK system that, according to

the DSB and other investigations, shot down MH17. Bellingcat's publication caused some turmoil in the talk pages, as an edit remark on 9 September, 2014, by Geogene shows:

> I reverted content sourced to Bellingcat at [5]. I don't think a website "by and for citizen investigative journalists" are [*sic*] RS enough to identify the specific Russian unit that (allegedly) shot the plane down. I also think this is a lot of weight given to one source (which also applies to the BBC panorama content, although the BBC is much more RS than this.) ("Igor Ostanin," archive 15)

Bellingcat is treated with suspicion, yet also fiercely defended, even two months later:

> I think such reports by independent investigative journalists [Bellingcat blog] are *significantly more reliable and informative than vague claims by state-controlled organizations*, such as German intelligence, or meaningless statements by official investigators who do not reveal their data before the end of their investigation.
>
> My very best wishes [an editor, *RS*] thinks that a *blog is more reliable than statements made by the relevant investigative authority*, which is engaged in the largest criminal investigation in Dutch history. *Are editors really going to try to pretend that there is consensus for this madness*? – Herzen(talk) 01:18, 14 November 2014 (UTC)
>
> bellingcat report was picked up by multiple RS - you are protesting too much methinks - *belingcat* [sic] *pointed out blatant lies from the Russians concerning where certain vehicles were* - perhaps its that that drives your determination to rubbish the messenger. I like the way you don't mention what was in the bellingcat report - just denigrate it - lowbrow stuff really. Sayerslle (talk) 01:42, 14 November 2014 (UTC) ("edit war," Archive 22, emphasis mine)

This thread shows that the use of Bellingcat instigated a clash of opinions regarding facts presented by sources whose authority is derived from establishment ("state-controlled organizations" and legacy media) and an independent, bottom-up knowledge producer. Bellingcat is only accepted as a reliable source after much debate and, importantly, after mainstream media such as the BBC and the CNN started to take the organization's work seriously. In the stable version of the wiki, findings by Bellingcat have a prominent place in the article.

The reliable source guideline and interpretations thereof help settle disputes, but are also criticized and contested. The common reasoning would be the following (Geogene, 12 August, 2014): "The plane was shot down. Hundreds of sources say so. Therefore, the article should say so. If reliable sources later decide that aliens did it, then we'll change the article to reflect that. The only standard of truth is RS." Yet, as Sceptic1954 argues in a comment on

26 August, 2014, if this "simply means we select those RS which suit our point of view and disregard others," than this article is "as reliable as Russia Today" ("changes to lead," archive 14). Here we see a pivotal problematic issue: how can Wikipedia be neutral and truly reliable, if the selection of sources lies in the hands of individual editors who each have their own political and cultural backgrounds? This question is repeatedly addressed in the talk pages and remains fundamentally unanswered. Only by especially forceful measures (see next section) do established editors high up in the hierarchy effectively counter this.

Technological access and authority

So far, the technological features and affordances of Wikipedia have not taken center stage in the analysis. However, authority in Wikipedia is intrinsically connected to access to technological features of the platform. The higher up an editor is on the hierarchical ladder, the more technologically-enabled measures are available to him or her to prevent others from editing. A pivotal, yet contested measure is increasing the so-called "protection status" of the article, implemented especially during 'edit wars'. Because this procedure effectively prevents editors with low permission levels from editing, discussions about the implementation make up a discourse of access and authority. Although comment threads that discuss the protection status of the article are not the most proliferate, they are extensive and revolve around a number of key issues in Wikipedia: who may edit a contested topic and who is, through the platform's technological affordances, excluded from editing and why?

The wiki on MH17 is highly edited and consensus was not reached on a number of issues, especially on the inclusion of Russian sources. This led to calls in the talk pages to increase the protection status of the article. This involves a technical restriction that allows only certain editors to add and change content to wikis. Only administrators can apply, modify and remove protection. The most common types of protection are "full protection" (only administrators can change the wiki) and "semi-protection" (only logged in and confirmed accounts may edit) ("Protection Policy").

Increasing the protection status is an effective measure against so-called single purpose accounts (SPAs)[43]. Sock puppetry (or socking) is the use of multiple user accounts for improper purposes, which include "attempts to deceive or mislead other editors, disrupt discussions, distort consensus, avoid sanctions, evade blocks or otherwise violate community standards and policies" ("Sock-puppetry"). A SPA "is a user account or IP editor whose editing is limited to one very narrow area or set of articles, or whose edits to many articles appear to be for a common purpose" ("single-purpose account"). Within the top 20 editors of the wiki in terms of their number of edits, there are two sock-puppets. Even though their accounts are now banned, they provoked heavy discussion in the talk pages. Both

43 Within the top 20 of editors in terms of number of edits, there are two sock-puppets. Their accounts are now blocked and banned.

SPAs and sock puppets are regarded as highly disruptive and increasing the protection status of an article effectively counters this. In a nutshell, this means that editing the wiki directly only became possible for editors who were higher up in Wikipedia's hierarchical ladder. New users and editors without a proven track record could not make edit requests anymore. Even though increasing the protection status of an article is highly effective at repelling malicious editing, it is also fiercely argued against on democratic grounds.

Another tension regarding the protection status is between speed of updates and accuracy of information. An exchange between editors 9kat, an inexperienced editor, and RGloucester, an authoritative editor, is illustrative in this matter:

> Full protection is a very bad idea, and is doing more harm than good here. The article will quickly become outdated and inaccurate. With this many edits and this big an event, some editwarring is inevitable; deal with those users individually if they can't use the talk page. The article was developing nicely overall before it was protected. It will be impossible to get changes needed through talk page requests, so potentially useful edits will simply be lost. 9kat (talk) 00:26, 20 July 2014 (UTC)
>
> There is no deadline on Wikipedia. We need to avoid WP:RECENTISM, and holding off until the picture becomes clearer is an excellent idea. Allowing the article to become slightly outdated is better than it constantly changing based on every piece of tabloid drivel. RGloucester — ☎ 01:20, 20 July 2014 (UTC) ("fully protected," archive 3)

Throughout the talk pages the theme of speed versus accuracy comes back. Because Wikipedia is a key player within the new media ecology, many editors felt the need to keep the site as updated as possible, yet especially in the first month after the crash misinformation, speculation, and fake news circulated.

If affordances describe the range of possible actions regarding a technological object or environment, than increasing the protection status of a wiki limits this range of action. Protection status effectively counters the disruptive or political usage of Wikipedia through, for example sock-puppets and SPAs. In the process, however, the platform becomes more closed off, less accessible, for beginning editors or those whose perspectives do not follow mainstream, Western media discourses. What is more, 'protection' can be perceived as an affordance of Wikipedia in itself. The catch is that this affordance is connected to hierarchy. What editors *can do* on and with Wikipedia is dependent on their permission levels.

Most Wikipedians attempt to be civil, neutral, and objective observers of the world around them. Yet, these codes of conduct were practiced in many different ways. Swearing and profane language did not occur in the talk pages—due to the extreme vigilance of fellow Wikipedians—yet views on terms such as *objectivity* and *neutrality*, *reliability* and *verifiability*, and *authority* and *access* vary. The messiness of collaborative construction is

structured through interpretation and indeed enforcement of policies, guidelines, rules and principles by established editors with a proven track record and a good standing in the community. Indeed, in principle anyone can edit Wikipedia, but in practice the edit process is oligarchic and often restricted. This frustrates editors up until the point that they accuse established editors of the same misconduct they are accused of, as a comment by Herzen, a starting editor, on 2 December 2014 demonstrates: "You stop your edit warring, tag teaming, continual misrepresentation, lawyering, civil POV-pushing, BATTLEGRUND, and OWN. You don't actually [think] people to put up with all that, do you? Your editing is extremely disruptive" ("new edit war," archive 22).

Conclusion: memory work and the ideology of openness

In the previous two chapters, respectively YouTube and Facebook have been conceptualized as platforms of memory. In both cases, the platforms enable, shape, and constrain memory work. They are *part of* memory work because the both re-present the past, as well as carry it into the future. Even though these platforms present themselves as neutral intermediaries in this process, they are active actors within it through their associated user practices, community dynamics, and technological features. Wikipedia is no exception to this. As a community of practice and as a technological site or object, it is actively engaged in the re-presentation of the past and its transference into the future. Editors filter the past and create their own version of it by *choosing* topics for inclusion (what does and does not belong in Wikipedia), by *selecting* sources that provide information on these topics, and *represent* these topics in a way corresponding to Wikipedia's perceived ideology. Each of these practices is shaped by contested norms and values of the community, while the practices themselves shape these norms and values.

This chapter has shown that an 'open' past has its limits. Despite Wikipedia's claims and efforts to provide a platform to which anyone can contribute, it is a hierarchically stratified place of knowledge production. The result of this is that past contentious events such as the MH17 disaster are interpreted and re-presented by a relatively small group of Wikipedians high up in the hierarchical ladder. These editors might be conceived of as new 'elites' in memory work; they construct the past in the present and help transfer that construction into the future.

Reaching consensus in Wikipedia might take into account "all editors' legitimate concerns" but the actual decision-making process is oligarchical. In other words, memory work on Wikipedia is not so much done by crowds, but rather by in-crowds. Wikipedia is managed by established editors who have access to technologies to prevent others from editing and who have the social capital and the knowledge of guidelines, rules, principles, and 'Essays' to steer discussions and settle disputes. The knowledge of rules is therefore more important than knowledge about the topic at hand. This, in turn, stabilizes articles and interpretations of past events. The ideology of openness is thus ambiguous. On the

one hand it invites participation, but on the other hand this participation is limited and steered into particular directions.

This does not mean that Wikipedians do not challenge the platform's guidelines, rules and hierarchies. Wikipedia is a specific community of practice in which an ideology of openness is continually challenged and negotiated, but also where interpretations of it are enforced, mainly by authoritative editors. Through analysis of the article's talk pages, the chapter engaged with the question how editors legitimize their selection of topics for inclusion, negotiate neutrality, choose and discuss reliable sources, and critique, revert and prevent each other's edits. This process seems chaotic and indeed often is, yet, during this process, normative stances about what a good wiki is and what Wikipedia ought to be are formed. These stances are constructed in the talk pages and revolve around overlapping discourses on objectivity and neutrality, reliability and verifiability, and technological access and authority.

Many of these normative stances are carefully defended by editor Geogene, an influential editor of the MH17, in a comment meant for new editors on October 13, 2014:

- Yes, the article is biased towards a "Western" POV; this reflects what seems to be the bulk of sources.
- Russian sources have a very different perspective from most of the rest of the world.
- The article is supposed to be biased towards the bulk of reliable sources.
- What "neutral" means in Wikipedia is different from what most new users assume it means. (see WP:NPOV)
- The NPOV tag is strongly opposed by consensus.
- The article is no place for conspiracy theories. (see WP:WEIGHT and WP:FRINGE)
- "Systemic bias" is not an excuse to override any core content policy.
- Edit warring takes place on most weekends.
  ("a summary for new editors here," archive 19)

Hence, Geogene provides an interpretation of the rules as guidelines to abide by. A wiki is regarded as objective and neutral when it simply states a claim made by a source, rather than questioning the actual truthfulness of the claim. This has striking similarities with the practice of 'objective' journalism (Tuchman, 1978). By 'just' stating what their sources state, Wikipedians claim to be objective and neutral. This strategy is used by both editors who want to include non-Western sources and those who do not. This makes source selection a political practice, something that is also noted by critical editors.

Proportionate attention and balance in viewpoints expressed in sources are important, according to many editors, yet most of the sources that are deemed reliable come from mainly 'Western' and established news sources or government documents. By 'fringing' alternative perspectives editors ward off conspiracy theories, but the downside of this practice is that less mainstream ideas and perspectives might be quickly disregarded

as a fringe theory. Even though many editors discursively *position* Wikipedia outside mainstream media and government perspectives, the influence of both on the content of the article is high, which is evidenced by the inclusion of a majority of references to these sources on the grounds that they are reliable, which also gives them more rhetorical weight. Besides striving to select objective and neutral sources, Wikipedians aim for an objective and neutral tone in wikis as well. The language used to describe details of the crash and its aftermath is a precarious and much-debated issue. Distance in writing is achieved through interpretations of the NPOV principle by authoritative editors, who also settle and lock these debates. The most controversial 'lock-down practice' is increasing the protection status of the wiki. This technologically enabled measure is reserved for authoritative editors who reassert their standing and power within the community by means of it.

Despite the platform's description of itself as 'just' an encyclopedia, it is actually much more. Notwithstanding the platform's guidelines on the matter, it is a forum in which wikis are discussed and, through that, what Wikipedia is and what it is not. And what is even more important in light of this dissertation's main topic, Wikipedia is a platform where the past is constantly *worked* and transferred into the future. This follows the strict guidelines created and (re)enforced by authoritative editors. This is why an anonymous editor writes on July 6, 2015:

> So much biased crap that this is why Wikipedia will probably never really work as a reliable source of information for people. Teachers at my former school have said that Wikipedia has gotten better over the years, I'm really questioning that statement when I see articles like these. When it comes to historical reliability, Wikipedia is not to be trusted. ("Pro-Ukrainian Bias," Archive 23)

This remark precisely points at the inherent 'problem' concerning Wikipedia. Time and again, Wikipedians accuse each other of bringing into discussions their own personal interpretations, which are based on their social, cultural and political context. When so many turn to Wikipedia as a place that contains a large and growing part of our public pasts—a platform of memory—we need to remember that the memory work involved in the construction of that past is as much political as any other form of memory work, despite the platform's promise of openness. If memory work is a particular discursive activity, we can see this construction in the talk pages of MH17. This has striking similarities with the memory work in other domains, ranging from traditional media to historiography. Memory work is always caught in the dynamics of power and steered by those with access to social, cultural, and technological resources. As Bowker (2008, pp. 229-230) asserts "[m]emory practices matter because they are what carries the past along with us into the future; they are what makes our current reality true and our future—in will if not in deed—controllable [...] Only an open past can unlock the present and free the future." Despite its promise of openness, Wikipedia is not free of politics that are entangled in memory work.

Conclusion

When platform politics are interwoven with memory politics

Social media platforms are complex agents of memory work. In the summer of 2017, evidence was again provided for this claim. The *New York Times* reported that YouTube accidently removed thousands of videos that were aimed at documenting atrocities in the Syrian conflict (Browne, 2017). This was the result of the platform's effort to automatically delete material that did not comply with its guidelines, using machine learning technology to facilitate this. Not only were videos deleted, also complete channels ran by citizen journalists, human rights watchers, and activists—who rely on YouTube to archive and spread their videos—were temporally inaccessible. "What's disappearing in front of our eyes is the history of this terrible war," responded Chris Woods, director of Airwars, an organization that tracks airstrikes against civilians. Moreover, legal organizations using information originating from social media, such as the United Nations' I.I.I.M. (the International, Impartial and Independent Mechanism), were hindered in their work (Browne, 2017). Even though some videos were reinstated when their uploaders notified YouTube, this instance demonstrates in the extreme how the politics of a platform interweaves and interferes with the politics of memory.

Platforms *can* become "memory holes" when automated procedures assess and remove content, or when their technology changes or is replaced. The example above is reminiscent of an imagined technology in the novel *Nineteen Eighty-Four* by George Orwell. In the book, protagonist Winston Smith works at the Ministry of Truth where he writes propaganda texts and burns and disposes—using a "memory hole"—every written trace of the past that does not correspond with the current state of affairs. Although Orwell's vision of the future is dystopian, the author understood the power of memory work. At two points in the novel he writes: "Who controls the past controls the future. Who controls the present controls the past." For all his prophetic talent, Orwell did not foresee social media platforms, though they might have fitted well within his novel. Most platforms automatically save 'everything' or serve as popular archives, but are, concurrently, selective and forgetful.

The case studies in this dissertation detail how platforms have become important actors in memory work by keeping, transferring, shaping, interpreting, and re-presenting our individual and collective pasts. This may sound overly alarmist and somewhat technologically deterministic. Humans have, of course, not completely surrendered control over their pasts. As the case studies elucidate, memory work is more complex than that. People strategically and creatively use and appropriate platforms for memory work, even as this usage is *simultaneously* steered and shaped by the platform. Agency in memory work has been *redistributed* among old and new, human and nonhuman actors. The 'accidental' deletion of thousands of potentially compromising videos is but one example of the agency of a platform in memory work.

This study addressed the need for empirically focused, theory-driven work that avoids *a priori* pessimism and remains critical of social and technological determinism. My aim in this dissertation was to provide a detailed assessment of the complex, often less obvious interactions between human and 'nonhuman' actors in memory work. Of course, social

media platforms allow for the sharing, saving, and archiving of material in the first place. That is, in principle ‘anyone’ with access to the right media technologies can add their versions of the past to platforms. Yet, this material does not remain unscathed and, once it is uploaded to platforms, it can be remixed, altered, edited, and re-presented by other users and by the platforms themselves. To better understand the dynamics of contemporary memory work, this study provided much needed insights into these interactions.

For analytical purposes, this dissertation has developed and employed the term memory work. Even though the term has been applied throughout memory studies both as a method (cf. Haug, 1984; Kuhn, 2010) and as a theoretical construct (Van Dijck, 2007; Pentzold & Lohmeier, 2014), it has not been thoroughly developed. Moreover, these studies mostly focus on the intentional and human-centered aspects of engagements with the past for present and future purposes. This dissertation has strived to address these gaps in existing research. Memory work has been conceptualized here as the construction of the past in the present and the transfer of the present into the future. This occurs through concurrent interactions between human practices, technologies, and cultural forms. Such a conceptualization is inclusive: anyone and anything can become an actor in memory work, but not anyone or anything does. This is the result of constant power struggles between these actors.

In what follows, I will first briefly revisit how these power struggles played out in the case studies. Second, I will discuss how this study has provided a methodological roadmap for future research and challenged dominant theoretical conceptualizations in memory studies. I then move on to discuss how the findings of this study can be placed within the broader discussion on the mediatization of memory and memory construction in a new media ecology. I conclude by discussing what the implications of this study are for important “memory workers” and for society at large.

Memory work on and by YouTube, Facebook and Wikipedia

In the introduction, I asked *how is memory work performed in the new media ecology*? To operationalize this question, three sub-questions were asked. On the level of practice, I asked *how are power and agency negotiated and redistributed in memory work on platforms*? On the level of technology, *how do the technological affordances, mechanics and operational procedures of platforms enable, shape and constrain memory work on them*? And, on the level of cultural form, w*hy are certain versions of the past re-presented and transferred into the future on and by platforms*? In this section, I answer these questions in light of the case studies and then move on to answering the main research question.

In chapters five, six and seven I analyzed memory work on and by three platforms, respectively YouTube, Facebook, and Wikipedia. In the case of YouTube, I showed how certain witness videos are popularized and others are forgotten, which is mainly the consequence of curating practices and the logics of search. Indeed, the visual record of what happened

in Ghouta on August 21, 2013, one of the cases researched here, is mostly comprised of material shot by witnesses, yet this material was picked up by others who framed the event in specific ways. Most prominently, I provided insight into how witness accounts were remixed into videos that questioned whether or not a chemical weapons attack took place in the first place. Additionally, the study found that legacy and web-native media have a powerful role in determining what is most visible in YouTube's archive: They know best how to curate their 'remixes' of witness footage and are well-embedded in the rest of the Web. What this ultimately shows is how mediated memory, in this case of the Ghouta attack re-presented in YouTube's archive, is structured by curating practices and the platform's (Google's) search logics.

The second case study analyzed the Facebook page *Justice for Mike Brown* in order to rethink the role of memory work within contemporary digital activism. I showed how memory work on Facebook pages can be conceptualized as a particular type of discursive practice, offering us insights into how this work bridged personal and collective action frames. This bridging occurs in four overlapping ways. First, the page allows for affective commemorative engagement that helped shape Brown's public image. Second, Brown's death is contextualized as part of systematic injustice against African-Americans. Third, the past is used to legitimize present action, wherein the present was continually connected to the past and future. And fourth, particular discursive units became recognizable symbolic markers during the protests and for future recall.

Consequently, I demonstrated how memory work, although multidirectional and in flux, is stabilized by the interactions between the page administrator, its users and Facebook's operational logic. The memory work on *Justice for Mike Brown* thus allowed protesters and activists to connect to each other *in* time, across different geographical locations, but also *through* time, connecting the present situation to previous protests and activism. At the same time, Facebook's visibility and personalization mechanisms—supported by 'likes', 'shares', and comments—are interwoven with memory work to the point that especially simple discursive units are popularized and carried into the future. We need to question to the extent to which this may ultimately lead to further polarization of an already heated debate on racism and police violence in the US.

In the third case, which focuses on Wikipedia, I critically investigated how strict adherence to community rules and hierarchies led to a specific, 'Wikipedian', reconstruction of a past event. In principle, we could argue that the platform's politics of openness allow everyone to add perspectives and information on what happened during an event, in the case of this research the flight MH17. However, through in-depth analysis I paint a more complex picture and show how authoritative editors high up in Wikipedia's hierarchical ladder legitimize their editing interventions and use technologies to restrict others from editing. This results in wikis on important historical events being mostly written by a handful of authoritative editors. These editors favor media sources that reflect Western perspectives. Ultimately, this exemplifies what I have theorized as the *limits* of an 'open' past.

This conclusion also applies to the other case studies: when people engage in memory work on platforms, hierarchies will emerge and the authority that comes with these will help shape what and whose versions of the past come to dominate the present and which ones are transferred into the future. However, here we need to be cautious: My research details the differences between platforms and we need to keep in mind that one platform is not the other. Each invites different practices and each helps produce specific cultural forms. Vice versa, these practices, cultural forms, and communities shape the platforms themselves. Without user input, they would not exist or be able to operate.

Methodological roadmaps and theoretical challenges

This thesis has not only provided and applied a theoretical model of memory work (discussed further below), but it has also offered a methodological roadmap on how to study digital memory work. This is necessary given the novelty and complexity of digital memory work. In the thesis I have outlined this in detail, but here I would like to illustrate the core components by briefly sketching the roadmap by means of one example. At the core of the roadmap is the acknowledgement that we need to investigate memory work at different levels. Researching memory work on the levels of *practices*, *technologies*, and *cultural forms* allows us to scrutinize the layered and complex nature of memory work, by operationalizing the here-developed theoretical approach into empirical research.

Let us take Instagram as a platform and '9/11', when the US was struck by a series of terrorist attacks, as an event. On the level of *practice*, research can ask what people *do* with and on Instagram to commemorate the attacks. A quick search on the platform shows that users have shared a wide range of photos, using the hashtag #sept11. The more than 60,000 posts using this hashtag create a commemorative space revolving around the event. Research into this archived hashtag can shed light on patterns of memory practice. Do users engage with the platform to share private memories on the event, or is it used as a space to engage in more politically oriented memory work? On the level of *technologies*, we could ask how Instagram re-presents those pictures to its users. In terms of technological affordances, what practices does the platform invite and support? For example, what role do the platform's 'geotagging' options play in memory work? How is content structured through the interactions between users and the operating logic of the platform? On the level of *cultural form*, what types of photos are dominantly shared? Do we mainly see selfies taken at the newly built Freedom Tower, or do we see videos of the attacks or old news photos? How do users engage with Instagram's photographic 'filter' (or 'layers') options in order to add meaning to their photos? By adopting such a multi-level analysis, research is able to provide insights into how people, technologies, and cultural forms and content concurrently constitute and perform memory work.

Theoretically, the findings of this dissertation challenge dominant concepts in memory studies. Concepts such as collective, cultural, communicative, personal, social, popular,

historical, and public memory converge and collapse on social media platforms. That is, the research conducted here shows how the diverse relational and temporal heuristic levels of memory work identified in earlier research (see chapters 1-3 for a discussion) fail to do justice to the hybrid memory work found within a new media ecology. It is through the multi-level analysis of multiple case studies, including different platforms, that allows us insight into this. This shows, for example, how a creative appropriation of a historical figure shared on Facebook (here: Mike Brown) is a personal interpretation, while at the same, it is also infused with cultural meaning and used to communicate a particular stance in a (semi) public space. The sharing, on the same platform, of personal grief and memories may attract diverse public interactions and come to 'stand in' for the grief and memory of a collective.

In other words, the research has allowed me to show and theorize how digital memory work is diverse and layered. It may take the form of deliberate and rational engagement with the past, but it can also be spontaneous, affective, and unanticipated. On social media platforms, this 'messiness' and unpredictability is apparent. Historical facts blend with emotional opinions; an expert's rigorous reconstruction of an event may be undermined by an internet troll's antagonistic rants; activists concerned with documenting atrocities for future recall may be challenged by cynical nationalists. These confrontations initially lead to chaotic and heated debates. However, people's practices, community dynamics, and the operational procedures and cultural forms associated with platforms, concomitantly stabilize this layered and blurred mnemonic discourse. The empirically-driven research of this thesis supports these insights. In the next section, I discuss how the findings of this thesis add to research into the dynamics of memory construction in a "mediatized world" (Hepp, 2013).

Memory work in a mediatized world

Stepping back from the case studies, I will consider here how the findings of this dissertation contribute to our wider understanding of memory construction in a new media ecology. As I have argued in the theoretical chapters, the distributed nature of memory work is not intrinsic to the digital age. From 'oral' to 'mediatized' cultures and societies, memory work has always involved processes of mediation, interaction, and association between people and their social and material environments (Van Dijck, 2007; Pentzold & Lohmeier, 2014). As such, the past is never neutrally recorded, re-presented or transmitted into the present and future (Huyssen, 1995), but is affected by the assemblage (Latour, 2007) of both previous and emergent actors involved in memory work. Following the arguments most prominently outlined in chapters one and two, we thus need to study engagements with the past in relation to sociotechnical and communicative environments. In contrast to the largest part of human history, this environment is currently pervaded by media, and especially social media platforms, which have crept deeply into the textures of our every-

day lives (Van Dijck, 2013, p. 55). As Hepp (2013) has argued, we live in mediatized worlds, a condition that leaves its mark on memory and memory work (Hoskins, 2009; 2014).

But how can we understand memory work in the face of mediatization of culture and society? Most prominently, my research, following Le Goff's (1992) discernment of different phases in the history of memory, shows how mediatization can be seen as giving rise to a sixth phase in the history of memory. This phase follows an age in which memory was dominated by centralized broadcast media and the institutionalized memory of the nation-state. Notwithstanding the fact that broadcast media are still very much alive and interwoven with digital media, I make the case based on my research that digital media enable and shape new practices, forms, and technologies of memory and simultaneously remediate 'old' ones.

This study offers us clear insights into these practices, forms, and technologies. As I show in Chapter 7, for example, curating is an age-old memory practice that was historically done by the powerful élite, but it is now also part of everyday media practice. Furthermore, the recording and documenting of atrocities has traditionally been the work of journalists and activists, but can now also be done by neighborhood residents, as I show in chapter five. The creation and circulation of recognizable and iconic imagery is today largely dependent on clicks and likes, next to 24-hour cable broadcasting (see also Chapter 6). The reconstruction of historical events lies not only in the hands of historians, but also in the hands of people coming together on platforms (see chapter 7) and the mechanics of those platforms themselves (chapter 5-7).

The mediatization of culture and society, then, has inspired the emergence of a wider range of memory agents who employ the media at their fingertips. As becomes clear in this research, these media *structure* or 'mold', to use Hepp's (2013) term, the memory work of our time in idiosyncratic ways. In the case of YouTube, this is primarily involves the logics of search and curation (chapter 5). Facebook structures memory work according to its mechanics of visibility and interaction (chapter 6). And Wikipedia shapes memory work according to its strict guidelines and hierarchies, which are supported by editing-restrictive technologies (chapter 7).

Nevertheless, it is important to stress that like the earlier stages in memory's history, the current stage builds upon previous ones. People still turn on their radios and television sets for national commemorative events. During family gatherings, they still listen to grandfather telling stories from times past. People still write in paper diaries to keep a personal record of their lives and still visit national museums. Yet, in highly mediatized societies and cultures, the past is also literally at our fingertips. The structural components of the digital media ecology—digital and mobile media, 'living', accessible archives, peer production, Web 2.0—have opened up new possibilities and challenges pertaining to memory work. A family member can check grandfather's claims on her smartphone or comment on a national commemoration while it takes place. Iconic images and videos can be created with a few clicks and swipes. Conversely, as my research has shown, it can be altered as

quickly as it is made, or it can disappear altogether in "memory holes." Memory today is constructed inclusively, globally, and transnationally, yet alternative interpretations of the past that follow racist or extreme right-winged agendas can also undermine it.

The idea that the digital era is a next phase in the history of memory has, to some extent, been noted within recent research on the topic. Let me briefly revisit some dominant perspectives on this. A new "social network memory" is, asserts Hoskins (2009): "fluid, deterritorialised, diffused and highly revocable, but also immediate, accessible and contingent on the more dynamic schemata forged through emergent sociotechnical practices" (p. 41). This seems to go hand in hand with a rather hopeful view of the democratizing potential of digital technology in memory work. Haskins (2007, p. 405), for example, asserts that, in the digital era, "[t]he boundaries between the official and the vernacular, the public and the private, the permanent and the evanescent will cease to matter, for all stories and images will be equally fit to represent and comment on the past." Pentzold (2009, p. 262) also ascribe to this line of thinking by arguing that "[t]he web presents not only an archive of lexicalized material but also a plethora of potential dialogue partners" and that the texts produced in these dialogues are not only part of "storage memory," but also of "functional memory" because "they are remembered and linked to other texts in forms of 'living' intertextuality." Finally, states Ibrahim (2007, p. 3), "[m]obile technologies and new media platforms offer spaces of storage in which a proliferation of narratives and images provide avenues for reading history differently, away from institutionalized spaces of museums and official archives."

In summary, these authors argue: today, memory is increasingly networked, connected, and shared; actively and reactively, hastily and spontaneously constructed; collapsed in terms of time and space; dynamic, multiple, creative, contested, embodied, performed, and mediated. However, we can ask whether this has not always been true about memory. The perspective that I have proposed here is that memory is always under construction, always *worked*. The relevant questions then are how it is worked, who is involved, and how has this changed? These questions are at the heart of this thesis. Memory construction has always taken place within networks of people, things, places, and ideas that mutually shape our understanding and knowledge of the past.

Rather, as I argue, memory work involves a process of *mediation* from the start. Moreover, memory work has always been about connection: it allows people to connect to each other in and through time. At the same time memory work also can divide people, through the creation of pasts that do not correspond to individuals' experiences and feelings. Ultimately, memory work has always been about collapsing time and space—*imagining* the past in the present makes us travelers in time and space. Certainly the range, speed, and extent to which this occurs may have altered, yet, one could argue, the underlying principles of memory work have remained the same. This does not mean that nothing is new. Rather, memory work has been re-distributed among old and new actors who

interact with each other in *new* ways, an essential insight that I will pick up now in the final section of this conclusion.

Social media and digital memory work

How *can* or *should* we understand digital memory work then? As I have argued, different actors stabilize and structure memory on social media platforms in different ways. To a certain extent, memory is re-territorialized, re-organized, and stabilized on and by platforms. In theory, digital media technologies make the past accessible and re-workable for everyone. In practice, we see that certain versions become dominant, more visible, and more easily taken over on the basis of platform-specific rules, operational procedures, and community dynamics. The past might be initially fluid on social media platforms, yet it becomes more solid as time progresses. Social media platforms 'filter' the past, enable actors to shape it, contain it, and are part of it. They enable and shape memory work according to their own technological procedures, associated affordances and practices, and the newly-formed hierarchy and authority within their user communities. It may be true that more material is recorded, uploaded, remixed, and archived by a more diverse group of people, but, if anything, this thesis has shown the important central roles platforms play in the selection and re-presentation of this material. They are not just social media platforms. They are platforms of memory, not only as archives and databases that store and externalize our pasts, but also as active "memory agents" (Zelizer, 2008) that shape our memory work and re-present the past *for* us in specific ways, next to and interaction with human agents.

Given the important role that memory work plays in societies, these findings hold implications for different societal groups and for the public at large, who all, to varying degrees, have an impact on and are affected by memory work. Activists, citizen witnesses, and human rights advocates are all influenced by the fact that the material they upload and use might be saved, but is not necessarily safe on platforms. Though the dependence on these platforms may suggest otherwise, non-public platforms like YouTube and Facebook are not reliable or accountable for safekeeping this material. They can even become "memory holes," as I have shown here. Seemingly less dramatic, but equally if not more impactful, information that circulates on platforms is almost never 'raw'. It is changed, remixed, revised, altered and amended.

This understanding of the nature of digital memory work is equally relevant for two other important groups of (potential) "memory workers" who use or will use platforms as platforms of memory: historians and journalists. When investigating past events by using platforms, historians and journalists, like all memory workers, need to understand the operating procedures of these platforms. Such literacy is needed if we wish to use platforms and the content they carry as valuable sources for historical inquiry. Trusting our pasts to platforms means invariably that we hand over some control over our futures.

In this dissertation, I have theorized how memory work is done and have given insight into the role played by platforms in what and how societies remember and how the present is carried into the future—lest we keep this awareness alive: Platforms remember, but they also forget.

Bibliography

Abrahams, F. (2013, August 22) Dispatches: The Longest Short Walk in Syria. *Human Rights Watch*. Retrieved from https://www.hrw.org/news/2013/08/22/dispatches-longest short-walk-syria

AFP. (2014, December 24). Russia says Ukrainian pilot behind MH17 crash. *The Telegraph*. Retrieved fromhttp://www.telegraph.co.uk/news/worldnews/europe/ukraine/11312348/Russiasay-Ukrainian-pilot-behind-MH17-crash.html

Albertazzi, D. & Cobley, P. (2010). *The Media: An Introduction*. 3rd edition. New York and London: Routledge.

Alexa (n.d.). Topsites. Retrieved from http://www.alexa.com/topsites

Allan, S. (2013). *Citizen Witnessing: Revisioning Journalism in Times of Crisis*. Cambridge and Malden, MA: Polity Press.

Altheide, D. L., & Snow, R. P. (1979). *Media logic*. Beverly Hills, CA: Sage.

Améry, J. (1986). *At the Mind's Limits: Contemplations by a Survivor on Auschwitz and its Realities*. (S. Rosenfeld & S. P. Rosenfeld, Trans). Bloomington: Indiana University Press.

Andén-Papadopoulos, K. (2013a). Citizen Camera-Witnessing: Embodied Political Dissent in the Age of 'Mediated Mass Self-Communication.' *New Media & Society*. Advance online publication. doi: 10.1177/1461444813489863.

Andén-Papadopoulos, K. (2013b). Media Witnessing and the 'Crowd-Sourced Video Revolution.' *Visual Communication, 12*(4), 341-357.

Andén-Papadopoulos, K. (2014). Journalism, Memory and the 'Crowdsourced Video Revolution.' In B. Zelizer & K. Tenenboim (Eds.), *Journalism and Memory* (pp. 148 163). Basingstoke and New York: Palgrave.

Anderson, B. (2006). *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. London and New York: Verso.

Ardèvol, E., Roig, A., San Cornelio, G. & Pagès, R., & Alsina, P. (2010). Playful Practices: Theorising 'New Media' Cultural Production. In B. Bräuchler and J. Postill (Eds.), *Theorising Media and Practice* (pp. 259-279). New York and Oxford: Berghahn Books.

Assmann, J. (1995). Collective Memory and Cultural Identity. *New German Critique, 65*, 125-133.

Assmann, J. (1997). *Moses the Egyptian: The Memory of Egypt in Western Monotheism.* Cambridge, MA: Harvard University Press.

Bartlett, F.C. (1967). *Remembering: A Study in Experimental and Social Psychology*. London and New York: Cambridge University Press.

Bastide, R. (2011). From: *The African Religions of Brazil: Toward a Sociology of the Interpretation of Civilizations*. In J.K. Olick, V. Vinitzky-Seroussi, & D. Levy (Eds.), *The Collective Memory Reader* (pp. 157-162). Oxford: Oxford University Press.

Bauman, Z. (2000). *Modernity and the Holocaust*. Ithaca: Cornell University Press.

Bayerl, P.S. and Stoynov, L. (2014). Revenge by photoshop: Memefying police acts in the public dialogue about injustice. *New Media & Society*. Advance online publication. doi: 10.1177/1461444814554747.

Baym, N.K. (2010). *Personal Connections in the Digital Age*. Cambridge: Polity Press.

Beamish, T.D., Molotch, H., *and* Flacks, R. *(1995).* Who Supports the Troops? Vietnam, the Gulf War, and the Making of Collective Memory. *Social Problems, 42(*3), 344-*3*60*.*

Beer, D. (2009). Power Through the Algorithm? Participatory Web Cultures and the *Technological Unconscious*. *New Media & Society, 11*(6), 985-1002.

Bennett, W.L. and Segerberg, A. (2012). The logic of connective action: Digital media and the personalization of contentious politics. *Information, Communication & Society, 15*(5), 739-768.

Benkler, Y. (2006). *The wealth of networks: How social production transforms markets and freedom*. New Haven, CT: Yale University Press.

Bird, E.S. (2010). “From Fan Practice to Mediated Moments: The Value of Practice Theory in the Understanding of Media Audiences.” In B. Bräuchler and J. Postill (Eds.), *Theorising Media and Practice* (pp. 85-104). New York and Oxford: Berghahn Books.

Bilić, P. (2015). ‘Searching for a centre that holds’ in the network society: Social construction of knowledge on, and with, English Wikipedia. *New Media & Society, 17*(8), 1258-1276.

Biografie Maurice Halbwachs. (n.d.). *50 Klassiker der Sociologie*. Archiv für die Geschichte der Soziologie in Österreich. Retrieved from http://agso.uni graz.at/lexikon/klassiker/halbwachs/22bio.htm

Blair, C. (2006). Communication as Collective Memory. In G.J. Shepherd, J. St. John, and T. Striphas (Eds.), *Communication as . . . Perspectives on Theory* (pp. 51-59). New Delhi: Sage.

Bock, M.A .(2012). Citizen Video Journalists and Authority in Narrative: Reviving the Role of the Witness. *Journalism, 13*(5), 639-653.

Bonilla, Y. and Rosa, J. (2015). #Ferguson: Digital Protest, Hashtag Ethnography, and the Racial Politics of Social Media in the United States. *American Ethnologist, 21*(1), 4-17.

Bolter, J. D. and Grusin, R. (1999). *Remediation: Understanding New Media*. Cambridge, MA: MIT Press.

Bourtchouladze, R. (2002). *Memories are Made of This: How Memory Works in Humans and Animals*. New York: Columbia University Press.

Bowker, G.C. (2008). *Memory Practices in the Sciences*. Cambridge, MA: MIT Press.

boyd, d. (2011). Social Network Sites as Networked Publics: Affordances, Dynamics, and Implications. In Z. Papacharissi (Ed.), *A Networked Self: Identity, Community, and Culture on Social Network Sites* (pp. 39-58). New York: Routledge.

Brennen, B. (2013). *Qualitative research methods for media studies*. New York: Routledge.

Broersma, M. and Koopmans, J.W. (2010). *Identiteitspolitiek: Media en de constructive van het gemeenschapsgevoel*. Hilversum: Verloren.

Brown, R. and Kulik, J. (1977). Flashbulb Memories. *Cognition 5*, 73-99.

Brown, S.D. and Hoskins, A. (2010). Terrorism in the New Memory Ecology: Mediating and Remembering the 2005 London Bombings. *Behavioral Sciences of Terrorism and Political Aggression, 2*(2), 87-107.

Browne, M. (2017, August 22). YouTube removes videos showing atrocities in Syria. *The New York Times*. https://www.nytimes.com/2017/08/22/world/middleeast/syria-youtube videos-isis.html

Brügger, N. (2015). A brief history of Facebook as a media text: The development of an empty structure. *First Monday, 20*(5). http://journals.uic.edu/ojs/index.php/fm/article/view/5423/4466

Bruns, A. (2008). *Blogs, Wikipedia, Second life, and Beyond: From production to produsage*. New York: Peter Lang.

Bryman, A. (2012). *Social Research Methods*. 4th ed. Oxford: Oxford University Press.

Bucher, T. (2012). Want to be on Top? Algorithmic Power and the Threat of Invisibility on Facebook. *New Media & Society, 14*(7), 1164-1180.

Burgess, J. and Green, J. (2009). *YouTube : Online video and participatory culture*. Cambridge: Polity.

Carruthers, M. (2008). *The Book of Memory: A study of Memory in Medieval Culture*. Cambridge: Cambridge University Press.

Casey, E.S. (1987). *Remembering: A Phenomenological Study*. Bloomington: Indiana University Press.

Carvalho, A. (2008). Media(ted) discourse and society. *Journalism Studies, 9*(2), 161-177.

Castells, M. (2009). *Communication Power*. Oxford and New York: Oxford University Press.

Castells, M. (2015). *Networks of outrage and hope: Social movements in the internet age.* Malden: Polity Press.

Chadwick, A. (2013). *The Hybrid Media System: Politics and Power*. Oxford and New York: Oxford University Press.

Connerton, P. (1989). *How Societies Remember*. Cambridge: Cambridge University Press.

Corliss, R. *(2012, November 15)* Photos on Facebook Generate 53% More Likes Than the Average Pos. *Hubspot*. Retrieved from http://blog.hubspot.com/blog/tabid/6307/bid/33800/Photos-on-Facebook Generate-53-More-Likes-Than-the-Average-Post-NEW-DATA.aspx

Coser, L. A. (1992). Introduction: Maurice Halbwachs: 1877-1945. In M. Halbwachs *On Collective Memory* (pp. 1-34). (L.A. Coser, Ed. & Trans.). Chicago: Chicago University Press.

Couldry, N. (2003). *Media Rituals: A Critical Approach*. London: Routledge.

Couldry, N. (2004). Theorising Media as Practice. *Social Semiotics, 14*(2), 115-132.

Couldry, N. (2008). Mediatization or Mediation? Alternative Understandings of the Emergent Space of Digital Storytelling. *New Media Society, 10*(3), 373-391.

Couldry, N. (2012) *Media, Society, World: Social Theory and Digital Media Practice*. Cambridge: Polity.

Couldry, N., and Van Dijck, J. (2015). Researching social media as if the social mattered. *Social Media + Society, 1*(2). doi:10.1177/2056305115604174

Darwish, A. (2007, 4 September). Halabja: whom does the truth hurt? *Open Democracy*. Retrieved from http://www.opendemocracy.net/conflict journalismwar/article_1049.jsp.

Davidson, H., and Yuhas, A. (2014, July 18). Malaysia Airlines plane MH17 'shot down' in Ukraine—as it happened. *The Guardian*. Retrieved from http://www.theguardian.com/world/ 2014/jul/17/malaysia-airlines-plane-crashes ukraine-live

De Certeau, M. (1988). *The Practice of Everyday Life*. (S.F. Rendall, Trans). Berkeley, CA: University of California Press.

De Kosnik, A. (2016). *Rogue Archives: Digital Cultural Memory and Media Fandom*. Cambridge, MA: MIT press.

Deuze, M. (2012). *Media Life*. Cambridge: Polity Press.

Draaisma, D. (2010). *De Metaforenmachine: Een Geschiedenis van het Geheugen*. Groningen: Historische Uitgeverij.

Dutch Safety Board. (2015, October). Crash of Malaysia Airlines MH17. Retrieved from https://www.onderzoeksraad.nl/uploads/phase-docs/1006/debcd724fe7breport mh17-crash.pdf

Eagleton, T. (2005). *The Idea of Culture*. Malden, MA: Blackwell.

Eagleton, T. (2007). *Ideology: An Introduction*. London and New York: Verso.

Edgerton, G.R. and Rollins, P.C. (2001) *Television Histories: Shaping Collective Memory in the Media Age*. Lexington: University of Kentucky Press.

Eisenstein, E. (1966). Clio and Chronosm. *History and Theory, 6,* 36-64.

Eisenstein, E. (2012). *The Printing Revolution in Early Modern Europe*. 2nd Ed. Cambridge: Cambridge University Press.

Entman, R.M. (1993). Framing: Towards Clarification of a Fractured Paradigm. *Journal of Communication, 43*(4), 51-58.

Epstein, R. (2016, May 18). The empty brain. *Aeon*. Retrieved from https://aeon.co/essays/your-brain-does-not-process-information-and-it-is-not-acomputer

Evans-Pritchard, E.E. (1968). *The Nuer: A Description of the Modes of Livelihood and Political Institutions of a Nilotic People*. Oxford: Clarendon Press.

Evans, S. K., Pearce, K. E., Vitak, J., & Treem, J. W. (2017). Explicating Affordances: A Conceptual Framework for Understanding Affordances in Communication Research. *Journal Of Computer-Mediated Communication*, *22*(1), 35-52. doi:10.1111/jcc4.12180

Facebook users in the world. (2016). *Internet World Stats*. Retrieved from http://www.internetworldstats.com/facebook.htm

Faraj, S. and Azad, B. (2012). The materiality of technology: An affordance perspective. In: Leonardi, P. M., Nardi, B. A., & Kallinikos, J. (Eds.). *Materiality and organizing: Social interaction in a technological world* (pp. 237-258). Oxford: Oxford University Press.

Fairclough, N. (1995). *Critical Discourse Analysis: The Critical Study of Language.* Harlow: Pearson Education Limited.

Fentress, J.J. and Wickham, C. (1992). *Social Memory: New Perspectives on the Past*. Oxford: Blackwell.

Ferron, M. and Massa, P. (2011). WikiRevolutions: Wikipedia as a lens for studying the real time formation of collective memories of revolutions. *International Journal of Communication, 5*, 1313-1332.

Ferron, M. and Massa, P. (2014). Beyond the encyclopedia: Collective memories in Wikipedia. *Memory Studies, 7*(1), 22-45.

Finkenauer, C, Gisle, L. and Luminet, O. (1997). When Individual Memories are Socially Shaped: Flashbulb Memories of Sociopolitical Events. In J.W. Pennebaker, D. Paez, & B. Rimé (Eds.) *Collective Memories of Political Events* (pp. 191-208). Mahwah, NJ: Lawrence Erlbaum.

Finley, J.C. (2014, July 17). Malaysia Airlines crash prompts Ukrainian President Poroshenko to investigate. United Press International. Retrieved from http://www.upi.com/Top_News/World-News/2014/07/17/Malaysia-Airlines-crash- prompts-Ukrainian-President-Porosh-enkoto-to- investigate/3711405614458/#ixzz3NQ4e65B2

Florini, S. (2014). Tweets, Tweeps, and Signifyin' Communication and Cultural Performance on "Black Twitter." *Television & New Media, 15*(3), 223-237.

Foer, J. (2012). *Moonwalking with Einstein: The Art and Science of Remembering Everything*. London and New York: Penguin, 2012.

Foucault, M. (2011). From: Film in Popular Memory: An Interview with Michel Foucault. In J.K. Olick, V. Vinitzky-Seroussi, & D. Levy (Eds.), *The Collective Memory Reader* (pp. 252-253). Oxford and New York: Oxford University Press.

François, E. and Schulze, H. (Eds.). (2005). *Deutsche Erinnerungsorte: Eine Auswahl*. München: C.H. Beck, 2005.

Freud, S. (1966). *Psychopathology of Everyday Life*. London: Ernest Benn.

Frosh, P. and Pinchevski, A. (2009). Why Media Witnessing? Why Now? In P. Frosh and A. Pinchevski (Eds.), *Media Witnessing: Testimony in the Age of Mass Communication* (pp. 1-22). New York: Palgrave MacMillan.

Garde-Hansen, J. (2009). MyMemories?: Personal digital archive fever and Facebook. In J. Garde-Hansen, A. Hoskins, & A. Reading (Eds.) *Save As . . . Digital Memories* (pp. 135 150). New York: Palgrave MacMillan.

Garde-Hansen, J. (2011). *Media and Memory*. Edinburgh: Edinburgh University Press.

Garde-Hansen, J., Hoskins, A., and Reading, A. (Eds.). (2009), *Save As . . . Digital Memories*. New York: Palgrave.

Gedi, N. and Elam, Y. (1996). Collective Memory—What is it? *History and Memory, 8*(1), 30-50.

Gehl, R.W. (2009). YouTube as Archive: Who will Curate this Digital Wunderkammer? *International Journal of Cultural Studies, 12*(1), 43-60.

Gehl. R.W. (2011). The Archive and the Processor: The internal logic of Web 2.0. *New Media & Society*. Advance online publication. doi: 10.1177/1461444811401735.

Gellner, E. (1983). *Nations and Nationalism*. Oxford: Blackwell.

Gerbaudo, P. (2015). Protest avatars as memetic signifiers: political profile pictures and the construction of collective identity on social media in the 2011 protest wave. *Information, Communication & Society, 18*(8), 916-929.

Gerlitz, C. and Helmond, A. (2013). The like economy: Social buttons and the data-intensive web. *New Media & Society*, *15*(8), 1348-1365.

Gibson, J. J. (1979). *The ecological approach to visual perception.* Boston, MA: Houghton Mifflin.

Giddens, A. (1984). *The Constitution of Society*. Cambridge: Polity.

Gillespie, T. (2010). The politics of '…' *New Media & Society, 12*(3), 347-364.

Gillespie, T. (2014). The Relevance of Algorithms. In T. Gillespie, P.J. Boczkowski, & K.A. Foot (Eds). *Media Technologies: Essays on Communication, Materiality, and Society* (pp. 167-193). Cambridge, MA: MIT Press.

Gitelman, L. (2008). *Always Already New: Media, History, and the Data of Culture*. Cambridge, MA: MIT press.

Goff, D.H. (2013). A history of the social media industries. In A.B. Albarran (Ed.). *The social media industries*. New York: Routledge.

Hacking, I. (1995). *Rewriting the Soul*. Princeton: Princeton University Press.

Hajek, A., Lohmeier, C., & Pentzold, C. (Eds.). (2016). *Memory in a mediated world: Remembrance and reconstruction*. Houndmills, Basingstoke, Hampshire: Palgrave Macmillan.

Halbwachs, M. (1992). *On Collective Memory*. (L.A. Coser, Trans. & Ed.). Chicago: Chicago University Press.

Hall, S. (1998). Notes on deconstructing 'the popular'. In J. Storey (Ed.) *Cultural Theory and Popular Culture: A Reader* (pp. 442-453). London: Pearson/Prentice Hall.

Hand, M. (2014). Persistent Traces. Potential Memories: Smartphones and the Negotiation of Visual, Locative, and Textual Data in Personal Life. *Convergence*. Advance online publication. doi: 10.1177/1354856514546094.

Hansen, M.B. (1996). *Schindler's List* is not *Shoah*: The Second Commandment, Popular Modernism and Public Memory. *Critical Inquiry, 22*(2), 292-312.

Haskins, E. (2007). Between Archive and Participation: Public Memory in a Digital Age. *Rhetoric Society Quarterly, 37,* 401-422.

Haug, F., et al. (Eds.). (1987). *Female sexualization: A collective work of memory*. (E. Carter, Trans.). London: Verso

Hayes, D. (2014). St. Louis Suburb is National Media Flashpoint. *Broadcasting and Cable, 144*(31), 4.

Hepp, A. (2013). *Cultures of Mediatization*. (K. Tribe, Trans.). Cambridge: Polity Press.

Hirsch, M. (1996). Postmemories in Exile. *Poetics Today, 17*(4), 659-686.

Hjarvard, S. (2008). The Mediatization of Society: A Theory of the Media as Agents of Social and Cultural Change. *Nordicom Review, 29*(2), 105-134.

Hjarvard, S. (2012). Doing the Right Thing: Media and Communication Studies in a Mediatized World. *Nordicom Review, 33*(1), 27-34.

Hjarvard, S. (2013). *The Mediatization of Culture and Society*. London and New York: Routledge.

Hobart, M. (2010). What Do We Mean by 'Media Practices'? In B. Bräuchler & J. Postill (Eds.). *Theorising Media and Practice* (pp. 55-76). New York and Oxford: Berghahn Books.

Hobsbawn, E.J. (1990). *Nations and Nationalism since 1780*. Cambridge: Cambridge University Press.

Hobsbawm, E.J. and Ranger, T.O. (Eds.). (2012). *The Invention of Tradition*. Cambridge: Cambridge University Press.

Hoskins, A. (2004). Television and the Collapse of Memory. *Time and Society, 13*(1), 109-127.

Hoskins, A. (2009a). *News and memory: old and new media pasts.* In S. Allan (Ed.), *The Routledge Companion to News and Journalism Studies* (pp. 460-470). London and New York: Routledge.

Hoskins, A. (2009b). Digital Network Memory. In A. Erll & A. Rigney. *Mediation, Remediation, and Dynamics of Cultural Memory* (pp. 91-106). Berlin and New York: Walter de Gruyter.

Hoskins, A. (2009c). The Mediatisation of Memory. In J. Garde-Hansen, A. Hoskins, & A. Reading (Eds.), *Save As . . . Digital Memories* (pp. 27-43). New York: Palgrave MacMillan.

Hoskins, A. (2011a). 7/7 and Connective Memory: Interactional Trajectories of Remembering in Post-scarcity Culture. *Memory Studies, 4*, 269-280.

Hoskins, A. (2011b). Anochrisms of Media, Anochrisms of Memory: From Collective Memory to a New Memory Ecology. In M. Neiger M, O. Meyers, & E. Zandberg E (Eds), *On Media Memory: Collective Memory in a New Media Age* (pp. 278-288). Houndmills, Basingstoke, Hampshire: Palgrave Macmillan.

Hoskins, A. (2011c). Media, Memory, Metaphor: Remembering and the Connective Turn. *Parallax, 17*(4), 19-31.

Hoskins, A. (2013). The End of Decay Time. *Memory Studies, 6*(4), 387-389.

Hoskins, A. (2014). The Mediatization of Memory. In K. Lundby (Ed.), *The Mediatization of Communication* (pp. 661-680). Berlin: Walter de Gruyter.

Hoskins, A. (2016a) Archive me! Media, memory, uncertainty. In A. Hajek, C. Pentzold, & C. Lohmeier (Eds.), *Memory in a Mediated World* (pp. 13-35). London: Palgrave Macmillan.

Hoskins, A. (2016b). Memory ecologies. *Memory Studies, 9*(3), 348-357.

Hoskins, A. and O' Loughlin, B. (2010). *War and the Media: The Emergence of a Diffused War*. Cambridge: Polity Press.

Hutchby, I. (2001). Technologies, texts and affordances. *Sociology, 35*(2), 441-456.

Hutton, P. (1993). *History as an art of memory*. Hanover, NH: University Press of New England.

Huyssen, A. (1995). *Twilight Memories: Marking Time in a Culture of Amnesia*. New York: Routledge.

Huyssen, A. (2003), *Present Pasts: Urban Palimpsests and the Politics of Memory*. Stanford, CA: Stanford University Press.

Ibrahim, Y. (2007). The technological gaze: Event construction and the mobile body. *M/C Journal, 10*(1). http://journal.media-culture.org.au/0703/03-ibrahim.php

Innes, M. (1998). Memory, Orality and Literacy in an Early Medieval Society. *Past and Present, 158,* 3-36.

Irwin-Zarecka, I. (1994). *Frames of Remembrance: The Dynamics of Collective Memory*. New Brunswick, NJ: Transaction Publishers.

Ito, M. (2008). Introduction. In K. Varnelis (Ed.), *Networked Publics* (pp. 1-14). Cambridge, MA: MIT Press.

Jäger, S. (2004). *Kritische Diskursanalyse. Eine Einführung. (Discourse Analysis. An Introduction)*. 4th ed. Münster: UNRAST-Verlag.

Jameson, F. (1991). *Postmodernism, or, the Cultural Logic of Late Capitalism*. London and New York: Verso.

Jansen, R.S. (2007). Resurrection and Appropriation: reputational Trajectories, memory Work, and the Political Use of Historical Figures. *American Journal of Sociology, 112* (4), 953-1007.

Jenkins, H. (1992). *Television Fans and Participatory Culture*. Routledge: London & New York.

Jenkins, H. (2008). *Convergence culture: Where old and new media collide*. New York: New York University Press.

Jenkins, H, Ford, S., Green, J. (2013). *Spreadable Media: Creating Value and Meaning in a Networked Culture*. New York and London: New York University Press.

Johnson, S. (2004). *Mind Wide Open: Your Brain and the Neuroscience of Everyday Life*. New York: Scribner.

Johnson, T. J. (1995). *The Rehabilitation of Richard Nixon: The Media's Effect on Collective Memory.* New York: Garland Press.

Kammen, M. (1991). *Mystic Chords of Memory: The Transformation of Tradition in American Culture*. New York: Alfred A. Knopf.

Kammen, M. (1995). Rev. of Frames of Remembrance: The Dynamics of Collective Memory, by Iwona Irwin-Zarecka. *History and Theory, 34*(3), 245-261.

Kaplan, A. M., and Haenlein, M. (2010, January 1). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons, 53*(1), 59-68.

Kaun, A. and Stiernstedt, F. (2014). Facebook Time: technological and institutiona affordances for media memories. *New Media & Society*. Advance online publication. doi: 10.1177/1461444814544001.

Keightley, E. and Pickering, M. (2012). *The Mnemonic Imagination: Remembering as Creative Practice*. New York: Palgrave MacMillan.

Kennedy, J. (2013). Rhetorics of Sharing: Data, Imagination, and Desire. In G. Lovink and M. Rasch (Eds.), *Unlike us reader: social media monopolies and their alternatives #8* (pp.127-136). http://networkcultures.org/blog/publication/unlike-us-reader-social media-monop-olies-and-their-alternatives/

Keating, D., Rivero, C., and Tan, S. (2014). A breakdown of the arrests in Ferguson. *The Washington Post*, 21 August.

Kern, R., Forman, A.E., and Gil-Egui, G. (2013). R.I.P.: Remain in perpetuity. Facebook Memorial Pages. *Telematics and Informatics, 30*, 2-10.

Kuhn, A. (2010). Memory texts and memory work: Performances of memory in and with visual media. *Memory Studies, 3*(4), 298-313.

Landsberg, A. (2004). *Prosthetic Memory: the Transformation of American Remembrance in the Age of Mass Culture*. New York: Columbia University Press.

Langer, L.L. (1991). *Holocaust Testimonies: The Ruins of Memory*. New Haven: Yale University Press.

Latour, B. (2007). *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press.

Le Goff, J. (1992). *History and Memory*. (S. Rendall and E. Claman, Trans). New York: Columbia University Press.

Leonardi, P. M., and Barley, S. R. (2008). Materiality and change. *Information and Organization*, *18*, 159–76.

Lievrouw, L.A. (2006). New media design and development: diffusion of innovations v social shaping of technology. In L.A.Lievrouw & S. Livingston (Eds.), *The Handbook of New Media* (pp. 246-265). London: Sage.

Lievrouw, L.A. (2011). *Alternative and Activist New Media*. Malden, MA: Polity.

Lim, M. (2012). Clicks, Cabs, and Coffee Houses: Social Media and Oppositional Movements in Egypt, 2004-2011. *Journal of Communication, 62*(2), 231-248.

Lipsitz, G. (2001). *Time Passages: Collective Memory and American Popular Culture*. Minneapolis and London: University of Minnesota Press.

Livingstone, S. (2009a). On the Mediation of Everything: ICA Presidential Address 2008. *Journal of Communication, 59*, 1-18.

Livingstone, S. (2009b). Foreword: Coming to Terms with 'Mediatization.'" In K. Lundby (Ed.), *Mediatization: Concept, Changes, Consequences.* New York: Peter Lang.

Loewen, J.W. (1995). *Lies My Teacher Told Me: Everything Your American History Textbook Got Wrong*. New York: The New Press.

Loewen, J.W. (1999). *Lies Across America*. New York: Simon & Schuster.

Lohmeier, C., and Pentzold C. (2014). Making mediated memory work: Cuban-Americans, Miami media and the doings of diaspora memories. *Media, Culture and Society*, *36*(6), 776-789.

Lowenthal, D. (1985). *The Past is a Foreign Country*. Cambridge: Cambridge University Press.

Luyt, B. (2015). Wikipedia, collective memory, and the Vietnam War. *Journal of the association for information science and technology, 4*, 1-6.

Maltby, S and Keeble, R. (2007). *Communicating War: Memory, Media & Military*. Suffolk: Arima Publishers.

Manovich, L. (2001). *The Language of New Media*. Cambridge, MA: The MIT Press.

Manovich, L. (2009). The Practice of Everyday (Media) Life: From Mass Consumption to Mass Cultural Production? *Critical Inquiry, 35*(2), 319-331.

Marwick, A. and Ellison, N.B. (2012). "There isn't WiFi in Heaven!" Negotiating Visibility on Facebook Memorial Pages. *Journal of Broadcasting & Electronic Media, 56*(3), 378 400.

Mayring, P. (2000). Qualitative Content Analysis. *FQS 1*(2). http://www.qualitative research. net/index.php/fqs/article/view/1089/2385

Mayring, P. (2002). *Einführung in die Qualitative Sozialforschung - Eine Anleitung zu qualitativem Denken (Introduction to Qualitative Social Science Research - Instruction Manual to Qualitative Thinking).* Basel: Beltz Verlag

Mead, G.H. (1932). *The Philosophy of the Present*. LaSalle, IL: Open Court Publishing.

Merck, C., Topcu M.N., and Hirst, W. (2016). Collective mental time travel: Creating a shared future through our shared past. *Memory Studies*, *9*(3), 284-294.

Merrin, W. (2008, January 4). *Media Studies 2.0 – My Thoughts. Media Studies 2.0* http://mediastudies2point0.blogspot.nl/2008_01_01_archive.html

Middleton, D., and Edwards, D. (1990). *Collective remembering*. London: Sage Publications.

Nikulin, D. (2015). *Memory: A history*. Oxford: Oxford University Press.

Milner, R. (2013). Pop Polyvocality: Internet Memes, Public Participation, and the Occupy Wall Street Movement. *International Journal of Communication, 7*, 2357-2390.

Misztal, B.A. (2003). *Theories of Social Remembering*. Philadelphia, PA: Open University Press.

Mortensen, M. (2011). The Eyewitness in the Age of Digital Transformation. In K. Andén Papadopoulos & M. Pantti (Eds.). *Amateur Images and Global News*. Bristol: Intellect.

Nagy, P. and Neff, G. (2015). Imagined affordance: Reconstructing a keyword for communication theory. *Social Media + Society, 1*(2). doi:10.1177/2056305115603385

Neal, A. G. (1998). *National Trauma and Collective Memory: Major Events in the American Century*. Armonk, NY: M.E. Sharpe.

Neiger, M., Meyers, O., and Zandberg, E. (2011). On Media Memory: Editor's Introduction. In O. Neiger, O. Meyers, & E. Zandberg (Eds.) *On Media Memory: Collective Memory in a New Media Age* (pp. 1-24). New York: Palgrave MacMillan.

Niederer, S and Van Dijck, J. (2010). Wisdom of the crowd or technicity of content? Wikipedia as a sociotechnical system. *New Media & Society, 12*(8), 1368-1387.

Nicolini, D. (2017). Practice Theory as a Package of Theory, Method and Vocabulary: Affordances and Limitations. Jonas, M. et al. (eds.) *Methodological Reflections on Practice Oriented Theories*. doi:10.1007/978-3-319-52897-7_2

Nora, P. (1989). Between memory and history: *Les Lieux de Mémoire*. (M. Roudebush, Trans.) *Representations, 26*, 7-24.

Norman, D. A. (1988). *The psychology of everyday things*. New York: Basic Books.

Novick, P. (2000). *The Holocaust in American Life*. New York: Mariner Books.

Olick, J. (2008). From Collective Memory to the Sociology of Mnemonic Practices and Products. In: A. Erll & A. Nünning (Eds.) *Cultural Memory Studies: An International and Interdisciplinary Handbook* (pp. 151-161). Berlin and New York: Walter de Gruyter.

Olick, J.K. and Robbins, J. (1998). Social Memory Studies: from 'collective Memory' to the Historical Sociology of Mnemonic Practices. *Annual Review of Sociology, 24*, 105-140.

Olick, J.K., Vinitzky-Seroussi, V., and Levy, D. (2011). Introduction. In J.K. Olick, V. Vinitzky Seroussi, & D. Levy (Eds.), *The Collective Memory Reader* (pp. 3-62). Oxford: Oxford University Press.

Olick, J.K. (2012). What is memory studies? Keynote delivered at Stony Brook University July 23, 2012. https://www.youtube.com/watch?v=FdU_hYosb4o

Onyx, J. and Small, J. (2001). Memory-Work: The method. *Qualitative Inquiry, 7*(6), 773-786.

O'Reilly, B. (2005, 30 September). What is web 2.0? Design patterns and business models for the next generations of software. http://www.oreilly.com/pub/a/web2/archive/what-is-web20.html?page=1

O'Sullivan, D. (2009). *Wikipedia : A New Community of Practice?* New York and London: Routledge.

O'Sullivan, D. (2011). What is an Encyclopedia? From Pliny to Wikipedia. In G. Lovink & N. Tkacz (Eds.), *Critical Point of View: A Wikipedia Reader (*pp. 34-49). Amsterdam: Institute for Network Cultures.

Orwell, G. (2008). *1984*. London and New York: Penguin.

Pannti, M. (2013). Seeing and not Seeing the Syrian Crisis: New Visibility and the Visual Framing of the Syrian Conflict in Seven Newspapers and their Online Editions. *JOMEC Journal* 4. https://helda.helsinki.fi/handle/10138/42895

Patelis, K. (2013). Political Economy and Monopoly Abstractions: What Social Media Demand. In G. Lovink & M. Rasch (Eds.), *Unlike us reader: social media monopolies and their alternatives #8* (pp.118-126). http://networkcultures.org/blog/publication/unlike-us-reader-social media monopolies-and-their-alternatives/

Pentzold, C. (2008). Wikipedia. In M. Albrow, H. Anheier, M. Glasius, M. Price, & M. Kaldor (Eds.), *Global Civil Society 2007/08* (pp. 234–235). London: Sage.

Pentzold, C. (2009). Fixing the floating gap: The online encyclopaedia Wikipedia as a global memory place. *Memory Studies, 2*(2), 255-272.

Pentzold, C. (2010). Imagining the Wikipedia community: What do Wikipedia authors mean when they write about their 'community.' *New Media & Society, (13)*5, 704-721.

Peters, J.D. (2001). Witnessing. *Media, Culture & Society, 23*(6), 707-723.

Peters, J.D. (2015). *The Marvelous Clouds: Toward a philosophy of environmental media.* Chicago: University of Chicago press.

Pickering, M. and Keightley, E. (2013). Communities of Memory and the Problem of Transmission. *European Journal of Cultural Studies, 16*(1), 115-131.

Plato. (1973). *Phaedrus and the Seventh and Eight Letters*. (W. Hamilton, Trans.). Harmondsworth: Penguin Books.

Popular Memory Group. Popular Memory: Theory, Politics, Method. In R. Johnson, G. McLennan, B. Schwarz, & D. Sutton (Eds.), *Making Histories: Studies in History Writing and Politics*. London: Hutchinson.

Postman, N. (1970). The reformed English curriculum. In A. C. Eurich (Ed.), *High school 1980: The shape of the future in American secondary education* (pp. 160-168). New York: Pitman.

Postill, J. (2010). Introduction: Theorising Media and Practice. In B. Bräuchler and J. Postill (Eds.), *Theorising Media and Practice* (pp. 1-32). New York and Oxford: Berghahn Books.

Potter, J. and Wetherell, M. (1987). *Discourse and social psychology: Beyond attitudes and behaviour*. London: Sage Publications.

Prager, J. (1998). *Presenting the Past: Psychoanalyisis and the Sociology of Misremembering*. Cambridge, MA: Harvard University Press.

Rao, U. (2010). Embedded/Embedding Media Practices and Cultural Production. In B. Bräuchler and J. Postill (Eds.), *Theorising Media and Practice* (pp. 147-168). New York and Oxford: Berghahn Books.

Reading, Anna. (2009a). Memobilia: The Mobile Phone and the Emergence of Wearable Memories. In J. Garde-Hansen, A. Hoskins, & A. Reading (Eds.) *Save As . . . Digital Memories* (pp. 81-95). New York: Palgrave MacMillan.

Reading, A. (2009b). Mobile Witnessing: Ethics and the Camera Phone in the 'War on Terror.' *Globilizations, 6*(1), 61-76.

Reading, A. (2011). The London Bombings: Mobile Witnessing, Mortal Bodies and Globital Time. *Memory Studies, 4*(3), 298-311.

Reading, A. (2014). The Journalist as Memory Assembler: Non-Memory, the War on Terror and the Shooting of Osama Bin Laden. In B. Zelizer & K. Tenenboim Eds), *Journalism and Memory (*pp.164-178). Basingstoke and New York: Palgrave.

Richardson, J. (2007). *Analysing Newspapers: An Approach to Critical Discourse Analysis*. Basingstoke: Palgrave Macmillan.

Rintel, R. (2013). Crisis memes: The importance of templatability to Internet culture and freedom of expression. *Australasian Journal of Popular Culture, 2*(2), 253–271.

Roediger, H., & Wertsch, J. (2008). Creating a new discipline of memory studies. *Memory Studies, 1*(1), 9-22.

Rogers, R. (2013). *Digital Methods*. Cambridge and London: MIT Press.

Rose, S. (2003). *The Making of Memory: From Molecules to Mind*. London: Vintage.

Rose, G. (2012). *Visual Methodologies: An Introduction to researching with Visual Materials*. 3rd edition. London: Sage.

Salmons, J. (2016). *Doing Qualitative Research Online*. London: Sage.

Sandvig, C. (2015). Seeing the sort: the aesthetic and industrial defense of “the algorithm.” *Journal of the New Media Caucus, 11*(3). http://median.newmediacaucus.org/art infrastructures-information/seeing-the-sort-the-aesthetic-and-industrial-defense-of the-algorithm/

Sasseen, J. (2012). *The Video Revolution: A Report to the Center for International Media Assistance*. Washington, DC: Center for International Media Assistance.

Schatzki, T.R. (2001). Introduction: Practice theory. In T.R. Schatzki, K. Knorr-Cetina, E. Savigny (Eds.), *Practice Turn in Contemporary Theory* (pp. 1-14). London and New York: Routledge.

Schlunke, K. (2013). Memory and Materiality. *Memory Studies, 6,* 253-261.

Schneider, F. (2013). How to do a discourse analysis. *Politics East Asia* http://www.politicseastasia.com/studying/how-to-do-a-discourse-analysis/

Schudson, M. (1993). *Watergate in American Memory: How We Remember, Forget and Reconstruct the Past.* New York: Basic Books.

Schulz, W. (2004). Reconsidering Mediatization as an Analytical Concept. *European Journal of Communication, 19*(1): 87–101.

Schwartz, B. (2000). *Abraham Lincoln and the Forge of National Memory*. Chicago: University of Chicago Press.

Schwarz, O. (2014). The Past Next Door: Neighbourly Relations with Digital Memory Artefacts. *Memory Studies, 7*(1), 7-21.

Shirky, C. (2008). *Here Comes Everybody: The Power of Organizing without Organizations*. New York: Penguin Press.

Sienkiewicz, M. (2015). Open BUK: Digital labor, Media Investigation and the Downing of MH17. *Critical Studies in Media Communication, 32*(3), 208-223.

Sharma, S. (2013). Black Twitter? Racial Hashtags, Networks and Contagion. *New Formations: a journal of culture/theory/politics, 78,* 46-64.

Shifman, L. (2013). Memes in a digital world: Reconciling with a conceptual troublemaker. *Journal of Computer-Mediated Communication, 18*(3), 362–377.

Shotter, J. (1990). The Social Construction of Remembering and Forgetting. In D. Middleton & D. Edwards (Eds.), *Collective Remembering* (pp. 120-138). London: Sage.

Silverstone, R. (2002). Complicity and Collusion in the Mediation of Everyday Life. *New Literary History, 33*(5), 745-764.

Silverstone, R. (2003). Preface to R. Williams *Television: Technology and cultural form* by R. Williams (pp. vii-xiii). London and New York: Routledge.

Silverstone, R. (2005). Mediation and Communication. In C. Calhoun, C. Rojek & B. Turner (Eds.), *The International Handbook of Sociology* (188-207). London: Sage.

Sinjab, L. (2014). Hope fades for Syrians One Year after Chemical Attack. *BBC News*. http://www.bbc.com/news/world-middle-east-28870611

Snickars, P. and Vondereau, P. (Eds.). (2009). *The YouTube Reader*. Stockholm: National Library of Sweden.

Spratt, M. (2007). When Police Dogs Attacked: Iconic News Photographs and the Construction of History, Mythology, and Political Discourse. *American Journalism, 25*(2), 85-105.

Srnicek, N. (2017). *Platform Capitalism*. Cambridge: Polity Press.

Stiegler, B. (2010). Memory. In W.J.T. Mitchell & M.B.N. Hansen (Eds.), *Critical Terms for Media Studies* (pp. 64-87). Chicago: University of Chicago Press.

Sturken, M. (1997). *Tangled Memories: The Vietnam War, the Aids Epidemic, and the Politics of Remembering*. Berkeley: University of California Press.

Sturken, M. (2008). Memory, consumerism and media: Reflections on the emergence of the field. *Memory Studies*, *1*(1), 73-78.

Sutton, J. (1998). *Philosophy and Memory Traces: Descartes to Connectionism*. Cambridge: Cambridge University Press.

Tarde, G. (2000). *Social Laws: An Outline of Sociology*. (H.C. Warren, Trans). Kitchener, OT: Batoche Books.

Taylor, D. (2003). *The Archive and the Repertoire: Performing Cultural Memory in the Americas*. Durham and London: Duke University Press.

Teague, M. (2014, November 30). Long history of racial tension set the stage for Ferguson protests. *Los Angeles Times*.

Terdiman, R. (1993). *Present Past: Modernity and the Memory Crisis*. Ithaca, NY: Cornell University Press.

Tenenboim-Weinblatt, K. (2013). Bridging Collective Memories and Public Agendas: Toward a Theory of Mediated Prospective Memory. *Communication Theory, 23*(2), 91-111.

Thompson, J.B. (1995). *The Media and Modernity: A Social Theory of the Media*. Cambridge: Polity.

Thrift, N. (2004). Remembering the technological unconscious by foregrounding knowledges of position. *Environment and Planning D: Society and Space, 22*(1), 175-190.

Tkacz, N. (2010). Wikipedia and the politics of mass collaboration. *Platform, 2*(2), 40-53.

Tkacz, N. (2012). The truth of Wikipedia. *Digithum: The humanities in the digital Era, 14*, 88 -93.

Tkacz, N. (2015). *Wikipedia and the Politics of Openness*. Chicago and London: The University of Chicago Press.

Tuchman, G. (1978). *Making news: A study in the construction of reality*. New York: Free Press.

Van Dijck, J. (2007). *Mediated memories in the digital age*. Stanford: Stanford University Press.

Van Dijck, J. (2012) Facebook and the Engineering of Connectivity: A Multi-Layered Approach to Social Media Platforms. *Convergence, 19*(2), 141-155.

Van Dijck, J. (2013). *The Culture of Connectivity. A Critical History of Social Media. Oxford:* Oxford University Press.

Van House, N. and Churchill, E.F. (2008). Technologies of Memory: Key Issues and Critical Perspectives. *Memory Studies, 1*, 295-310.

Van Loon, J. (2008). *Media Technology: Critical Perspectives*. Maidenhead: Open University Press.

Van Vree, F., Tilmans, K. and Winter, J. (2010). *Performing the Past. Memory, History, Identity*. Amsterdam: Amsterdam University Press.

Warner, M. (1990). *The Letters of the Republic: Publication and the Public Sphere in Eighteenth Century America*. Cambridge, MA: Harvard University Press, 1990.

Warner, W. (1959). *The living and the dead : A study of the symbolic life of Americans.* New Haven, CT: Yale University Press.

Wall, M. and El Zahed, S. (2014). Embedding Content from the Syrian Citizen Journalists: the Rise of the Collaborative News Clip. *Journalism*. Advance online publication. doi: 10.1177/1464884914529213.

White, H. (1973). *Metahistory: The Historical Imagination in Nineteenth-Century Europe* Baltimore: Johns Hopkins University Press.

Wiki. (n.d.). *Wikipedia*. https://en.wikipedia.org/wiki/Wiki

Wikimedia Report Card. (n.d.). https://analytics.wikimedia.org/dashboards/reportcard/#pageviews-july-2015-now

Williams, R. (1958). *Culture and Society*. New York: Chatto and Windus.

Williams, R. (1981). *The Sociology of Culture*. London: Fontana.

Winter, J. (1995). *Sites of Memory, Sites of Mourning: The Great War in European Cultural History*. Cambridge: Cambridge University Press, 1995.

Wodak, R. (2001). What CDA is about: A summary of its history, important concepts and its developments. In R. Wodak & M. Meyer (Eds.), *Methods of critical discourse analysis* (pp. 1-13). London: Sage.

Wodak, R., and Meyer, M. (2009). *Methods of critical discourse analysis* (2nd ed). London: Sage.

Work. (n.d.). In *Merriam-Webster's collegiate dictionary*. Retrieved from https://www.merriamwebster.com/dictionary/work

Yates, F. A. (1966). *The Art of Memory*. Chicago: University of Chicago Press.

Yeo, R. (2001). *Encyclopaedic Visions: Scientific Dictionaries and Enlightenment Culture*. Cambridge: Cambridge University Press.

YouTube (n.d.). About. https://www.youtube.com/yt/about/

YouTube (n.d.). Statistics. https://www.youtube.com/yt/press/statistics.html

Zelizer, B. (1992). *Covering the Body: The Kennedy Assassination, the Media, and the Shaping of Collective Memory*. Chicago: University of Chicago Press.

Zelizer, B. (2007). On 'Having Been There': 'Eyewitnessing' as a journalistic Key Word. *Critical Studies in Media Communication, 24*(5), 408-428.

Zelizer, B. (2008). Why Memory's Work on Journalism Does Not Reflect Journalism's Work on Memory. *Memory Studies, 1*(1), 79-87.

Zierold, M. (2008). Memory and Media Cultures. In A. Erll & A. Nünning (Eds.) *Cultural Memory Studies: An International and Interdisciplinary Handbook* (pp. 399-407). Berlin and New York: Walter de Gruyter.

List of referenced YouTube clips

1Syriatruth (2013) *Ghouta-Est'Un père pleare ses enfants morts à cause du bombardement chimique*. Available at: http://www.youtube.com/watch?v=XH_UXhlERes.

ABC News (2013) *Did Syria Use Chemical Weapons on Its People?* Available at: http://www.youtube.com/watch?v=EMUkGZgV3UE.

ABC News (2013) *Terrifying Images of Women and Children in Syria*. Available at: http://www.youtube.com/watch?v=Y_5K89XK8vk.

Ahmad Al Radaini (2013) *Using Chemical Weapons by the Syrian President Forces against Civilians in Damascus* Available at: https://www.youtube.com/watch?v=unjE_yoCWr0&bpctr=1394534824.

AlJazeeraEnglish (2013) *Inside Story : Syria: Chemical warfare?* Available at: http://www.youtube.com/watch?v=0guFlvvJxzM.

ANAChannelEng (2013) *Young girl affected by chemical weapons attack on Damascus 21/08/2013*. Available at: http://www.youtube.com/watch?v=QF6wHbgT2XU&bpctr=1383226101.

Eretz Zen (2013) *Breaking: Leaked Footage of Islam Battalion Launching Infamous Ghouta Chemical Attack on Aug 21*. Available at: http://www.youtube.com/watch?v=-HCJI5AbJkQ.

Euronews (2013) *Assad forces accused of killing hundreds in nerve gas attack*. Available at: http://www.youtube.com/watch?v=ix1vtepgpB8.

Fazzamin (2013) *A father finds his children among the dead: Syria Chemical Attack August 2013 [Ghouta]*. Available at: http://www.youtube.com/watch?v=-hzHspqLT48.

GlobalLeaks (2013) *Alleged Chemical Weapon launch – Syria*. Available at: http://www.youtube.com/watch?v=-EqagvmDcqw.

Kirnéa (2013) ► *August 2013 ♀ ATROCITIES IN SYRIA ~ CHEMICAL ATTACK ~ Bashar Al Assad* Available at: http://www.youtube.com/watch?v=16mMiV-8vJ0.

SouriaArchive:SA#14 (2013) *18+ Syria - Assad Chemical Weapons Gas Attack Kills Hundreds 8-21-13*. Available at: http://www.youtube.com/watch?v=lP5lyLORqYY.

SYMAN NOLUN (2013) *[Heart warming] Syrian Father Reunites With Son He Thought Was Killed in Chemical Attack*. Available at: http://www.youtube.com/watch?v=fYiymcjhrtU.

TheSyrianrev2011 (2013) *[940] Syria: Hundreds of Victims by Chemical Weapons in Eastern Gouta 21/8/2013 (+18)[Multilingual]*. Available at: http://www.youtube.com/watch?v=ajOhK_DYkUU.

The Young Turks (2013) *Poison Gas Attack in Syria [GRAPHIC]*. Available at: http://www.youtube.com/watch?v=oGNT3f02XsE.

Truthloader (2013) *Syria chemical weapons – Sarin gas attack near Damascus?* Available at: http://www.youtube.com/watch?v=n2GPTqxf8rE&bpctr=1383223573.

VexZeen (2013) *SYRIA Man Struggles For Air, Chemical Weapons Kill 650 In Damascus: Suspicious Timing*. Available at: http://www.youtube.com/watch?v=Pv0fpCtemQs.

List of referenced Wikipedia pages

Edit history graph
https://tools.wmflabs.org/xtools/wikihistory/wh.php?page_title=Malaysia_Airlines_
Flight_17

Wikipedia article traffic statistics
http://stats.grok.se/en/201407/Malaysia%20Airlines%20Flight%2017

WikiData
https://www.wikidata.org/wiki/Q17374096

Guidelines, rules and Essays, etc.

https://en.wikipedia.org/wiki/Wikipedia:Five_pillars

https://en.wikipedia.org/w/index.php?title=Malaysia_Airlines_Flight_17&action=info

https://en.wikipedia.org/wiki/Wikipedia:About

https://en.wikipedia.org/wiki/Wikipedia:List_of_policies_and_guidelines

https://en.wikipedia.org/wiki/Wikipedia:Core_content_policies

https://en.wikipedia.org/wiki/Wikipedia:Consensus

https://en.wikipedia.org/wiki/Wikipedia:List_of_guidelines#Behavioral

https://en.wikipedia.org/wiki/Wikipedia:Citing_sources

https://en.wikipedia.org/ wiki/Wikipedia:Assume_good_faith

https://en.wikipedia.org/wiki/Wikipedia:Essays

https://en.wikipedia.org/wiki/Wikipedia:Sock_puppetry

https://en.wikipedia.org/wiki/Wikipedia:Edit_requests

https://en.wikipedia.org/wiki/Wikipedia:Identifying_reliable_sources

https://en.wikipedia.org/wiki/Wikipedia:What_Wikipedia_is_not#Wikipedia_is_not_a_battleground

https://en.wikipedia.org/wiki/Wikipedia%3AProtection_policy

https://en.wikipedia.org/wiki/Wikipedia:Edit_warring

https://en.wikipedia.org/wiki/Wikipedia:Single-purpose_account

https://en.wikipedia.org/wiki/Wikipedia:Disruptive_editing#Failure_to_understand_the_point

https://en.wikipedia.org/wiki/Wikipedia:Fringe_theories

https://en.wikipedia.org/wiki/Wikipedia:User_access_levels

Appendix 1 – coding categories for talk page threads

Topic	Code	Rule
Images, figures, photos	IM	Thread about the placement and content of images
Media coverage	MC	Thread about the media coverage of the disaster
Casualties	CA	Thread about the human casualties in the crash (crew and passengers)
International reactions	IR	Thread about the international reactions (gov'ts, Boeing, indiv politicians)
Cause and responsibility	CR	Thread about the cause of and responsibility for the crash
Links, see also section, similar incidents	SA	Thread about links that direct to other pages
Timeline & map	TM	Thread about times, location, coordinates relating to the downing
Protection status	PS	Thread about the protection status of the Wiki or the talk page
NPOV	NP	Thread about neutrality point of view relating to the Wiki
Verifiability	VE	Thread about the reliability of sources and the verifiability of claims
Manual of Style and guidelines	MS	Thread about the Wikipedia's Manual of Style and the guidelines concerning edit procedures
War circumstances and tensions	WT	Thread about the war and tensions in the region of the crash site
Airplane and cargo	AP	Thread about technical details of the plane and its non-human cargo
Investigation	IV	Thread about the ongoing investigation into the downing.
Original research	OR	Thread about Wikipedia's "no original research" policy
Other	OT	Thread about any other topic that falls outside these categories

Appendix 2 – Time path of significant events in the aftermath of the downing of MH17

Date	Organization	Publication
September 9, 2014	DSB	Preliminary report
October, 2014	German Federal Intelligence Service	Report claiming that plane was shot down by pro-Russian separatists using a BUK system
November 16, 2014	DSB	Recovery of wreckage begins
November 2014	Bellingcat	Report claiming that separatists possessed BUK system on July 17
December 9, 2014	DSB	First wreckage convoys arrive at Gilze-Wijen air force base
March and April, 2015	VKontakte and various Russian websites	News story that a R-60 air-to-air missile was used to shoot down MH17.
May and June 2015	*Novaya Gazeta*	Report by Russian military engineers concluding that BUK system was used to down MH17 by Ukrainians. *Navoya Gazeta* critical.
May and June 2015	Bellingcat and *Bild*	Reports that claim Russian satellite imagery of the crash site was tampered with
July 29, 2015	Various countries	UN proposal to adopt resolution on tribunal (vetoed by Russia)
October 13, 2015	DSB	Final report
February 25, 2016	DSB/Dutch Parliament	Dutch Parliament asks questions to DSB
May, 2016	Families of casualties	Suing of Russia and President Putin European Court for Human Rights
May and June 2016	Bellingcat	Detailed report on launcher on the basis of social media posted on social media

English summary

This dissertation develops and explores the concept of *digital memory work*. Memory work is as old as humankind, and it has always involved specific technologies and techniques—whether they are cave paintings, rituals, writing, or television. Memory work can be more personal, like diary writing, or more collective, as in the case of national anniversaries and commemorations. It encompasses the transfer and reconstruction of knowledge and experience of the past into the present and future. This occurs through and by specific practices, technologies, and cultural forms and, often, for specific goals. This makes memory work inherently political. Which and whose version of the past is carried into the future is the result of a continuous power struggle.

Hence, I argue, the past is continually being constructed in the present by various social actors that have their own goals and agendas. Nowadays, this process increasingly involves social media platforms. These platforms affect memory work—like the media technologies before them—in idiosyncratic ways. The primary effort of this dissertation is to trace how different social actors use platforms for *digital* memory work and, concurrently, how platforms enable, shape, and constrain it.

One way to rethink memory work in the 'digital age' is to talk about "connective memory" in a "new media ecology." This latter term is used to describe our contemporary socio-technical and communicative environments (Hoskins, 2011). At the basis of memory work in a previous 'broadcast age' stands a linear trajectory of mass communication where a powerful medium sends a message that arrives, in one piece, at a heterogeneous group of receivers.

Even though aspects of this view are debatable from the start (was there ever such a thing as a passive mass audience?), it is contrasted by today's new, more active media ecology. This new media ecology is characterized by bottom-up, user-generated content appearing next to content produced by media professionals. It is populated by hyper-connected, transnational audiences using mobile media. Within a new media ecology people are therefore confronted by a constant stream of updates from all around the world and from different kinds of people, wherever they are. Potentially, they are also able to produce their own content wherever they are.

Hence, researchers have described digital memory work as being less institutional and more bottom-up. It is theorized as fluid, diffuse, easily revocable, and more accessible (Hoskins, 2009, p. 41). In this view, anyone with the appropriate (digital) tools at hand can construct and spread *their* versions of the past, which may ultimately lead to new voices being heard and the previously invisible being made visible. This dissertation, however, aims to nuance this slightly utopian perspective by scrutinizing the newly emerged power dynamics within digital memory work.

Ultimately, the goal of this dissertation is to trace the agency of and interactions between platform users and platforms themselves. YouTube, Facebook, and Wikipedia—the platforms analyzed in the empirical chapters—can, I contend, be regarded as platforms

of memory. I view platforms of memory as those social media sites that allow and are appropriated for memory work and which at the same time shape it in medium-specific ways. They are media, but also living archives and they re-present and re-construct the past from these archives. On these platforms, personal, collective, private, public, political, and cultural memories connect, converge, and collapse. This is a messy, dynamic, and unpredictable process. Yet, there is order in this mnemonic chaos: certain versions of the past become more popular and visible than others, and are then carried into the future.

Following this line of thinking, the main research aim guiding this dissertation is to theorize *how memory work is performed in the new media ecology*. Yet, in order to investigate this new media ecology and its implications for memory work, it is crucial to shed light on the issue at stake on three analytical levels: practices, technologies and cultural forms. What should be kept in mind, however, is that this is a heuristic construct. Practices, technologies, and cultural forms affect each other and concomitantly constitute memory work.

In line with this, this study addresses the following sub-questions: On the level of practice it asks, *how are power and agency negotiated and redistributed in memory work on platforms*? This question relates to how users use and appropriate a platform for memory work. It is also geared toward answering how norms and values emerge within memory work and how communities are shaped through practice (and how communities shape practice).

On the level of technology, this study explores the following question: *how do the technological affordances, mechanics, and operational procedures of platforms enable, shape and constrain memory work on them*? This question pertains not only to how platforms structure human memory work, but also how platforms themselves engage in memory work.

The third question relates to the outcomes of these practical and technological interactions: *Why are certain versions of the past re-presented and transferred into the future on and by platforms*? By answering these questions and relating each back to the others, I aim to paint a holistic picture of the dynamic interactions between human and 'nonhuman' actors in digital memory work.

In chapters five, six and seven, I analyze memory work on and by three platforms, respectively YouTube, Facebook, and Wikipedia. In the case of YouTube, I show how certain witness videos are popularized and others are forgotten, which is mainly the consequence of curating practices and the logics of search. Indeed, the visual record of what happened in Ghouta on August 21, 2013, one of the cases researched here, is mostly comprised of material shot by witnesses, yet this material was picked up by others who framed the event in specific ways.

Most prominently, I provide insight into how witness accounts were remixed into videos that questioned whether or not a chemical weapons attack took place in the first place. Additionally, the study finds that legacy and web-native media have a powerful role in determining what is most visible in YouTube's archive: They know best how to curate their

'remixes' of witness footage and are well-embedded in the rest of the Web. What this ultimately shows is how mediated memory, in this case of the Ghouta attack re-presented in YouTube's archive, is structured by curating practices and the platform's (Google's) search logics.

The second case study analyses the Facebook page *Justice for Mike Brown* in order to rethink the role of memory work within contemporary digital activism. I show how memory work on Facebook pages can be conceptualized as a particular type of discursive practice, offering us insights into how this work bridged personal and collective action frames. This bridging occurs in four overlapping ways. First, the page allows for affective commemorative engagement that helped shape Brown's public image. Second, Brown's death is contextualized as part of systematic injustice against African-Americans. Third, the past is used to legitimize present action, wherein the present was continually connected to the past and future. And fourth, particular discursive units became recognizable symbolic markers during the protests and for future recall.

Consequently, I demonstrate how memory work, although multidirectional and in flux, is stabilized by the interactions between the page administrator, its users and Facebook's operational logic. The memory work on *Justice for Mike Brown* thus allowed protesters and activists to connect to each other *in* time, across different geographical locations, but also *through* time, connecting the present situation to previous protests and activism. At the same time, Facebook's visibility and personalization mechanisms—supported by 'likes', 'shares', and comments—are interwoven with memory work to the point that especially simple discursive units are popularized and carried into the future. We need to question to the extent to which this may ultimately lead to further polarization of an already heated debate on racism and police violence in the US.

In the third case, which focuses on Wikipedia, I critically investigate how strict adherence to community rules and hierarchies led to a specific, 'Wikipedian', reconstruction of a past event. In principle, we could argue that the platform's politics of openness allow everyone to add perspectives and information on what happened during an event, in the case of this research the flight MH17. However, through in-depth analysis I paint a more complex picture and show how authoritative editors high up in Wikipedia's hierarchical ladder legitimize their editing interventions and use technologies to restrict others from editing. This results in wikis on important historical events being mostly written by a handful of authoritative editors. These editors favor media sources that reflect Western perspectives. Ultimately, this exemplifies what I have theorized as the *limits* of an 'open' past.

This conclusion also applies to the other case studies: when people engage in memory work on platforms, hierarchies will emerge and the authority that comes with these will help shape what and whose versions of the past come to dominate the present and which ones are transferred into the future. However, here we need to be cautious. My research details the differences between platforms and we need to keep in mind that one platform is not the other. Each invites different practices and each helps produce specific cultural

forms. Vice versa, these practices, cultural forms, and communities shape the platforms themselves. Without user input, they would not exist or be able to operate. In this dissertation, I theorized how memory work is done today and give insight into the role played by platforms in what and how societies remember and how the present is carried into the future.

Nederlandse samenvatting

Dit proefschrift ontwikkelt en verkent het begrip *digitaal herinneringswerk*. Herinneringswerk is zo oud als de mensheid en verscheidene technologieën en technieken maken reeds deel uit van dit fenomeen, van grottekeningen en rituelen tot het schrift en televisie. Herinneringswerk kan persoonlijke vormen aannemen zoals het schrijven van een dagboek of collectief zijn zoals nationale herdenkingsdagen. Het omvat de overlevering en reconstructie van kennis en ervaringen van verleden naar het heden en de toekomst. Dit uit zich in specifieke gebruiken, technologieën en culturele vormen, en meestal voor specifieke doelen. Dit maakt herinneringswerk intrinsiek politiek. Het is een constante machtsstrijd wie of wat bepaalde versies van het verleden naar de toekomst draagt.

Dit is de reden waarom die proefschrift beargumenteert dat verschillende sociale actoren het verleden constant reconstrueren met hun eigen doelen en agenda's. Vandaag de dag spelen sociale media platformen een groeiende rol in dit proces. Deze platformen beïnvloeden herinneringswerk - net als de media technologieën voor hen - op eigen wijze. Het primaire doel van dit proefschrift is om te traceren hoe oude en nieuwe sociale actoren deze platformen gebruiken voor herinneringswerk en, tegelijkertijd, hoe platformen dit gebruik mogelijk maken, vormen en beperken.

Eén manier om herinneringswerk in het digitale tijdperk opnieuw te conceptualiseren is om over "connectieve herinnering" in een "nieuwe media-ecologie" te spreken. Hoskins (2011), bijvoorbeeld, gebruikt de laatste term om onze huidige sociaal-technische en communicatieve omgeving aan te duiden. Aan de basis van herinneringswerk in een voorafgaande tijd van massacommunicatie stond een lineair traject van massacommunicatie, waarin een machtig medium een boodschap verstuurt, die arriveert bij een heterogene groep ontvangers.

Zelfs al is deze opvatting discutabel (is er ooit zoiets geweest als een passieve groep ontvangers?), dan complementeert een huidige, actievere media-ecologie dit bestaande media landschap. Deze nieuwe media-ecologie wordt gekarakteriseerd door *bottom-up* media-inhoud, gemaakt door gebruikers van sociale media, naast de producties van professionele media producenten. Individuen die constant met elkaar in verbinding staan en mobiele media gebruiken bewonen deze transnationale ecologie. In deze ecologie worden gebruikers constant geconfronteerd met een stroom *updates* van over de hele wereld en van verschillende mensen, waar ze ook zijn. Daarnaast kunnen gebruikers ook hun eigen media-inhoud genereren, waar ze ook zijn.

Bovengenoemde elementen zijn de redenen waarom onderzoekers vandaag de dag herinneringswerk conceptualiseren als minder institutioneel en meer *bottom-up*. Onderzoekers theoretiseren herinneringswerk als zijnde vloeibaar, diffuus, makkelijk veranderbaar en toegankelijker (Hoskins, 2008, p. 41). Volgens deze opvatting zou iedereen zijn of haar versies van het verleden kunnen maken en verspreiden. Dit zou uiteindelijk leiden tot meerstemmigheid en zichtbaarheid van alternatieve opvattingen en ervaringen. Dit

proefschrift, echter, tracht deze licht utopische zienswijze te nuanceren door de nieuwe machtsdynamiek in digitaal herinneringswerk te onderzoeken.

Dit proefschrift traceert de machtsverhoudingen en interacties tussen platformgebruikers en platformen zelf. YouTube, Facebook en Wikipedia – de platformen die dit proefschrift analyseert – kunnen, beargumenteer ik, gezien worden als herinneringsplatformen (*platforms of memory*). Ik zie herinneringsplatformen als dié sociale media die herinneringswerk uitnodigen en/of hiervoor worden gebruikt. Tegelijkertijd vormen platformen zélf herinneringswerk. Platformen zijn media maar ook 'levende archieven' die constant veranderen en ze representeren en reconstrueren het verleden uit dit archief. Persoonlijke, collectieve, privé, publieke, politieke en culturele herinneringen conflicteren of smelten samen op deze platformen. Dit is een onordelijk, dynamisch en onvoorspelbaar proces. Desalniettemin, er is orde in deze mnemonische chaos: bepaalde versies van het verleden zijn populairder en zichtbaarder dan andere.

De hoofdvraag van dit proefschrift vloeit voort uit deze manier van denken: hoe voeren verschillende sociale en technologische actoren samen herinneringswerk uit in de nieuwe media-ecologie en welke (veranderende) machtsstructuren liggen hieraan ten grondslag? Echter, voordat ik deze vraag kan beantwoorden is het belangrijk om dit probleem te benaderen vanuit drie analytische niveaus: gebruiken, technologieën en culturele vormen. Wat in het achterhoofd gehouden dient te worden is dat deze constructie heuristisch is. Gebruiken, technologieën en culturele vormen beïnvloeden elkaar en vormen samen herinneringswerk.

Daarom onderzoekt dit proefschrift een aantal deelvragen. Op het niveau van gebruiken onderzoek ik hoe de macht is verdeeld in herinneringswerk op platformen. Deze vraag heeft betrekking op de vraag hoe gebruikers een platform omvormen tot een *herinnerings*-platform. Ook is dit deel van het onderzoek gericht op het beantwoorden van de vraag hoe normen en waarden opkomen in herinneringswerk en hoe groepen worden gevormd door gebruiken (en hoe groepen gebruiken vormen).

Op het niveau van technologie vraagt deze studie: hoe sturen en beïnvloeden de technologische processen van platformen herinneringswerk? Deze vraag relateert niet alleen aan de vraag hoe platformen menselijk herinneringswerk structuren, maar ook hoe platformen *zelf* participeren in herinneringswerk.

De derde deelvraag is gericht op de uitkomsten van het samenspel tussen menselijk en technologisch handelen. Waarom worden specifieke versies van het verleden gerepresenteerd in het heden en getransporteerd naar de toekomst op en door platformen? Door deze vragen te beantwoorden en de uitkomsten aan elkaar te toetsen beoogt dit proefschrift een holistisch beeld te schetsen van de dynamische interacties tussen menselijke en niet-menselijke actoren in digitaal herinneringswerk.

In hoofdstukken vijf, zes en zeven analyseer ik herinneringswerk op en door drie platformen, respectievelijk YouTube, Facebook en Wikipedia. In het geval van YouTube, laat ik zien hoe bepaalde video's van getuigen (*witness videos*) populair worden en andere vergeten.

Dit is voornamelijk het resultaat van de wijze waarop video's zijn gearchiveerd, beschreven en gelabeld en de logica van zoekmachines. De case studie richt zich op het visuele archief van een chemische wapenaanval op de wijk Ghouta in Damascus, Syrië.

Wat het onderzoek laat zien is dat hoewel het meeste materiaal is gemaakt door getuigen, anderen hiermee aan de haal gaan en de gebeurtenis anders inkaderen. De belangrijkste bevinding is dat gebruikers video's van getuigen hergebruiken in video's die zich afvragen of er in de eerste plaats een chemische wapenaanval heeft plaatsgevonden. Daarnaast laat de studie zien dat traditionele media en web media een machtige rol hebben in de zichtbaarheid van bepaald materiaal op YouTube. Zij weten het best hoe ze hun *remixes* van origineel materiaal moeten cureren zodat ze bovenin de zoekresultaten verschijnen. Wat de case studie uiteindelijk laat zien is dat de gemedieerde herinnering van de aanval op Ghouta gestructureerd wordt door cureer-gebruiken en de zoeklogica van YouTube (Google).

De tweede case studie is een analyse van de Facebook-pagina *Justice for Mike Brown*. In dit hoofdstuk belicht ik de rol van herinneringswerk in hedendaags digitaal activisme. Dit hoofdstuk theoretiseert herinneringswerk op Facebook-pagina's als een discursieve praktijk, die persoonlijke en collectieve actie-raamwerken (action frames) overbrugt. Deze overbrugging vindt plaats op vier, overlappende niveaus. Ten eerste nodigt de pagina uit tot affectieve herinnering die het publieke beeld van Brown vormt. Ten tweede contextualiseren paginagebruikers de dood van Brown als zijnde deel van de systematische onrechtvaardigheid ten aanzien van Afrikaans-Amerikanen. Ten derde gebruiken zij het verleden om actie in het heden te legitimeren en verbinden zij het heden constant met het verleden en toekomst. Ten vierde werden zekere discursieve eenheden herkenbare symbolen tijdens de protesten en de toekomst.

Een belangrijk resultaat uit deze studie is dat, alhoewel herinneringswerk multidirectioneel is en in constante beweging, het ook stabiliseert door de interacties tussen de beheerder van de pagina, haar gebruikers en Facebooks operationele technologie. Het herinneringswerk op *Justice for Mike Brown* nodigt daarom activisten en protesteerders uit om zich met elkaar te verbinden in de tijd, op verschillend locaties, maar ook door de tijd, door het heden met het verleden te verbinden. Tegelijkertijd zorgt Facebooks zichtbaarheids- en personaliseringstechnologie ervoor dat bepaalde, en vooral simpele, discursieve eenheden populair worden. We moeten ons daarom afvragen in hoeverre dit leidt tot verdere polarisering van een al zeer hoog opgevoerd debat over rassenongelijkheid en politiegeweld in de VS.

De derde case studie richt zich op Wikipedia. Ik analyseer hierin hoe strikte navolging van gemeenschapsregels en hiërarchieën leidt tot een specifieke, 'Wikipediaanse' reconstructie van een gebeurtenis uit het verleden. In principe kan men beargumenteren dat Wikipedia's ideologie van openheid iedereen toelaat tot het verstrekken van informatie en perspectieven, in het geval van dit onderzoek de wiki over vlucht MH17. Echter, door de discussies achter de schermen van Wikipedia te analyseren, concludeer ik dat vooral redacteuren die

hoog op de ladder staan anderen er van weerhouden de wiki te veranderen, mede door gebruik van technologieën. Uiteindelijk leidt dit ertoe dat slechts een handjevol redacteuren belangrijke historische gebeurtenissen beschrijven. Deze redacteuren bevoorrechten met name Westerse media en bronnen. Uiteindelijk laat deze case studie de beperkingen van een 'open' verleden zien.

Deze laatste conclusie is ook toepasbaar op de andere case studies. Wanneer mensen deelnemen aan herinneringswerk op platformen zullen er hiërarchieën ontstaan. De hieruit ontstane autoriteit zal mede bepalen welke versies van het verleden het heden domineren en welke zullen verschijnen in de toekomst. Echter, we moeten hier voorzichtig zijn: het onderzoek in dit proefschrift laat de verschillen tussen platformen zien, iets wat we ons moeten blijven herinneren. Elk platform genereert verschillende gebruiken en gemeenschappen, en produceert verschillende culturele vormen. Omgekeerd vormen de platformen deze gebruiken, culturele vormen en gemeenschappen. Zonder input van gebruikers kunnen zij niet functioneren.

In dit proefschrift heb ik getracht te laten zien hoe herinneringswerk vandaag de dag tot stand komt en hoe platformen deel uitmaken van wat en hoe samenlevingen herinneren en hoe het verleden en heden in de toekomst terecht komen.

Curriculum Vitae

Pieter Hendrik (Rik) Smit (5 November 1986) received a BA and MA in American Studies and an MA in Radio and TV Journalism from the University of Groningen (RuG). Next to his PhD research, he has been teaching in the BA Media Studies, the minor Media Journalistic Culture, and the MA Journalism at the RuG. He has published in *New Media & Society*, *Journal for Media History* (TMG), and *The Networked Self* (forthcoming). Since November 2017, he is an Assistant Professor at the department of Media and Journalism Studies at the RuG. His research mainly focuses on social media and memory studies.