# THE FUTURE OF THE PAST

A CASE STUDY ON THE REPRESENTATION OF THE HOLOCAUST ON WIKIPEDIA
2002-2014

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**Master Thesis Global History and International Relations**
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# The future of the past

*A case study on the representation of the Holocaust on Wikipedia*

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1. Wikipedia-logo_inverse.png (2007)

   of the Wikipedia user *Nohat* (concept by Wikipedian *Paulussmagnus*).

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2. Holocaust-Victim.jpg (2013)

   Photographer unknown.

   Digital image.

   Retrieved from: http://www.myinterestingfacts.com/ (2-12-2013).

This thesis is dedicated to the loving memory of my grandmother, Maagje den Hartogh-Bos, who sadly passed away before she was able to see this thesis completed.

# Abstract

Since its creation in 2001, Wikipedia, 'the online free encyclopedia that anyone can edit', has increasingly become a subject of debate among historians due to its radical departure from traditional history scholarship. The medium democratized the field of knowledge production to an extent that has not been experienced before and it was the incredible popularity of the medium that triggered historians to raise questions about the quality of the online reference work and implications for the historian's craft. However, despite a vast body of research devoted to the digital encyclopedia, no consensus has yet been reached in these debates due to a general lack of empirical research.

This study therefore begins to fill this academic research on history as an 'open source' discipline by conducting a case study on the (re)presentation of the *Holocaust* in Wikipedia. More specifically, a combination of quantitative and qualitative content analysis has been conducted to examine and compare the main entry of the Holocaust on the English, German, and Dutch language version of Wikipedia, with particular attention to (a) how the Holocaust is (re)presented and being shaped on Wikipedia (b) who is involved in the information production of this modern historical episode and (c) to what extent national influences are apparent in the representation of the Holocaust on Wikipedia. In addition, the implications of the findings for Western historiography have received considerable attention in this study.

One of the most significant findings of this research is that the Holocaust entries under study revealed that there does not exist *one* representation of the Holocaust, but each language version has its own unique account of events and phenomena included in the representation of the Holocaust. In fact, significant differences exist between the Holocaust entries under study, as, for example, the English-language has been found to be the most elaborate in absolute quantity, succeeded by the German-language, and followed with considerable distance by the Dutch-language. These quantitative differences have accordingly be found to further resonate in the qualitative depth of the articles, such as the level of detail and thoroughness of the description of events and phenomena. This is been reflected in the fact that the Dutch-language representation of the Holocaust is incomplete (the liberation of the camps is ignored) and is lacking further detail, while its English- and German-language counterparts are considerably 'better' in this respect.

Another important finding is that it has been found that none of the Holocaust entries under study is rated 'good quality', which indicates that the pages are in considerable need of improvement according to Wikimedia standards. At this point, this study envisages a role for professional historians, who are overtly encouraged in this study to contribute to Wikipedia and improve historiography in this respect. Wikipedia simply needs the contributions of expert historians. Further

implications of the findings of this study are positioned in larger themes of *digital storytelling, public history,* and *commemoration*.

**Key words**

Wikipedia, the Holocaust, representation, digital storytelling, public history, commemoration

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# Preface

When I first told my girlfriend my Master's thesis would be about the representation of the Holocaust on Wikipedia, I had a hard time explaining why it is important and relevant to study such a subject. She believed it was an interesting topic to read about, but would be not much more than that. Quite similar responses followed from other people in my surroundings, all driven by the question what could possibly be the social relevance of my research. As a result, I have noticed that it is sometimes hard for people to understand why Wikipedia is an important medium to analyze and why someone would spent several months of his life researching it.

This set me thinking and ultimately led to the conclusion that all of these people had one thing in common: they underestimated the power of stories in society. Over and over again, I had to explain that all throughout our lives stories have, for a large part, determined who we are, as they shape our perceptions of the world and our own position in it. However, as soon as the power of stories was properly understood, it was no longer hard to see the relevance of researching the world's number one *digital storyteller*: Wikipedia.

In retrospect, I can say that it was my fascination for stories that has been the personal drive behind this thesis, which kept me motivated during the six-month writing process. However, had it not been for specific people to enlighten the burden in weary times, and support me through ups and downs, the writing process of this thesis would not have been as fruitful as I consider it to be now. Therefore, I would like to thank everyone who helped me through the research and writing process.
First and foremost, I would like to thank my thesis supervisor prof. dr. Kees Ribbens for his support and enthusiasm for my research. Not only am I grateful for him being my thesis supervisor, but also for arranging and supervising my internship at the *NIOD Institute for War, Holocaust and Genocide Studies*. It was his enduring enthusiasm and expertise that guided me through the predominantly individualistic (and lonely) road of writing a Master's thesis and encouraged me to look beyond my own conceptual boundaries.

In addition, I would like to express my gratitude to my second reader, dr. Robbert-Jan Adriaansen, who also played a significant role in the development of the thesis. All throughout the writing process, he provided invaluable insights and advice that contributed to the overall improvement of this thesis in important ways. Both inside and outside courses, his experience and feedback proved very valuable for taking hurdles encountered. Also on a personal level, I want to thank both Kees Ribbens and Robbert-Jan Adriaansen for their commitment and enjoyable conversations.

Furthermore, my thanks go out to the *NIOD Institute for War, Holocaust and Genocide Studies* with a special mention of Wikipedian-in-Residence Arie Sonneveld who was willing to share his incredible expertise with me in a three-hour (!) interview. Likewise, I would like to thank all the professors of the Master Program *History of society* at the *Erasmus University Rotterdam* and in particular dr. Marijke Huisman, whose literature suggestions, critical comments, and devotion to detail have helped me tremendously in setting up this research.

The last words of this note are for my family and friends who supported and encouraged me all along the way. I owe my parents my deepest gratitude for encouraging me to get the best out of myself, for shaping the conditions I needed to get this far, as well as for their enduring support when things did not worked out as planned. However, above all, I would like to thank Anine, who endured stress and excitement, sorrows and joys, who kept believing in me and shared her unconditional love and attention when I needed it the most.

Readers of this thesis, I also thank you for holding this thesis in your hands now and I hope you will enjoy reading it.

Rudolf den Hartogh

Krimpen aan den IJssel, July 2014.

# 1. INTRODUCTION

'Who controls the past controls the future. Who controls the present controls the past.'

- George Orwell[1]

Dying at an 'alarmingly fast rate' (nearly one per hour in Israel), 'Holocaust survivors, some of the last first-hand witnesses to the atrocities committed in the twenty-first century, will soon become just another memory.[2] Fewer and fewer survivors of the Holocaust are alive to tell their stories in 2014, which is one of the reasons why more and more people turn to the internet to find information about the historical massacre[3]. Thereby, the internet has become an increasingly important source of information in this respect and some scholars have even argued that it has replaced human agency and has become *the* most 'powerful teaching and learning tool' of today[4].

The statistics seem to support this statement, as more than 60% of the public in the West utilizes the internet today[5]. In fact, nine in ten internet users turn to search engines to find information about specific (scientific) issues[6], and Wikipedia's entries (also referred to as articles) are the first- or second-ranked results for most internet searches[7]. This suggests that, from all the websites on the internet people can consult for information, Wikipedia, a free online encyclopedia that anyone can edit, is the most commonly used source for general reference[8]. For example, when 'Holocaust' is typed into Google, Wikipedia's entry on the subject is the top-ranked result[9]; likewise, its entry on Holocaust denial is first when the search words are 'Holocaust denial'[10]. As Simon Garfinkel fairly explains: 'Google's search algorithms rank a story in part by how many times it has been visited, and people are visiting Wikipedia pages a lot.'[11]

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[1] Orwell, George. *Nineteen Eighty-Four*. (New York 1977) 191.

[2] Debbie Callahan, 'Eight things Holocaust survivors need to know', *Jewish Press*, 6 December 2013. Retrieved from http://www.jewishpress.com/indepth/opinions/eight-things-holocaust-survivors-need-you-to-know/2013/12/06/ (23-05-2014).

[3] J. Shiverly and P. Vanfossen, 'Critical thinking and the internet: opportunities for the social studies classroom', *The Social Studies* 90/1 (1999) 42.

[4] B.R. Robin, 'Digital storytelling: A powerful technology tool for the 21st century classroom', *Theory into practice* 47/3 (2008) 222.

[5] Carolyn L. Funk, 'Science and technology: Public attitudes and understanding', in *Science and Engeneering Indicators 2012* (2012). Retrieved from http://www.nsf.gov/statistics/seind12/pdf/c07.pdf (12-05-2014).

[6] Kirsten Purcell, Joanna Brenner and Lee Rainie, 'Search Engine Use 2012', in *Pew Internet & American Life Project* (2013). Retrieved from http://www.pewinternet.org/files/old-media/Files/Reports/2012/PIP_Search_Engine_Use_2012.pdf (23-05-2014).

[7] S. Garfinkel, 'Wikipedia and the Meaning of Truth', *Technology Review* 111/6 (2008) 84.

[8] M. Banaji, 'Wikipedia is the encyclopedia that anybody can edit. But have you?', *APS Observer* 23/10 (2010). Retrieved from http://www.psychologicalscience.org/index.php/publications/observer/2010/december-10/wikipedia-is-the-encyclopedia-that-anybody-can-edit-but-have-you.html (23-05-2014).

[9] See: https://www.google.com/?gfe_rd=cr&ei=P-BsU77WMseUOq78gNAK#q=holocaust (09-05-2014).

[10] See: https://www.google.com/?gfe_rd=cr&ei=P-BsU77WMseUOq78gNAK#q=holocaust+denial (09-05-2014).

[11] Garfinkel, 'Wikipedia and the meaning of truth', 84.

The significance of Wikipedia as reference work can be further understood when considering that more than 532 million people visited Wikipedia in January 2014[12], and the online encyclopedia is ranked as the sixth most visited website of today.[13] At the moment of writing, there are over 30 million entries available on 287[14] different language versions of Wikipedia[15] and the English language version of the Holocaust entry alone is visited by more than 300,000 different people per month[16]. For this reason, the significance of the medium in today's information society cannot, and should not, be underestimated.

In the context of this research, the popularity of Wikipedia suggests that the medium increasingly tells the story of the Holocaust, which is why scholars have often referred to the online encyclopedia as a *digital storyteller*. It are the stories, or content, of the online encyclopedia that affects a wide variety of people, whose research on many topics starts – and often ends – with Wikipedia.[17] Even people who are considered 'professionals', such as journalists and scientists, often start their research routinely with Wikipedia and then repeat the information as 'background' without bothering to cite it.[18] As the late Roy Rosenzweig argues: 'In a few short years, it [Wikipedia] has become perhaps the largest work of online historical writing, the most widely read work of digital history, and the most important free historical resource on the World Wide Web. (…) It is surely a phenomenon to which professional historians should attend.'[19]

The reason why *historians* are particularly urged to pay attention to Wikipedia, is because most of the entries on the online encyclopedia are related to history.[20] As more and more people get their historical knowledge from Wikipedia, historians are inevitably involved in the academic debates on the online medium – even if they do not want to. For this reason, many historians has entered the

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[12] This number of unique visitors as of January 2014. See: The Wikimedia foundation, 'Wikimedia Report Card – January 2014': http://reportcard.wmflabs.org/ (20-01-2014).

[13] Y.M. Li, L.F. Lin, and Y.H. Lin, 'A recommender mechanism for social knowledge navigation in an online encyclopedia.' *Information Processing & Management* 50 (2014) 635.

[14] From the 287 language versions of Wikipedia, nearly half (125 of total (44%)) may be considered as significant Wikipedias, as they contain over 10,000 entries. However, another 36% of the language versions is just above 1,000 entries and there is even a substantial amount of languages (16%) that only contains between 100 and 1,000 entries. Accordingly, there is even a minority (3.5%) of language versions of Wikipedia that has no more than 100 entries in total.
In addition, it is important to understand that more than half of all entries on Wikipedia (16,8 million) can be found on the ten most comprehensive language versions of Wikipedia, including -in hierarchical order- the English, Dutch, German, Swedish, French, Italian, Russian, Spanish, Vietnamese and Waray-Waray languages.

[15] Wikimedia, 'In a nutshell, what is Wikipedia? And what is the Wikimedia Foundation?': http://wikimediafoundation.org/wiki/FAQ/en (14-12-2013).

[16] The English Holocaust entry on Wikipedia was visited by 242,600 people in January 2014, compared to 59,758 visitors on the German Wikipedia and 11,875 visitors on the Dutch Holocaust entry on Wikipedia in January 2014. Statistics retrieved from: http://stats.grok.se/en/201401/the%20holocaust (English), http://stats.grok.se/de/201401/holocaust (German), and http://stats.grok.se/nl/201401/holocaust (Dutch) (14-02-2014).

[17] Garfinkel, 'Wikipedia and the meaning of truth', 84.

[18] *Ibidem*.

[19] R. Rosenzweig, 'Can history be open source? Wikipedia and the future of the past', *The Journal of American History* 93/1 (2006) 119.

[20] *Ibidem,* 117.

academic debate in which particular attention is devoted to the transition from historical knowledge production by professionals to historical knowledge production by non-professionals.

As a result, there are numerous historians who devote considerable attention to the online encyclopedia in their research, but there is one major problem: there is a general dearth of empirical research on Wikipedia. This means that many questions continue to exist on readability, reliability and authorship regarding Wikipedia as an encyclopedia, without consensus being reached in this respect. Therefore, research is needed to (a) put the subject on the research agenda, and (b) to bring more fact-based consensus in the academic field about what Wikipedia is and what this means for the future of information retrieval.

Therefore, the purpose of this thesis is to contribute to the academic debate by presenting a thorough qualitative content analysis of the *Holocaust* entries on Wikipedia. This analysis, as well as the entire subject of this thesis, has in large part been established and conducted during a 10-week internship at the *NIOD Institute for War, Holocaust and Genocide Studies* in which the main entry of the Holocaust on the English, German, and Dutch language version of Wikipedia were analysed.[21] Here, the data collected during this internship is further examined and discussed, with particular attention to (a) what is written about the Holocaust on Wikipedia (b) who is involved in the information production of this modern historical episode and (c) to what extent the representation of the Holocaust is 'internationalized'.

To that end, this thesis seeks to answer some rudimentary questions about Wikipedia in the context of the Holocaust. What is Wikipedia? How does it work? How is the story (narrative) of the Holocaust told? Are there differences in representation between languages on Wikipedia? Who writes the entries? Does Wikipedia serve its function as encyclopedia? What are the implications for professional historians, and how should they approach and respond to the online encyclopedia?

Implications of the findings are positioned in larger frameworks of *digital storytelling, public history,* and *commemoration.* Although the findings only refer to a specific and therefore limited historical event - the Holocaust -, the scientific importance can be found in the fact that this study starts to fill the gap in the academic field by providing a thorough overview of Wikipedia's representation of one of the most significant transnational historical events of the twentieth century. The empirical findings

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[21] More specifically, the subject of this thesis was first formulated by prof. dr. Kees Ribbens, who is endowed professor of Popular historical culture and War at Erasmus University Rotterdam and a Senior Researcher at the *NIOD Institute for War, Holocaust and Genocide Studies*. During my ten-week internship, I had the honour of working together with prof. dr. Kees Ribbens on this research project, and it is important to note he played a pivotal role in much of the theoretical choices made throughout this thesis.

presented in this thesis may provide a solid ground for future research and debates on Wikipedia and historiography.

Accordingly, the social relevance of this study can be found in the alleged contribution to societal debates on the future of historiography in the *electronic age[22]* and the accuracy of Wikipedia as a reference work in general. Furthermore, this study helps determining the value of the Holocaust entries on Wikipedia for educational purposes, as well as providing practical guidance for a wide variety of potential contributors of Wikipedia.

## 1.1 Theoretical framework

**Wikipedia, academics and digital storytelling**

Over the past decade, the popularity of Wikipedia has increasingly attracted the interest of scholars[23], resulting in a total of 603 peer-reviewed journal articles, 29 doctoral theses, and 50 conference articles devoted to the online encyclopedia (on December 12, 2010)[24]. These studies have been conducted by a wide variety of scholars, ranging from medical practitioners to social scientists – indicating the wide-ranging interest in the online medium. This level of interest, however, is extraordinary given that Wikipedia is, above all, an encyclopedia; a genre seldom used and little valued in academia[25].

According to Mesgari, Okoli, Mehdi, Nielsen and Lanamäki (2014), the explanation for the high level of academic interest can be found in the simple fact that Wikipedia has become an important part of the public's access to information.[26] Medical practitioners are increasingly confronted with patients who turn to Wikipedia for health information[27], while teachers (e.g. professors) are experiencing the consequences of Wikipedia being one of the mostly used resources

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[22] The twenty-first century is often referred to as the *electronic age,* because electronic devices such as computers, smartphones and other digital devices play an increasingly important role in current societies.

[23] M. Mesgari, C. Okoli, M. Mehdi, F.Å. Nielsen, and A. Lanamäki, '"The sum of all human knowledge": A systematic review of scholarly research on the content of Wikipedia', *Journal of the American Society for Information Science and Technology* (2014). Retrieved from http://spectrum.library.concordia.ca/978618/1/WikiLit_Content_-_open_access_version.pdf (12-04-2014).

[24] The ScienceDirect database indicates that the number of academic publications regarding Wikipedia is much higher, as it presents 14,311 results when searching on the term 'Wikipedia.' However, it is likely that this number is considerably lower in reality, as duplications may exist, as well as invalid (conference) articles. Therefore, this number may solely be used as indication of the total number of publications on the subject. See: ScienceDirect, 'ScienceDirect (search: Wikipedia)': http://www.sciencedirect.com/science?_ob=ArticleListURL&_method=list&_ArticleListID=-609417820&_sort=r&_st=13&view=c&md5=277815232f93a0c7c1a9a42c76ad263e&searchtype=a (11-07-2014).

[25] H. Eijkman, 'Academics and Wikipedia: Reframing Web 2.0+ as a disruptor of traditional academic power-knowledge arrangements', *Campus-Wide Information Systems* 27/3 (2010) 182.

[26] Mesgari et al., 'Sum of all human knowledge', 20.

[27] See, for example, D. Fallis and M. Frické, 'Indicators of accuracy of consumer health information on the internet: A study of indicators relating to information for managing fever in children in the home', *Journal of the American medical informatics association* 9/1 (2002) 73-79.

by students[28]. So, in terms of impact, Wikipedia has moved way beyond the boundaries of traditional encyclopedia[29] and has become a reality scholars simply cannot ignore.

Therefore, the question is justified: 'what is Wikipedia?' The answer is quite short: at its core, Wikipedia mainly serves the function of digital storytelling, which is, 'portraying real or fictitious events in words, images, and sounds', and just like any other storyteller, Wikipedia holds a collection of stories to inform, entertain and educate[30]. Thereby, Wikipedia has become a key player in the practice of digital storytelling, which is winning ground at the expense of traditional storytelling[31]. Ask just about any young person about the reference works that they regularly use and you will find that they do not visit university libraries to find information, but more often turn to widely publicized sites such as Wikipedia, YouTube and Google Books. In addition, the list even includes blogs, podcasts, and social bookmarking tools.[32]

Due to the incredible popularity of Wikipedia, it can be stated that the online encyclopedia has become one of the most important storytellers of today. In fact, Wikipedia now is a primary source of information for many of today's youth. Since stories are fundamental to the way we learn and to the way we communicate, Wikipedia, as a powerful teaching and learning tool, has thereby moved way beyond the traditional role of encyclopedia. For this reason, it is quite understandable that much research has been conducted on the subject and has resulted in a wide body of academic literature, which can be classified in six different categories.[33]


The first category is called 'Readership' [studies], which is an umbrella term for research that is mainly concerned with 'reaching readers around the world with Wikimedia content'. Studies that fall under this category primarily address the visitors of Wikipedia and the *reach* of the medium. The second category is 'Content' [studies], referring to studies concerned with the actual content of encyclopedic entries and mainly focus on the quality of entries but, also on issues such as the overall size of Wikipedia. The third category is named 'Participation', concerning the 'Wikipedians' (editors of Wikipedia) as community members, their contribution to entries and other kinds of collaboration. A fourth category is called 'Infrastructure', referring to studies about the 'organizational, legal, and technological infrastructure underlying Wikipedia'.[34]

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[28] See, for example, N. Waters, 'Why you can't cite Wikipedia in my class', *Communications of the ACM* 50/9 (2007) 15-17.
[29] Eijkman, 'Academics and Wikipedia, 182.
[30] J.B. Williams, K. Bedi, and M. Goldberg, 'The impact of Digital Storytelling on social agency: Early experience at an online university', *U21Global Working Papers Series* 3 (2006). Retrieved from
http://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID1606104_code1467685.pdf?abstractid=1606104&mirid=1 (13-05-2014).
[31] Robin, 'Digital storytelling', 221.
[32] *Ibidem.*
[33] Mesgari et al., 'Sum of all human knowledge', 20.
[34] *Ibidem*.

In addition to these four categories, Mesgari et al. have added a so-called 'Corpus' category, referring to studies concerning the use of Wikipedia as 'textual corpus' for scholarly research. Studies falling under this category primarily address how to extract data from Wikipedia (e.g. editing statistics, visitor count, etc.) and analyze it accordingly. This category of studies is primarily interesting for Wikipedia researchers who intend to analyze Wikipedia. Finally, the sixth category is called 'General' and refers to literature that discusses Wikipedia as a whole in a way that is not effectively captured by one of the other categories.[35]

Perhaps the most researched question in all six categories of the literature on Wikipedia is 'how good is it?' Or, in other words: is this encyclopedia, written mostly by anonymous non-expert contributors, a 'high-quality product?'[36] However, much controversy seems to exist among scholars in this respect, as two kinds of excess can be identified in the academic field.

To illustrate, on one hand, there are scholars who strongly oppose *Wikipedia*, such as Neil Waters (2007), who wrote a controversial article titled: 'Why you can't cite Wikipedia in my class'[37], while on the other hand, there are researchers who deliberately embrace the online medium, such as Jim Giles (2005)[38], who has argued that Wikipedia is a 'good' encyclopedia that can even rival with 'standard' encyclopedia such as Encyclopedia Britannica when it comes to encyclopedic 'accuracy' and 'reliability'[39]. In addition, there are also scholars who do not necessarily reject or embrace Wikipedia, but want to approach the medium from a different angle. For example, some people move beyond the idea of Wikipedia as an encyclopedia and suggest that it would be more appropriate to perceive and treat the online medium as something else. For example, some have argued that it would be more appropriate to perceive Wikipedia as a social network[40], a 'global memory place'[41], a translation resource[42], or even as participatory journalism instead of an encyclopedia[43].

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[35] *Ibidem.*
[36] *Ibidem,* 2.
[37] Waters, 'Why you can't cite Wikipedia', 15-17.
[38] J. Giles, 'Internet encyclopedias go head to head', *Nature* 438 (2005) 900-901.
[39] Reliability can be understood as: 'the degree to which the contents of a Wikipedia entry corresponds to the true state of accepted knowledge.' Mesgari et al., 'Sum of all human knowledge', 11.
[40] See, for example: N. Korfiatis, M. Poulos and G. Bokos, 'Evaluating authoritative sources using social networks: an insight from Wikipedia', *Online Information Review* 30 (2006) 252-262.
[41] See, for example: C. Pentzold, 'Fixing the floating gap: The online encyclopedia Wikipedia as a global memory place', *Memory Studies* 2/2 (2009) 255-272.
[42] See, for example: D. Nguyen, A. Overwijk, C. Hauff, D. Trieschnigg, D. Hiemstra and F. de Jong, 'WikiTranslate: query translation for cross-lingual information retrieval using only Wikipedia', in C. Peters, T. Deselaers, N. Ferro, J. Gonzalo, G.J.F. Jones, M. Kurimo, T. Mandl, A. Peñas and V. Petras (eds.), *Evaluating Systems for Multilingual and Multimodal Information Access: 9th Workshop of the Cross-Language Evaluation Forum, CLEF 2008, Aarhus, Denmark, September 17-19, 2008, Revised Selected Papers* (New York 2009) 58-65.
[43] A. Lih, 'Wikipedia as participatory journalism: Reliable sources? Metrics for evaluating collaborative media as a news resource', in *Proceedings of the 5th International Symposium on Online Journalism* (Austin 2004).

Nevertheless, it is important to understand that the majority of today's researchers balance their conclusions between strengths and weaknesses of Wikipedia, providing more nuanced perspectives on the online encyclopedia.[44] For example, in the article 'Fighting bad history with good, or, why historians must get on the web now', author Marshall Poe emphasizes the opportunities of Wikipedia as a teaching tool on one hand, while expressing concerns regarding accuracy and verifiability on the other[45]. A similar conclusion can be found in the article of Crovitz and Smoot (2009), who have argued that the site has its weaknesses, but could very well be used as a tertiary source and a 'stepping stone' for deeper research; 'as Wikipedia founder Jimmy Wales has argued it should be used'[46]. According to the sociologist Henk Eijkman, the majority of scholars seems to share this stance towards the online encyclopedia.

More specifically, in his research, Eijkman states that 56 per cent ($n$ = 115) of (Australian and Canadian) academics[47] are willing to accept the use of Wikipedia as a 'research starter'[48], with a general tendency towards a blend of relatively cautious acceptance and/or gentle discouragement[49]. A sizable majority (72 per cent) of academics even indicated to be 'not at all concerned' about people using Wikipedia as a 'first port of call'[50], which is in contrast with earlier reports of popular press which suggested that academics and researchers *generally* oppose the use of Wikipedia[51]. Still, it must be noted that a significant number of scholars (28 per cent) *does* still express concerns about the use of Wikipedia – primarily regarding incorrect information, biased information, and missing information.[52]

It is mainly because of these ongoing concerns regarding Wikipedia's content that more and more scholars brought questions about quality and authority to the forefront of academic

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[44] It should be noted here that - especially in the past five years - radical opposition of Wikipedia has become a diminishing phenomenon within academia and a strong tendency exist towards more nuanced opinions regarding the medium.

[45] M. Poe, 'Fighting bad history with good, or, why historians must get on the Web now', *Historically Speaking* 10/2 (2009) 22-23.

[46] D. Crovitz and S. Smoot, 'Wikipedia: Friend, not foe' *English Journal* 98/3 (2009) 91-97.

[47] The academics included in Eijkman's study came from respectively Australia (73.8%) and Canada (26.2%). Therefore, it must be noted that the findings reported here first and foremost apply to the academics that are included in the study, but can still be used as indication for other academics. See: Eijkman, 'Academics and Wikipedia, 177.

[48] Eijkman, 'Academics and Wikipedia, 178.

[49] Examples of research with similar conclusions: V. Every and M. Young, 'The impact of a collaborative wiki assignment on teaching and learning in a teacher education program', *Society for Information Technology & Teacher Education International Conference* 2011/1 (2011) 2426-2433; E. Jennings, 'Using Wikipedia to teach information literacy', *College & Undergraduate Libraries* 15/4 (2008) 432-437.

[50] Eijkman, 'Academics and Wikipedia, 178.

[51] A.L. Bond, 'Why ornithologists should embrace and contribute to Wikipedia', *Ibis The International Journal of Avian Science* 153/3 (2011) 640.

[52] Eijkman, 'Academics and Wikipedia, 178.

discussions[53]. Also many historians, such as Roy Rosenzweig[54], showed a good deal of interest in the quality of the online encyclopedia as a historical reference work and paid particular attention to the implications for the historian's craft.[55] As a result, Wikipedia has also become a highly debated subject in the field of historiography and it is the medium's radical departure from traditional history scholarship that is driving the discussion in this respect.

**Wikipedia and history scholarship**

While the field of history used to be an arena reserved for historians[56], the rise of digital media such as Wikipedia has increasingly democratized the field, allowing every individual to use, edit and add historical information. In fact, digital media offer both professional- and amateur historians a wide variety of new ways to present historical knowledge and share it with a, potentially, immense public. Accordingly, the most significant characteristic of recent digital advances is the opportunity provided by the internet, and especially digital social networks, to *non-academics* in terms of knowledge production. Consequently, it is an uncontested fact that the rise of the digital media, and especially the internet, are changing existing perceptions on writing and consuming history.

Collaboration has become a key word in the online spaces of digital media[57], and is directly conflicting with the traditional field of history scholarship that is characterized by individualism. To illustrate, only about 6 percent of the more than 32,000 scholarly works indexed since 2000 in the bibliographic guide of the 'Journal of American History', have more than one author. This indicates that history scholarship is a field that is characterized by possessive individualism, making the rise of digital media such as Wikipedia a challenging development. As Dan Cohen observes, 'this nascent transformation in the historian's craft challenges an academic status quo that assumes scholarly success and intellectual credibility stem from a Ph.D. and published monograph'.[58]

Another noteworthy difference with 'traditional' history scholarship is the diminishing significance of national context in the writing of history. Specifically, while historiography used to be strongly influenced by restricted national frameworks, Wikipedia is, to a very large extent transboundary in nature. This means that geographical borders and national context seem of

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[53] Examples of such studies are: Giles, 'Internet encyclopedias go head to head', 900-901; Lih, 'Wikipedia as participatory journalism.'

[54] For example, in an article titled 'can history be open source?' (2006), the historian Roy Rosenzweig examines the reliability of Wikipedia as an historical source and addresses the implications for professional historians accordingly. See: Rosenzweig, 'Can history be open source?', 119.

[55] Dougherty, Jack and Kristen Nawrotzki (eds.), *Writing History in the Digital Age* (Michigan 2013) 6.

[56] Rosenzweig, 'Can history be open source?', 117.

[57] Bruns, Axel, *Blogs, Wikipedia, Second Life, and beyond: From production to produsage* (New York, 2008).

[58] Robert Wolff, 'The Historian's Craft, Popular Memory, and Wikipedia', in Jack Dougherty and Kristen Nawrotzki (eds.), *Writing History in the Digital Age* (Michigan 2013) 73.

diminishing importance in the digital writing of history on Wikipedia, while language is likely to be of increasing significance.

Nevertheless, it is important to understand that this alleged transformation in writing of history goes way beyond the rise of Wikipedia and that the online encyclopedia is not entirely unique in this respect. On the contrary, Wikipedia can be perceived as just one more historiographical development since World War II that has challenged the role and authority of professional historians.[59] Oral history, quantitative social history and public history, for example, have already challenged the centrality of the professional historian and postmodernism undermined the 'authority' of categories.[60] Accordingly, the forthcoming subsection further explores public history as historical sub-discipline that has infected humanities scholars with intellectual challenges (and status anxiety) way before Wikipedia did.

**Public history**

The understanding of the term public history is internationally somewhat diverse, but briefly put, public history can be understood as 'history by, for and/or with the public.[61] This historical sub-discipline traces its roots back to a utilitarian movement in the 1970's for historians who wanted to work outside the research institutions and use historical methods for non-academic goals in the United States.[62] In Europe, a similar movement started in the late 1960s under the name *The British History Workshop Movement*, founded by Raphael Samuel. In public workshops, Samuel promoted historiography as a collaborative undertaking, 'one in which the researcher, the archivist, the curator and the teacher, the 'do-it-yourself' enthusiast and the local historian, the family history societies and the individual archaeologist, should all be regarded as equally engaged'.[63]

The rise of public historians was later followed by an increased interest in the academic field for commemoration and other expressions of historical culture. In fact, a so-called 'memory boom' took place in history scholarship, resulting in an increased emphasis on the 'collective', 'social', and

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[59] Dougherty and Nawrotzki, *Writing History in the Digital Age,* 17.
[60] *Ibidem*, 17.
[61] F. Danniau, 'Public history in a digital context: back to the future or back to basics?', *BMGN-Low Countries Historical Review* 128/4 (2013) 119.
[62] R. Kelley, 'Public History: Its Origins, Nature, and Prospects', *The Public Historian* 1/1 (1978) 16-28.
[63] History Workshop Online, 'About us': http://www.historyworkshop.org.uk/about-us/ (23-01-2014).

'public' aspects of commemoration.[64] Pierre Nora named it 'the age of commemoration'[65], and it *was*.[66]

There was an urge of society, groups and individuals to remember and commemorate. This renewed interest was expressed in all kinds of commemorative initiatives, and fascinations with origins and heritage. Consequently, together with the introduction of oral history in the 1980s and 1990s, the immense interest in commemoration influenced the way scholars perceived their own role in the interpretative process. Instead of perceiving history as a field reserved for historians, they started to gradually acknowledge that they did not have the exclusive rights in historiography.[67] Hence, it is important to understand that the idea of history as an 'open' field, or 'open source discipline' is not induced by Wikipedia, but was already deeply embedded in the rise of public history and propagated by public historians in the past couple of decades.

Nevertheless, while public historians challenged the position of professional historians, the rise of digital media in the latter half of the 20th century introduced a challenge on a whole different scale.[68] Specifically, since the 1990s[69], online media platforms such as Facebook, Wikipedia, blogs, Twitter, and YouTube[70] opened up the market and made it possible for *every* individual to be both consumer and producer of historical knowledge[71]. In other words, these media offer both professional- and amateur historians a wide variety of ways to present historical knowledge and share it with a, potentially, immense public.

Hence, the technological developments at the end of the twentieth century introduced a fundamental paradigm shift in historiography, which resulted in a growing body of literature on digital media and their implications for academics. In this context, emerging evidence shows that more and more academics are in support of using online platforms and perceive the digital

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[64] For more information on the memory boom, see: K.L. Klein, 'On the emergence of memory in historical discourse', *Representations* 69 (2000) 127-150.

[65] Pierre Nora, 'General Introduction: Between Memory and History', in P. Nora (red.), *Realms of Memory: Rethinking the French Past*, Vol. I. (New York 1996) 20.

[66] Jansen, Harry, review of Frijhoff, Willem, *De mist van de geschiedenis. Over herinneren, vergeten en het historisch geheugen van de samenleving* (Nijmegen 2011), *BMGN-Low Countries Historical Review* 126/3 (2011) 82-84.

[67] Danniau, 'Public history in a digital context', 120-121.

[68] See, for example, Rosenstone, Robert, *Visions of the past: The challenge of film to our idea of history* (Harvard 1995); Ribbens, Kees, *Een eigentijds verleden. Alledaagse historische cultuur in Nederland 1945-2000* (Hilversum 2002).

[69] See: R.J. Deibert, 'International plug'n play? Citizen activism, the Internet, and global public policy', *International Studies Perspectives* 1/3 (2000) 255-272.

[70] G. Langlois, F. McKelvey, G. Elmer and K. Werbin, 'Mapping commercial Web 2.0 worlds: Towards a new critical ontogenesis', *Fibreculture* 14 (2009) 1-14.

[71] K. Ribbens, 'Strijdtonelen – De Tweede Wereldoorlog in de populaire historische cultuur', *Tijdschrift voor Geschiedenis* 127/1 (2014) 98.

revolution as a new wave in technology-enhanced learning, as well as in teaching.[72] However, despite the fact that many scholars take a positive stand towards digital media – such as wikis and blogs – Wikipedia remains highly debatable in the field of academics, which is often perceived as *the* public face of online participatory media and collaborative knowledge production.[73]

**A research gap**

As a result of existing controversy on Wikipedia, more and more research has been conducted to 'measure' Wikipedia's accuracy and reputation as an encyclopedia, bringing questions about quality and authority to the forefront of academic discussions[74]. Accordingly, numerous studies have attempted to determine the quality of Wikipedia by either focusing on its size[75], processes of collaboration[76], the ways in which entries are interlinked[77], how entries evolve[78], or which sources are used in Wikipedia entries[79]. However, as can be perceived, each of these studies touches upon a specific 'quality dimension' of Wikipedia – such breadth, reliability (accuracy) and authorship – but fails to combine and synthesise all of these aspects to strengthen the claims about the 'quality' of the online encyclopedia. Hence, it can be stated that current academic research on Wikipedia is characterized by a failure to synthesize different research methods and develop more thorough arguments about its quality.

However, this is not the only weakness in current academic research. Specifically, José van Dijk (2007) and Christian Penzold (2009) have argued that one of the most significant problems in current

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[72] See, for example, M. Laurent and T.J. Vickers, 'Seeking health information online: does Wikipedia matter?', *Journal of the American Medical Informatics Association* 16 (2009) 471-479; J.M. Heilman, E. Kemmann, M. Bonert, A. Chatterjee, B. Ragar, G.M. Beards, D.J. Iberri et al., 'Wikipedia: a key tool for global public health promotion', *Journal of medical Internet research* 13/1 (2011) e14; Nix, Elizabeth M., 'Wikipedia: How it works and how it can work for you', *The History Teacher* 43/2 (2010) 259-264.
[73] See, for example, Eijkman, 'Academics and Wikipedia', 174.
[74] Examples of such studies are: Giles, 'Internet encyclopedias go head to head', 900-901; Lih, 'Wikipedia as participatory journalism.'
[75] Voss examines number of articles, division of the language-specific sites, growth of the site, editing behavior of authors, sizes of articles, and other formal elements of the Wikipedia site. See: J. Voss, 'Measuring Wikipedia', in *Proceedings of 10th International Conference of the International Society for Scientometrics and Informetrics* (Stockholm 2005) 1-10.
[76] Bryant, Susan L., Andrea Forte and Amy Bruckman, 'Becoming Wikipedian: transformation of participation in a collaborative online encyclopedia', in Schmidt, Kjeld, Mark Pendergast, Mark Ackerman and Gloria Mark (eds.), *Proceedings of the International Conference on Supporting Group Work, 5-9 November 2005, Sanibel Island, Florida, USA* (Florida 2005) 11-20.
[77] Stvilia, Besiki, Michael B. Twidale, Linda C. Smith and Les Gasser, 'Information quality work organization in Wikipedia', *Journal of the American society for information science and technology* 59 (2008) 983-1001.
[78] Fernanda Viégas, Martin Wattenberg, Jesse Kriss and Frank van Ham, 'Talk before you type: Coordination in Wikipedia', in *Proceedings of the 40th Hawaii International Conference of System Sciences* 2007 (Big Island 2007) 78; Dennis Wilkinson and Bernardo A. Huberman, 'Cooperation and quality in Wikipedia', in *Proceedings of the 2007 international symposium on Wikis* (Montreal 2007) 157-164.
[79] Nielsen, Finn Ãrup, 'Scientific citations in Wikipedia', *First Monday* 12/8 (2008). Retrieved from http://arxiv.org/pdf/0705.2106v1.pdf (26-05-2014).

Wikipedia research is a lack of empirical evidence to support the claims.[80] Henk Eijkman (2010) confirms this notion by stating there has been a general failure to move beyond anecdotal examples in determining Wikipedia's strength and 'quality' as an encyclopedia[81].

It is for this reason that Jeff Loveland and Joseph Reagle note: 'characterizations of Wikipedia [in the academic field] are often exaggerated and ahistorical – a tendency that prevents us from appreciating genuine innovation and robs us of opportunities to engage with the past.'[82] Therefore, scholars stress the need for more research on Wikipedia in order to attain a better understanding of phenomenon, and, especially, to understand the many consequences and implications involved for a wide variety of academic disciplines.[83] However, due to the dynamic and rapidly changing nature of the online encyclopedia Wikipedia, it is, allegedly, impossible to fully grasp the complexity of the medium and all its content.

Nevertheless, when scholars collaboratively conduct empirical research on Wikipedia, it will gradually fill the gap in academic research. Only when empirical research is conducted, it will be possible to further determine Wikipedia's position within today's society and to assess its quality as a reference work.[84] Therefore, the purpose of this study is to contribute to the field of Wikipedia research by conducting a case study on the representation of the Holocaust on Wikipedia.

## 1.2 Research questions

In order to start filling the gap in research, four research questions are formulated. All questions are formulated to examine how history is shaped in the digital age, and more specifically how the Holocaust is shaped and (re)presented on Wikipedia. To answer these questions, the study reported here presents a qualitative content analysis in which particular attention is devoted to the question *how* the Holocaust is represented on Wikipedia, who is involved in the information production, and to what extent national influences are apparent in the entries under study. The findings can be further positioned in the debate on the position of Wikipedia in today's democratized field of knowledge production, as well as the position in historiography.

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[80] See, for example, Dijck, José van, *Mediated Memories in a Digital Age* (California 2007) and Pentzold,'Fixing the floating gap', 255-272.

[81] Eijkman, 'Academics and Wikipedia', 173.

[82] J. Loveland and J. Reagle, 'Wikipedia and encyclopedic production', *New Media & Society* 15 (2013) 1294.

[83] This research gap is identified by several scholars, who suggest that more studies of Wikipedia are needed to develop a better understanding of the phenomenon. See, for example, Keegan, Brian and Darren Gergle, 'Egalitarians at the gate: One-sided gatekeeping practices in social media', in *CSCW '10: Proceedings of the 2010 ACM Conference on Computer Supported Cooperative Work* (New York 2010) 131-134; Eijkman, 'Academics and Wikipedia', 183.

[84] Loveland and Reagle, 'Wikipedia and encyclopedic production', 1294-1295.

Hence, while building on the literature presented in the theoretical framework, this thesis proceeds by advancing the following research question and sub-questions:

RQ1:    How is the Holocaust (re)presented on the online encyclopedia Wikipedia and what are the implications for Western historiography?

SQ1:    How is the (re)presentation of the Holocaust being shaped on the Dutch, German, and English language versions of Wikipedia since the beginning of the twenty-first century?

SQ2:    Who is involved in the information production of the Holocaust on Wikipedia?

SQ3:    To what extent are national influences apparent in the representation of the Holocaust in Dutch, German, and English language versions of Wikipedia?

In order to answer these questions, each chapter examines a specific aspect of Wikipedia and/or its (re)presentation of the Holocaust, and thereby provides essential information to answer the research questions. However, due to the complexity of the questions, it is not until the final discussion and conclusion in Chapter 5 that the main research question, as well as sub-question 1 (SQ1) are completely answered. Sub-question 2 (SQ2) and 3 (SQ3), on the other hand, are already answered in respectively Chapter 2 and Chapter 4. Yet, before heading to the content-specific chapters, the methodology of this research is first discussed in the next section.

## 1.3 Research methodology

As examined before, the academic debate on Wikipedia primarily revolved around the question: is the online encyclopedia a 'good' reference work? Notions of 'objectivity', 'reality' and 'truth' have been used in the debates, suggesting a reality 'exists' on the basis of 'facts'. From this perspective, scholars have started to search for empirical evidence to either conclude that Wikipedia should not at all be used as a source of reference[85], or to praise the accuracy of Wikipedia, such as Jim Giles who stated that Wikipedia comes close to encyclopedia *Britannica* in terms of the accuracy of its science entries.

However, I believe it is wrong to use terms like reality and truth in the context of Wikipedia, because it is first and foremost an encyclopedia, a tertiary source of reference. Each entry on the online encyclopedia is nothing more than a *representation* of phenomena: an abstraction of reality, which has been constructed by the use of symbols and images[86]. This means that every

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[85] Waters, 'Why you can't cite Wikipedia', 15-17.
[86] V. Sisler, 'Digital Arabs: Representation in Video Games', *European Journal of Cultural Studies* 11/2 (2008) 203-220.

representation on Wikipedia is limited to the information authors have chosen to highlight[87] and therefore will never be able to fully grasp all aspects of reality.

Consequently, the analysis here does not focus on the 'completeness' of the entries (as, for example, Giles (2005) did)[88] but primarily focuses on what 'extraction level' is chosen by the authors. By analyzing the product of Wikipedia – the encyclopedia articles on the Holocaust – this chapter further addresses other important 'quality dimensions', such as currency, readability and reliability (accuracy). More specifically, leading from the research questions, this thesis primarily focuses on how the English, German and Dutch Wikipedia define the Holocaust, what topics are included or excluded in the representation, which persons are mentioned, whether language does influence the representation, and to what extent consistency does exist in the representation of the Holocaust on Wikipedia.

For this purpose, the study presented here analyzes *how* the Holocaust is represented on Wikipedia and to what extent similarities and differences exist between different language versions of Wikipedia. The main focus is on the scope, breadth and depth of the Holocaust entries under study, and the research primarily serves as a case study on the 'quality' of Wikipedia as a historical reference work, with particular attention to the implications of the online medium for professional historians. Thereby, the study presented here can primarily be labelled as a 'Content study', but can also partly be perceived as a 'Participation study', as well as an 'Infrastructure study'.

The issues of research to be attended within the framework of this thesis are relatively new. Little well-founded knowledge is available about the ways in which history is represented on Wikipedia and who are involved in the writing process. Furthermore, the quality of Wikipedia seems to only have been determined from a specific quality dimension, making this one of the first studies to thoroughly analyze the quality of Wikipedia's content. Hence, no systemised knowledge and theory concerning the research-issues are available as yet. This study should therefore primarily be perceived of as a scientific exploration, aiming at generating coherent knowledge and theory.

Since explorative investigations often prove to be most effectively conducted by means of qualitative research methods[89], a *qualitative content analysis* serves as primary research tool. The

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[87] Peter Gallert and Maja Van der Velden, 'Reliable sources for indigenous knowledge: Dissecting Wikipedia's catch-22', in Heike Winschiers-Theophilus and Nicola Bidwell (eds.), *Indigenous Knowledge and Technology* (Forthcoming 2014). Retrieved from http://ir.polytechnic.edu.na/bitstream/10628/409/1/Indigenous%20Knowledge%20for%20Wikipedia.pdf (07-05-2014).

[88] In his empirical research, Jim Giles has argued that Wikipedia articles have been 'propelled' to a 'high level of completeness.' See: Giles, 'Internet encyclopedias go head to head', 900-901.

[89] D.M. Baarda, M.P.M. de Goede and J. Teunissen, *Basisboek kwalitatief onderzoek. Handleiding voor het opzetten en uitvoeren van kwalitatief onderzoek* (Groningen 2005) 17-21.

Holocaust entries are the main units of analysis in this respect and are thoroughly analyzed and cross-referenced to determine how the Holocaust is represented on Wikipedia. Hence, qualitative elements of the entries, such as the nature and characteristics of the Holocaust, are of central concern in this research.

Nevertheless, the qualitative analysis is complemented with a *quantitative content analysis*, because quantities like amounts, volumes and frequencies are also of importance in this study. For example, the number of references listed on the pages of the Holocaust entries may tell a lot about the representation itself, as well as the total number of words used to explain particular aspects of the Holocaust. Accordingly, these quantities provide insight in the breadth of the content and help to illustrate where the authors place particular attention.

It is important to note that the Holocaust entries under study are digital/electronic in nature and are open and freely available to the public, making them inexpensive primary sources for this study. These sources are complemented with a vast body of literature that already exists on encyclopaedia and, specifically, on Wikipedia. Background information that is already available in either print or available online is used as secondary resource for this research and the findings of this study are further grounded and related to the current body of literature regarding the research subjects.

Although there is no explicit intention to use visual sources, certain images and other visual material are nevertheless included in the analysis. This is because the Holocaust entries are multimedia in nature and visual material is part of the content under study, making this also a unit of analysis. In addition, an oral resource is included in the analysis to verify particular findings and implications formulated in this thesis. Specifically, a topic interview has been conducted with Wikipedian-in-Residence Arie Sonneveld, who is an expert in the field of Wikipedia. This interview is audio-recorded and is primarily intended for data-triangulation. For the same reason, the findings of this research are placed in the context of prior studies on Wikipedia and compared accordingly.

The selection of research objects discussed above involves several choices, based on purposive sampling. With regard to Wikipedia content, dr. Ribbens selected the Second World War as overarching theme of the research, which was later, in liaison with dr. Ribbens, deduced to the Holocaust. For reasons of convenience and personal affiliation, I followed his lead and chose the Holocaust entries as main units of analysis. Furthermore, the choice is strengthened by the fact that the massacre is one of *the* most prominent events in recent history, and arguably, *the* most significant and contested event of the twentieth century.[90]

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[90] I. Gundare, and P. Batelaan, 'Learning about and from the Holocaust: the development and implementation of a Complex Instruction Unit in Latvia', *Intercultural Education* 14/2 (2003) 161.

The Holocaust entries to be analyzed needed to be limited to a number that is feasible to analyze within the limited time of the study. Out of a total of 121 available languages, the English, German and Dutch language versions of the Holocaust entries are chosen for two reasons. First, the chosen languages represent the three largest versions of Wikipedia when it comes to total number of entries[91]. Second, the choice is enforced by the practical fact that I, as researcher, am able to understand these languages.

The interview with Mr. Sonneveld is largely induced by dr. Ribbens who draw the attention to the expertise of this professional. As a Wikipedian-in-Residence, Mr. Sonneveld's role is to bridge the gap between various organizations and Wikipedia by 'enabling the host organisation and its members to continue a 'productive relationship' with the online encyclopedia and its community after the Residency is finished[92]. Hence, he is specialized in Wikipedia and its community, making him a reliable peer of verification.

Nevertheless, despite the verification of the findings and broader application of data-triangulation, it is important to understand that there are still some considerable limitations involved in this research. One of the most significant challenges in this respect is that the verifiability of the results presented here may weaken over time. In fact the dynamic and rapidly changing nature of Wikipedia leads to high textual instability, implying that the information analysed in this study may be changed by the time it is publically available. This makes the analysis of certain contents somewhat arbitrary. To largely overcome this limitation, the rapid rate of content change is addressed all throughout the analysis. Specifically, for each of the entries included in the analysis, the quantity, type and scope of editorial changes over time is determined.

Another limitation of this study is that the size and scope of Wikipedia hinders a truly representative sample. This means that the generalizability of this study is limited due to the applied sampling methods. Therefore, it is important to understand that the results and conclusions presented in this study first and foremost refer to the sample under study, unless stated otherwise.

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[91] Wikipedia, 'List of Wikipedias': https://en.wikipedia.org/wiki/List_of_Wikipedias#1_000_000.2B_articles (15-12-2013).
[92] Wikipedia, 'Wikipedian in Residence':
http://outreach.wikimedia.org/wiki/Wikipedian_in_Residence#List_of_Wikipedians_in_Residence (16-07-2014)

## 1.4 Thesis outline

This introductory chapter of this thesis is followed by three empirical chapters. First, the thesis proceeds with a chapter in which the focus is on Wikipedia itself and its infrastructure. This chapter is centered on the question what Wikipedia is, how it works and who is involved in the information production. Subsequently, it is in this second chapter that sub-question 2 (SQ2) is answered, which accordingly focuses on who is involved in the establishment of the Holocaust entries on Wikipedia.

Successively, the thesis proceeds with a second empirical chapter, which focuses on the development of the Holocaust entries under study. In this chapter, particular emphasis is placed on the evolution of the content over time, as well as to the role of editing in this respect. This chapter provides key insight into the question why the Holocaust on Wikipedia is (re)presented the way it is today.

Accordingly, this third chapter is succeeded by a fourth chapter that addresses the current (re)presentation of the Holocaust on Wikipedia and places particular emphasis on the differences between the language versions of Wikipedia under study. Also, the national influences in the coverage of the Holocaust on Wikipedia are addressed here, and sub-question 3 (SQ3) is accordingly answered in this chapter. Subsequently, the thesis ends with a discussion and conclusion in which the findings are further evaluated, the research questions are answered, limitations are addressed and implications for future research are proposed.

## 2. WIKIPEDIA AND ITS INFRASTRUCTURE

'Imagine a world in which every single person on the planet is given free access to the
sum of all human knowledge. That is what we are doing.'

-   Jimmy Wales[1]

Well-known media theorist Marshall McLuhan once stated: 'the medium is the message'[2], implying that the impact of the medium is 'integral' to and in some cases 'determinant' of the message[3]. This suggests that a symbiotic relationship exists between the medium and the message, by which the medium influences the interpretation of the message. In the context of this research, this means that a symbiotic relationship exists between Wikipedia and its Holocaust entries, and the interpretation of the text is affected by the Wikipedia (the medium). Therefore, it is important to look beyond the 'obvious', which is the content, and see the underlying structures and implications of the medium Wikipedia.

Hence, as proposed by McLuhan, this study provides a balance between 'content analysis' and 'media analysis', which challenges the 'traditional' attitude among scholars of communication to focus on the content[4]. Consequently, the purpose of this chapter is to analyse the *medium* Wikipedia and build a thorough understanding of the online encyclopedia. To that end, this chapter seeks to answer some basic questions about Wikipedia in the context of the Holocaust. How did it develop? How does it work? Who writes the entries, and why do people write for Wikipedia?

To answer these questions, the chapter first determines what Wikipedia *is* by emphasizing its origins, development and main characteristics, and continues with addressing the underlying infrastructure of Wikipedia, including policies, rules and norms. Subsequently, the chapter devotes a considerable amount of attention to the editing community of Wikipedia and why people write for Wikipedia. Based on the findings of this chapter, the conclusion reflects on what Wikipedia is and also answers sub-question 2 (SQ2), which poses: *'Who is involved in the information production of the Holocaust on Wikipedia?'*.

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[1] Jimmy Wales quoted in Brent Hecht and Darren Gergle, 'A Beginner's Guide to Geographic Virtual Communities Research', in Ben K. Daniel (ed.), *Handbook of Research on Methods and Techniques for Studying Virtual Communities: Paradigms and Phenomena* (New York 2011) 342.

[2] McLuhan, Marshall, *Understanding Media: The Extensions of Man* (New York 1964).

[3] T. Anderson, L. Rourke, W. Archer and R. Garrison, 'Assessing teaching presence in computer conferencing transcripts', *Journal of the Asynchronous Learning Network* 5/2 (2001) 14.

[4] This 'traditional' attitude can be illustrated by a quote from Peterson (2003): 'At the heart of media analysis is the media text: the news story, the film, the show, the ad, the snap shot. The text is at once an object of exchange, a vehicle for cultural representation, and a resource for social formation. See: Peterson, Mark, *Anthropology and mass communication: Media and myth in the new millennium* (New York 2006) 22*.

## 2.1 Origins

Wikipedia can best be described as an open, free internet encyclopedia that is collaboratively edited and supported by the non-profit Wikimedia Foundation. Its mission is to 'empower a global volunteer community to collect and develop the world's knowledge and to make it available to everyone for free, for any purpose.'[5] The Wikipedia project was started in the United States in 2001, and two years later, in 2003, the Wikimedia Foundation was formed as an independent institution to maintain and develop free (open source) internet projects, including Wikipedia.[6] On Wikimedia's website, Wikipedia is defined as:

> 'World's largest and most popular encyclopedia. (…) It is a collaborative creation that has been added to and edited by millions of people during the past ten years: anyone can edit it, at any time. It is one of the most popular sites in the world (…) [and] has become the largest collection of shared knowledge in human history.'[7]

The online encyclopedia itself traces its roots back to the ancient Library of Alexandria and Pergamon, and the concept of 'gathering all of the world's knowledge in a single place', as well as to Denis Diderot and the eighteenth century encyclopedists.[8] Concretely, the practice of collecting knowledge in one place allegedly started with the work of the ancient Roman nobleman Pliny the Elder, who authored the 37-volume *Natural History*, often considered the first Western encyclopedia.[9] The practice of collection further accelerated in the European Renaissance, when there was a renewed interest in origins and heritage, and the culture of the Renaissance was oriented toward 'seeking out and stockpiling information'.[10]

In the following centuries, people continued to be attracted to the practice of compiling encyclopedias. Driven by idealistic goals, enthusiasts, such as Louis de Jaucourt and Denis Diderot, devoted a substantial part of their life to the compiling of encyclopedia. However, despite their idealistic compulsions, as Loveland and Reagle emphasize, it is important to remember that one of the triggers behind many encyclopaedists' 'obsessive collection' was that of financial need.[11] This financial aspect, had always played a central role in the compilation of encyclopedia, until the rise of the digital revolution and development of online media. It was in March 2000, that the

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[5] Wikimedia, 'In a nutshell, what is Wikipedia? And what is the Wikimedia Foundation?':
http://wikimediafoundation.org/wiki/FAQ/en (14-12-2013).
[6] Voss, 'Measuring Wikipedia', 1-2.
[7] Wikimedia, 'In a nutshell, what is Wikipedia? And what is the Wikimedia Foundation?':
http://wikimediafoundation.org/wiki/FAQ/en (14-12-2013).
[8] Rosenzweig, Roy, *ClioWired: The future of the past in the Digital Age* (New York 2011).
[9] Blair, Ann, *Too Much to Know: Managing scholarly information before the information age* (New Haven 2010).
[10] *Ibidem*, 12.
[11] Loveland and Reagle, 'Wikipedia and encyclopedic production', 3.

traditional perception of encyclopedia was changed completely by the initiative of – what the creators called – 'Interpedia'.[12] Not much after its establishment, the project was renamed to 'Nupedia', a 'Free Universal Encyclopedia and Learning Resource', which would later be considered the first free Web-based encyclopedia and predecessor of the widely-known Wikipedia project.[13]

**From Nupedia to Wikipedia**

The Nupedia project was established under the ownership of *Bomis*, a web portal company[14]. Jimmy Wales was the prime motivating force within this organization, and he was the one who had the intention of creating a free online encyclopedia that would rival the 'traditional' encyclopedia the *World Book Encyclopedia* and *Encyclopedia Britannica*[15]. The responsibility for the actual development of the Nupedia encyclopedia, however, rested in the hands of the editor-in-chief, Larry Sanger[16].

Nupedia was a for-profit venture that required its articles (entries) to undergo strict peer review process before being published for public access. Nupedia had a seven-step approval process to control the content of articles before being posted, which was largely similar to a peer-review process of academic journals. This process was managed by an advisory board of editors and peer reviewers, who together controlled the editorial processes of Nupedia. Contributors of Nupedia were required to be experts in their respective fields, and a postgraduate academic degree (PhD) was generally preferred.[17]

However, due to the extensive review process of articles, Nupedia was suffering low productivity, which turned out to be an ongoing problem. [18] As a solution, Sanger started *Wikipedia* as a side-project, which was basically created to stimulate the writing of articles. In Wikipedia, editors were provided the opportunity of virtual collaboration on one and the same article, and the information was publically accessible online prior to the peer-review process. Nevertheless, the idea was that, after finishing the article, it would still enter a seven-step peer-review process to be eventually published on *Nupedia*.

So, Wikipedia was initially designed to complement Nupedia and supply it with content. However, Wikipedia quickly developed a life of its own as it increasingly attracted contributors and began to function independently of Nupedia. The advisory board, however, was not in favour of

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[12] See: Rosenzweig, 'Can history be open source?', 119.

[13] *Ibidem.*

[14] Larry Sanger, 'The early history of Nupedia and Wikipedia: a memoir', in Chris DiBona, Danese Cooper and Mark Stone (eds.), *Open Sources 2.0: the continuing evolution* (Sebastopol 2005) 312.

[15] *Ibidem*, 310.

[16] *Ibidem*, 312.

[17] *Ibidem*, 313.

[18] *Ibidem*.

'open' nature of Wikipedia, as their commitment was to 'rigor and reliability'[19]. They believed the Wikipedia-project was too informal and unstructured to ever resemble an encyclopedia at all, and, accordingly, they distanced themselves from the project.

It reaction to this lack of support, Sanger decided to publish the project in another domain and rename it to *Wikipedia*.[20] Hence, Wikipedia was born on January 15, 2001, and with over 1,000 entries in the first month, and 20,000 entries at the end of the year, it rapidly replaced Nupedia as prominent free online encyclopedia.[21] Consequently, to the astonishment of many, Wikipedia, the completely free encyclopedia, grew out to one of the most popular encyclopedia ever.

## 2.2 Key characteristics

Wikipedia's popularity is not met by any other digital encyclopedia, but it is important to understand that its concept is not entirely unique.[22] For example, *Microsoft* already published a digital encyclopedia in 1993, named *Encarta*, followed by *Encyclopedia Britannica Online* in 1994, and *the Stanford Encyclopedia of Philosophy* in 1995[23]. While these encyclopedia were solely written by experts, other online projects, such as *everything2* (1998) and *h2g2* (1999) already introduced the collaborative aspect to the encyclopedia by engaging an online community of users in the establishment of the content.[24] However, the key difference between Wikipedia and its predecessors is the implementation of the so-called 'wiki-technology' and related features, which accordingly, revolutionized the online encyclopedia and made it an ultimate symbol of democratization of knowledge production.[25]

**Wiki-technology**

Accordingly, it may be assumed that the success of Wikipedia is largely facilitated by wiki-technology, which is a technology that allows its users to instantly create and edit a webpage without having programming skills.[26] The word 'Wikipedia' itself partly refers to this technology, as it is a combination of the term 'wiki' and 'encyclopedia'. The term 'wiki' comes from Hawaiian and means

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[19] *Ibidem*, 316.
[20] Sanger, 'The early history of Nupedia and Wikipedia: a memoir', 307-338.
[21] Rosenzweig, 'Can history be open source?', 121.
[22] M. Hongbao, 'Wikipedia: The free encyclopedia', *Nature and Science* 4/2 (2006) 80.
[23] Loy, Matthew, 'Stanford Encyclopedia of Philosophy: Launching a 'Freemium' model. Case study update', http://www.jisc.ac.uk/media/documents/programmes/contentalliance/sep.pdf (12-12-2013).
[24] Hongbao, 'Wikipedia: The free encyclopedia', 80.
[25] It should be noted here that some scholars question the 'democratization' of knowledge production on Wikipedia. For example, in his article, René König indicates that the knowledge production on Wikipedia is no pure democratic process by arguing that Wikipedia articles are characterized by 'elite knowledge of well-established authorities', whereas 'alternative interpretations are harshly excluded or at least marginalized.' See: R. König, 'Wikipedia: Between lay participation and elite knowledge representation', *Information, Communication & Society* 16/2 (2013) 172.
[26] Hongbao, 'Wikipedia: The free encyclopedia', 79.

'fast' or 'informal'[27], fitting the nature of Wikipedia quite well. The technology was first developed by Ward Cunningham in 1995 and became the foundation of many wikis. Some popular examples include *Wikianswers, Wikibooks* and *AboutUs.org[28]*, but none of these wikis matches the popularity of Wikipedia.

The success of Wikipedia can largely be described to its prime mover advantage, meaning that its popularity is assisted by the fact that it was the first medium to combine wiki-technology with encyclopedic content. For this reason, competing wiki-projects such as the online encyclopedia *Susning.nu* (October 2001), *Enciclopedia Libre* (February 2002), and *WikiZnanie* (2003) never matched the status of Wikipedia[29]. One exception in this respect is the Swedish wiki-based encyclopedia *Susning.nu*, which was until 2005 larger in size and content than the Swedish language version of Wikipedia[30]. Nevertheless, the success of *Sunsing.nu* diminished over the years, while Wikipedia's popularity kept on rising[31]. Although most of these projects are quite similar to Wikipedia, it is the latter which is way out in front. According to Hongbao, this difference in success is inherently related to Wikipedia's unique combination of wiki-technology and the *GNU Free Documentation License* (GFDL)[32].

**GNU Free Documentation License**

The *GNU Free Documentation License* postulates that the authors who publish content under this license permit the redistribution, commercial use, and creation of derivative work of the content. By using this license, Wikipedia has to provide a 'transparent copy' of its information in a readable format whose specification is available to the general public, free of charge.[33] In simple terms, this GNU Free Documentation License suggests that authors of Wikipedia abandon the copyright of their content[34] and make all the information on Wikipedia available for free. It is because of this license that Wikipedia can be described as an 'open-source' media platform that allows for the non-commercial *and* commercial re-use and re-distribution of information.

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[27] P. Konieczny, 'Wikis and Wikipedia as a teaching tool', *International Journal of Instructional Technology and Distance Learning* 4/1 (2007) 16.
[28] See: Wikipedia, 'List of wikis': http://en.wikipedia.org/wiki/List_of_wikis (17-07-2014).
[29] Hongbao, 'Wikipedia: The free encyclopedia', 80.
[30] See: Wikipedia, 'Susning.nu': http://en.wikipedia.org/wiki/Susning.nu (13-12-2013).
[31] Voss, 'Measuring Wikipedia', 1.
[32] Hongbao, 'Wikipedia: The free encyclopedia', 80.
[33] Voss, 'Measuring Wikipedia', 1.
[34] Hongbao, 'Wikipedia: The free encyclopedia', 80.

**Open editing environment**

Hence, the combination of wiki-technology with the GNU Free Documentation License is the reason why Wikipedia is open to editing 'by anyone, at any time'.[35] Accordingly, Wikipedia entries have two states[36]. By default, wikis are in *read state*, which means that the page looks just like a normal webpage (see Figure 2.1). However, when users want to edit a wiki, they can easily point their internet browser to the wiki URL (e.g. http://nl.wikipedia.org/wiki/Holocaust) and click on the edit button that is featured at the top of each wiki page (Figure 2.2). After users press the edit button on the Wikipedia page, a text box opens up that offers a simplified alternative to HTML (a programming 'language') in which users can add or delete the information of the webpage (Figure 2.3).[37]

Figure 2.1. *Read state of Holocaust entry on the English language version of Wikipedia.[38]*



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[35] Wikimedia, 'In a nutshell, what is Wikipedia? And what is the Wikimedia Foundation?':
http://wikimediafoundation.org/wiki/FAQ/en (14-12-2013).
[36] Augar, Naomi, Ruth Raitman and Wanlei Zhou, 'Teaching and learning online with wikis', in *Beyond the comfort zone: proceedings of the 21st ASCILITE Conference, Perth, 5-8 December* (Perth 2004) 96.
[37] *Ibidem.*
[38] From: Wikipedia, 'The Holocaust', http://en.wikipedia.org/wiki/Holocaust (12-05-2014).

Figure 2.2. *'Edit' tab of Wikipedia articles.*[39]
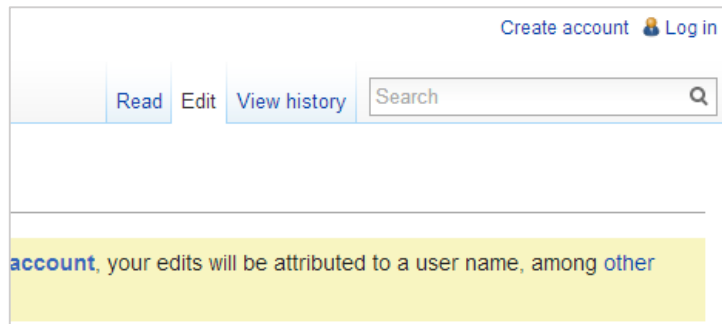


Figure 2.3. *Editing environment in Wikipedia.*[40]
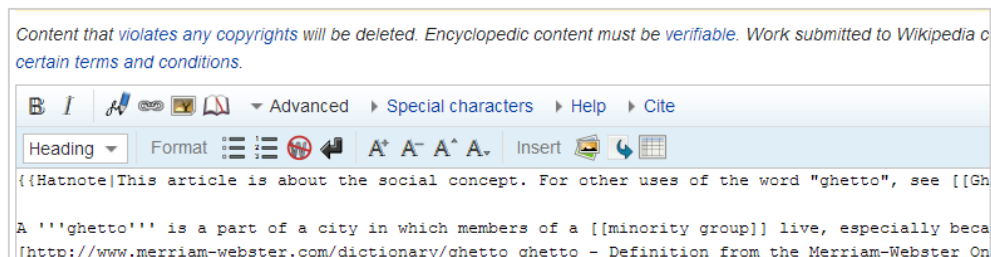


**Editors**

The moment Wikipedia visitors enter the edit state of an article, change the content and click the 'save' button accordingly, the users become 'editors' of the online encyclopedia.[41] This means that any visitor of Wikipedia has been provided the ability to switch to producer in just a matter of seconds, which strongly characterizes the open editing environment of the encyclopedia. As a result, scholars have coined the term 'produsage'[42], referring to this unique combination of user and producer. However, despite the blurring boundaries between common users and producers, it is important to understand that there is still a clear distinction between 'common users' of Wikipedia on one hand and editors on the other.

Editors are people who write and edit the pages for Wikipedia, unlike users who simply read the articles. This means that anyone who makes *at least* one edit to the online encyclopedia may be considered an editor. Interchangeable terms used in this thesis to refer to editors include: 'contributors', 'producers' and 'Wikipedians'.

Although editors may also be considered to be users of Wikipedia, the use of the term users in this thesis is restricted to refer to readers of Wikipedia who have made zero edits to Wikipedia. The terms 'visitors' and 'readers' are used interchangeably in this respect. In addition, it is important

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[39] From: Wikipedia, 'Ghettos', http://en.wikipedia.org/w/index.php?title=Ghetto&action=edit (12-05-2014).
[40] The figure shows the text box in which the source code (HTML) of the webpage can be edited by the users. From: Wikipedia, 'Ghettos', http://en.wikipedia.org/w/index.php?title=Ghetto&action=edit (12-05-2014).
[41] Konieczny, 'Wikis and Wikipedia as a teaching tool', 18.
[42] Bruns, *Blogs, Wikipedia, Second Life, and beyond: From production to produsage*, 107.

to note that all people who have made at least one edit to Wikipedia are considered to be a *Wikipedian* and accordingly belong to the Wikipedia community.

Furthermore, it is important to note that there is also a difference between registered and unregistered users of Wikipedia. Registered users, in this respect, are visitors of Wikipedia who have created an account (based on an email-address), are logged in, and operate under a self-chosen username. Unregistered users, at the other hand, are visitors of Wikipedia that are not logged in under a personal user account and can anonymously engage in Wikipedia under reference of their IP-address. Important to understand here is that both registered and unregistered users are able to edit Wikipedia.

## 2.3 Regulations and control

**Soft security**

When Wikipedia was young and the number of active contributors was numbered in the 100s, volunteer editors could directly manage its content and processes.[43] All of a day's changes could be manually reviewed by only one person, and often corrected within matter of minutes. Vandalism and disruption were therefore not of major concern, and to deal with these threats, Wikipedia primarily relied on the concept of 'soft security', which means that editorial decisions were self-described as governed by consensus[44].

In simple terms, soft security implies that damage is not prevented in the first place, but malicious edits are to be 'reverted' by other Wikipedians.[45] The idea is that controversial edits (or plain vandalism) are quickly noticed and reverted by others, unless the author in question can convince others of the merit of the edit.[46] In general, this philosophy of 'soft security' tended to be effective as regards many Wikipedia articles. Errors that bring an article out of balance were corrected over time, and soft security progressed the articles most often toward a stable and 'neutral' state.[47]

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[43] A. Halfaker and J. Riedl, 'Bots and cyborgs: Wikipedia's immune system', *Computer* 45/3 (2012) 79.

[44] The notion of consensus on Wikipedia is that 'consensus [is] a natural and inherent product of editing' and 'the process of finding a consensus is continued by discussion on the relevant talk pages.' Where these processes don't succeed, consensus is enforced by authority, which deals with behavioural issues, *not* content. There is no role provided for 'expert opinion' in the notion of consensus. See: Wikipedia, 'Wikipedia:Consensus': http://en.wikipedia.org/wiki/Wikipedia:Consensus (15-05-2014).

[45] Pentzold, 'Fixing the floating gap', 256.

[46] Konieczny, 'Wikis and Wikipedia as a teaching tool', 18.

[47] R. Nicholson, 'Mormonism and Wikipedia: The Church History That "Anyone Can Edit"', *Interpreter: A Journal of Mormon Scripture* 1 (2012) 154.

**Bots**

The situation, however, changed when Wikipedia began to experience an exponential growth in total number of editors and articles. With higher number of editors, it became harder to reach consensus and the online encyclopedia became more susceptible to vandalism and disruption[48]. Community members responded to this problem by developing two types of computational tools: robots, or *bots*, and *cyborgs.* [49] Bots are 'autonomous or semi-autonomous programs' which have been developed to help with maintenance functions of Wikipedia such as identifying and reverting vandalism and spam.[50] Most bots automatically handle repetitive tasks such as expanding template text, repairing links and reverting malicious edits. For example, *SpellCheckerBot* checks recent changes for common spelling mistakes and fixes them by using an international dictionary.[51] However, there are also more advanced bots who pull raw information from databases and use algorithms to generate and implement text in Wikipedia entries. For example, according to a recent *Wall Street Journal* report, a single bot program named 'Lsjbot' (from Sweden) has created more than 2.7 million articles on Wikipedia - or about 8.5 percent of the total collection[52].

Cyborgs, on the other hand, are intelligent user interfaces that humans 'put on' like a virtual Ironman suit to combine computational power with human reasoning'[53]. For example, *VandalProof*, an early cyborg technology, provides its user a graphical interface that help trusted editors monitor article edits at real time and allow editors to revert a collection of contributions in one click[54]. Hence, the major difference with bots is that cyborgs do not automatically revert edits, but require humans to do this for them.

**The five pillars of Wikipedia**

Together, bots and cyborgs function as 'first-line defences' in Wikipedia's system of control, but it is important to understand that they are accompanied by a firm set of rules and policies. Although policy making was never part of a planned system of governance, the development of policies and regulating influences at different points in the site's history seemed inevitable.[55] As a result, detailed

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[48] Pentzold, 'Fixing the floating gap', 261.
[49] Nicholson, 'Mormonism and Wikipedia', 154.
[50] Reid Priedhorsky, Jilin Chen, Shyong Tony K. Lam, Katherine Panciera, Loren Terveen and John Riedl, 'Creating, destroying, and restoring value in Wikipedia', in *Proceedings of the 2007 international ACM conference on Supporting group work* (Florida 2007) 259-268.
[51] Halfaker and Riedl, 'Bots and cyborgs', 79.
[52] Ellen Jervell, 'For this author, 10,000 Wikipedia articles is a good day's work', *Wall Street Journal*, 13 July 2014. Retrieved from: http://online.wsj.com/articles/for-this-author-10-000-wikipedia-articles-is-a-good-days-work-1405305001?mod=_newsreel_4 (18-07-2014).
[53] Halfaker and Riedl, 'Bots and cyborgs', 79.
[54] *Ibidem.*
[55] *Ibidem.*

policies and guidelines provide fundamental behavioural rules that influence the content of Wikipedia's articles, and 'the functionality of these social-norms and policies is', McGrady states, 'the most important element in the success of Wikipedia'[56]. Accordingly, the fundamental principles by which Wikipedia operates can be summarized in 'five pillars'.[57]

First, 'Wikipedia is an encyclopedia', meaning that it should be perceived as a secondary source where non-encyclopedic content, or original research is not acceptable.[58] This is an important point to take into consideration for historians as it suggests that they may not present new insight into matters that have not been published before. Hence, this means that historians cannot rely on their authority when contributing to Wikipedia. Second, 'Wikipedia is written from a neutral point of view', which advocates that Wikipedia articles should summarize multiple perspectives on the subject without attempting to determine an objective truth.[59]

Third, 'Wikipedia is free content that anyone can edit, use, modify, and distribute', which is a rather self-explanatory policy. Fourth, 'editors should treat each other with respect and civility', an advice good for any organization. As Wikipedia fairly states: 'treating others with respect is key to collaborating effectively in building an international online encyclopedia.'[60] For this purpose, the online encyclopedia has formulated a so-called 'Wikipedia etiquette', which is a behavioural guideline on how to work with others on Wikipedia and overcome widely varying 'views, perspectives, opinions, and backgrounds'. [61]

Fifth, 'Wikipedia does not have firm rules'[62], which denotes that wiki policy is not meant for 'retaliation', but instead to guide 'normative' behaviour.[63]


**Neutral Point of View (NPOV)**

From these five policies, the so-called 'neutral point of view' (NPOV) tends to be the most controversial and widely discussed policy. This policy suggests that articles should represent differing views on a subject, provide 'authoritative references', and present verifiable information that is written without biases.[64] However, scholars, and professional historians in particular, are likely to

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[56] R. McGrady, 'Gaming against the greater good.' *First Monday* 14/2 (2009). Retrieved from http://pear.accc.uic.edu/ojs/index.php/fm/article/view/2215/209 (16-05-2014).

[57] See: Wikipedia, 'Wikipedia:Five Pillars': http://en.wikipedia.org/wiki/Wikipedia:Five_pillars (16-05-2014).

[58] Konieczny, 'Wikis and Wikipedia as a teaching tool', 12.

[59] *Ibidem*.

[60] *Ibidem*.

[61] See: Wikipedia, 'Wikipedia:Etiquette': http://en.wikipedia.org/wiki/Wikipedia:Etiquette (14-05-2014)

[62] See: Wikipedia, 'Wikipedia:Five Pillars': http://en.wikipedia.org/wiki/Wikipedia:Five_pillars (16-05-2014).

[63] Brian Butler, Elisabeth Joyce and Jacqueline Pike, 'Don't look now, but we've created a bureaucracy: the nature and roles of policies and rules in Wikipedia', in *Proceedings of CHI, ACM Conference on Human Factors in Computing Systems* (Florence 2008) 1108.

[64] M. Ferron and P. Massa, 'Beyond the encyclopedia: Collective memories in Wikipedia', *Memory Studies* 7 (2014) 27.

regard this policy with suspicion as the general belief in the academic field is that there is no 'objective' history. According to Rosenzweig, for example, 'writing "without bias" – even in the circumscribed way that Wikipedia defines it – is a 'founding myth' for Wikipedia much as 'objectivity' is for the historical profession'.[65]

Nevertheless, Wikipedia points out that the NPOV policy (as it is commonly referred to in Wikipedia discussions) 'doesn't assume that writing an article from a single, unbiased, objective point of view is possible.'[66] Instead, Wikipedia suggests that the articles should describe disputes rather than to take sides in them, to represent differing positions fairly.[67] The NPOV policy should therefore not be perceived as an ultimate goal of Wikipedia, but rather as desire that is formulated by Wikipedia in order to encourage its editors to reach a maximum level of 'objectivity'.

**Talk page**

In order to coordinate the policies and rules that have been mentioned above, Wikipedia articles are accompanied by so-called 'Talk pages' (see Figure 2.4).[68] These talk pages are attached to each encyclopedic entry on Wikipedia and facilitate the control of the content creation process. They allow for discussion of article's content in order to reach consensus, and to settle occurring disagreements and disputes among authors[69]. Accordingly, the talk pages fulfil a vital role in the (proper) development of Wikipedia entries, as they can be utilized by users to propose edits to the associated article, explain removed edits and discuss sections that should be trimmed, paragraphs that should be added, and so on.[70]

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[65] Rosenzweig, 'Can history be open source?', 122.
[66] See: Wikipedia, 'User:FT2/NPOV': http://en.wikipedia.org/wiki/User:FT2/NPOV (13-05-2014).
[67] Rosenzweig, 'Can history be open source?', 122.
[68] Ferron and Massa, 'Beyond the encyclopedia', 27.
[69] Pentzold, 'Fixing the floating gap', 257.
[70] Viégas et al., 'Coordination in Wikipedia', 78.

Figure 2.4. *Talk page of the Holocaust entry on the English language version of Wikipedia.[71]*
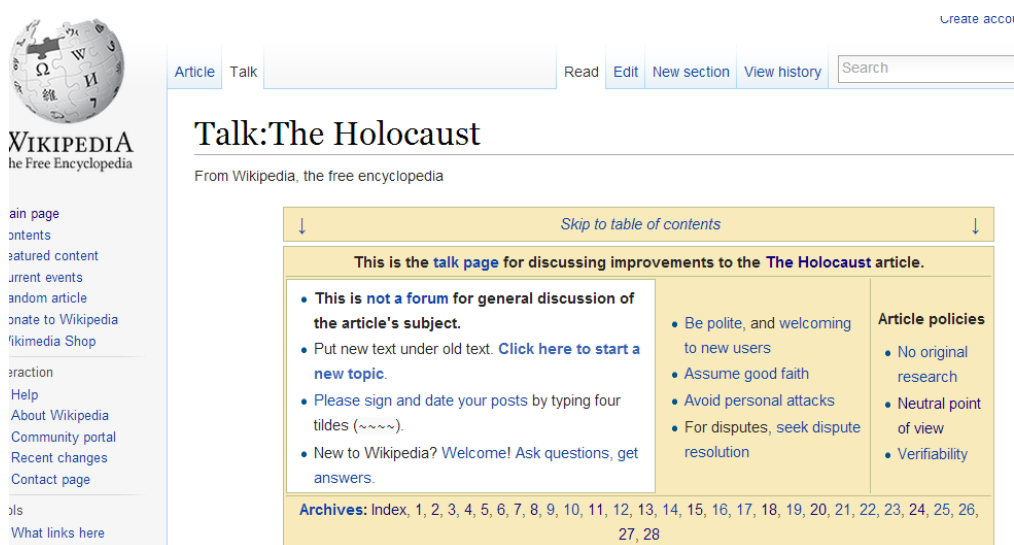


One of the top number one topics of debate on the talk pages is the enhancement of the above mentioned NPOV policy. Especially on talk pages of entries dealing with highly controversial subjects, such as the Holocaust articles under study.[72] These types of articles simply tend to attract editors who have an agenda to push, and use Wikipedia as an attractive medium to 'publish' their opinions with instant visibility and considerable credibility.[73] When other Wikipedians change or remove contributions of such editors for reasons of 'non-Neutral Point of View', the initial author usually disagrees and uses the talk page accordingly to make an appeal. Sometimes the debates go on and on[74], such as the literally dozens of discussion pages devoted to the Holocaust entry on the English language version of Wikipedia (see Figure 2.5). The breadth of the discussion forum of the English language version of the Holocaust article indicates that much controversy exists on the subject, making it very hard for such articles to meet founder Jimmy Wales's goal of presenting 'ideas and facts in such a fashion that both supporters and opponents can agree.'[75]

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[71] From: Wikipedia, 'Talk:The Holocaust': http://en.wikipedia.org/wiki/Talk:The_Holocaust (12-05-2014).
[72] Nicholson, 'Mormonism and Wikipedia', 154.
[73] *Ibidem*.
[74] The Talk Pages on the German and Dutch language version of Wikipedia have respectively six and one pages of discussion on the Talk Page.
[75] See: Wikipedia, 'Wikiquote:Neutral point of view': http://en.wikiquote.org/wiki/Wikiquote:Neutral_point_of_view (13-05-2014).

Figure 2.5. *Breadth of the Talk Page on the English language version of the Holocaust article [yellow mark RdH].*[76]
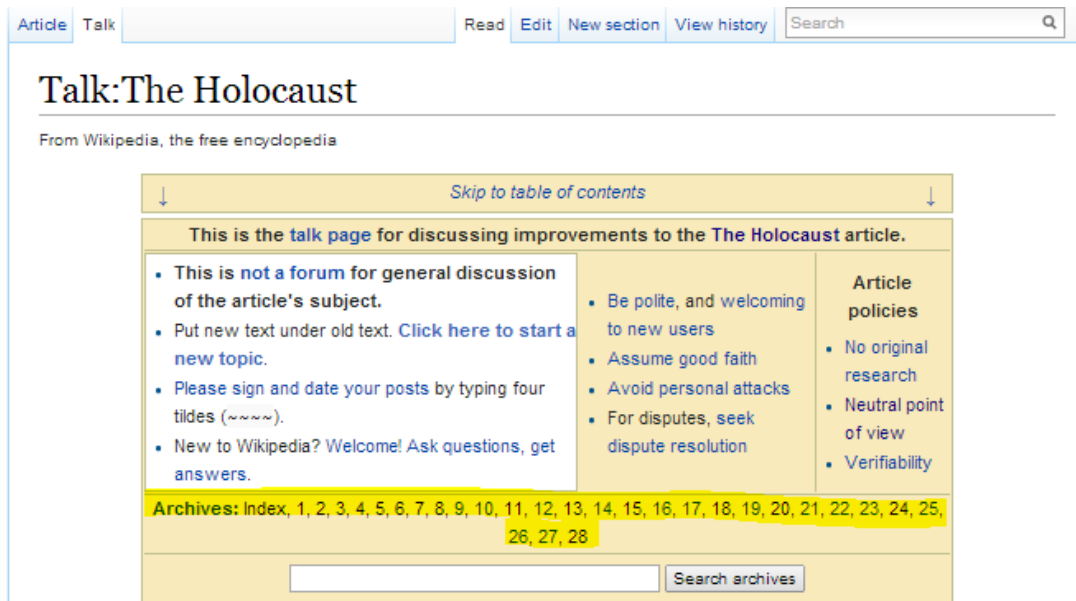


## History page

In addition to the Talk page, each Wikipedia entry is accompanied by a history page, which presents a record of every state of the page since its first creation. For example, the history page of the Holocaust entry allows the users to review every edit made to the Wikipedia entry, as well as all previous versions of the page. When users enter the history page, a chronological list documenting all edited versions of the article will appear (Figure 2.6).

Accordingly, the history page lists every edit made, as well as the date and time at which each edit was made. It also identifies the source of changes, which is why most Wikipedia editors prefer to register themselves under a User ID, usually pseudonyms, which appears in the history page alongside their edits.[77] More 'casual' users usually edit Wikipedia without logging in, and are accordingly identified by their IP address on the history page.[78] Hence, the history page helps Wikipedians to identify who made particular edits to a page and helps them to settle disputes with these specific persons accordingly.

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[76] The figure shows the index of the discussion page (Talk Page) of the English language version of the Holocaust article. It can be perceived that 28 pages of discussion are archived, indicating the breadth of the Talk Page of the English language version of the Holocaust article, and the discussion on the Holocaust on Wikipedia in general. Print-screen retrieved from: Wikipedia, 'Talk:The Holocaust': http://en.wikipedia.org/wiki/Talk:The_Holocaust (12-05-2014).

[77] Steggle, Matthew, 'Prospero and Plagiarism: Early Modern Studies and the rise of Wikipedia', *Digital Studies/Le champ numérique* 2/1 (2010). Retrieved from https://www.digitalstudies.org/ojs/index.php/digital_studies/article/view/205/266 (14-05-2014).

[78] *Ibidem.*

Figure 2.6. *Revision history of the English language version of the Holocaust entry on Wikipedia [yellow mark by RdH].*[79]



## Hierarchy and control

Although it is sometimes claimed that hierarchy does not exist within Wikipedia[80], administrators have been appointed by Wikipedia bureaucrats to oversee the talk pages and assure that policies and guidelines are being put in place and followed by the editors of Wikipedia.[81] These administrators are privileged users who have been granted, as the Wikipedia site suggests, the technical ability to 'protect and delete pages, block other editors, and undo these actions as well.'[82] Nevertheless, it is important to understand that these administrators are part of a much wider, refined hierarchical structure in which administrators, registered users, anonymous users and bots all have a distinct rank in an orderly system.

In fact, a closer look at Wikipedia's hierarchy reveals that the project is run by a many-layered oligarchy that is established to maintain order and assure the operation of the site. Specifically, Table 2.1 reveals that various user groups can be distinguished, of which some are global (in terms that they edit across various language versions of Wikipedia) and others are specific to a certain 'local' Wikipedia.

As the table shows, anonymous users are at a lower level of permission than registered users, who, in turn, have fewer permissions than bots. Administrators, or 'admins', in practice occupy

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[79] From: Wikipedia, 'The Holocaust: Revision History':
http://en.wikipedia.org/w/index.php?title=The_Holocaust&action=history (12-05-2014).
[80] Butler et al., 'Rules in wikipedia', 1107.
[81] *Ibidem*.
[82] See: Wikipedia, 'User:Feinoha/Admins'*:* http://en.wikipedia.org/wiki/User:Feinoha/Admins (15-05-2014).

the highest level of control over Wikipedia's content. Above the admin level are the cheekily named *bureaucrats*, who are empowered to appoint administrators and will do so when they believe user consensus has been reached.

Table 2.1. *Schematic overview of global and local categories of users according to permission levels.*[83]

| Permission level | Wikipedia Users |
|---|---|
| Most permissions | The Foundation board of directors |
| | System Administrators |
| ↓ | Steward |
| | Bureaucrat |
| | Administrator/Sysop |
| | Bot |
| | Registered User |
| | Newly Registered User |
| | Anonymous User |
| No Permissions | Blocked User |

To further illustrate, according to the English language version of Wikipedia, anyone can become an administrator of the medium because there are no 'official requirements' to become a Wikipedia administrator[84]. However, Bejamin Collier and Robert Kraut argue that 'the process for becoming an administrator in Wikipedia is challenging for candidates, and only 56% of people nominated for the leadership position are promoted'.[85] Specifically, in order to become a Wikipedia administrator, users should be nominated for the position by someone within the Wikipedia community (a registered user), or request for the position themselves.[86] Consequently, the candidates undergo a seven-day screening period in which their record is reviewed and fellow editors discuss the merits of the candidate for promotion. After this seven-day period, a bureaucrat determines whether there is consensus to approve the request, and promotes the candidate accordingly.[87] 'As a general descriptive rule of thumb', Wikipedia states, 'most requests above ~80% approval [among fellow editors] pass and most below ~70% fail.[88]

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[83] The statistics in the table are retrieved from: Wikipedia, 'User groups': http://meta.wikimedia.org/wiki/User_groups (16-05-2014). Own calculations.

[84] See: Wikipedia, 'Wikipedia:Administrators': http://en.wikipedia.org/wiki/Wikipedia:Administrators (15-05-2014).

[85] Bejamin Collier and Robert Kraut, 'Leading the collective: social capital and the development of leaders in core-periphery organizations', *ArXiv* 1204 (2012). Retrieved from http://arxiv.org/ftp/arxiv/papers/1204/1204.3682.pdf (26-05-2014).

[86] See: Wikipedia, 'Wikipedia:Administrators': http://en.wikipedia.org/wiki/Wikipedia:Administrators (15-05-2014).

[87] Collier and Kraut, 'Leading the collective', 1204.

[88] *Ibidem*.

Furthermore, there is also a level above the bureaucrats, called *stewards*, of whom there are only 38[89], appointed by the seven-person Wikimedia Foundation board of directors. The foundation board of directors, however, are usually not active on Wikipedia entries, but may occasionally need to perform actions for bureaucratic reasons. Likewise, system administrators only 'manage and maintain the Wikimedia Foundation Servers'.[90]

Remarkable in this hierarchical system is the position of so-called bots (short for 'software robots')[91], which have a higher permission level than registered users and are just below the authority of administrators. Additional details about Wikipedia's hierarchy are less relevant in the context of this research, and will not be further discussed here. For now, it is important to note the position of administrators and automated mechanism in the control of content, because they tend to play a significant role in the development of the content on the Holocaust articles under study.

## 2.4 The editing community

**Editors of Wikipedia at large**

All in all, the Wikipedia community consists of 18,6 million editors (both registered and unregistered) and are together good for over 720 million edits on the online encyclopedia (May, 2014).[92] Most of these editors (20%) reside in the United States, followed by Germany (12%) and Russia (7%). Predictably, the largest share of Wikipedians primarily edits (76%) and reads (49%) the English Wikipedia, followed by the German Wikipedia (20% and 12%), and Spanish Wikipedia as 12% and 6% respectively. Accordingly, Wikipedia reports that more than half (51%) of the editors contribute in two or more languages.[93]

Furthermore, it has been found that 59% of the editors are aged 17 to 40, whereas 28% of the editors are aged 40+ and only 13% are aged 17 and under.[94] Accordingly, an estimated 84% of the English Wikipedia editors are male[95], and the worldwide survey showed that even 91% of the editors on all the Wikipedias are male[96]. This means that women are largely underrepresented on Wikipedia, which can be explained, according to Lam, Uduwage, Dong, Sen, Musicant, Terveen and

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[89] From: Wikipedia, 'Stewards': http://meta.wikimedia.org/wiki/Stewards (15-06-2014).
[90] Niederer, Sabine and José Van Dijck, 'Wisdom of the crowd or technicity of content? Wikipedia as a sociotechnical system', *New Media & Society* 12/8 (2010) 1376.
[91] *Ibidem*.
[92] From: Wikipedia, 'Wikipedia Statistics': http://stats.wikimedia.org/EN/TablesRecentTrends.htm (12-06-2014).
[93] From: Wikipedia, 'Wikipedia:Wikipedians': http://en.wikipedia.org/wiki/Wikipedia:Wikipedians (18-07-2014).
[94] *Ibidem*.
[95] B. Hill and A. Shaw, 'The Wikipedia Gender Gap Revisited: Characterizing Survey Response Bias with Propensity Score Estimation', *PloS ONE* 8/6 (2013) e65782.
[96] Wikimedia Foundation, 'Wikipedia editors study: results from the editor survey, April 2011': http://upload.wikimedia.org/wikipedia/commons/5/51/Editor_Survey_Report_April_2011.pdf (18-07-2014).

Riedl (2011) by the conflict-oriented culture of the online encyclopedia. 'Experienced female editors can be very successful –they are more likely to become administrators than men– but they are more likely to leave if treated aggressively in discussions'.[97]

This gender-conflict is, however, not the only reason for the gender imbalance on Wikipedia. On the contrary, summarizing research on the gender gap also point to women's 'apparent modesty and lack of confidence'[98] and their alleged preference for 'women's topics'[99] as possible causes for the gender imbalance. Yet, it must be noted that there is no simple explanation for the gender gap, which is clearly illustrated by the fact that the US government decided (on 30 July 2014) to invest over 200,000 dollar to find out how and why this gender bias is produced on Wikipedia[100].

Nevertheless, whatever the reasons may be, it is most important to understand that the dearth of women contributors has skewed Wikipedia's content, 'undercutting its explicit promise to provide "access to the sum of all human knowledge" and instead 'resulting in a male-dominated knowledge base in some parts of Wikipedia.'[101]

**Activities and motivation of the editors**

According to the *Wikipedia Editor Survey 2011,* most of the editors' (66%) that were surveyed pointed out that their primary activity on Wikipedia is to edit existing articles. Another 28% said their main activity is creating new articles, while 23% said that they do mostly patrolling work (check for spelling mistakes, references, etc.). Moreover, 22% indicated to primarily participate in discussions and 17% of the editors has been found to mainly upload media.[102] The motivation for the majority of editors to edit Wikipedia (71%) is because they 'like the idea of volunteering to share knowledge', followed by the ideological belief that information should be freely available (69%) and 63% pointed out to contribute because it is 'fun'. Only 7% indicated to edit Wikipedia for professional reasons.[103]

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[97] From: Wikipedia, 'Wikipedia:Wikipedians': http://en.wikipedia.org/wiki/Wikipedia:Wikipedians (18-07-2014).
[98] Stine Eckert and Linda Steiner, 'Wikipedia's gender gap', in Cory L. Armstrong (ed.), *Media disparity: A gender battleground* (Maryland 2013) 89.
[99] *Ibidem*, 88.
[100] Elizabeth Harrington, 'Government spending $200,000 to study 'gender bias' on Wikipedia', *Fox News Online*, 20 July 2014, http://www.foxnews.com/politics/2014/07/30/government-spending-200000-to-study-gender-bias-on-wikipedia/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+foxnews%2Fpolitics+%28Internal+-+Politics+-+Text%29 (30-07-2014).
[101] Benjamin Collier and Julia Bear, cited in Stine Eckert and Linda Steiner, 'Wikipedia's gender gap', in Cory L. Armstrong (ed.), *Media disparity: A gender battleground* (Maryland 2013) 88.
[102] Wikimedia Foundation, 'Wikipedia editors study: results from the editor survey, April 2011': http://upload.wikimedia.org/wikipedia/commons/5/51/Editor_Survey_Report_April_2011.pdf (18-07-2014).
[103] *Ibidem*.

**Editors of the Holocaust entries**

In the specific case of the Holocaust entries under study, statistics show that in June 2014, the latest month for which statistics were available at the time of writing, over 18,000 edits are made to the English, German, and Dutch language version, by a total of more than 3,500 registered users and over 2,300 unregistered users. An important difference between both types of users is that registered users can decide themselves what they do and do not want to share about their identity on their personal 'User page', while anonymous, *unregistered* users are obliged to share their IP-address with the public of Wikipedia.[104] Specifically, when unregistered users make an edit on Wikipedia, their IP-address is stored by the medium and displayed in the revision history of entries. Accordingly, these IP-addresses can be reviewed by other users, like you and me and can be used to retrieve the geographic location of the editor. This suggests that unregistered editors can never remain completely anonymous.

Registered users, on the other hand, *are* able to hide their entire identity, including their geographic location. Therefore, it is not uncommon that very active Wikipedians remain completely anonymous on the website (e.g. user *A.S.Brown*)[105]. Nevertheless, there are also registered users who tend to be very open about their identity – such as the user 'Goodoldpolonius2' who deliberately shares his real name, age, place of residence, profession and interests on its user page (Figure 2.7).

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[104] It must be noted here that both kinds of users are protected by Wikipedia's privacy policy, which means that the online encyclopedia does not disclose the identity of its users. See: Wikipedia, 'Wikipedia's privacy policy protects Wikipedia's users': http://en.wikipedia.org/wiki/Wikipedia:User_access_levels (19-07-2014).
[105] The user with username *A.S.Brown* is one of the largest contributors of the English-language Holocaust entry on Wikipedia (109 edits), but has shared no personal information at all. See: Wikipedia, 'User:A.S.Brown': *http://en.wikipedia.org/wiki/User:A.S._Brown* (27-05-2014).

Figure 2.7. *Example of a User page (Goodoldpolonius2).*[106]



A closer look at the personal user page (public profile page) of user Goodoldpolonius2 reveals that this editor is a US citizen who has Polish ancestors and therefore is interested in topics related to the Holocaust. This contributor states to have academic qualifications to talk about sociology, organizational studies, entrepreneurship, business, innovation, and the history of technology, but adds to this that he has 'enthusiastic amateur qualifications when discussing Jews and Jewish history, World history, or other topics, though I do have reasonable training as a historian.'[107] Thereby, user Goodoldpolonius2 can be perceived as the perfect example of a non-professional historian who actively contributes to Wikipedia.

**Identity of registered users of the Holocaust entries**

In addition to Goodoldpolonius2, 90 other user pages have been analyzed in order to get an idea about the identity of editors of the Holocaust entries under study. Although an empirical analysis of all 5,800 editors would provide best insight in the editing community of the Holocaust entries, limitations of time make such an analysis impossible. Therefore, only the user pages are taken into account of the 30 most active contributors of each of the language version of Wikipedia's Holocaust entries under study.

The analysis of the top active users by edit count might be considered unrepresentative since only a small minority of editors is taken into consideration. However, in the context of this research, the sampled group is the most important group, as it is the contribution of this small group that

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[106] The figure represents a printscreen of the personal profile (user) page of is one of the editors of the English Holocaust article on Wikipedia. As can be perceived, the user 'Goodoldpolonius2' shares some information about himself, which Wikipedia users, however, are not obliged to. Printscreen retrieved from: Wikipedia, 'User:Goodoldpolonius2': http://en.wikipedia.org/wiki/User:Goodoldpolonius2 (27-05-2014).
[107] *Ibidem*.

largely shaped the content on the Holocaust articles under study. Nevertheless, it should be noted that the results and conclusions presented below first and foremost refer to the sample under study.

Table 2.2 shows a schematic overview of the characteristics about registered users that could have been retrieved from the user pages under study. One of the most significant findings in this respect, is that the majority of registered users under study does not share information about themselves on their User pages. This means that most users do not share personal information like their name, where they come from, what their gender is, what their profession is, what their education is, and so on. As the user *Humus_sapiens* states on his or her user page: 'Here it only matters what we do, not who we are'[108]. The statistics seem to confirm this statement.

Table 2.2. Characteristics of top 30 editors on the Holocaust articles on Wikipedia.[109]

| Characteristics of the top 30 editors on each of the Holocaust entry under study | English language version | German language version | Dutch language version |
|---|---|---|---|
| **Number of edits made by the most active editor** | 724 (*SlimVirgin*) | 480 (*Jesusfreund*) | 105 (*Bart Versieck*) |
| **Number of edits made by the 30th most active editor** | 40 (*Jimhoward72*) | 12 (*Saperaud*) | 7 (*VR-Land*) |
| | | | |
| **Inactive users** | 0 | 5 (17%) | 4 (13%) |
| **Banned users** | 5 (17%) | 2 (7%) | 2 (7%) |
| **Scholars** | 3 (10%) | 2 (7%) | 0 |
| **Historians** | 0 | 0 | 0 |
| **Administrators** | 7 (23%) | 0 | 3 (10%) |
| **Bots** | 2 (7%) | 0 | 4 (13%) |
| **Users not listing personal information** | 19 (63%) | 23 (77%) | 19 (63%) |

In addition, when exploring the list of top editors by edit count (listed in Appendix 1), it may be noticed that several 'bots' occupy some of the top positions. These bots can – as mentioned before – best be understood as 'autonomous or semi-autonomous programs' which have been developed to

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[108] See: Wikipedia, 'User:Humus_sapiens': *http://en.wikipedia.org/wiki/User:Humus_sapiens* (01-06-2014).
[109] The table presents the key findings of an empirical analysis of the top 30 active users on the Dutch, English, and German language version of the Holocaust article on Wikipedia. These top 30 editors are selected on the total *number* of edits on the Holocaust article on Wikipedia. The top 30 of editors is based on statistics from the online tool 'Xtool', see: http://tools.wmflabs.org/xtools/articleinfo/index.php?article=holocaust&lang=en&wiki=wikipedia&begin=&end= (English language version), http://tools.wmflabs.org/xtools/articleinfo/index.php?article=holocaust&lang=nl&wiki=wikipedia&begin=&end= (Dutch language version), and http://tools.wmflabs.org/xtools/articleinfo/index.php?article=holocaust&lang=de&wiki=wikipedia&begin=&end= (German language version) (02-06-2014). Own calculations.

help with maintenance functions of Wikipedia such as identifying and reverting vandalism and spam.[110] Therefore, the high activity of bots on the English and Dutch indicates that the Holocaust articles under study are the target of much vandalism, which is actively identified and automatically reverted by these bots.

A similar explanation can be given for the relative high number of administrators in the top 30 of active editors on the English language version of the Holocaust article. Specifically, since the English page is visited significantly more than the German and Dutch Wikipedia articles, the risk of vandalism seems to be higher, which could accordingly explain a demand for more control (by administrators) on Wikipedia. In particular when compared to the German and Dutch language version of the article. Nevertheless, this theory does not explain why the German language version of the Holocaust article on Wikipedia does not have *any* administrators among the 30 most active editors.

A higher number of active administrators on the Holocaust articles also suggests that some kind of monopoly may exist. Since administrators have more rights than others, their effort intensity may be more influential than others. Administrators have the right to 'block', or 'ban' other users when they deem the edits non-constructive, or in violation with Wikipedia's policies, rules and norms. Hence, this may also explain the relatively higher number of 'banned' editors among the 30 most active editors on the English language version of the Holocaust article on Wikipedia, compared to the German and Dutch version.

A very different, but important finding, is that from the 30 most active users of the Holocaust articles under study, a total of 5 users has indicated to have a Bachelor's or Master's degree. Three of them are among the 30 most active editors of the English language version of the Holocaust article[111] and two are among the 30 most active editors of the German language version[112]. Their fields of expertise include theology, sociology, music theory and law. However, none of them is a professional historian, which indicates that the Holocaust articles under study are predominantly written by non-historians.

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[110] Priedhorsky et al., 'Creating, destroying, and restoring value in Wikipedia', 261-262.
[111] The users with academic credentials listed on the English user pages include: *Goodoldpolonius2*, *Jimhoward72* and *Antandrus*. See: http://en.wikipedia.org/wiki/User:Goodoldpolonius2 (Goodoldpolonius2), http://en.wikipedia.org/wiki/User:Jimhoward72 (Jimhoward72), and http://en.wikipedia.org/wiki/User:Antandrus (Antandrus) (02-06-2014).
[112] The users with academic credentials listed on the German user pages include: *Lung* and *Eisbaer44*. See: http://de.wikipedia.org/wiki/Benutzer:Eisbaer44 (Eisbaer44), and http://de.wikipedia.org/wiki/Benutzer:Lung (Lung) (02-06-2014).

A closer look at the users who share information about themselves on their user profile pages reveals that the users come from a wide variety of backgrounds. For example, the fourth most active editor on the English language version of the Holocaust entry on Wikipedia (*Woogie10w*[113]) turns out to be an accountant, whereas the sixth most active editor (*JpGordon*[114]) happens to be a professional programmer. When it comes to gender, only one of the 29 editors listing personal information indicated to be female, which is the user *Ellywa*[115], the fourth most active user on the Dutch language version of the Holocaust entry.

In addition, most of the 29 editors with relevant user profiles somehow express a personal interest in history (e.g. *Antandrus*[116]) and specifically in the Second World War (e.g. *Richard Lenzen*[117]).[118] Some others express personal affiliation with Jews and Jewish history (e.g. *Humus sapiens*[119]), while another editor indicated to have particular interest in crimes against humanity (*Joel MC*[120]). Nevertheless, it is important to note that, despite some similarities between the Wikipedians, there does not exist a certain profile of the editors.

In fact, the only thing they all have in common is a significant devotion to Wikipedia and –to a lesser extent– a personal affiliation or interest in history. A general characteristic most of the editors shared is that they indicate to speak or read at least two or more languages. This largely confirms the finding of the study conducted by the Wikimedia foundation, which posed that most of the Wikipedians are multilingual[121].


**Identity of unregistered users of the Holocaust entries**

Although the findings above already provide some insight in the identity of the editors of the Holocaust entries under study, it does not tell much about the geographic location of the editors. Most of the 29 user pages did not include any information about the physical location of the editor, end even if they would have done so, it would not be representative for the editing community as a whole. However, more valuable in this respect are the 2,300 unregistered editors of the Holocaust

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[113] Wikipedia, 'User:Woogie10w': http://en.wikipedia.org/wiki/User:Woogie10w (18-07-2014).

[114] Wikipedia, 'User:Jpgordon': http://en.wikipedia.org/wiki/User:Jpgordon (18-07-2014).

[115] Wikipedia, 'Gebruiker:Ellywa': http://nl.wikipedia.org/wiki/Gebruiker:Ellywa (18-07-2014).

[116] Wikipedia, 'User:Antandrus': https://en.wikipedia.org/wiki/User:Antandrus (18-07-2014).

[117] Wikipedia, 'Benutzer:Richard Lenzen': http://de.wikipedia.org/wiki/Benutzer:Richard_Lenzen (18-07-2014).

[118] It should be noted that none of the users share their interests in extensive detail on their user profile page. For example, many users pointed out to be interested in history, but did not specify which parts, or aspects of history they are particularly interested in. Richard Lenzen, however, was an exception as hey indicated to have a particular interest in the history of the twentieth century, and especially in the Second World War.

[119] Wikipedia, 'User:Humus sapiens': http://en.wikipedia.org/wiki/User:Humus_sapiens (18-07-2014).

[120] Wikipedia, 'User:Joel MC': http://en.wikipedia.org/wiki/User:Joel_Mc (18-07-2014)

[121] From: Wikimedia Foundation, 'Wikipedia editors study: results from the editor survey, April 2011': http://upload.wikimedia.org/wikipedia/commons/5/51/Editor_Survey_Report_April_2011.pdf (18-07-2014).

entries, because they –as explained before– are obliged to share their IP-address, which represents a geographical location.

Accordingly, it is possible to retrieve the geographic location of these anonymous users by analyzing their edits. For the purpose of this research, a specialized tool, named *Wiki Trip*, is used to automatically conduct this process by subtracting the IP-addresses of unregistered editors from the editing history of the Holocaust entries and visualize their geographic location accordingly. The results are shown in Figure 2.8, Figure 2.9 and Figure 2.10.

Figure 2.8*. Geographic location of edits made by unregistered users to the English language version of the Holocaust entry.[122]*
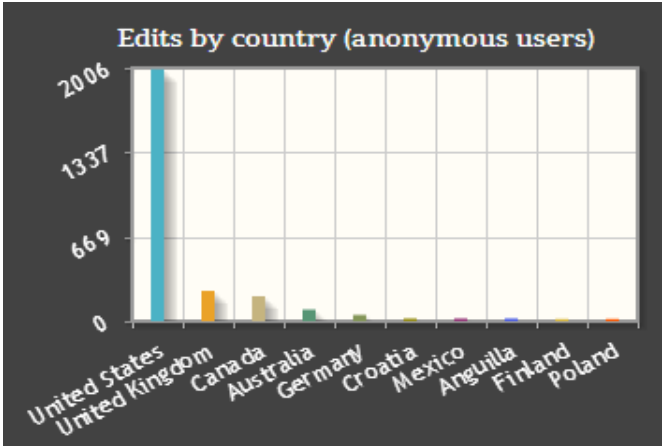


Figure 2.9. *Geographic location of edits made by unregistered users to the German language version of the Holocaust entry[123]*
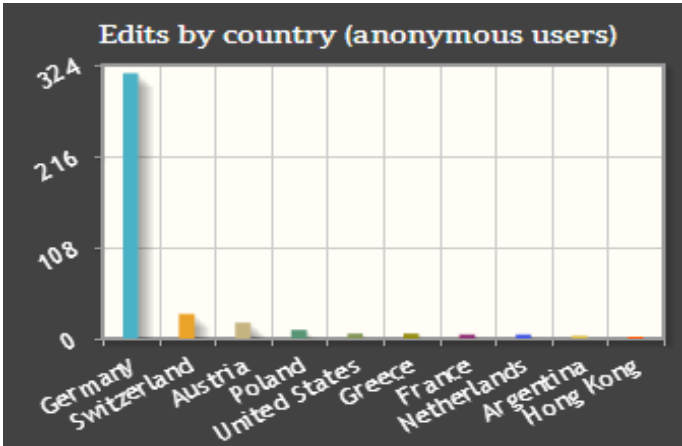
[122] Graph retrieved from: Sonetlab, 'Wiki Trip [English]': http://sonetlab.fbk.eu/wikitrip/#|en|Holocaust (11-06-2014).
[123] Graph retrieved from: Sonetlab, 'Wiki Trip [German]': http://sonetlab.fbk.eu/wikitrip/#|de|Holocaust (11-06-2014).

Figure 2.10. *Geographic location of edits made by unregistered users to the Dutch language version of the Holocaust entry.* [124]
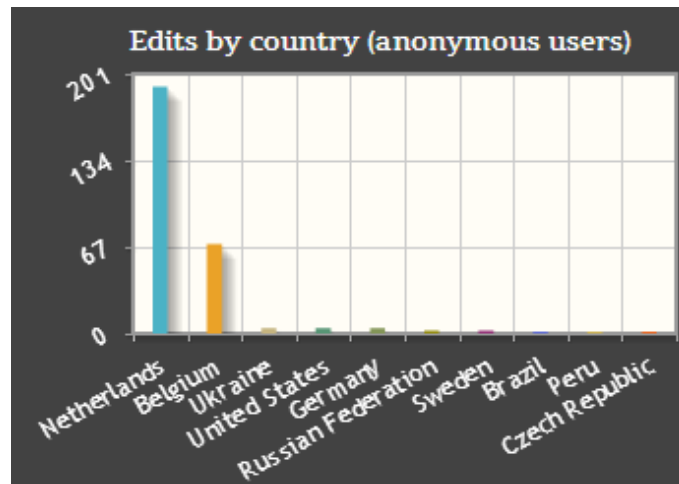


Above all, the graphs indicate that Wikipedia is to a very large extent transboundary in nature, confirming the earlier made assumption that it considerably different from traditional historiography (which tends to be strongly restricted to national frameworks). However, more specifically, the findings show that most (anonymous) edits on the English language version of the Holocaust article Wikipedia are made from the United States of America (2006 edits), followed by the UK (268 edits) and Canada (222 edits). Likewise, most edits on the Dutch language version are made from the Netherlands (196 edits), followed by Belgium (69 edits) and Ukrain (3 edits). German language version are made from Germany (320 edits), followed by Switzerland (32 edits) and Austria (21 edits). These findings are further visualized in Figure 2.11, Figure 2.12 and Figure 2.13.

[124] Graph retrieved from: Sonetlab, 'Wiki Trip [Dutch]': http://sonetlab.fbk.eu/wikitrip/#|nl|Holocaust (11-06-2014).

Figure 2.11. *Visualisation of the geographic location of edits made by unregistered users to the English language version of the Holocaust entry on Wikipedia.*[125]



Figure 2.12. *Visualisation of the geographic location of edits made by unregistered users to the German language version of the Holocaust entry on Wikipedia.*[126]



Figure 2.13. *Visualisation of the geographic location of edits made by unregistered users to the Dutch language version of the Holocaust entry on Wikipedia.*[127]



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[125] Visualization retrieved from: Sonetlab, 'Wiki Trip [English]': http://sonetlab.fbk.eu/wikitrip/#|en|Holocaust (11-06-2014).

[126] Visualization retrieved from: Sonetlab, 'Wiki Trip [German]': http://sonetlab.fbk.eu/wikitrip/#|de|Holocaust (11-06-2014).

[127] Visualization retrieved from: Sonetlab, 'Wiki Trip [Dutch]': http://sonetlab.fbk.eu/wikitrip/#|nl|Holocaust (11-06-2014).

As can be perceived, by far the most edits on the English Wikipedia are made from the USA, followed by the UK and Canada. Likewise, the people who have edited the Dutch Holocaust article tend to be primarily located in the Netherlands, as well as –to a lesser extent– in Belgium. In addition, the German Wikipedia tends to be largely edited from people within Germany, followed by Switzerland and Austria. This may be considered remarkable because Austria was much closer involved in the history of the Holocaust than Switzerland. Nevertheless, it is important to realize that this finding is largely insignificant as it only represents 32 edits, which is even less than 1% of the total number of edits (3,549).

In fact, it should be noted that the above findings only represent the location of around 19% of the total edits made to the Holocaust entries under study[128], suggesting that the findings presented in the above figures represent the geographic locations of only one fifth of the total edits. Therefore, the findings presented here should be primarily perceived as a mere *indication* of the geographic location of the editors.

## 2.5 Editing statistics

Although the previous sections already touched upon the (number of) editors, it is also important to get more in-depth insight in the magnitude of editing processes on the online encyclopedia. Therefore, this section primarily reflects on quantities and frequencies of editing on Wikipedia and thereby constructs a theoretical framework that is vital in understanding some of the findings discussed in the next chapter. Above all, the statistics presented here are illustrating the rapidity with which the Wikipedia entries change and provide key insight in the involvement of editors.

As mentioned before, the Wikipedia community consists of 18,6 million editors who together produced over 720 million edits on Wikipedia (May, 2014).[129] In the specific case of the Holocaust entries under study, statistics show that in June 2014, the latest month for which statistics were available at the time of writing, over 18,000 edits are made to the English, German, and Dutch language version, by a total of more than 3,500 registered users and over 2,300 unregistered users (Table 2.3).

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[128] This percentage is calculated by using the statistics from Table 2.3.
[129] From: Wikipedia, 'Wikipedia Statistics': http://stats.wikimedia.org/EN/TablesRecentTrends.htm (12-06-2014).

Table 2.3. *Number of edits and editors on the Holocaust entries under study.*[130]

| Subject: | English language version | German language version | Dutch language version |
|---|---|---|---|
| **Number of total edits** | 13,243 | 3,549 | 1,181 |
| **Number of minor edits** | 4,313 | 1,248 | 500 |
| **Average edits (year)** | 1,081 | 306 | 109 |
| **Average edits (month)** | 91 | 26 | 10 |
| **Number of edits within previous year** | 289 | 142 | 89 |
| **Number of edits within previous month** | 30 | 1 | 10 |
| **Number of unique editors** | 4,328 | 1,034 (17,8) | 461 |
| **Number of edits made by anonymous (unregistered) editors** | 2,961 | 414 | 283 |
| **Number of registered editors** | 2481 | 765 | 280 |
| **Number of edits made by the top 10% of active users** | 7,705 (58% of total) | 2,192 (61% of total) | 607 (50% of total) |
| **First edit \*[131]** | 15-11-2001 | 14-07-2002 | 25-04-2003 |
| **Last edit** | 03-06-2014 | 01-06-2014 | 17-0-2014 |

A closer look at these numbers reveals that the English language version of the Holocaust entry takes up almost 75% of the total edits and up to 74% of the total number of unique editors. This is significantly more than its German (respectively 20% and 18%) and Dutch (respectively 6% and 8%) language-counterparts (Table 2.3). These differences seem to reflect the general hierarchy and balance in breadth and depth (e.g. size of the articles) between the language versions of the Holocaust entries on Wikipedia. This can largely be explained by the difference in total number of native speakers of the languages. Specifically, with 300 million native speakers of the English language worldwide[132], there are simply significantly more English speakers in the world than there are native German speakers (approximately 100 million)[133], and significantly more German speakers than there are native speakers of the Dutch language (around 23 million)[134].

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[130] The statistics in the table are retrieved from: X!'s Tools, 'Page History: Holocaust': http://tools.wmflabs.org/xtools/articleinfo/index.php?article=holocaust&lang=nl&wiki=wikipedia&begin=&end= (Dutch Wikipedia), http://tools.wmflabs.org/xtools/articleinfo/index.php?article=holocaust&lang=de&wiki=wikipedia&begin=&end= (German Wikipedia), http://tools.wmflabs.org/xtools/articleinfo/index.php?article=The_Holocaust&lang=en&wiki=wikipedia (English Wikipedia) (11-06-2014). Own calculations.
[131] It is important to note that Wikipedia's revision history indicates that the English language version of the Holocaust article was first edited on 15 November 2001, but the history of the Talk page goes back to 7 November 2001 and suggests that the entry was already edited prior to 15 November 2001. This issue is further discussed in Chapter 3.1.
[132] Broughton, Geoffrey, Christopher Brumfit, Anita Pincas and Roger D. Wilde,.*Teaching English as a foreign language* (New York 2002) 2.
[133] U. Ammon, 'The Federal Republic of Germany's policy of spreading German', *International Journal of the Sociology of Language* 95/1 (1992) 42.
[134] Rehm, Georg and Hans Uszkoreit, *The Dutch Language in the Digital Age* (Berlin 2012) 47.

Another notable finding in this respect is that 58 percent of the 18,000 edits on the Holocaust entries under study are made by the top 10% of active users in 2014. This suggests that Jimmy Wales, the co-founder of Wikipedia, was merely right to challenge the dominating belief that Wikipedia is actually produced by collaborating 'crowds' as he repeatedly downplayed the notion that Wikipedia's success is determined by a 'massive collective of contributors'. As he pointed out in a speech at Stanford University in 2006:

> The idea that a lot of people have of Wikipedia, is that it's some emergent phenomenon – the wisdom of mobs, swarm intelligence, that sort of thing – thousands and thousands of individual users each adding a little bit of content and out of this emerges a coherent body of work. (...) [But Wikipedia is in fact written by] a community, a dedicated group of a few hundred volunteers. (...) I expected to find something like an 80-20 rule: 80% of the work being done by 20% of the users (…) But it's actually much, much tighter than that: it turns out over 50% of all the edits are done by just [0].7% of the users.[135]

Yet, whereas Wales reported that 50% of all the edits are done by just 0.7% of the users, the reality shows a less disproportionate balance between (self-)designated developers versus 'common users' (58% of the work done by 10% of the users). This suggests that it would be a mistake to dismiss the idea of Wikipedia as 'collaborative knowledge' as a myth. In fact, it is important to realize that 10% of 5,800 editors is still a significant number of people working on the same project and that Wikipedia is, above all, a platform that is written *by* and *for* the public[136].

## 2.6 Conclusion

This chapter has tried to provide a general understanding of Wikipedia and some of its key characteristics. In summary, it is important to understand that Wikipedia was originally intended to be an expert-generated encyclopedia, which, however, became most famous for its collaborative character of many minds producing knowledge.[137] Its unique combination of Wiki-technology and the GNU Free Documentation License has made Wikipedia radically different from traditional encyclopedia. Never before was an encyclopedia open to editing 'by anyone, at any time' and never before became an online reference work so popular. However, Wikipedia's popularity also had a significant downside, as it made the medium more susceptible to vandalism and disruption. This resulted in a complex system of control and regulations.

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[135] Jimmy Wales, cited in: Aaron Swarz, 'Who writes Wikipedia?': http://www.aaronsw.com/weblog/whowriteswikipedia/ (10-04-2014).
[136] Howe, Jeff, 'The rise of crowdsourcing', *Wired magazine* 14/6 (2006) 1-4.
[137] Niederer and Van Dijck, 'Wisdom of the crowd or technicity of content?', 1370-1371.

More specifically, although policy making was never part of a planned system of governance, the development of policies and regulating influences at different points in the site's history seemed inevitable and turned Wikipedia from an encyclopedia based on 'soft security' into one of tight control. A hierarchical system of administrators, bureaucrats and bots is accordingly established to monitor and control the articles, and to ensure the 5,800 contributors of the Holocaust articles under study follow strong overall regularities. However, despite clearly formulated guidelines, much ambiguity continues to exist on the NPOV policy, leading to considerable debates between Wikipedians on the talk pages of the articles.

Nevertheless, despite a large number of discussions on the Holocaust articles, this chapter has shown that there is still a significant group of dedicated people, which actively edits the webpages. In addition, with regard to sub-question 2 (SQ2): '*Who is involved in the information production of the Holocaust on Wikipedia?*', the findings of this chapter have shown that the Holocaust entries on Wikipedia are constructed and edited by 5,800 different people who predominantly choose to stay anonymous. This means that, for most of the authors, it is not known where they come from, who they are and why they contribute to Wikipedia. From the users whose identity *is* known, however, it has been found that they come from a wide variety of backgrounds and are predominantly non-professionals.

Still, it can be stated that most of the editors of the Holocaust entries are located in either the USA (for the English language version), in Germany (for the German language) and in The Netherlands (or Belgium for the Dutch language version). Accordingly, it can be concluded that most of the contributors of Wikipedia come from countries with the largest number of native speakers of respectively English (USA), German (Germany) and Dutch (The Netherlands).

All in all, this means that a group of (predominantly) amateur historians from all over the world is responsible for the (re)presentation of one of the most significant themes of modern history on the sixth most visited website in the world, completely out of free will.

So, Wikipedia has created a working community, but has it created a good historical resource? Are Wikipedians good historians? These are the central questions of this research and will be answered in the following chapters. However, before I do so, the next chapter first provides further insight in the Holocaust entries under study, with particular attention to the development of the Holocaust articles on the English, German and Dutch language versions of Wikipedia.

# 3. THE DEVELOPMENT OF THE HOLOCAUST ENTRIES ON WIKIPEDIA

'History is not the past, but a map of the past drawn from a particular point of view to be useful to the modern traveller. (…) Reality is not in the present but between the past en the future.'

- Henry Glassie[1]

There are two major aspects of Wikipedia's content that have not been adequately addressed in prior research.[2] First, allegedly the most researched question about Wikipedia since its foundation has been, 'how good is the content?' That is, can a reference work predominantly built by anonymous non-expert contributors be a high-quality product? A major shortage in existing reviews has been the failure to move beyond anecdotal examples of article success or failure to provide more thorough metrics of quality[3]. A second major aspect of the content is the size of Wikipedia articles. No previous empirical research has synthesized the studies on this important aspect of Wikipedia as is done here.

Nevertheless, it is important to understand that there *have* been numerous attempts to 'measure' Wikipedia's accuracy and reputations that bring questions about quality and authority to the forefront of discussions among scholars[4]. However, most of these attempts have tried to determine the quality of content by *either* focusing on size (e.g. Voss, 2005)[5], the process of collaboration (e.g. Bryant, Forte and Bruckman, 2005)[6], the content of the articles (e.g. Pfeil, Zapheris and Ang, 2006)[7], the ways in which articles are interlinked (Stvilia et al., 2005)[8], or how articles evolve (Viégas et al., 2004; Wilkinson and Huberman, 2007)[9]. However, a major shortage in existing research has been the failure to combine these aspects of 'quality' that are appropriate for considering Wikipedia.

Therefore, this chapter focuses on several important quality dimensions, including breadth, comprehensiveness and social control. In the next chapter, the findings are complemented with an empirical analysis that focuses on other important quality dimensions, such as currency, readability

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[1] Glassie, Henry H., *Passing the time: folklore and history of an Ulster community* (New York 1982) 621.
[2] Mesgari et al., 'Sum of all human knowledge', 2.
[3] *Ibidem*.
[4] Examples of such studies are: Giles, 'Internet encyclopedias go head to head', 900-901; Lih, 'Wikipedia as participatory journalism'; T. Chesney, 'An empirical examination of Wikipedia's credibility', *First Monday* 11/11 (2006). Retrieved from http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1413/1331 (16-05-2014).
[5] Voss, 'Measuring Wikipedia', 1-10.
[6] Bryant et al., 'Becoming Wikipedian', 11-20.
[7] A. Halavais and D. Lackaff, 'An analysis of topical coverage of Wikipedia', *Journal of Computer-Mediated Communication* 13 (2008) 429-440.
[8] Stvilia et al., 'Information quality work organization in Wikipedia', 983-1001.
[9] Viégas et al., 'Coordination in Wikipedia', 78; Wilkinson et al., 'Cooperation and quality in Wikipedia', 157-164.

and reliability (accuracy). Hence, this research thus gives a much more thorough perspective on the quality of Wikipedia articles than has been previously conducted.

The contribution of this chapter to this thesis is twofold. Firstly, it systematically reviews the development of the Holocaust articles under study in terms of breadth and depth. Considerable attention is devoted to the (development in) breadth and depth of the articles, with a mere focus on the amount of words and total number of references. This provides insights about the extensively varied evolution of the studied articles, which uncovers how the Holocaust is being shaped on Wikipedia. Secondly, it analyses trends in contributions and quality control of the different language versions of the Holocaust entries, which is helpful in understanding the current coverage of the Holocaust on Wikipedia. This analysis is vital to better capture unique aspects of Wikipedia, and enhance the understanding of findings on the representation of the Holocaust that are presented in Chapter 4.

Accordingly, this chapter first focuses on how the Wikipedia articles have evolved over time, particularly emphasizing the (quantitative) differences in development between the articles under study. Second, the nature of contributions is addressed, with particular focus on NPOV (Neutral Point Of View) edits, and finally, the chapter ends with a conclusion in which the findings are summarized.

## 3.1 First versions of the Holocaust entries

According to the revision history of Wikipedia, the English language version of the Holocaust entry was created on 15 November 2001[10], followed by a German-language version on 14 July 2002[11] and a version in Dutch on 25 April 2003[12]. These first versions were far from elaborate and came not even close to the articles they are today in terms of breadth and depth. For example, the English language version of the Holocaust article contained 762 words, the German language version 110 words, and the Dutch language -version only contained 64 words.

It is, however, important to note that the revision history appears to be partly incomplete as, in the case of the English language version of the Holocaust entry, the oldest available version of the

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[10] See: Wikipedia, 'The Holocaust (old revision)': http://en.wikipedia.org/w/index.php?title=The_Holocaust&oldid=256574 (05-05-2014).

[11] See: Wikipedia, 'Holocaust (alte Version)': http://de.wikipedia.org/w/index.php?title=Holocaust&oldid=5966585 (05-05-2014).

[12] See: Wikipedia, 'Holocaust (oude versie)': http://nl.wikipedia.org/w/index.php?title=Holocaust&oldid=38409 (05-05-2014).

article is of 15 November 2001[13], while the talk page goes back to 7 November 2001. This suggests that revisions were already made in the period prior to the alleged 'first' version of the entry of 15 November 2001[14]. Therefore, the oldest available version of the Holocaust entry on the *English* language version of Wikipedia is likely to be not the actual first version of the page, suggesting that the findings presented here should be interpreted with a degree of caution. The first versions of the German and Dutch language version of the Holocaust entries, though, are well and truly the first versions.

**Early representations of the Holocaust**

The representation of the Holocaust in the early versions of the Wikipedia entries under study may deemed considerably limited when compared to the current versions. The first Dutch language version of the entry, for example, was not much more than a concise definition of the Holocaust in two sentences, stating that the Holocaust refers to the murder of a 'large part' of European Jews by German Nazi's in concentration camps. In addition, the authors mention that 100,000 *Dutch* Jews were victimized, indicating a national focus, which is not apparent in the early versions of the other studied articles (Figure 3.1).

Figure 3.1. *The first version of the Holocaust article on the Dutch language version of Wikipedia (25 April 2003).* [15]



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[13] See: Wikipedia, 'The Holocaust (old revision)': http://en.wikipedia.org/w/index.php?title=The_Holocaust&oldid=256574 (05-05-2014).
[14] See: Wikipedia, 'Talk:The Holocaust: Revision history':
http://en.wikipedia.org/w/index.php?title=Talk:The_Holocaust&action=history (05-05-2014).
[15] Printscreen represents the first version of the Dutch language version of the Holocaust article. From: Wikipedia, 'Holocaust (oude versie)': http://nl.wikipedia.org/w/index.php?title=Holocaust&oldid=38409 (05-05-2014).

Likewise, the first version of the German language version of the Holocaust entry was not much more than four sentences devoted to defining the Holocaust.

Figure 3.2. *The first version of the Holocaust article on the German language version of Wikipedia (14 July 2002).*[16]

## Holocaust

⚠ Dies ist eine alte Version dieser Seite, zuletzt bearbeitet am 14. Juli 2002 um 11:52 Uhr durch pD9587CB7.dip.t-dialin.net (Diskussion). Sie kann sich erheblich von der aktuellen Version unterscheiden.
(Unterschied) ← Nächstältere Version | Aktuelle Version (Unterschied) | Nächstjüngere Version → (Unterschied)

Unter **Holocaust** versteht man die Tötung einer großen Zahl von Menschen, oft einem bestimmten Volk zugehörig (Genozid).

Historisch bezieht sich Holocaust vor allem auf die Verfolgung, Ghettoisierung und systematische Ausrottung von sechs Millionen europäischen Juden durch das Dritte Reich und seine Verbündeten während des Zweiten Weltkriegs. Neben den Juden wurden auch bis zu einer halben Million Zigeuner und mindestens 250.000 geistig oder körperlich Behinderte (siehe auch Euthanasie-Programm) umgebracht.

Drei Millionen russische Kriegsgefangene wurden hingerichtet und mehr als zwei Millionen Osteuropäer starben in der Zwangsarbeit. Politisch Missliebige, wie z.B Kommunisten, Gewerkschaftler, Zeugen Jehovas, oder Homosexuelle wurden ebenfalls in den Konzentrationslagern umgebracht.

*siehe auch:* Deportation, Wannsee-Konferenz, Endlösung, Auschwitz, nuklearer Holocaust

**Weblink:** www.shoa.de

/Diskussion

In fact, no more than 100 words were used in this early edition of the article to define the Holocaust as 'the killing of a large number of people, often belonging to a particular people [Volk]'[17]. Subsequently, the authors added that the term Holocaust historically has been increasingly related to genocide of the persecution, ghettoization and systematic extermination of six million European Jews by the Third Reich and its allies during the Second World War. The article ends with listing non-Jewish victims of 'the Holocaust', including Gypsies, mentally and physically disabled people, (three million) Russian prisoners of war and other political dissidents such as communists, trade unionists, Jehovah's Witnesses and homosexuals, are implicitly included in the definition (Figure 3.2).

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[16] Printscreen represents the first version of the German language version of the Holocaust entry on Wikipedia. From: Wikipedia, 'Holocaust (alte Version)': http://de.wikipedia.org/w/index.php?title=Holocaust&oldid=5966585 (05-05-2014).
[17] From: *Ibidem.*

Figure 3.3. *The early version of the Holocaust article on the English language version of Wikipedia (15 November 2001).*[18][19]



Furthermore, the early version of the Holocaust entry on the English language version of Wikipedia tends to be the most comprehensive of the three entries, as it not only provides a definition of the Holocaust, but also touches upon other aspects of the phenomenon, including its history, interpretations, revisionism and criticism, as well as the origins and use of the term.

According to this entry, 'the term Holocaust has come to refer to the extermination (or genocide) of an estimated six million Jews by Nazi Germany and other Axis powers in the years leading up to and during World War II'. Subsequently, the history of the Holocaust is discussed (in 351 words) in which is described how anti-Semitism, rooted in Europe for many centuries, became the basis of Hitler's book *Mein Kampf* (1925) and eventually accelerated into the Holocaust once Hitler acquired political power. After the section on the history, the early section on the history of the Holocaust fast forwards from Anti-Semitism to the establishment of ghettos for Jews in Germany, followed by paragraphs on concentration camps, *Einsatzgruppen* (death squads), the *Wannsee Conference*, and, finally, extermination camps.

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[18] Printscreen represents the oldest available version of the English language version of the Holocaust entry on Wikipedia. From: Wikipedia, 'The Holocaust (old revision)': http://en.wikipedia.org/w/index.php?title=The_Holocaust&oldid=256574 (05-05-2014).

[19] In contrast with the German and Dutch language versions of the Holocaust entries, this printscreen does not capture the entire article/entry. This is because the entry is simply too elaborate to include completely.

Accordingly, the article continues with emphasizing different interpretations of the role and awareness of the German public during the Holocaust, followed by a section on revisionism and criticism (66 words). Finally, the article concludes with a section on the origins and use of the term 'Holocaust' (Figure 3.3).

Four key findings can be identified when reviewing these early versions of the Holocaust articles on Wikipedia. Firstly, the focus of the articles differs. Secondly, the English language version added more detail than its counterparts. Thirdly, the language versions tend to differ on which groups of people are victimized during the Holocaust, and fourthly, the Dutch language version tends to be nationalized. As the following sections will show, these findings sustained all throughout the development of the Holocaust entries and still apply to the articles of today.

## 3.2  Growth of the Holocaust entries

In the years after their first creation, more and more content was added to the Holocaust entries, which made them increasingly elaborate and more detailed. The total amount of words on the Dutch language version of the Holocaust entry, for example, grew from 64 words in the first version of April 2003 to 4,318 words in January 2004. Likewise, the German language version of the Holocaust entry grew from 110 words in 14 July 2002 to 16,748 words in 14 July 2004[20]; an increase of more than 15,000% in the first two years of its existence. Moreover, the English-language version of the Holocaust entry experienced a similar increase as it grew from 762 words in November 2001 to 24,358 words in January 2004.[21] It should be noted here that there is no formal limitation to the total number of words defined by Wikipedia, which means that the number of words presented here can – theoretically– even rise in the coming years.[22]

**Patterns of growth**

The perceived differences in total number of words between the Holocaust entries under study are closely related to the total number of contributors and the number of edits made to these articles[23]. More edits are likely to increase the breadth and depth of the Holocaust entries, which makes the

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[20] See: Wikipedia, 'Holocaust (alte Version:14-07-2004)':
http://de.wikipedia.org/w/index.php?title=Holocaust&oldid=5966585 (05-05-2014).
[21] Statistics obtained from the English, German, and Dutch entry of 'Holocaust' on Wikipedia. For the English-language version, see: Wikipedia, 'The Holocaust': http://en.wikipedia.org/wiki/Holocaust (16-01-2014); For German, see: Wikipedia, 'Holocaust': http://de.wikipedia.org/wiki/Holocaust (16-01-2014); For Dutch, see: Wikipedia, 'Holocaust': http://nl.wikipedia.org/wiki/Holocaust (16-01-2014).
[22] See: Wikipedia, 'Wikipedia:Article size', http://en.wikipedia.org/wiki/Wikipedia:Article_size (14-07-2014).
[23] Lih, 'Wikipedia as participatory journalism.'

total number of edits an important unit of analysis in this respect. Therefore, the development of total number of edits, as well as total size of the Holocaust entries is examined here, providing key insight in the evolution of the Wikipedia entries articles study.

A first look at the total number of edits (contributions) over the years reveals that the growth of edits is *normally distributed*, with a peak in number of edits in the period between 2004 and 2007[24] (Figure 3.4, Figure 3.5, and Figure 3.6). In retrospect, it can be stated that 40% of the total number of edits on the Holocaust articles under study are made in 2005 and 2006[25], indicating that the peak of the distribution took place during these years. Concretely this means that, up to 2007, the Holocaust entries experienced an exponential growth in total number of edits, but faced a considerable decrease afterwards. From 2008 onwards, the total number of edits tends to fluctuate over the years, but remain relatively stable overall.

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[24] See Appendix 1.

[25] In 2005 and 2006 the English page was edited 6285 times (47% of a total of 13,294), the German edited 1430 times (40% of a total of 3,594 edits), and the Dutch language version was edited 415 times (34% of a total of 1,217 edits). Together, these statistics suggest that around 40% of the total amount of edits on the Holocaust articles under study are made in 2005 and 2006. See Table 2.3.

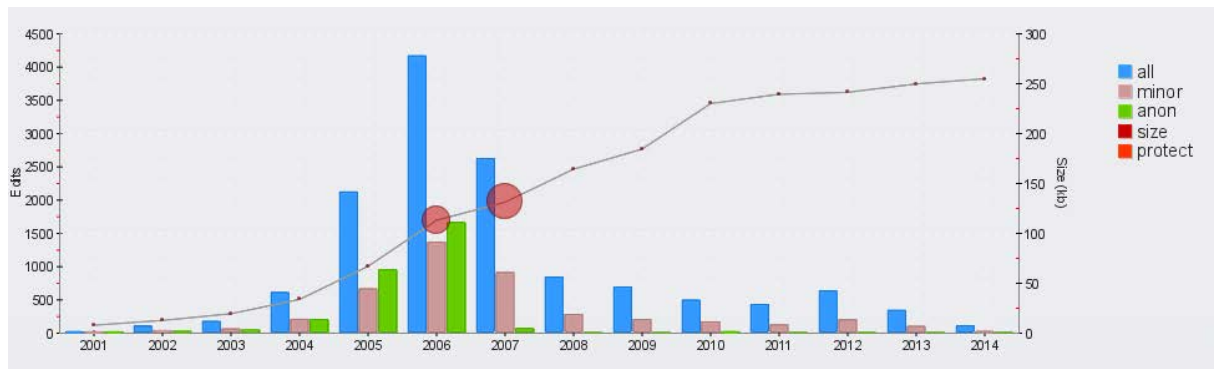Figure 3.4. *The development in number of absolute edits per year on the English language version of the Holocaust entry.*[26]



Figure 3.5. *The development in number of absolute edits per year on the German language version of the Holocaust entry.*[27]
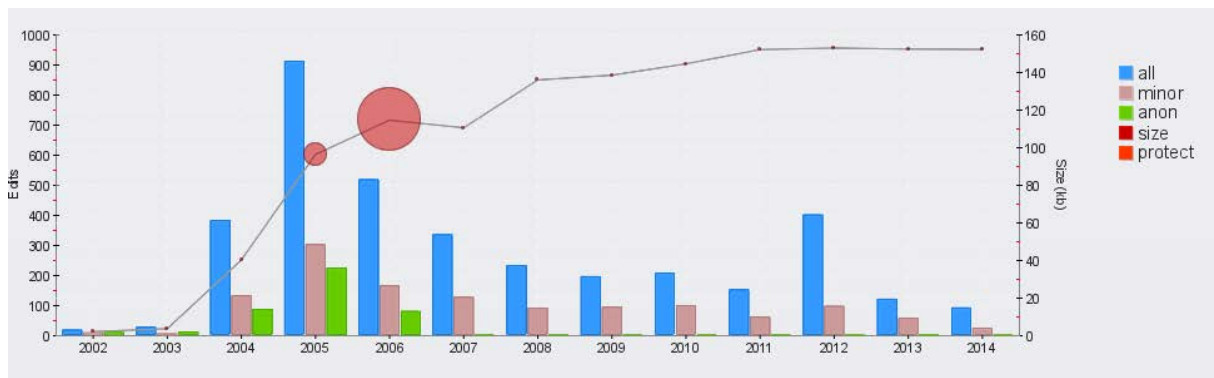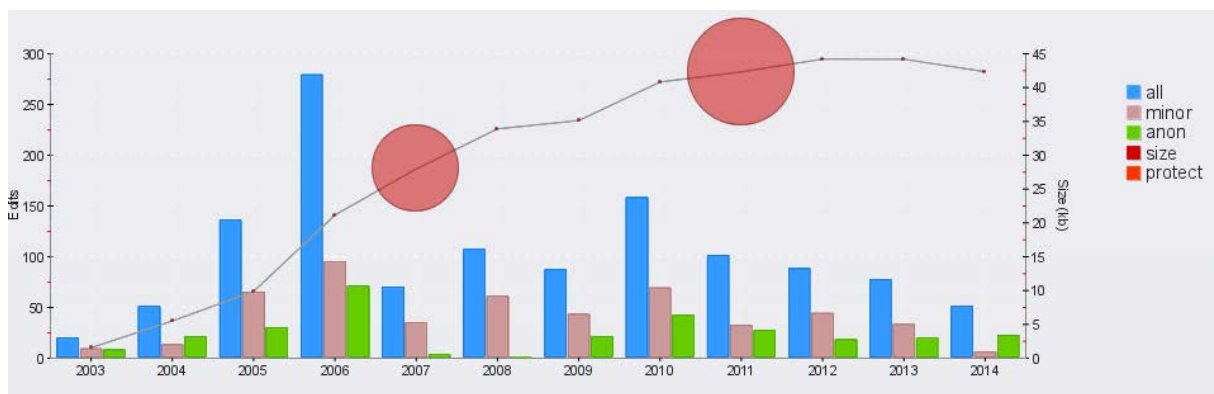


Figure 3.6. *The development in number of absolute edits per year on the Dutch language version of the Holocaust entry.*[28]

[26] From: Wmflabs, 'The Holocaust • en.wikipedia.org':
http://tools.wmflabs.org/xtools/articleinfo/?article=holocaust&lang=en&wiki=wikipedia&begin=&end (03-06-2014).
[27] From: Wmflabs, 'Holocaust • de.wikipedia.org':
http://tools.wmflabs.org/xtools/articleinfo/?article=holocaust&lang=en&wiki=wikipedia&begin=&end (03-06-2014).
[28] From: Wmflabs, 'Holocaust • nl.wikipedia.org':
http://tools.wmflabs.org/xtools/articleinfo/?article=holocaust&lang=en&wiki=wikipedia&begin=&end (03-06-2014).

It is important to note that the perceived decrease and stabilization of total number of edits is not unique to the Holocaust articles under study, but rather seems to reflect the evolution of Wikipedia *at large*[29]. For example, Halfaker, Geiger, Morgan and Riedl (2013) have argued that Wikipedia experienced an exponential growth from hundreds of active editors in 2001 to thousands in 2004, with a peak in March of 2007 at 56,400 active editors on all language versions of the online encyclopedia[30]. However, at the beginning of 2007 participation on Wikipedia at large entered a period of decline[31]. Around the same time, the Holocaust articles under study experienced a relative stabilization in size (measured in kilobytes), which suggests that a relation may exist between the decrease in total number of active editors on Wikipedia at large and the development of the Holocaust entries under study.

This would confirm the findings of Morten Rask, who states that the 'healthiness' of a particular Wikipedia project depends on the characteristics of the 'Internet community', and especially on the number of users[32]. Accordingly, it seems probable that Voss (2005) was right to argue that Wikipedia projects tend to stabilize when they get a certain size[33] (even if the articles' mean size is growing) and the number of distinct authors per article follows a 'power law distribution'[34]. The question, however, is why.

Recent research points to different explanations. For example, Suh et al. (2009) argue that the decline could be the result of increasing completion of the articles[35]. However, this statement seems to be invalid, as Wikipedia's 'core 1,000' most important articles are still considered to be of 'poor quality', and across the encyclopedia, only 19,045 (0,0937%) articles are rated 'good quality'[36]. Also,

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[29] A. Halfaker, S. Geiger, J. Morgan and J. Riedl, 'The rise and decline of an open collaboration system: How Wikipedia's reaction to sudden popularity is causing its decline', *American Behavioral Scientist* 57 (2013) 664.

[30] *Ibidem.*

[31] *Ibidem.*

[32] M. Rask, 'The reach and richness of Wikipedia: Is Wikinomics only for rich countries?' *First Monday* 13/6 (2008) 6. Retrieved from http://pear.accc.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2046/1970 (28-05-2014).

[33] Voss argues that the growth in size of Wikipedia's articles is 'lognormal distributed', suggesting a significant rise at the beginning, followed by a peak and continuous decline over time. See: Voss, 'Measuring Wikipedia', 6.

[34] 'Power law distribution' suggests that the 'power' of Wikipedia's growth is related/correlated to the total number of contributors/editors. *Ibidem*.

[35] Bongwon Suh, Gregorio Convertino, Ed H. Chi, and Peter Pirolli, 'The singularity is not near: slowing growth of Wikipedia', in *Proceedings of the 5th International Symposium on Wikis and Open Collaboration* (New York 2009) 8-9.

[36] See: Wikipedia, 'Wikipedia:Good article statistics (January 2014)': http://en.wikipedia.org/wiki/Wikipedia:Good_article_statistics (10-06-2014).

none of the Holocaust articles is rated 'good quality'[37], meaning that the articles under study may not be considered complete[38].

Other researchers point to failed 'socialization systems' to explain the general stabilization of Wikipedia. For example, in a research of Krieger, Stark and Klemmer (2009), the authors emphasize the increasing barriers for newcomers on Wikipedia[39], which are likely to play a role in the decline of users and, accordingly, the decline of edits. While generic socialization tactics (such as a standardized welcome message) are common on Wikipedia, there is a general absence of effective personal communication encouraging sustained contribution[40]. In combination with an increasingly complex editing structure on Wikipedia (e.g. complex patterns of control), Wikipedia fails to serve most newcomers[41].

Also, the editing community could simply be 'right-sizing', as have been suggested by Halfaker et al[42]. This theory suggests that the main work of the encyclopedia is done and there would be no need for the high number of edits in 2004-2007. However, two pieces of data argue against this notion. First, as noted above, the vast majority of articles in Wikipedia – including the articles under study – are still below community standards for 'good' articles. Second, revision history shows that edits on the Holocaust articles under study are not always constrictive to the quality of the article, meaning that the dynamic nature of the content on Wikipedia requires ongoing editing to maintain its quality.

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[37] Good articles are entries that meet the 'good article criteria' which have been formulated by Wikipedia. These criteria require an article to be (1) well-written, (2) verifiable with no original research, (3) broad in its coverage, (4) neutral, (5) stable, and (6) illustrated, if possible, with images. Articles can be nominated by anyone, though Wikipedia prefers that nominators have contributed significantly and are familiar with the article they nominate. Likewise, the articles nominations can be reviewed by any registered user who has not contributed significantly to the article and is not the nominator. When at least one reviewer accepts the nomination, the article is assigned the status 'good article.' However, anyone can propose that an article does not (longer) meet the good article criteria, the article has to be reassessed again. See: Wikipedia, 'Good articles': https://en.wikipedia.org/wiki/Wikipedia:GA (18-07-2014).

[38] In short, the good article criteria require articles to be 'very well-written, contain factually accurate and verifiable information, are broad in coverage, neutral in point of view, stable, and illustrated, where possible, by relevant images with suitable copyright licenses.' For more detailed information, see: Wikipedia, 'Wikipedia:Good articles': http://en.wikipedia.org/w/index.php?diff=prev&oldid=535943145 (10-06-2014).

[39] Michel Krieger, Emily Margarete Stark and Scott Klemmer, 'Coordinating tasks on the commons: designing for personal goals, expertise and serendipity', in *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (New York 2009) 1485-1494.

[40] Boreum Choi, Kira Alexander, Robert E. Kraut and John M. Levine, 'Socialization tactics in Wikipedia and their effects', in *Proceedings of the 2010 ACM conference on Computer supported cooperative work* (New York 2010) 107-116.

[41] David Musicant, Yuqing Ren, James A. Johnson and John Riedl, 'Mentoring in Wikipedia: a clash of cultures', in *Proceedings of the 7th International Symposium on Wikis and Open Collaboration* (New York 2011) 173-182.

[42] Halfaker et al., 'The rise and decline of an open collaboration system', 666.

Either way, it is important to understand that – despite the general decline in total number of edits and size – the Holocaust articles are still edited in a considerable frequency[43]. Therefore it is vital to have a general understanding of the nature of these edits, which is the central theme of the next section.

## 3.3 Nature of the edits

The above sections already serve as a good indication that all throughout the development of the studied articles, editing plays a key role. It is even fair to say that without the contributions of Wikipedia's users, the Holocaust articles on Wikipedia would not have been the articles they are today. The fact is, however, that not all authors contribute the same way, neither with the same intensity. On the contrary, the nature of contributions is known to vary much from author to author and from edit to edit[44]. Indeed, a qualitative analysis of the roughly 18,000 edits of the Holocaust articles under study reveals that the edits made were not equally constructive – and sometimes even destructive – for the representation of the Holocaust. Specifically, it can be stated that the edits made to the articles under study largely fall into three overarching categories.

Firstly, a minority of the edits – probably around 4%[45] of nearly 18,000 edits – could be classified as 'vandalism-related edits': ignorant or malicious people changing or adding content that was simply not appropriate, often followed by another editor undoing their change (reverted edit). Secondly, the vast majority, by far (around 35% of the edits), could be classified as small changes: people fixing typos, links, categories, images, formatting, and so on. These edits improved the quality of the page, but not adding much in the sense of substance. Thirdly, a much smaller amount of edits was of genuine addition: a couple of sentences, paragraphs, or even sections of new information added to the Holocaust articles.

### 3.3.1  Malicious edits

The first group of edits can be classified as malicious edits, representing edits that are inevitably harming the quality and integrity of Wikipedia entries. These edits are frequently referred to as vandalism and have, unfortunately, played a considerable role in the development of the Holocaust

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[43] The English language version of the article was edited 289 times in 2013, compared to 142 edits on the German, and 89 edits on the Dutch language version of the Holocaust article. See: Global Wikipedia Article Search, 'History statistics for "Holocaust" (history)': http://vs.aka-online.de/cgi-bin/wppagehiststat.pl (12-05-2014).

[44] See: Aniket Kittur, Bongwon Suh, B.A. Pendleton and Ed H. Chi, 'He says, she says: conflict and coordination in Wikipedia', in *Proceedings of the SIGCHI conference on Human factors in computing systems* (California 2007) 453-462.

[45] Specifically, 2,5% (326/13,243) of the total edits on the English Wikipedia can be categorized as reverted edits, compared to 4,2% (152/3549) on the German Wikipedia and 5,8% (68/1181) on the Dutch language version of the Holocaust article on Wikipedia. From: Global Wikipedia Article Search, 'History statistics for "Holocaust" (history)'*:* http://vs.aka-online.de/cgi-bin/wppagehiststat.pl (12-05-2014).

articles under study. For example, it was due to a high number of repeated malicious edits, administrators of the English and German language versions of the Holocaust entries under study saw themselves forced to apply a so-called 'semi-protection' to the pages, which is a common protection for entries that are vulnerable to 'heavy and persistent vandalism or violations of content policy'[46]. Currently, this protection has been applied to 4,344 Wikipedia entries[47] and practically implies that the article cannot be edited by unregistered users and users who have made less than 10 edits on Wikipedia[48].

The semi-protection on the English language version of the Holocaust article was applied on September 20, 2006, by the administrator *Hoopydink,* who stated on the Talk Page of Wikipedia: 'I've just semi-protected this article on a request from a user (…). There has been multiple unique IP addresses vandalising the article today and none have positively contributed to the article. Any administrator should feel free to unprotect it whenever he/she feels that semi-protection is no longer necessary.'[49] In fact, on the day the semi-protection was applied, the Holocaust article was violated from four different IP-addresses (see Figure 3.7).

Figure 3.7. *Vandalism by four unique IP-addresses (yellow mark by RdH).[50]*



A closer look at the edits made by the four different IP-addresses reveals that the each of the edits was destructive in nature. For example, the number that is highlighted next to the IP-addresses

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[46] See: Wikipedia, ''Wikipedia:Protection policy': http://en.wikipedia.org/wiki/Wikipedia:Protection_policy (17-05-2014).
[47] See: Wikipedia, 'Wikipedia:Database reports/Indefinitely semi-protected articles':
https://en.wikipedia.org/wiki/Wikipedia:Database_reports/Indefinitely_semi-protected_articles/6 (18-07-2014).
[48] Idem.
[49] See: Wikipedia, 'Talk:The Holocaust/Archive 12': http://en.wikipedia.org/wiki/Talk:The_Holocaust/Archive_12 (20-05-2014).
[50] The figure shows a printscreen from the page history of the English language version of the Holocaust article of 20 September 2006. Four IP-addresses are highlighted, which have made malicious edits to the article. From: Wikipedia, 'The Holocaust: Revision history':
http://en.wikipedia.org/w/index.php?title=The_Holocaust&action=history&year=2006&month=9&tagfilter= (20-05-2014).

(Figure 3.7) represents the amount of words that has been 'contributed' by the editors. The figure, however, shows that this number is significantly negative, suggesting that the users have simply removed many more words of the article than they have added.

In addition, one of the editors added to the section 'etymology and use of the term', the sentence 'I think you are wrong', without further explaining why (Figure 3.8). Therefore, this edit was removed by an administrator. However, only a couple of hours later, another unregistered user violated the entry by adding the sentence 'IT DIDN'T HAPPEN! Hagel Hilter!!!' (Figure 3.9) to the very same section. Again, an administrator removed the edit.

Figure 3.8. *Malicious edit made by IP 203.81.213.91 on the English language version of the Holocaust entry on Wikipedia (20 September 2006).*[51]
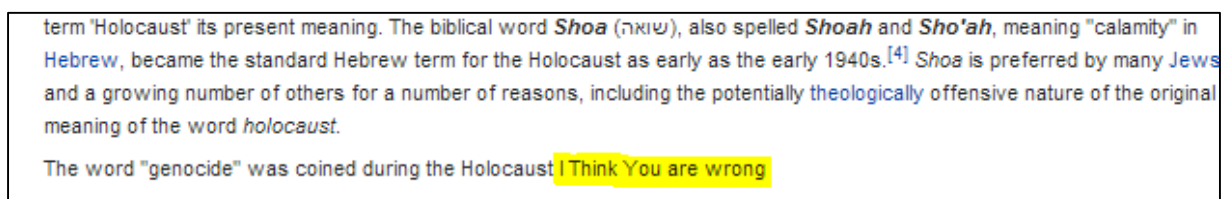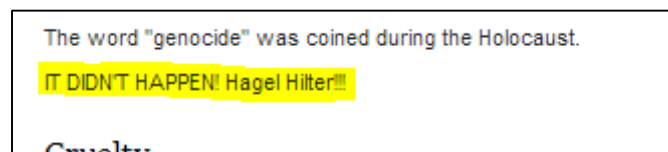


Figure 3.9. *Malicious edit made by IP 168.212.66.156 on the English language version of the Holocaust entry on Wikipedia (20 September 2006).*[52]



However, although the non-constructive edits were removed by other users within a couple of hours and the IP-addresses were blocked accordingly, the repeated violation of the English language version of the Holocaust article made the administrators decide to apply a semi-protection to the page. For the same reason, a protection has been applied to the German language version of the Holocaust article on April 25, 2005[53]. As David Ludwig explains: 'Die Mehrzahl der IP-Edits mussten in letzter Zeit revertiert werden. Zudem gehört dieser Artikel zu den sensibelsten, die wir haben.'[54] The Dutch language version of the Holocaust article, however, has not been protected, meaning that this

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[51] From: Wikipedia, 'The Holocaust: Difference between revisions':
http://en.wikipedia.org/w/index.php?title=The_Holocaust&diff=76803669&oldid=76794060 (20-05-2014)
[52] From: Wikipedia, 'The Holocaust: Difference between revisions':
http://en.wikipedia.org/w/index.php?title=The_Holocaust&diff=76778561&oldid=76770311 (20-05-2014).
[53] See: Wikipedia, 'Seitenschutz-Logbuch':
http://de.wikipedia.org/w/index.php?title=Spezial:Logbuch/protect&page=Holocaust (20-05-2014).
[54] Translated in English: 'The majority of IP edits had to be reverted lately. Therefore, this is one of the most sensitive [susceptible] articles we have.' See: Wikipedia, 'Seitenschutz-Logbuch':
http://de.wikipedia.org/w/index.php?title=Spezial:Logbuch/protect&page=Holocaust (20-05-2014).

is the only version of the Holocaust article under study that can actually be edited by 'anyone, at any time'.

However, it would be incorrect to believe that the reason why the Dutch language version of the Holocaust article on Wikipedia has not been protected by a so-called semi-protection is because no malicious editing takes place on the site. On the contrary, from January 4, 2007, the Dutch language version of the Holocaust article also had a semi-protection applied to the page for the same reason as the other Holocaust articles under study, which however was suspended on August 17, 2011. The reason for suspension is not specified, but it may be likely that it is somehow related to the earlier-mentioned drop in number of edits that seems to coincide with the application of the semi-protection in 2007 (see Figure 3.6).

### 3.3.2    Minor edits

In addition to malicious edits, most of the edits made to the Holocaust entries under study are likely to fall under the category 'minor edits'. A minor edit signifies that only 'superficial' differences may exist between the entry before and after a minor edit has been made.[55] According to Wikipedia, a minor edit is one that 'the editor believes requires no review and could never be the subject of a dispute'. This means that any change that affects the *meaning* of an article is not minor. Hence, even if an edit concerns a single word but does change the meaning of a sentence, Wikipedia does consider it as a major edit[56].

Examples of minor edits include typographical corrections, formatting and rearrangements of text without modification of its content. In addition, there are also presentational changes, which primarily refer to minor edits that slightly change the representation of particular information. An example of such a presentation change is the editing of emotionally loaded sentences that are conflicting with Wikipedia's NPOV policy, such as can be perceived in Figure 3.10. Here, terms that may be considered as non-NPOV, such as the German words 'problematisch' and 'eindeutig unpassend', are removed from the paragraph, which is rewritten accordingly.

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[55] From: Wikipedia, 'Help:Minor edit': https://en.wikipedia.org/wiki/Help:Minor_edit (18-07-2014).
[56] *Ibidem*.

Figure 3.10. *Minor edit classified as presentational change (on the German language version of the Holocaust entry on Wikipedia (yellow mark by RdH).[57]*
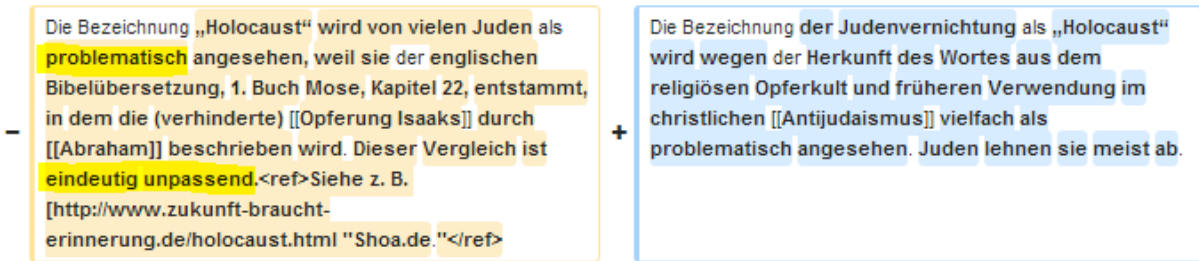


### 3.3.3   Genuine addition

The third category of edits is labelled as 'genuine' addition and it is important to note that this category is subjected to a considerable level of ambiguity and subjectivity. Specifically, while some people may consider a particular edit a valuable addition to the article, others may deem it less valuable – or even inappropriate. This means that one and the same edit can be deemed a genuine addition by one group of Wikipedians, whereas another group may consider it invaluable, or even deem it vandalism. Either way, it should be understood that it is always the responsibility of Wikipedia's users to determine whether a particular edit is a genuine addition or not. In other words: editing Wikipedia articles is always a process of social negotiation.

**Social negotiation**

Accordingly, some edits lead to considerable discussions on the Talk pages of the articles, where Wikipedians are trying to reach consensus about the 'value' of certain edits. These discussions, however, are not always as democratic as could be expected of a medium that has been built on the concepts of collaboration and democratization of knowledge production. The following example is a perfect illustration of the – sometimes – undemocratic nature of the discussions on Wikipedia.

Specifically, on 23 January 2013, the user *Pikolas* added several paragraphs (+- 400 words) about speakers of the international language Esperanto in the context of the Holocaust[58]. However, one day later, user *Joel MC* completely removed the paragraphs[59] for the reason that – prior to

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[57] The image represents a printscreen of an edit made to the German language version of the Holocaust article on Wikipedia on 6 February 2014 by the user *Kopilot*. See: Wikipedia, '„Holocaust" – Versionsunterschied': http://de.wikipedia.org/w/index.php?title=Holocaust&diff=127258906&oldid=127258864 (25-05-2014).
[58] The edit can be perceived on: Wikipedia, 'The Holocaust: Difference between revisions': http://en.wikipedia.org/w/index.php?title=The_Holocaust&diff=534517423&oldid=534508941 (10-06-2014).
[59] The removal of *Pikolas'* contribution by *Joel MC* can be perceived on: Wikipedia, 'The Holocaust: Difference between revisions': http://en.wikipedia.org/w/index.php?title=The_Holocaust&diff=534633852&oldid=534517667 (10-06-2014).

*Pikolas*' addition – no consensus had been reached on the article's Talk page to include a section on Esperantists[60]. Hence, without further debate, *Picolas'* addition was deleted.

In this specific case, it is important to understand that the user *Joel MC* deleted *Picolas'* contribution because – in an earlier discussion on the Talk page – other Wikipedians had determined that Esperantists should not be included in the Holocaust article. However, a closer look at the earlier discussion on the inclusion of Esperantists reveals that only six Wikipedians were involved in the particular discussion, of which four Wikipedians – including *Joel MC* – were against inclusion of Esperantists and two users were in favour. Clearly, the user *Picolas* was also in favour of including Esperantists in the Holocaust article, meaning that eventually four Wikipedians were against adding the topic and three Wikipedians were in favour.

Nevertheless, it is important to note that this research has absolutely no intentions to enter the debate on the role of Esperantists in the Holocaust, but rather uses this edit on the role of Esperantists in the Holocaust as an example to illustrate the –sometimes– undemocratic nature of social negotiation on Wikipedia.

**POV contributions**

Apart from removing topics that are deemed as inappropriate in the context of the Holocaust entry on Wikipedia, the revision history of the Holocaust Wikipedia pages reveals that the NPOV policy poses another challenge for determining the 'quality' of edits. Both Lih[61] (2004) and Viégas et al.[62] note the importance of 'Neutral Point of View' on Wikipedia, which is promoted explicitly as a 'mantra' of the site[63]. Articles written in NPOV should 'present ideas and facts in such a fashion that both supporters and opponents can agree'[64]. However, it is important to note that much debate exists around the NPOV (Neutral Point of View) policy of Wikipedia, as there are no concrete guidelines of classification. Consequently, it is not uncommon that significant discussions on the Talk Pages of the articles under study revolve around reverted or removed edits that are classified as 'non-NPOV'. When no consensus can be reached about a particular edit on the Talk Page, the situation sometimes leads to real 'edit wars'.

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[60] The specific reason *Joel MC* formulated is: 'Does not belong. Already discussed: see talk page.' See: Wikipedia, 'The Holocaust: Revision history (10:12, 24 January 2013)', *Wikipedia*: *http://en.wikipedia.org/w/index.php?title=The_Holocaust&offset=&limit=500&action=history* (10-06-2014).
[61] Lih, 'Wikipedia as participatory journalism.'
[62] Viégas et al., 'Coordination in Wikipedia', 78.
[63] William Emigh and Susan C. Herring, 'Collaborative authoring on the web: A genre analysis of online encyclopedias', in *Proceedings of the Thirty-eighth Annual Hawaii International Conference on System Sciences* (California 2005) 99a.
[64] From the Wikipedia guidelines; quoted in: Lih, 'Wikipedia as participatory journalism.'

Such edit wars are typical for topics on which much controversy exist, such as the Holocaust. In the specific case of the Holocaust articles, the revision history shows that the controversy primarily revolves around the *existence* of the Holocaust, as well as *who* were involved. For example, many non-NPOV edits on the articles under study are either related to Holocaust denial or the alleged (groups of) people who were involved. In response to these edits, there are overt notices requesting clean-up or deletion on the lengthy talk pages, repeated involvement of seniors in the articles' arbitration processes, and bans on some of the editors from working on the page.[65]

To further illustrate, over the years many editors on the English language version of the Holocaust entry on Wikipedia have discussed the appropriateness of addressing Holocaust denial and revisionism in the article[66]. Eventually, no attention has been devoted to this topic as of today[67] – except for an internal link to a separate lemma on Holocaust denial on Wikipedia at the end of the article.[68] For a long time, however, the English language version of the Holocaust entry did contain a separate section on revisionism and denial, which though was removed in April 2006.

When the user *Pwnagepanda121* accordingly asked, on June 8, 2008, whether the article should not include a section on Holocaust denial, he received the following answer:

> 'Such a section would have to be sourced, and some users, such as *Jpgordon*, believe that "Holocaust denial sites as a class are unusable as sources". This despite the fact that WP:RS [Wikipedia's policy on reliable sources] clearly authorizes limited use of "extremist and fringe" sources with phrases like *"Use of these sources must not obfuscate the description of the mainstream view..."*.'[69]

Hence one of the main reasons why the topic does not receive any particular attention in today's version of the English language version of the Holocaust entry is because of the lack of credibility of the theory of the Holocaust, resulting in considerable controversy on the subject. Accordingly, the Talk pages on Holocaust denial show that there is simply no consensus on the subject, making the line between a genuine addition and POV edits (or plain vandalism) very thin in this respect.

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[65] According to Róbert Sumi et al., the characteristics mentioned are confluent criteria that mark pages as edit wars. See: Róbert Sumi, Taha Yasseri, András Rung, András Kornai and János Kertész, 'Characterization and prediction of Wikipedia edit wars', in *Proceedings of the ACM WebSci'11* (Koblenz 2011) 1-3.

[66] See: Wikipedia, 'Talk:The Holocaust/Archive 10 (Holocaust denial)': https://en.wikipedia.org/wiki/Talk:The_Holocaust/Archive_10 (05-06-2014).

[67] It should be noted that the German and Dutch language versions of the Holocaust entry on Wikipedia *do* have included a separate section on Holocaust denial and revisionism.

[68] See: Wikipedia, 'The Holocaust': https://en.wikipedia.org/wiki/The_Holocaust (18-07-2014).

[69] See: 'Talk:The Holocaust/Archive 19 (Holocaust denial)': https://en.wikipedia.org/wiki/Talk:The_Holocaust/Archive_19 (05-06-2014).

## 3.4   Increasing quality control

As a direct response of the above mentioned POV-edits and other malicious contributions, rejection and reverting of unwanted contributions has increasingly become Wikipedia's primary quality control mechanism.[70] Today, reverts represent approximately 9% of all edits on the English Wikipedia, 7% on the German edition and 5% on the Dutch language version of Wikipedia (January 2014).[71] Hence, little debate exists on the importance of reverts in maintaining the quality of Wikipedia. They fix mistakes, repair vandalism, and help enforce policy.

Nevertheless, Halfaker, Kittur and Riedl[72] have argued that reverts can also be damaging, especially to the aspiring editor whose work they 'destroy'. As the scale of reverts increased, rejection of newcomer contributions has also increased, with the unintended consequence of driving away well-intentioned newcomers. In fact, newcomers are particularly likely to decrease their contributions after they are reverted[73], which seems to correlate with the growth of Wikipedia in general.

Closely related to the increase of reverts is the formalization of implicit norms (discussed in Chapter 2.3) into rules and the embedding of these rules in 'peer processes' that function efficiently at scale.[74] Also on the Holocaust entries under study, enforcement of policies can be perceived in the edit history as more editors began to write and cite policies – in particular after the application of semi-protection in 2007. This increased quality control is particularly expressed in a rising proportion of the policies cited by administrators and editors that are referring to sources and provide indications on how to choose them.

More specifically, there seems to be an increased emphasis on the use of references to assure that the information can be verified and to limit POV (Point of View) edits. To limit the number of non-NPOV edits and vandalism, citations without an official source have been gradually removed and readers are increasingly warned when verifiable sources are absent (see Figure 3.11 and Figure 3.12). Especially on the English language version of the Holocaust article, tight control seems to exist on the verifiability of the contributions.

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[70] Stvilia et al., 'Information quality work organization in Wikipedia', 983-1001.

[71] Revert statistics are obtained from: http://stats.wikimedia.org/EN/EditsRevertsEN.htm (English Wikipedia), http://stats.wikimedia.org/EN/EditsRevertsDE.htm (German Wikipedia), and http://stats.wikimedia.org/EN/EditsRevertsNL.htm (Dutch Wikipedia) (15-05-2014).

[72] Aaron Halfaker, Aniket Kittur and John Riedl, 'Don't bite the newbies: how reverts affect the quantity and quality of Wikipedia work', in *Proceedings of the 7th international symposium on wikis and open collaboration* (New York 2011) 163-172.

[73] *Ibidem*.

[74] Viégas et al., 'Coordination in Wikipedia', 78.

Figure 3.11. *Awareness of absence of sources on the English language version of the Holocaust entry on Wikipedia.*[75]
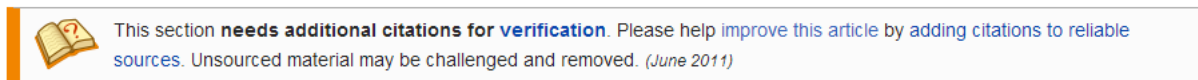
This section **needs additional citations for verification**. Please help improve this article by adding citations to reliable sources. Unsourced material may be challenged and removed. *(June 2011)*

Figure 3.12. *Awareness of absence of sources on Dutch language Holocaust article.*[76]

• De late nawerking van de verlichtingsfilosofie met Jean-Jacques Rousseau waardoor het idee groeide dat de maatschappij gezuiverd moest worden en ontdaan van alle storende elementen met als gevolg het ontstaan van een maakbare mens[bron?]
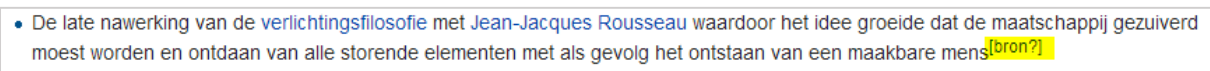
Table 3.1 further illustrates the increasing importance and emphasis on the use of references on Wikipedia. As can be perceived, the English language version of the Holocaust entry increased the number of footnotes from 63 in January 2005 to 386 in January 2014, while the total number of references even rose from zero in 2005 to 151 in 2014. The German edition of the page experienced a similar increase in footnotes, yet to a lesser extent. The Dutch language, on the other hand, seems to be far behind in this respect with 22 footnotes and 3 references in 2014 (the nature of links and references is further discussed in Chapter 3.6).

It is important to note that this significant difference in number of footnotes between the language versions of Wikipedia is not unique to the articles under study. On the contrary, Table 3.1 and Figure 3.13 show that a similar difference in number of references exists between the different language versions of Wikipedia at large. This finding is also supported by a study conducted by Lampe (2009)[77], in which the researcher analyzed Wikipedia entries on the 'Olympic games' and concluded that the English language version of the entries of is the most elaborate edition of Wikipedia when it comes to width, and especially in total number of words and references.[78]

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[75] Image represents a notification that is presented on the main page of the English language Holocaust article on Wikipedia. It specifically states that the information needs additional citations for verification. Retrieved from: Wikipedia, 'Holocaust': http://en.wikipedia.org/wiki/Holocaust (10-06-2014).

[76] Image represents a fragment of the Dutch-language Holocaust article on Wikipedia, which ends with the notification 'bron?' [source?], indicating the absence of verifiable references for the particular information. Retrieved from: Wikipedia, 'Holocaust': http://nl.wikipedia.org/wiki/Holocaust (10-06-2014).

[77] J. Lampe, 'Wikipedia: zegen of vloek? De bruikbaarheid van Wikipedia in de academische sector. Casus: Olympische Spelen London 1948', *Unpublished History Master Thesis Universiteit Gent* (2009). Retrieved from http://lib.ugent.be/fulltxt/RUG01/001/415/101/RUG01-001415101_2010_0001_AC.pdf.

[78] *Ibidem*.

Table 3.1. *Development of total number of footnotes and references on the Holocaust entries under study.*[79]

| Year: | | English language version | German language version | Dutch language version |
|---|---|---|---|---|
| **2005** *(January 1)* | | | | |
| | # Footnotes | 63 | 1 | 0 |
| | # References | 0 | 18 | 7 |
| **2014** *(January 1)* | | | | |
| | # Footnotes | 386 | 98 | 22 |
| | # References | 151 | 62 | 3 |

Figure 3.13. *Difference in total number of references on Holocaust entries under study compared with total number of references on Wikipedia at large.*[80]
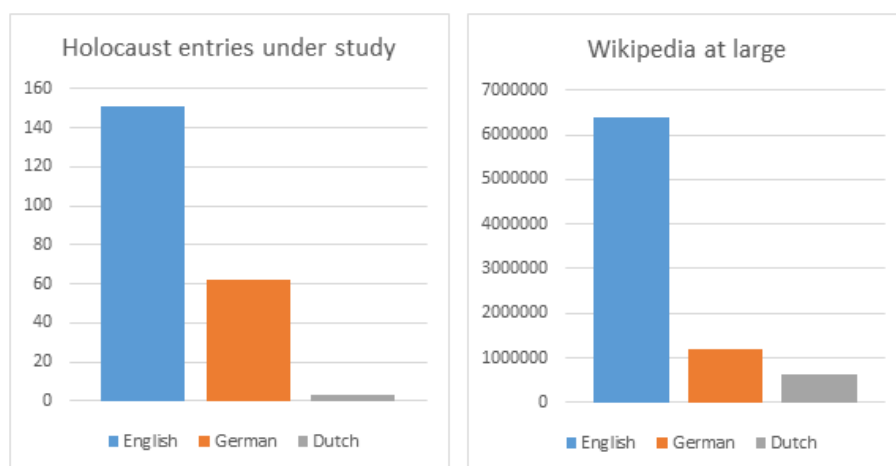


Moreover, the perceived variation in total number of references reflects the difference in *coordination* and *quality control* on the Holocaust articles under study. Specifically, the relatively high number of references on the English language version reflects a tight control of the content, which – in practice – means that contributions without verifiable sources are directly removed. On the German edition, such non-verifiable contributions are more often allowed without being removed, indicating a 'softer' form of control and the Dutch edition of the article is found to have an even less

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[79] The table presents the development of total number of references and footnotes on the Holocaust entries under study. Statistics retrieved from: Wikipedia, 'Revision history': https://en.wikipedia.org/wiki/Holocaust; Wikipedia, 'Versionsgeschichte': https://de.wikipedia.org/w/index.php?title=Holocaust&action=history; Wikipedia, 'Bewerkingsgeschiedenis van Holocaust': https://nl.wikipedia.org/w/index.php?title=Holocaust&action=history&year=2004&month=6&tagfilter= (18-07-2014). Own calculations.

[80] The graph on the left shows the difference in number of references between the language versions of the Holocaust articles under study, while the graph on the right represents the total number of references on the English, German, and Dutch language version of Wikipedia at large (on 1 January 2014). As can be perceived, the graphs present quite similar distributions. Statistics retrieved from: http://stats.wikimedia.org/EN/ChartsWikipediaNL.htm (Dutch), http://stats.wikimedia.org/EN/ChartsWikipediaDE.htm (German), http://stats.wikimedia.org/EN/ChartsWikipediaEN.htm#4 (English) (19-05-2014). Own calculations.

strict form of quality control, which is reflected by the fact that only 22 footnotes and 3 verifiable references are used in the entire page (Table 3.1). Accordingly, it can be stated that this difference in coordination and control is closely related to the total number of edits and editors.[81]

This assumption is further supported by Emigh and Herring (2005), who performed a genre analysis of Wikipedia, and concluded that social-technical processes of article creation (e.g. quality control) shape the content presented[82]. However, even though the perceived (quantitative) differences tend to uncover some key differences between the Holocaust entries under study, it does not tell much about the focus of the articles. Therefore, the next section provides further insight in the shift in focus of the Holocaust entries on Wikipedia.

## 3.5   Changing focus of the Holocaust entries

Despite a significant number of malicious edits and non-genuine additions, the entries under study transformed into elaborate and detailed articles on the Holocaust. As time passed, the pages adopted Wikipedia's 'standard' format (structure), including an introduction, followed by a table of contents, several pages of facts and background, as well as a handful of links, photos and references[83]. However, not only the appearance of the articles changed, the focus also seems to be subjected to change over time. More insight in this transformation is provided in the sections below in which the focus of the entries is determined by systematically analyzing (1) chapters, (2) links and references, and (3) images,

Probably one of the most significant indicators of the changing focus of the Holocaust entries is the transformation of the chapters over the years. Although it does not give full coverage of the content of the articles itself, it does provide a general insight in the focus the articles. Henceforth, the analysis of the table of contents of the Holocaust entries, which is presented below, provides a general understanding about the narrative that is presented of the Holocaust and where the focus is placed on.

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[81] Suh et al., 'Slowing growth of Wikipedia' 8.
[82] Emigh and Herring, 'Collaborative authoring on the web', 99a.
[83] It is important to note here that references are not the same as the earlier mentioned 'internal' and 'external' links in Wikipedia. Instead, whereas internal and external links refer to other sites on the internet, references always refer to print sources. See: E. Yaari, S. Baruchson-Arbib and J. Bar-Ilan, 'Information quality assessment of community generated content: A user study of Wikipedia', *Journal of Information Science* 37/5 (2011) 491.

**Chapters**

*Dutch language version*

Until June 12, 2004, the Dutch language version of the Holocaust entry did not have a table of contents, largely reflecting the brevity of the entry up to that point in time. With only 265 words in June 2004, structuring the entry was simply not necessary as it was easy to oversee the content. Nevertheless, when user *Andries* added 30 more words on June 2004, he (or she) also decided to create a table of contents[84], which is displayed in Figure 3.14.

Figure 3.14. Transformation of Table of contents on the Dutch language version of the Holocaust article.[85]

[84] See: Wikipedia, 'Bewerkingsgeschiedenis van Holocaust':
https://nl.wikipedia.org/w/index.php?title=Holocaust&action=history&year=2004&month=6&tagfilter= (18-07-2014).
[85] It is important to note that there are three reasons why June 2004, June 2007 and June 2014 are chosen as dates of measurement. First, June 2004 was chosen for the practical reason that it was in this month that the Dutch language version of the Holocaust entry on Wikipedia got a table of contents for the first time. Second, June 2007 has been chosen for the reason that scholars have found that most of the edit activity took place between 2004 and 2007, and stabilized afterwards (this is also discussed in Chapter 3.3). Third, June 2014 has been chosen because that is the most recent point in time and thereby reflects the situation as it is today. The reason why a gap of 7 years exists between the second and third point of measurement is because the size of the articles did not change significantly after 2007 (as is shown in Chapter 3.2).

As can be perceived in the table of contents of June 2004, this early version of the Holocaust entry was structured in four chapters. Based on the titles of these chapters, it can be stated that the entry primarily focused on concentration camps, resistance, and revisionism and denial in the context of the Holocaust. However, three years later, this focus partly changed. Specifically, the table of contents of June 2007 (12 chapters) shows that the Wikipedians started to pay more attention to the background of the Holocaust, as well as to the attitude of various groups of people towards the Holocaust. Also, more attention has been paid to the number of victims, with particular focus on the situation in the Netherlands and Belgium. Here, we see language to coincide with geographical boundaries for the first time.

In the following seven years, not much seems to have changed in the focus of the Dutch language version of the Holocaust entry on Wikipedia. As the table of contents of June 2014 (13 chapters) shows, some of the chapters have been further structured in several sub-chapters, such as, for example, is the case for the chapter on the background of the Holocaust, as well as for the chapter on the attitude of various groups of people towards the Holocaust. Nevertheless, a notable change in contents seems to be the addition of the chapters on the total number of victims at one hand, and non-Jewish victims on the other. This addition seems to suggest an increased focus on the victims of the Holocaust.

*German language version*

Just like the Dutch language version, the German-language version of the Holocaust entry on Wikipedia also experienced a significant increase in total number of chapters, as well as a considerable shift in focus. As can be perceived in Figure 3.15 the German Holocaust article contained 7 chapters in June 2004, further expanded to 10 chapters in 2007 and gradually rose to 11 chapters in January 2014. Particularly notable in this respect is the high amount of sub-chapters (29 in total), which is considerably more than its Dutch counterpart, which has 15 sub-chapters.

When it comes to focus of the German language version of the Holocaust article, it can be perceived in the table of contents of June 2004 that the prime focus of the article is on the history/background of the Holocaust. Specifically, the background is further structured in five different sub-chapters, including (1) the persecution of Jews, (2) the transition to systematic genocide (of Jews), (3) Extermination camps, (4) the Wannsee conference and numbers of victims, and (5) the awareness of the Holocaust among Germans. In addition to this elaborate chapter on the background, other chapters primarily focus on other victims of the Nazis, the motivation of the perpetrators and on Holocaust denial.

Figure 3.15. *Transformation of Table of contents on the German language version of the Holocaust article.*[86]

**June 2004**

**Inhaltsverzeichnis** [Verbergen]

1 Geschichte des Holocaust
  1.1 Entrechtung und Verfolgung der Juden
  1.2 Übergang zum systematischen Völkermord
  1.3 Die Vernichtungslager
  1.4 Wannseekonferenz und Opferzahlen
  1.5 Was wusste die deutsche Bevölkerung?
2 Weitere Opfer der Nationalsozialisten
3 Zur Motivation und Psychologie der Täter
4 Die Begriffe *Holocaust* und *Shoa*
5 Holocaust-Leugnung
6 Literatur
  6.1 Standardwerke
  6.2 Sekundärliteratur
7 Weblinks

**June 2007**

**Inhaltsverzeichnis** [Verbergen]

1 Bezeichnungen
  1.1 *Holocaust*
  1.2 *Shoa*
  1.3 *Churban*
2 Geschichte
  2.1 Judenverfolgung im Deutschen Reich (1933-1939)
  2.2 Übergang zum systematischen Völkermord (1939-1941)
  2.3 Die Vernichtungslager (1941-1945)
  2.4 Planungsdokumente und Opferzahlen
  2.5 Weitere von Vernichtung bedrohte Gruppen
3 Reaktionen
  3.1 Haltung der nichtjüdischen Deutschen
  3.2 Haltung der Alliierten
  3.3 Widerstand
    3.3.1 Jüdischer Widerstand
    3.3.2 Innerdeutscher Widerstand und Hilfsaktionen
    3.3.3 Widerstand in den besetzten oder verbündeten Ländern
    3.3.4 Weiterer europäischer Widerstand
4 Erklärungsansätze
  4.1 Gesellschaftliche und ideologische Grundlagen
  4.2 Ökonomische und soziale Motive der Täter
  4.3 Bürokratische und hierarchische Motive
  4.4 Rassistische und antisemitische Motive
  4.5 Psychologische Motive
  4.6 Historische Motive
  4.7 Religiöse Gründe
5 Folgen
  5.1 Traumatisierung der Überlebenden
  5.2 Juristische Aufarbeitung
  5.3 Entschädigungen
  5.4 Kirchliche Aufarbeitung
  5.5 Leugnung und Verharmlosung
  5.6 Mahnung und Erinnerung
6 Siehe auch
7 Referenzen
8 Literatur
9 Filme
10 Weblinks

**June 2014**

**Inhaltsverzeichnis** [Verbergen]

1 Bezeichnungen
2 Vorgeschichte
  2.1 Ziele des Nationalsozialismus
  2.2 Judenverfolgung im Deutschen Reich 1933–1939
3 Verlauf
  3.1 Eskalation
  3.2 Erste Massenmorde und Deportationen
  3.3 Ghettoisierung
  3.4 Deportationspläne
  3.5 Entschlussbildung
  3.6 Systematische Massenerschießungen
  3.7 Vernichtungslager
  3.8 Europaweite Judenvernichtung
    3.8.1 Beginn systematischer Deportationen
    3.8.2 Benelux-Staaten
    3.8.3 Bulgarien
    3.8.4 Deutsches Reich
    3.8.5 Frankreich
    3.8.6 Italien
    3.8.7 Griechenland
    3.8.8 Jugoslawien
    3.8.9 Kroatien
    3.8.10 Rumänien
    3.8.11 Skandinavien
    3.8.12 Slowakei
    3.8.13 Ungarn
  3.9 Schlussphase
4 Gesamtzahlen jüdischer Opfer
5 Täter
6 Holocaustkenntnis in der NS-Zeit
  6.1 Deutschland
  6.2 Alliierte
7 Widerstand und Rettungsversuche
  7.1 Juden
  7.2 Nichtjüdische Deutsche
  7.3 Besetzte oder verbündete Staaten
  7.4 Schweiz
  7.5 Befreiung der Überlebenden in den Lagern
    7.5.1 1944
    7.5.2 1945
8 Folgen
  8.1 Traumatisierung der Überlebenden
  8.2 Juristische Aufarbeitung
  8.3 Entschädigungen
  8.4 Kirchliche Aufarbeitung
  8.5 Ursachenforschung
  8.6 Leugnung und Verharmlosung
  8.7 Mahnung und Erinnerung
  8.8 Künstlerische Verarbeitung
  8.9 Filme
9 Literatur
10 Weblinks
11 Einzelnachweise

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[86] The table of contents that are displayed have been retrieved from the revision of the German language version of the Holocaust entry on Wikipedia. See: Wikipedia, 'Versionsgeschichte': https://de.wikipedia.org/w/index.php?title=Holocaust&action=history (18-07-2014).

In the following three years, the existing subjects were further elaborated, but the overarching chapters largely remained the same. One significant change, however, took place, which is the addition of an elaborate chapter on the 'legacy' of the Holocaust and its implications for the period succeeding the Nazi Regime. In addition, it is remarkable that the chapter on motivation of the perpetrators became increasingly elaborate and received seven sub-chapters accordingly, each representing a different angle on this topic.

This particular emphasis on the question why the German Nazis conducted the Holocaust may allegedly be related to the fact that the entry is primarily created and edited by people located in Germany (see chapter 2.4), and these people are said to feel an increased need to explain why it was the Germans who systematically killed so many Jews. As Cowell states: 'since the end of World War II, Germany has undergone 'cycles of agonized self-interrogation over the Holocaust' [and therefore] 'focused perhaps on the most overpowering question of all: why was it the Germans who systematically killed six million Jews?'[87]

Nevertheless, seven years later, in 2014, the chapter on motivation of the perpetrators has been completely removed and the focus tends to have shifted to the course of the Holocaust, with particular attention to the persecution of Jews, from deportations of Jews as early beginnings to the liberation of the camps as final stage of the Holocaust. Furthermore, there seems to be an added amount of attention for resistance and rescue attempts, as well as for the total number of victims.

*English language version*

As can be perceived in Figure 3.16, the early version of the English-language version of the Holocaust entry on Wikipedia is structured in eight chapters. Based on the titles of chapters, it can be stated that the entry in June 2004 primarily focused on concentration and extermination camps in the context of the Holocaust, with particular attention for Jews, Gypsies and Slavic victims. Noteworthy is the fact that no separate chapter is devoted to the background or course of the Holocaust. Instead, there seems to be a mere focus on different interpretations of the Holocaust, 'Holocaust theology' and origins and use of the term.

However, three years later, this focus completely changed. Specifically, the table of contents of June 2007 (7 chapters) shows that the Wikipedians started to pay more attention to the background, the development and execution of the Holocaust, as well as to the victims and death toll

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[87] Alan Cowell, 'Germans, Jews and Blame: New Book, New Pain', *New York Times*, 25 April 1996, http://www.nytimes.com/books/98/06/28/specials/goldhagen-bonn.html (18-07-2014).

of the Holocaust. Especially the development and execution of the Holocaust is extensively covered in this version, which is reflected by the fact that this chapter contains 13 sub-chapters.

Figure 3.16. Transformation of Table of contents on the English language version of the Holocaust article. [88]

| June 2004 | June 2007 | June 2014 |
|---|---|---|
| **Contents** [hide] | **Contents** [hide] | **Contents** [hide] |
| 1 Overview | 1 Etymology and use of the term | 1 Etymology and use of the term |
| 2 Concentration and extermination camps | 1.1 Definition | 2 Distinctive features |
| 2.1 Jews | 2 Distinctive features | 2.1 Institutional collaboration |
| 2.2 Slavs | 2.1 Compliance of Germany's institutions | 2.2 Ideology and scale |
| 2.3 Gypsies | 2.2 The dominance of ideology and the scale of the genocide | 2.3 Extermination camps |
| 2.4 Others | 2.3 Medical experiments | 2.4 Medical experiments |
| 2.5 Extent of the Holocaust | 3 Victims and death toll | 3 Development and execution |
| 2.6 The triangles | 3.1 Jewish victims | 3.1 Origins |
| 3 Historical interpretations | 3.2 Non-Jewish victims | 3.2 Legal repression and emigration |
| 3.1 Functionalism versus intentionalism | 3.2.1 Soviet POWs | 3.3 Kristallnacht (1938) |
| 3.2 Revisionists and deniers | 3.2.2 Roma | 3.4 Resettlement and deportation |
| 4 Holocaust theology | 3.2.3 Disabled and mentally ill | 3.5 Early measures |
| 5 Origin and use of the term | 3.2.4 Gay men | 3.6 Concentration and labor camps (1933–1945) |
| 5.1 Political ramifications | 3.2.5 Freemasons and Jehovah's Witnesses | 3.7 Ghettos (1940–1945) |
| 6 Related topics | 4 Development and execution | 3.8 Pogroms (1939–1942) |
| 7 Further reading | 4.1 Origins | 3.9 Death squads (1941–1943) |
| 8 External links | 4.2 Increasing persecution and pogroms (1938–1942) | 3.10 New methods of mass murder |
| | 4.3 Early measures in Poland | 3.11 Wannsee Conference and the Final Solution (1942–1945) |
| | 4.4 Concentration and labor camps (1933–1945) | 3.12 Reaction |
| | 4.5 Ghettos (1940–1945) | 3.13 Motivation |
| | 4.6 Death squads (1941–1943) | 3.14 Extermination camps |
| | 4.7 Wannsee Conference and the final solution (1942–1945) | 3.15 Jewish resistance |
| | 4.8 Extermination camps | 3.16 Climax |
| | 4.8.1 Gas chambers | 3.17 Escapes, publication of existence (April–June 1944) |
| | 4.9 Jewish resistance | 3.18 Death marches (1944–1945) |
| | 4.10 Climax | 3.19 Liberation |
| | 4.11 Escapes, D-Day, publication of news of the death camps (April–June 1944) | 4 Victims and death toll |
| | 4.12 Death marches (1944–1945) | 4.1 Jewish |
| | 4.13 Liberation | 4.2 Non-Jewish |
| | 5 See also | 5 Uniqueness |
| | 5.1 Involvement of other countries and nationals | 6 See also |
| | 5.2 Aftermath and historiography | 6.1 By country |
| | 5.3 Miscellaneous | 6.2 Perpetrators and collaborators |
| | 6 Notes | 6.3 Victims and survivors |
| | 7 Further reading | 6.4 Involvement of other countries and nationals |
| | | 6.5 Rescuers |
| | | 6.6 Aftermath |
| | | 6.7 Miscellaneous |
| | | 6.8 Other genocides and mass killings |
| | | 7 Footnotes |
| | | 8 Bibliography |
| | | 9 External links |

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[88] The table of contents that are displayed have been retrieved from the revision of the English language version of the Holocaust entry on Wikipedia. See: Wikipedia, 'Revision history': https://en.wikipedia.org/wiki/Holocaust (18-07-2014).

In the following seven years, not much seems to have changed in the focus on the English language version of the Holocaust entry on Wikipedia. As the table of contents of June 2014 (9 chapters) shows, some of the chapters have been further extended with some additional sub-chapters, such as, for example, is the case for the chapter on the development and execution of the Holocaust, yet no shift in focus tends to have taken place.

## 3.6 References and images

As can be perceived in Figure 3.14, Figure 3.15 and Figure 3.16, each of the Holocaust entries is accompanied by separate chapters devoted to footnotes, links and references. Such chapters are most frequently titled 'See also', 'Bibliography' or 'External links' and are apparent on all three language versions of the Holocaust entries under study. Nevertheless, since their early existence onwards, there seems to exist considerable differences in the total number of links, footnotes and references between the Holocaust entries under study.

To illustrate, in April 2003, the Dutch language version of the Holocaust entry on Wikipedia did not contain any references, nor did it have any external links (links to Web Pages outside Wikipedia). The only form of reference used in the article was a total of two internal links, which referred the visitors to other lemmas *within* Wikipedia. These internal links can be recognized by their blue colour[89], and as Figure 3.17 shows, two terms can be identified as internal links, which are 'Tweede Wereldoorlog' (Second World War) and 'Joden' (Jews). When a user clicks on these links, Wikipedia immediately directs this user to another lemma on Wikipedia that is respectively about the Second World War at one hand, and on Jews at the other.

Figure 3.17. *The first version of the Holocaust article on the Dutch language version of Wikipedia (25 April 2003).*[90]



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[89] Yaari et al., 'A user study of Wikipedia', 491.
[90] Printscreen represents the first version of the Dutch language version of the Holocaust article. From: Wikipedia, 'Holocaust (oude versie)': http://nl.wikipedia.org/w/index.php?title=Holocaust&oldid=38409 (05-05-2014).

Consequently, with one external link (to www.shoa.de) and 19 internal links, the first version of the German language version tends to be considerably more comprehensive, but still fails to match its English counterpart in this respect. In fact, the English language version of the Holocaust entry on Wikipedia was way out in front from the early beginnings, as it already contained 31 internal links, 4 external links and 7 references as of November 15, 2001.

Table 3.2. *Quantitative overview of links and references on the Holocaust entries under study.*[91]

| Subject: | English language version | German language version | Dutch language version |
|---|---|---|---|
| **Total number of footnotes** | 386 | 98 | 22 |
| **Total number of internal links**[92] | 2181 | 575 | 252 |
| **Total number of external links** | 7 | 22 | 7 |
| **Total number of references (print sources)** | 151 | 62 | 3 |

It is important to note that Wikipedia makes a distinction between footnotes, internal links, external links, and references. While internal- and external links are already explained above, it should be understood that the footnotes on Wikipedia always and *solely* refer to print or digital sources. This means that no additional information is included in the footnotes, which is in contrast to the function of footnotes of academic articles and books.

Nevertheless, just like other reference works, these footnotes include a wide variety of types of sources, including external links (links to online documents, articles or websites) and print sources, such as academic articles and books. References included in the reference list, on the other hand, *primarily* refer to print sources, such as journal articles and books. However, a closer look at the footnotes, external links and reference list reveals that the boundaries between them are often blurred, which is illustrated by the fact that some sources are included in the footnotes, as well as in the reference list and/or in the list of external links.

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[91] Statistics obtained from the English, German, and Dutch entry of 'Holocaust' on Wikipedia. For the English-language version, see: Wikipedia, 'The Holocaust': http://en.wikipedia.org/wiki/Holocaust (16-01-2014); For German, see: Wikipedia, 'Holocaust': http://de.wikipedia.org/wiki/Holocaust (16-01-2014); For Dutch, see: Wikipedia, 'Holocaust': http://nl.wikipedia.org/wiki/Holocaust (16-01-2014). Own calculations.
[92] Total number of internal links is computed by using the tool 'Link Extractor' from Wmflabs. See: From: Wmflabs, 'Link Extractor (The Holocaust EN)':
http://tools.wmflabs.org/render/toolkit/LEA/index.php?submit=1&title=the%20holocaust&lg=en&lang=en (19-07-2014); Wmflabs, 'Link Extractor (Holocaust DE)':
http://tools.wmflabs.org/render/toolkit/LEA/index.php?submit=1&title=the%20holocaust&lg=en&lang=de (19-07-2014); Wmflabs, 'Link Extractor (Holocaust NL)':
http://tools.wmflabs.org/render/toolkit/LEA/index.php?submit=1&title=the%20holocaust&lg=en&lang=nl (19-07-2014).

When the total number of footnotes, links and references of today's versions of the Holocaust entries on Wikipedia is taken into consideration (see Table 3.2), it can be perceived that the gap in total number of links and references that existed in the early beginnings of the articles is still apparent today, and has even increased. In fact, it can be perceived that the English language version of the Holocaust article has by far the highest number of links and references (2725 in total), followed with considerable distance by its German counterpart (757), while the Dutch language version seems to be far behind in this respect with only 284 links and references in total.

However, it is important to note that, according to Arie Sonneveld –Wikipedian-in-Residence and an expert in the field of Wikipedia– the total number of references and links used in an article does not necessarily relate to the quality of Wikipedia entries. In fact, in contrast with a widely-shared belief that more references increase the quality of Wikipedia entries, Sonneveld argues that the opposite is even possible. As he explains, a higher number of sources may lead to less coherency within the entry, and a higher number of used references may also indicate a higher number of arguments that are taken out of their original context and re-framed in a biased way.[93]

Nevertheless, this does not change the fact that considerable differences continue to exist in total references and links between the Holocaust entries under study, and not only in total number. For example, Figure 3.18 and Figure 3.19 indicate that there also exist significant differences in nature of the references. More specifically, Figure 3.18 shows that the total number of references (footnotes, external links and print references together) on the English language version is predominantly written in English (99% of a total of 544 references)[94] and the German language version particularly contains references that are written in German (96% of 188 references). The Dutch language version, on the other hand, seems to be more balanced in this respect, containing 14 references in English (44%), 13 in Dutch (41%), and another 5 in German (15%).

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[93] The statements of Arie Sonneveld are retrieved from a taped interview that has been conducted at the Niod Institute for War, Holocaust and genocide studies. Sonneveld, Arie. Personal interview. Amsterdam, July 8, 2014.
[94] It should, however, be noted that translations are not separately accounted for, suggesting that the percentages presented here may vary from the percentages the references are originally written in.

Figure 3.18. Language of links and references on the Holocaust entries under study.[95]

### Language of links and references

| | English language-version | German language-version | Dutch language-version |
|---|---|---|---|
| in Dutch | 0 | 0 | 13 |
| in German | 7 | 174 | 5 |
| in English | 537 | 8 | 14 |
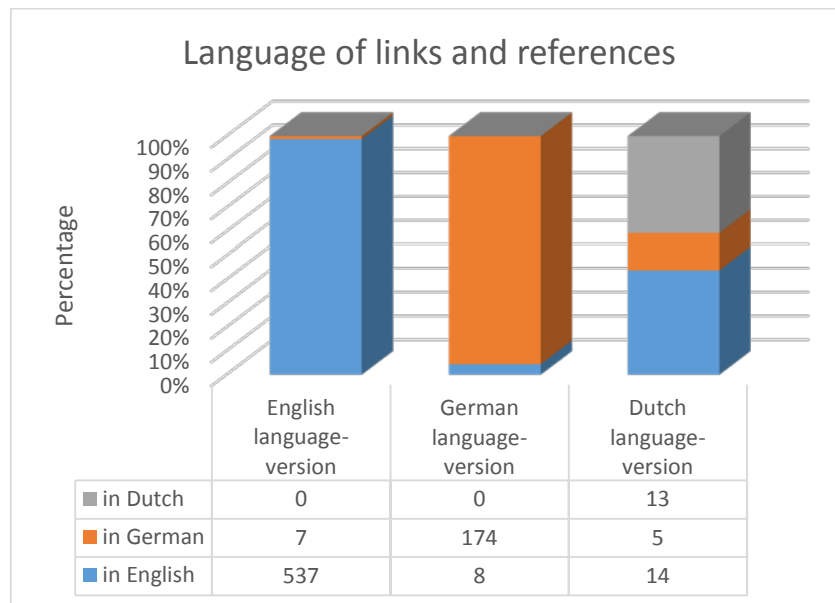
In addition, another significant difference can be perceived in types of sources that are referenced to, as the English language version seems to primarily refer to *Journal articles* in the Holocaust entry, while its German counterpart first and foremost refers to books and the Dutch entry primarily relies on Web Pages (Figure 3.19). These differences are remarkable and further research is needed to provide insight into the factors that are driving them.

Figure 3.19. *Types of links and references on the Holocaust entries under study.[96]*

### Types of links and references

| | English language-version | German language-version | Dutch language-version |
|---|---|---|---|
| Web Pages | 131 | 26 | 13 |
| Journal articles | 246 | 8 | 6 |
| Books | 167 | 148 | 3 |

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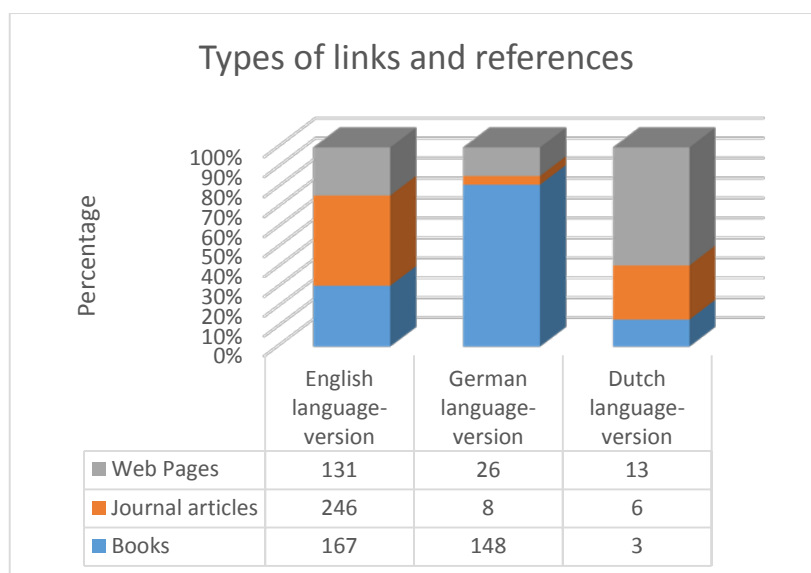
[95] Figure shows the language in which the total number of external links, footnotes, and references together are written in. Own calculations.

[96] Figure shows the nature of the total number of external links, footnotes, and references together. Statistics are retrieved by conducting a qualitative content analysis of the Holocaust entries under study. Own calculations.

**Nature of links and references**

When it comes to the nature of links and references, it can be stated that most of the sources used in the Holocaust are primarily about the Holocaust, or sub-aspects of the Holocaust. To illustrate, some sources reflect a very general reference work of the Holocaust, such as Yehuda Bauer's book *A History of the Holocaust* (1982), whereas other references tend to be more specific, such as books about particular people, places or events that played a role in the Holocaust. An example of a more specific book is Peter Longerich's biographical book, titled *Heinrich Himmler.* [97]

In addition, there is also a smaller number of sources used that are not specifically about the Holocaust, but are about broader themes/events, such as literature on the Second World War[98] or books about the rise of antisemitism in Germany[99]. Nevertheless, it can be fairly stated that every source included in the reference list is either about the Second World War, about the Holocaust, about a specific event of the Holocaust, a specific place or (groups of) person(s) related to the Holocaust, or about (the effects of) the Holocaust in the context of a specific culture or country. However, it is important to understand that most of the references and external links are about the Holocaust at large, or sub-aspects of the Holocaust. This is, however, different for internal links.

Specifically, with regard to the nature of internal links, it must be understood that in general they link to nearly everything that is somehow related to the Holocaust. In fact, almost every term used in the text of the Holocaust entries that has a separate lemma on Wikipedia is marked as an internal link, resulting in many links that are not per se related to the Holocaust. For example, on the Dutch-language version of the Holocaust entry on Wikipedia, the term '19e eeuw' [nineteenth century] received a link to the Wikipedia lemma about the nineteenth century in general.

Nevertheless, it can be stated that the majority of internal links still refers to subjects that are related to the Holocaust, of which some refer to broader themes such as *World War II*, whereas others refer to more specific themes such as *Operation Reinhard* and *Kristallnacht*.[100] Yet, due to the incredible number of internal links and references, further research is needed to provide more thorough insight into the nature of these links.

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[97] These books have been included in the reference list of the English language version of the Holocaust entry on Wikipedia.
[98] An example is: Kershaw, Ian, *Wendepunkte. Schlüsselentscheidungen im Zweiten Weltkrieg* (München 2008), which is included in the reference list of the German-language version of the Holocaust entry on Wikipedia.
[99] An example is: Gramel, Hermann, *Antisemitism in the Third Reich* (London 1992), which is referred to in the English language version of the Holocaust entry on Wikipedia.
[100] An overview of internal links on the Holocaust entries under study can be generated with the tool 'linkRipper', which is available on: *https://tools.digitalmethods.net/beta/linkRipper/* (27-07-2014).

**Images**

Another aspect of the Holocaust entries that needs to be mentioned here is the use of images throughout the articles. Over the years, visual material such as photos, geographical maps and logos are increasingly used to accompany the text. Table 3.3 shows the increase of the number of images on the Holocaust entries under study.

Table 3.3. *Overview of total number of images on the Holocaust entries under study in 2004, 2007 and 2014.*[101]

| Total number of images in year: | English language version | German language version | Dutch language version |
|---|---|---|---|
| **June 2004** | 4 | 0 | 0 |
| **June 2007** | 26 | 3 | 2 |
| **June 2014** | 54 | 31 | 16 |

As can be perceived, the English language version of the Holocaust entry under study has a significant higher number of images than its German and Dutch counterpart. Again, the Dutch language version is shown to be considerably behind in terms of quantity, which is in line with other findings of this research. Furthermore, the gap in number of images seems to be apparent at all three points in time, suggesting the differences between the Holocaust entries under study are likely to remain like this.

Table 3.4. *Overview categories of images used in the Holocaust entries under study (June 2014).*

| Categories: | English language version | German language version | Dutch language version |
|---|---|---|---|
| **Victims and death** | 16 (30%) | 8 (26%) | 9 (57%) |
| **Persecution and extermination processes/activities** | 12 (22%) | 9 (29%) | 3 (19%) |
| **Concentration camps** | 11 (20%) | 3 (10%) | 2 (12%) |
| **Other** | 15 (28%) | 11 (35% | 2 (12%) |
| | | | |
| *Total:* | **54 (100%)** | **31 (100%)** | **16 (100%)** |

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[101] Statistics retrieved from the English, German, and Dutch entry of 'Holocaust' on Wikipedia. For the English-language version, see: Wikipedia, 'The Holocaust': http://en.wikipedia.org/wiki/Holocaust (16-01-2014); For German, see: Wikipedia, 'Holocaust': http://de.wikipedia.org/wiki/Holocaust (16-01-2014); For Dutch, see: Wikipedia, 'Holocaust': http://nl.wikipedia.org/wiki/Holocaust (16-01-2014).

A closer look at the nature of these images reveals that they can be roughly categorized into three overarching themes, including (1) victims and death, (2) persecution and extermination processes/activities, and (3) concentration camps. Remarkable in this respect is that much of the images portray victims and/or persecutors, while the third group, bystanders, is not addressed in the images on the Holocaust entries under study, with an exception of two images on the Dutch language version. This reflects the general lack of attention that is devoted to the bystanders in the coverage of the Holocaust on Wikipedia.

Consequently, it may be no surprise that most of the images fall under the category victims and death, followed by a significant number of images that depict persecution or extermination processes/activities (see Table 3.4). Although no significant differences may seem to exist, the high percentage of images related to victims and death on the Dutch Holocaust entry may be considered remarkable. Nevertheless, in absolute quantity, the difference is considerably negligible.

## 3.7 Conclusion

All in all, this chapter has primarily touched upon sub-question 1 (SQ1), which posed: *'How is the (re)presentation of the Holocaust being shaped on the Dutch, German, and English language versions of Wikipedia since the beginning of the twenty-first century?'*. The most noteworthy finding in this respect is that the Holocaust articles on Wikipedia are under constant development, which means that the breadth and depth, as well as the focus of the Holocaust entries on Wikipedia may change from day to day. Whereas the first editions of the articles were not much more than concise definitions of the Holocaust, an exponential increase in contributions transformed the pages into comprehensive articles on the subject. This increase, however, has stopped since 2008, suggesting that the Holocaust articles have relatively stabilized over the past few years.

Nevertheless, it can be stated that the stabilization of the articles does not mean that the articles are complete. On the contrary, none of the Holocaust articles under study is rated 'good quality', indicating that the pages are in considerable need of improvement according to Wikimedia standards. Significant differences in nature and total number of edits, words, images, references and editors between the studied articles further indicate that the Dutch Holocaust article is especially lacking breadth and depth, while the English edition seems to be the most comprehensive in this respect.

Nevertheless, despite the differences, all studied articles are in need for genuine contributions to increase the quality of the articles. However, only a small core of contributions can be classified as 'genuine additions' to the pages, while the majority of edits consists of minor alterations – of which some are not even constructive. In practice, many edits are nothing more that

reverts of non-genuine contributions (e.g. vandalism) and non-verifiable contributions – which are often removed within a couple of hours. Especially on the English language version of the Holocaust article, the number of reverts is high due to tight quality control of the articles.

This tight quality control on the English edition of the article seems to have a positive effect on the verifiability of information, but does it also have a positive effect on the representation of the Holocaust? To answer this question, the next chapter further examines *how* the Holocaust is represented on the English, German and Dutch language versions of the Holocaust entries on Wikipedia. Although this chapter already touched upon the shift in focus of the Holocaust entries under study, the next chapter further elaborates on the current focus and scope of the articles, with particular attention to (possible) national influences in the representations.

# 4. CURRENT REPRESENTATIONS OF THE HOLOCAUST

The previous chapters have already provided some essential insight in the processes involved in the shaping of the Holocaust on Wikipedia. However, what has not been thoroughly addressed is how the Holocaust is (re)presented today, and what kind of story is told about this historical event. This information is crucial in order to answer the main research question of this thesis ('*How is the Holocaust (re)presented on the online encyclopedia Wikipedia and what are the implications for Western historiography?*'), as well as sub-question 3 (SQ3).

Therefore, the purpose of this chapter is to provide the missing information by addressing the current representations of the Holocaust on Wikipedia. This is done by reviewing the findings of an empirical analysis in which the most quintessential aspect of Wikipedia is examined: its encyclopedic content[1]. Specifically, by analyzing the product of Wikipedia –the content of the Holocaust entries–, this chapter further examines other important 'quality dimensions', such as readability and reliability (accuracy) of the information.

Particular attention is devoted to differences between the language versions of the Holocaust entries on Wikipedia, as well as to their implications. Accordingly, this chapter answers the third sub-question (SQ3), which posed: '*To what extent are national influences apparent in the representation of the Holocaust in Dutch, German, and English language versions of Wikipedia?*'.

## 4.1 The definition of the Holocaust

As could be expected of an encyclopedia, each of the Holocaust articles under study provides a definition of the Holocaust at the beginning of the page. Hence, the reader is directly confronted with a general definition of the subject, in which the essence of the phenomenon is explained. Since this definition is probably the first thing that visitors reads –and for many also the last–, the introduction may be deemed particularly important for the understanding of the subject. Therefore, the introduction of the English, German and Dutch language versions of the Holocaust are systematically analyzed below.

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[1] Mesgari et al. (2014) have argued that Wikipedia's encyclopedic content is the most 'quentissential' aspect of the online encyclopedia. See: Mesgari et al., 'Sum of all human knowledge', 2.

Figure 4.1 shows the introduction of the English language version of the Holocaust entry on Wikipedia. A closer look at the content of the introduction reveals that the following definition of the Holocaust is provided:

'The Holocaust (…), also known as **Shoah** (…)**,** was a **genocide** in which approximately **six million Jews** were killed by the **German military**, under the command of **Adolf Hitler**, and its collaborators. Killings took place throughout the **German Reich and German-occupied territories**.'[2]

Figure 4.1. *Introduction of English language version of the Holocaust entry on Wikipedia.* [3]



Directly after this concise definition of the Holocaust, the English language version of the Holocaust article continues with a paragraph stating:

'**Between 1941 and 1945 Jews, Gypsies, Slavs, communists, homosexuals, the mentally and physically disabled** and **members of other group**s were targeted and **methodically** murdered in **the largest genocide of the 20th century**. In total approximately **11 million people** were killed during the Holocaust including over **1 million children**. Of the nine million Jews who had resided in Europe before the Holocaust, approximately two-thirds were killed.'[4]

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[2] *Ibidem*.
[3] Print screen retrieved from: Wikipedia, 'The Holocaust': http://en.wikipedia.org/wiki/The_Holocaust (13-03-2014).
[4] From: Wikipedia, 'The Holocaust': http://en.wikipedia.org/wiki/The_Holocaust (13-03-2014).

In this second paragraph, the authors of the article place particular emphasis on the period 1941 and 1945, implicitly suggesting that this is the period in which the Holocaust took place. Also, other groups of victims are mentioned, which, however, are not explicitly included in the definition of the Holocaust.

Figure 4.2. *Introduction of German language version of the Holocaust article on Wikipedia.*[5]



A quite similar definition of the Holocaust can be found on the German language version of the Holocaust (Figure 4.2), as the following citation indicates:

'Als Holocaust (…) oder Shoa (…) wird der Völkermord an **5,6 bis 6,3 Millionen Menschen** bezeichnet, die das **Deutsche Reich in der Zeit des Nationalsozialismus** als **Juden** definierte. Er gründete auf dem vom **NS-Regime** propagierten **Antisemitismus**, zielte auf die **vollständige Vernichtung** der europäischen Juden und wurde von 1941 bis 1945 systematisch, ab 1942 auch mit industriellen Methoden durchgeführt.'[6]

Just like the English definition, particular attention is devoted here to the victimized Jews, as well as to the period of 1941 to 1945. Some differences can also be perceived between both definitions, such as, for example, a difference in the presented number of victimized Jews. Particularly noteworthy in this respect is the caution with which the term Jews is used as the authors emphasize that the Holocaust is primarily about the killing of people who were *defined* as Jews by the *German Nation*.

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[5] Print screen retrieved from: Wikipedia, 'Holocaust': http://de.wikipedia.org/wiki/Holocaust (13-03-2014).
[6] Translation: 'The Holocaust, or Shoah, refers to the genocide of 5,6 to 6,3 million people, who were identified as Jews by the German Nation in the time of National Socialism. It was constituted by the antisemitism that was propagated by the Nazi-Regime, aimed at the complete destruction of the European Jews, and was systematically carried out from 1941 to 1945, from 1942 onward industrial methods implemented.' See: Wikipedia, 'Holocaust': http://de.wikipedia.org/wiki/The_Holocaust (11-06-2014).

Accordingly, Figure 4.3 shows the introduction of the Holocaust on the Dutch language version of Wikipedia, which presents another (slightly) different definition of the phenomenon:

'De **Holocaust**, ook wel **Shoah**, Shoa of Sjoa (…) genoemd, was de **systematische Jodenvervolging** door de **nazi's en hun bondgenoten voor en tijdens de Tweede Wereldoorlog**. Tijdens de overheersing door nazi-Duitsland werden er **zes miljoen Europese Joden** vermoord. De moorden vonden grotendeels plaats in **concentratie- en vernietigingskampen**.'[7]

Figure 4.3. *Introduction of Dutch language version of the Holocaust article on Wikipedia.*[8]



As may be perceived, this definition is different from the English and German language versions of the Holocaust articles in terms of perceived perpetrators, but also in terms of its (greater) focus on concentration and extermination camps. This difference, among others, can be further perceived in Table 4.1, which provides a schematic overview of the key differences in definition of the Holocaust between the Holocaust entries under study.

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[7] Translation: 'The Holocaust, or Shoah, was the systematic persecution of Jews by the Nazis and their allies before and during the Second World War. Under the rule of Nazi-Germany, six million European Jews were murdered. These killings largely took place in concentration- and extermination camps.' See: Wikipedia, 'Holocaust': http://nl.wikipedia.org/wiki/The_Holocaust (13-03-2014).
[8] Print screen retrieved from: Wikipedia, 'Holocaust': http://nl.wikipedia.org/wiki/Holocaust (13-03-2014).

Table 4.1. *Schematic overview of definition of the Holocaust on Wikipedia.*

| Focus: | English language version | German language version | Dutch language version |
|---|---|---|---|
| **What** | Genocide of approximately six million Jews | Genocide / complete destruction of the European Jews | Systematic persecution of Jews |
| **Who (perpetrators)** | The German military under command of Adolf Hitler and its collaborators | The Nazi regime | The Nazis and their allies |
| **Who (victims)** | Approximately six million Jews | 5,6 – 6,3 million Jews (as defined by the Nazis) | Six million Jews |
| **When** | 1941 – 1945 | 1941 - 1945 | Before and during the Second World War |
| **Where** | German Reich and German-occupied territories | - | In concentration and extermination camps |
| **How** | methodically murdered | Systematical murder (1942: industrial methods) | - |
| **Why** | - | Because of antisemitism | - |

When reviewing the schematic overview of differences in the definition of the Holocaust at the beginning of the entries under study, it can be noticed that the definitions differ in when and where the Holocaust took place. Whereas both the English and German language version of the Holocaust article position the Holocaust in the timeframe of 1941-1945, the Dutch Wikipedia also includes the period before the Second World War in its definition. Likewise, the Dutch article under study is the only one mentioning concentration camps and extermination camps in its definition, while the English Holocaust article is the only one to link the Holocaust to a specific geographical location.

Nevertheless, the most important finding in this respect is the fact that *none* of the definitions at the beginning of the Holocaust articles provides an answer to all five 'w-questions' (*who, what, where, when, why*, and *how*), implying a significant limitation of these definitions. Nevertheless, these questions *are* answered in the rest of the Holocaust articles, but it may be argued that this information is of less significance for people's understanding of the Holocaust than the information in the introduction. In fact, it may even be stated that the definition at the beginning of the article is more important than the information in the rest of the article.

To illustrate the importance, it is important to understand that audiences are more and more confronted with information in today's 'information society'.[9] As a result, people in modern Western societies – such Europeans and Americans – are increasingly experiencing an 'information overload': there is simply more information than they are able to read within the available time. To overcome this problem, readers find various ways just to get by, including only reading the first few and last few sentences of an article.[10] Accordingly, this suggests that people searching for information on a subject are likely to stop reading as soon as they have found a definition that is deemed 'good enough'[11]. In practice, this means that a significant part of the visitors of the Holocaust articles may quit reading as soon as they have read the definition provided in the introduction of the articles.

Nevertheless, it would be a mistake to disregard the importance of the representation of the Holocaust in the other sections/chapters of the articles. In fact, it may be assumed that there is still a significant amount of people who continue reading after the introduction, suggesting that the information in the rest of the article does also matter. Therefore, the following sections further examine how the Holocaust is represented *after* the introduction.

## 4.2   The focus of the Holocaust narratives

**Overview of topics**

In order to get better insight in the representation of the Holocaust on Wikipedia, it is helpful to first consider which topics/themes are addressed in the entries under study. Therefore, a schematic overview of the main topics discussed in the Holocaust entries under study is presented in Table 4.2. The topics are ranked on the relative amount of words that is devoted to them (see also Appendix 3).

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[9] For the concept 'information society', see: Webster, Frank, 'The information society revisited', *The Handbook of New Media: Social Shaping and Social Consequences of ICTs* (London 2006) 443-457.

[10] David Levy, 'Information Overload', in Kenneth E. Himma and Herman T. Tavani (eds.), *The Handbook of Information and Computer Ethics* (New Jersey 2008) 498-499.

[11] Park, Do-Hyung, Jumin Lee and Ingoo Han. 'Information Overload and its consequences in the context of online consumer reviews', in *Proceedings of the 10th Pacific Asia Conference on Information Systems* (Kuala Lumpur 2006) 197-209.

Table 4.2. *Schematic overview of main topics of the Holocaust entries under study.*[12]

| Topic rank (in % of total amount of words): | English language version | German language version | Dutch language version |
|---|---|---|---|
| **1.** | Victims and Death toll (25%) | The Final Solution (10%) | The Final Solution (15%) |
| **2.** | Concentration and extermination camps (9%) | Resistance and rescue attempts (15%) | Resistance (10%) |
| **3.** | Jewish resistance (9%) | Extermination of Jews throughout Europe (14%) | Concentration and extermination camps (10%) |
| **4.** | Death squads (7%) | Extermination camps (10%) | Post-World War I Germany (7%) |
| **5.** | Early measures against Jews (6%) | Aftermath (12%) | Nuremberg Laws (7%) |
| **6.** | Rise of antisemitism (6%) | Systematic mass shootings (7%) | Killings by gas (5%) |
| **7.** | Systematic oppression of Jews (5%) | Awareness of the Holocaust in the Nazi era (5%) | Collaboration/obedience (5%) |

A closer look at the topics addressed in the Holocaust entries under study reveals that, overall, the English, German and Dutch Holocaust article 'share' around 33% of their concepts with each other. This percentage is often referred to as 'concept similarity', which is computed based on the frequency of nouns, such as (sub-)concepts like 'Jews', 'Nazis', 'Hitler', and 'Auschwitz'.[13] Without further elaborating on technical details of concept similarity, it is important to understand that the percentage represents the *relative* number of similar sub-concepts.

The English and German language version of the Holocaust article have the highest number of concept similarity (36%), suggesting they are most similar in terms of mentioned concepts. A quite similar correlation in concepts can be perceived between the English and Dutch language version of the articles (with a concept similarity of 35%), while, with 28%, the Dutch and German Wikipedia articles tend to vary the most in used concepts (see Table 4.3).

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[12] The topics listed in the table are retrieved from the table of contents of the English, German and Dutch language version of the Holocaust (05-06-2014). Accordingly, the total amount of words is computed for each of the topics and listed in Appendix 3.

[13] For a better explanation of the idea behind the concept similarity computation and sub-concept diversity, see: Brent Hecht and Darren Gergle, 'The tower of Babel meets web 2.0: user-generated content and its applications in a multilingual context', in *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (New York 2010) 291-300.

Table 4.3 *Metrics of concept similarity between the English, German and Dutch language version of the Holocaust entry on Wikipedia (in %).*

| *Concept Similarity between the Holocaust entries:* | **English language version** | **German language version** | **Dutch language version** |
|---|---|---|---|
| **English language version** | - | 36% | 35% |
| **German language version** | 36% | - | 28% |
| **Dutch language version** | 35% | 28% | - |

Hence, in this research, the amount of words devoted to the topics is perceived as an indication of significance, stemming from the hypothesis that the more words are devoted to a specific topic, the more likely it is the authors deem it important. Following this rule of thumb, four major themes can be identified in the representation of the Holocaust on Wikipedia, namely: (1) Antisemitism in pre-World War II Germany, (2) victims and death toll of the Holocaust, (3) extermination and concentration camps, and (4) resistance. Yet, within these overarching themes considerable differences seem to exist in concepts addressed and general focus of the authors, which is further examined in the following section.

**Overview of concepts**

In order to get an even more thorough understanding of the focus of the Holocaust entries under study, Table 4.4 presents an overview of the ten most frequently named entities studied articles. Specifically, based on the total number of times concepts have been mentioned in the entries, a hierarchical ranking of the named entities is presented here. This overview has been constructed with the help of the online tool 'Voyeur'[14], which is designed to 'count' the words and display which terms/nouns are used most frequent in particular texts.

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[14] 'Voyeur is a web-based text analysis environment. It is designed to be user-friendly, flexible and powerful. Voyeur is part of the Hermeneuti.ca, a collaborative project to develop and theorize text analysis tools and text analysis rhetoric.', see: Hermeneuti.ca, 'Voyeur Tools: See Through Your Texts': http://hermeneuti.ca/voyeur/ (11-03-2014).

Table 4.4. *Most frequently named entities (sorted on total times mentioned).*[15]

| Rank of most frequently named entities (in number of mentions): | English language version | German language version | Dutch language version |
|---|---|---|---|
| 1. | Jews (318) | Juden (287) | Joden (60) |
| 2. | Holocaust (308) | Holocaust (97) | Holocaust (51) |
| 3. | Jewish (197) | 1941 (91) | Nazi's (21) |
| 4. | Nazi (153) | 1942 (59) | Joodse (20) |
| 5. | German (150) | 1945 (54) | Nederland (15) |

As Table 4.4 suggests, the most frequent named entity in all three wikis is the word 'Jews', followed by the noun 'Holocaust'. The frequent use of these two terms can be explained by the fact that is simply a widely accepted fact that the Holocaust first and foremost refers to the (killings of) Jews. It therefore seems only to be logical that these two terms take up the top positions in the rankings on all three language versions of the entries. The same goes for the frequent use of the term 'German' (*Deutsche* in German and *Duitse* in Dutch) and the word 'Germany' (*Deutschland* in German and *Duitsland* in Dutch) (see also Table 4.6), as it is widely accepted knowledge that the Holocaust took largely place in Germany and was primarily executed by Germans.

However, more surprisingly is the difference in named entities that take up the other positions in the ranking. For example, the high number of reference to dates on the German Holocaust entry –four out of ten most frequently named entities happen to be dates– may be considered particularly remarkable; especially when taken into consideration that the English and Dutch language version does not have any date in its top ten most named entities. This might seem to indicate that a great(er) emphasis is placed on temporal accuracy in the representation of the Holocaust on German language version of Wikipedia.

However, when the dates are excluded from the analysis, it can be perceived that the German language version of the Holocaust entry seems to place particular focus on the prosecution of Jews (see Table 4.5). Also, considerable attention seems to be devoted to Germany and German people, which –as the following sections will show– is related to an increased focus on Germany throughout the Holocaust narrative in the German language version of the Holocaust entry on Wikipedia.

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[15] Statistics retrieved by entering the URLs of the Wikipedia articles under study in the tool on http://voyant-tools.org/ (11-03-2014).

Table 4.5 *Most frequently named entities without dates (sorted on total times mentioned).*[16]

| Rank of most frequently named entities (in number of mentions): | English language version | German language version | Dutch language version |
|---|---|---|---|
| **1.** | Jews (318) | Juden (287) | Joden (60) |
| **2.** | Holocaust (308) | Holocaust (97) | Holocaust (51) |
| **3.** | Jewish (197) | Deutschen (53) | Nazi's (21) |
| **4.** | Nazi (153) | Deutschland (36) | Joodse (20) |
| **5.** | German (150) | Verfolgung (33) | Nederland (15) |

Moreover, the table indicates that the English language version of the Holocaust entry on Wikipedia tends to place particular emphasis on the Jews as victims at one hand and the Nazis as perpetrators of the Holocaust at the other. In addition, the massacre seems to be largely discussed in the context of war, with a mere focus on Germany and Poland. Also the role of (extermination and concentration) camps seems to be of key significance in the context of the Holocaust.

The German language version of the Holocaust entry, on the other hand, seems to be primarily concerned with when and where phenomena exactly took place in the context of the Holocaust. Highly remarkable is the neutrality of the most named entities on this language version compared to its English and Dutch counterparts. For example, highly-loaded terms like 'war', Nazi' and 'victims' are, in contrast to its counterparts, not among the most named entities.

In addition, the Dutch language version of the Holocaust entry primarily seems to focus on the victimization of Jews by the Nazis, further illustrated by the use of terms like Jews (*Joden* in Dutch), prisoners (*gevangenen*) and resistance (*verzet*). Distinct to the Dutch Holocaust entry is the frequent reference to the terms *Nederland* (The Netherlands) and *België* (Belgium), which indicates an increased emphasis on the Netherlands and Belgium. This suggests that the representation of the Holocaust on the Dutch language version of the Holocaust is primarily placed within these two national frameworks.

On the other hand, the representation on the English-language version of the entry seems also to be somewhat nationalized, as Table 4.6 shows that considerably often mentions the United States (the country where by far the most edits of this entry came from), way more than its Dutch and German counterparts. Nevertheless, the English language version seems to primarily focus on Germany, Poland and the Soviet Union, which is quite similar on the German-language version of the Holocaust

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[16] Statistics retrieved by entering the URLs of the Wikipedia articles under study in the tool on http://voyant-tools.org/ (11-03-2014).

entry. The focus on these countries can very well be explained by the fact that most Jewish victims were killed in these countries during the Holocaust.[17] Consequently, it is remarkable that the Soviet Union is not among the top 5 mentioned geographical locations on the Dutch language version of the Holocaust. This may, again, be perceived an illustration of the influence of national frameworks.

Table 4.6. *Most frequently named geographical locations (sorted on total times mentioned).[18]*

| Rank of most frequent named geographic locations (in number of mentions): | English language version | German language version | Dutch language version |
|---|---|---|---|
| **1.** | Germany (96) | Deutschland (36) | Nederland (14) |
| **2.** | Poland (89) | Berlin (27) | België (12) |
| **3.** | Soviet Union (79) | Polen (24) | Duitsland (11) |
| **4.** | Europe (54) | Sowjet Union (14) | Polen (8) |
| **5.** | United States (30) | Schweiz (12) | Roemenië (6) |

In addition to the most frequent named entities that are mentioned above, Table 4.7 shows the most frequently named persons on the Holocaust entries under study. As can be perceived, by far most of the names refer to perpetrators of the Holocaust, predominantly Nazis. The only exceptions on the list are the names of Rudolf Vrba (widely-known Jewish escapee from Auschwitz) and Raul Hilberg (scholar of the Holocaust). This suggests that the Holocaust entries place particular emphasis on the perpetrators while, as will be confirmed later, the victims are primarily addressed to as a collective whole and thereby remain considerably anonymous.

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[17] It should be noted that, together with Germany, Poland is the only geographical location that is mentioned on all three language versions of the entries under study.
[18] Statistics obtained by entering the URLs of the Wikipedia articles under study in the tool on http://voyant-tools.org/ (11-03-2014).

Table 4.7. *Most frequently named persons on the Holocaust entries under study (sorted on total times mentioned).[19]*

| Rank of the most frequent named persons (in number of mentions): | English language version | German language version | Dutch language version |
|---|---|---|---|
| 1. | Adolf Hitler (64) | Adolf Hitler (23) | Adolf Hitler (2) |
| 2. | Heinrich Himmler (28) | Heinrich Himmler (18) | Adolf Eichmann (2) |
| 3. | Reinhard Heydrich (21) | Reinhard Heydrich (12) | Ion Antonescu (2) |
| 4. | Adolf Eichmann (15) | Adolf Eichmann (17) | Hermann Göring (1) |
| 5. | Rudolf Vrba (11) | Raul Hilberg (9) | Ernst vom Rath (1) |

Equally noteworthy in this respect is the fact that Reinhard Heydrich and Heinrich Himmler are not among the top 5 mentioned persons of the Dutch Holocaust entry, and have actually not at all been mentioned throughout the article (see Appendix 2). This is an illustration of the lack of details on the Dutch-language version of the Holocaust entry on Wikipedia, which can be perceived all throughout the article. This is further shown in the analysis of the Holocaust narratives on the entries under study, which is presented in the following sections.

## 4.3   The Holocaust narratives on the Wikipedia

**English language version**

When it comes to the representation of the Holocaust, it seems that the authors on the English language version of the Holocaust entry try to be as comprehensive as possible. Nearly everything related to the Holocaust is discussed here, or at least referred to: victims, perpetrators, camps, pogroms, death squads, countries involved, et cetera. One subject, however, stands out, which is the development of the Holocaust that is accordingly discussed in a total of 19(!) sub-chapters. The first sub-chapter is titled 'Origins', and the last is named 'Liberation', suggesting that an attempt is made to uncover the roots of the Holocaust, as well as the ending.

More than the German and Dutch Holocaust entries on Wikipedia, the English language version presents a thorough story of the Holocaust with a lot of details. Starting with the rise of anti-Semitism from the Middle Ages onward, the authors chronologically guide the readers through an extensive account of the Holocaust that seems to end with the liberation of the concentration and extermination camps. In between, key events are discussed that allegedly played a key role in the development of the Holocaust, ranging from early repression and emigration of Jews to the rise of

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[19] *Ibidem.*

extermination camps and reaction of the public (bystanders). Even the situation in North Africa is discussed in the narrative, illustrating the comprehensiveness of the entry.

Another aspect that receives a considerable amount of attention is the variety of non-Jewish victims of the Holocaust (4,244 words). This is remarkable, as the entry describes the Holocaust as 'the genocide of six million *Jews* under the command of Adolf Hitler'. Strictly speaking, this entire chapter should therefore not be part of the Holocaust entry. This is also noticed by the editors of the article, who accordingly have extensively discussed the appropriateness of including and excluding non-Jewish victims in the Holocaust entry[20]. However, as it turned out, non-Jewish victims seem to remain a grey area for the Wikipedians. Henceforth, with a considerable level of superficiality and general absence of a theoretical basis, a total of 14 different (ethnic) groups of victims are nevertheless addressed extensively in the article.

The chapter on non-Jewish victims may perhaps be perceived as an ultimate example that the authors of the English language version of the Holocaust entry, above all, make the narrative as comprehensive as possible. However, a downside of the incredible comprehensiveness is that the extensive of amount of words and attention devoted to particular subjects sometimes hinders the readability of the narrative. For example, the sub-chapter on Jewish resistance, which is positioned in the middle of the chapter on the development of the Holocaust, contains over 2,000 words and draws the attention away from the 'plot' of the narrative. Hence, it is can be stated than an increased amount of information (and a higher number of words) does not always yield a better understanding of the event. On the contrary, the next paragraphs will show that the German language version of the narrative is a clear example that it is possible to present an almost similar story of the Holocaust as the English language version of the entry in a lot less words than its English counterpart, without losing its 'quality'.

**German language version**

Just like its English counterpart, the German language version starts the story of the Holocaust with the rise of anti-Semitism in Germany (1870), and ends with the liberation of the camps (1945). A unique aspect of the German language version of the narrative, however, is that it is the only of the three studied articles which devotes considerable attention (an entire chapter) to the period *after* the Second World War. While the English (and Dutch) language version only focus on the period of the Second World War (1939-1945) and before, the German version also addresses the impact of the Holocaust *after* WWII.

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[20] See, for example, Wikipedia, 'Talk:The Holocaust/Archive 3':
http://en.wikipedia.org/wiki/Talk:The_Holocaust_Archive_3#Non-Jewish_Poles_Part_of_Holocaust (18-07-2014).

In fact, more than 2,000 words are devoted to a chapter on the period after the Second World War, in which particular attention is paid to traumatization of survivors, persecution of perpetuators, compensation payments, church reformation, denial and trivialization, and post-Holocaust memory culture in Germany (e.g. memorials, remembrance projects and museums). Thereby, the German language version of the Holocaust entry on Wikipedia even goes beyond the scope of its counterparts. However, the enhanced focus on post-Holocaust Germany in the story also indicates that the narrative is influenced by national frames, as it primarily speaks about the implications for the German public here.

This can be further perceived by the fact that a separate chapter on the German language version is devoted to the awareness of the Holocaust during the Nazi Regime, further divided in one section on Germany and one section on its allies. Although the English language version also addresses the reaction of the German public, a key difference can be perceived here. Whereas the German article focuses on the awareness of the Holocaust among the German people during the Nazi era[21], the English language version is primarily concerned with the allocation of blame (implying a certain extent of judgement): the English narrative already assumes that the German public was aware of the Holocaust and therefore mainly focuses on the question why the bystanders did not respond accordingly.[22]

This difference in focus might be largely related to the fact that Germany bears prime responsibility for the Holocaust in Europe, which seems to affect the German-language coverage of the lemma. The United Kingdom and the USA, on the other hand, were relative bystanders of the Holocaust and people from these countries are therefore less likely to zoom in on their 'own' victims. This explains why the English-language coverage of the Holocaust seems to be most objective; they were simply less involved, which increases the 'objectivity' and 'neutrality' of the (re)presentation.

Nevertheless, despite the above-mentioned differences in focus, the representation of the German Holocaust entry seems to be equally comprehensive when it comes to addressed topics and even seems to be wider in scope. Why is there then still such a significant difference in amount of words? Well, this can be explained by the fact that the German language versions (as well as the Dutch) has a general tendency to direct the users to other entries on Wikipedia instead of including particular information in the lemma.

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[21] See: Wikipedia, 'Holocaust: Holocaustkenntnis in der NS-Zeit'*:*
http://de.wikipedia.org/wiki/Holocaust#Holocaustkenntnis_in_der_NS-Zeit (15-06-2014).
[22] See: Wikipedia, 'The Holocaust: Reaction'*:* http://en.wikipedia.org/wiki/Holocaust#Reaction (15-06-2014).

For example, whereas the English language version devotes more than 1,700 words to illustrate the role of *Einsatzgruppen* (death squads), its German counterpart only refers to it briefly and simply directs the reader to the lemma on *Einsatzgruppen* on Wikipedia if they want to read more about it. This means that a similar narrative can be presented within fewer words, without losing its quality.

Nevertheless, the balance on the Dutch language version between the total number of words on one hand and the representation of the Holocaust on the other, happens to be a different case. Here, the total amount of words on the Dutch language version of the Holocaust entry seems to have a considerable effect on the narrative –in a negative way. In fact, not only the word count is considerably less than the English and German version of the articles, but also the information tends to be limited in size and scope. For example, sometimes the article only mentions (alleged) facts without further explaining them or placing them in the context of the article, while in other occasions information even seems to be inaccurate. This is further discussed in the next section.

**Dutch language version**

In essence, the narrative on the Dutch-language version of the Holocaust entry on Wikipedia follows a similar structure as its German and English language-counterparts. The story starts with an introduction (already discussed above), followed by an explanation of the term, the number of victims, a section on non-Jewish victims and some paragraphs about the origins and development of the Holocaust, with the extermination and concentration camps as ultimate climax. Subsequently, additional attention is devoted to the reaction of various groups and countries to the Holocaust. A unique aspect of this narrative is that it devotes a separate chapter to the significance of the Holocaust in Belgium and the Netherlands, which illustrates that –just like the German language version– national frameworks influence the representation. Finally, the article concludes with a section on archives, followed by listings of films and publications on the Holocaust, a bibliography and a list of external links.

The narrative is further guided by five key themes/events of the Holocaust, which are (in chronological order) (1) antisemitism in Germany in the beginning of the 20th century, (2) the Nuremberg laws, (3) Kristallnacht, (4) the *Wannsee* Conference and the Final Solution, and finally (5) concentration and extermination camps. As stated above, main emphasis of the entry is placed on concentration and extermination camps, with particular attention devoted to the reaction of various groups to the Holocaust. Specifically, a significant part of the story (1358 words; 31%) is devoted to resistance and cooperation of European countries, including Romania, the Baltic States, Croatia and Denmark. The Netherlands and Belgium receive most of the attention in this respect. Some other

(allegedly more) essential aspects of the Holocaust narrative are, however, left out. *Einsatzgruppen* are, for example, not mentioned in the Dutch Holocaust entry.

Another remarkable finding in this respect, is the fact that the Dutch language version does not mention the end of the Holocaust. The narrative builds up to the mass killings of millions of Jews in the concentration and extermination camps, but fails to note the liberation of these camps as indication that the Holocaust has ended. [23] Therefore it seems as if the extermination camps are a never-ending climax of the Holocaust, which may be considered as a considerable weakness in the representation of the Holocaust on Wikipedia.

Likewise, when it comes to accuracy of the information there also seems to be some limitations involved, as, for example, can be perceived at the beginning of the narrative. Here, the authors state that it is not clear why the Nazis started to kill the Jews (and others) at large scale, which, however, may be considered remarkable as its English and German language-counterparts are perfectly able to provide possible causes for the Holocaust (e.g. influence of Darwinism, Friedrich Nietzsche, Houston Stewart Chamberlain, Alfred Rosenberg, etc.). This lack of accuracy is –to a lesser extent– apparent throughout the entire entry and it is likely to be caused by a general lack of sources.

Nevertheless, the implications of these findings, among others, are further discussed in the following section in which a reliability assessment is at the centre of focus.

## 4.4   Reliability assessment

All throughout this thesis, it has been pointed out that the Holocaust entries under study all present their unique story of the Holocaust, varying in comprehensiveness and focus, and question that needs to be answered accordingly is: 'How 'good' are the articles?' First and foremost, it is important to state that no simple answer can be provided to this question, as a wide variety of quality dimensions needs to be taken into account. Yet, it is still possible to derive considerable conclusions from the analyses presented throughout this thesis and there are three conclusions I wish to emphasize here.

Firstly, there are significant perceptual differences between the narratives on each of the Holocaust entries under study, which is limiting the reliability of Wikipedia at large as a historical reference work. Despite the fact that it has been found that the core of representations is largely

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[23] The overview of topics displayed in Appendix A.3 further illustrates this finding, as it can be perceived that both the English and German language version of the Holocaust article devote a separate section on the final phase: the liberation of the camps. See Appendix A.3.

coherent across the studied Holocaust entries, there are some important differences in accuracy between the narratives that cannot simply be ignored. To support this conclusion, two findings can be taken into consideration: (1) each of the narratives presents a different number of Jewish victims, and (2) each of the stories tends to have a differing view on the ending of the Holocaust and its relative impact after the Second World War. Hence, the lack of cross-language coherence considerably weakens Wikipedia's reliability assessment.

Secondly, the total number and nature of references cannot be used as a predictor of the quality of Wikipedia entries. Specifically, as Arie Sonneveld has pointed out, a higher number of sources used does not necessarily improve the quality of the narrative and may even lead to less coherency within the entry. This could be also be perceived on the English language version of the entry, as its first definition of the Holocaust was contradicting with a chapter that followed on the non-Jewish victims of the Holocaust. This made the representation only more confusing for the readers.

On the other hand, the nature of the references (e.g. type of source and language of references) may have slightly different impact on the representation, but seems to be insignificant to the narrative as a whole. For example, the mere use of English-written references on the English language version of the Holocaust entry does not seem to induce an outspoken nationalized focus throughout the narrative, neither did the German references on the German language version. Instead, these national influences seem to be more related to the identity and location of the authors/editors than to the used references.

Thirdly, it can be concluded that the Holocaust entries are not equally 'good' when it comes to quality and it is therefore important to perceive the Holocaust entries separately and avoid generalizations about the representation of the Holocaust on Wikipedia. Both in quantity (e.g. word count, reference count, number of genuine additions, etc.) and quality (focus, accuracy, etc.) the Dutch language version of the entry seems to be far behind when compared to its English and German counterpart. The fact that the story is incomplete is a determining factor in concluding that this version of the Holocaust entry is least comprehensive and accordingly least in quality.

Nevertheless, it is important to note that the perceived comprehensiveness of the articles does not always tend to be a good quality dimension in determining the strength of Wikipedia entries. Specifically, since Wikipedia is an encyclopedia, more details do not always yield a better understanding of the events. Sometimes is may even have the opposite effect of drawing the attention away from what is primarily considered to be important in understanding events and phenomena.

To illustrate, the average person has a concentration span of 40-50 minutes[24] and it has been found that the average reading speed of people is between 200-400 words per minute[25]. This means that it would take the average person between 60-120 minutes to completely read the English language version of the Holocaust entry on Wikipedia (24,358 words) and between 40-80 minutes to completely read its German language-counterpart. In practice, this means that hardly anybody is able to completely read these two Holocaust entries without losing concentration. As a result, readers will skip certain parts, making it probable that also important information is bypassed by the readers.[26] Hence, this indicates that more information does not automatically generate a better story.

Still, despite the downside of the increased breadth and depth of the entry, it can be stated that the English language version of the Holocaust is number one in the hierarchy when it comes to the quality of its encyclopedic content, as it tends to present the most 'complete' story, and from a considerable Neutral Point of View. The German and Dutch language versions, on the other hand, are shown to be considerably shaped by national frameworks, which is weakening the objectivity an encyclopedia should essentially reflect. On the other hand, it must be noted that the German language version seems to better fulfil its encyclopedic role when it comes to comprehensiveness, since it does a better job in drawing the attention to events that are important to understand the Holocaust.

## 4.5 Conclusion

All in all, this chapter has shown that significant differences between the Wikipedia entries under study do not only exist in size of the articles, but also resonates all throughout the representation of the Holocaust. One of the most apparent differences between the Holocaust entries under study is who should be identified as non-Jewish victims of the Holocaust. No agreement seems to exist on who exactly should be included in the definition and nearly every group of people that has somehow been victimized by the Nazis are mentioned in the Holocaust entries. In fact, even Esperantists have been proposed to be included in the Holocaust entry, highlighting the existing ambiguity surrounding this issue.

Another significant difference between the Wikipedia entries under study is the fact that each language version has its own unique focus. In fact, it has been found that the English language version of the Holocaust entry on Wikipedia places particular emphasis on the Jews as victims at one

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[24] Chelsom, John V., Andrew C. Payne and Lawrence Reavill, *Management for engineers, scientists, and technologists* (New York 2005) 231.
[25] Carver, Ronald P., 'Reading rate: Theory, research, and practical implications', *Journal of Reading* (1992) 91-92.
[26] Levy, 'Information Overload', 498-499.

hand and the Nazis as perpetrators of the Holocaust at the other. In addition, the (re)presentation is characterized by an extensive strive for comprehensiveness, which is reflected by an incredible level of details all throughout the narrative (such as, for example, the significant number of persons mentioned by name[27]). On the other hand, the German language version of the Holocaust entry tends to place particular focus on the advent of the Holocaust and the consequences for Germany and the German public, while the Dutch language version draws particular attention to the significance of the Holocaust in The Netherlands and Belgium.

Accordingly, with regard to the third sub-question (SQ3) (on the extent to which national influences are apparent in the (re)presentations of the Holocaust), it can be stated that national influences are primarily apparent in the German- and Dutch-language Holocaust narratives, while this seems of less significance in the English-language coverage of the historical event. This difference is probably mainly caused by the fact that Germany bears prime responsibility for the Holocaust in Europe and the consequences of the Holocaust were painfully evident in The Netherlands and Belgium. Hence, contributors from these countries have been found to be more likely to zoom in on their 'own' country and victims. This is in contrast with the UK and USA, which were merely bystanders of the Holocaust.

Nevertheless, despite the differences, an overarching narrative of the Holocaust on the Wikipedia entries under study can be perceived in which the historical event is defined as the (systematic) genocide of approximately six million Jews (according to the German language version somewhere between 5,6 – 6,3 million killed Jews). In addition, there seems to exist considerable consensus that the origins of the Holocaust can be largely traced to the anti-Semitism that was rooted in Germany long before the beginning of the Second World War and the Holocaust entries under study tend to agree that systematic mass-murder facilitated by concentration and extermination camps should be perceived as the most important and significant feature of the Holocaust.

Hence, in the end, this seems to be the overarching (re)presentation of the Holocaust on Wikipedia.

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[27] For the list of persons mentioned in the Holocaust entries under study, see: Appendix 2.

# 5. DISCUSSION AND CONCLUSION

'If you want to affect how the world understands a particular topic, you must edit Wikipedia.'

– Adrianne Wadewitz[1]

The aim of this master thesis has been to get insight in how the Holocaust is being shaped and (re)presented on Wikipedia and how this affects Western historiography. The central research question of this study basically consisted of two parts: (1) '*How is the Holocaust (re)presented on the online encyclopedia Wikipedia'* and (2) *'what are the implications for Western historiography?*' In this final chapter, the answers to this question are systematically discussed, starting with a reflection on how the Holocaust is (re)presented on Wikipedia, followed by a consideration of the implications for Western historiography. Finally, the chapter ends by addressing the limitations of this research and implications for future research.

With regard to the first part of the research question, *'how is the Holocaust (re)presented on the online encyclopedia Wikipedia?',* it is above all important to conclude that there does not exist *one* representation of the Holocaust on Wikipedia, but several instead. Specifically, the analysis of the Wikipedia entries has shown that each of the language versions has its own unique account of events and phenomena included in the representation of the Holocaust. At first glance, this conclusion appears counter-intuitive. That is, the principle of neutral point of view upon which Wikipedia if founded, and the bureaucracy in place to manage it, could have been expected to make Wikipedia entries universal in the sense of the same, or increasingly similar, across language versions. However, this research has found that such a presumption does not hold.

On the contrary, the findings have shown that significant differences exist in the representation of the Holocaust between the English, German and Dutch language version of the Holocaust entries, particularly in quantity. The most significant difference in this respect is the difference in size of the articles between the English and German language versions of Wikipedia on one hand and the Dutch language version on the other. Accordingly, this quantitative difference is found to further resonate in the qualitative depth of the articles, such as the level of detail and thoroughness of the description of events and phenomena.

Within this respect, one of the most notable qualitative differences in representation between the language versions is the point in history where the Holocaust narratives 'end'. To

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[1] Adriana Wadewitz, 'Wikipedia is pushing the boundaries of scholarly practice but the gender gap must be addressed': http://en.wikisource.org/wiki/Wikipedia_is_pushing_the_boundaries_of_scholarly_practice_but_the_gender_gap_must_b e_addressed (05-05-2014).

illustrate, it has been found that the English-language Holocaust narrative ends with the liberation of the camps in 1945, while its German-language counterpart ends the narrative by zooming in on post-Holocaust Germany (1945~1975). The Dutch-language narrative, on the other hand, builds up to the mass killings of millions of Jews in the concentration and extermination camps, but never mentions the liberation of these camps as indication that the Holocaust has ended. [2] For this reason, among others, the Dutch-language representation of the Holocaust is incomplete and is lacking detail, while its English- and German-language counterparts are considerably 'better' in this respect.

This findings was further evidenced by a reliability assessment, which mainly focused on the 'verifiability' and 'comprehensiveness' of the Holocaust narratives. Comprehensiveness, however, turned out to be not a very appropriate quality dimension in assessing Wikipedia's strength as an encyclopedia. Specifically, it has been found that more details not always yield a better understanding of the phenomenon and can sometimes even induce the opposite effect by drawing the attention away from what is considered primarily important. Nevertheless, the high level of comprehensiveness, as well as links and references of the English and German language versions of the online encyclopedia seems to have resulted in a more thorough story of the Holocaust, making them 'better' encyclopedic entries than their Dutch-language counterpart.

When further looking at the differences in representation, it can be stated with a high level of confidence that the representation on Wikipedia is affected by national influences. This statement is supported by the finding that the German- and Dutch-language Holocaust narratives have been shown to place increased emphasis on respectively Germany, The Netherlands and Belgium. Explanations for increased focus on these countries can primarily be found in the correlation that seems to exist between the geographic location of the editors (authors) on one hand and the national influences in the Holocaust narratives on the other. Specifically, the English language version places (a slightly) increased emphasis on the United States in the Holocaust narrative, while its German- and Dutch-language counterparts have merely placed the Holocaust in the national context of respectively Germany and The Netherlands, indicating national influences. Hence, the identity of the editors seems to be of considerable importance for the current representations of the Holocaust.

Nevertheless, despite the differences in representation, an overarching narrative can still be perceived on Wikipedia. By looking at the events and phenomena shared across the language versions under study, it can be stated that, in general, Wikipedia defines the Holocaust as the (systematic) genocide of approximately six million Jews (according to the German language version somewhere between 5,6 – 6,3 million) that has been facilitated by the rise of concentration and

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[2] The overview of topics displayed in Appendix A.4 further illustrates this finding, as it can be perceived that both the English and German lingual version of the Holocaust article devote a separate section on the final phase: the liberation of the camps. See Appendix A.4.

extermination camps. Moreover, the historical massacre is set upon a wide historical stage with the Holocaust itself shown in relationship to trends of antisemitism operating in the late nineteenth and early twentieth century. The political nature of the Holocaust [naturally] draws the attention to its key figures, and especially to the role of Adolf Hitler. The actions or inactions of collaborators, bystanders, and ordinary people on the other hand, are, however, largely ignored in the representation. In this respect, the representation of the Holocaust on Wikipedia is contrasting 'mainstream' historiography[3].

Certainly this research is too limited in scope to make broad generalizations about the representation of the Holocaust on Wikipedia at large, but it nevertheless provides a valuable insight in how the Holocaust is being shaped on the online encyclopedia. In fact, if we extrapolate a little past the results of this research, we can safely assume that the findings presented here also largely apply to other (transnational) historical subjects on Wikipedia. We might even draw three conclusions from the findings of this research that apply to the representation of allegedly all (transnational) historical subjects on the online encyclopedia.

First, it can be stated that (transnational) historical subjects on Wikipedia are all characterized by a high level of changeability, which is caused by the dynamic and collaborative nature of Wikipedia. In practice this means that the representation of historical subjects is never fixed, and may, theoretically, even change from day to day. Second, it can be stated that the representation of important historical events has become a public domain, which means that everyone is initially able to edit the online entries, even people with malicious intentions. This means that there is a considerable level of competition, which is important for historians to take into account. Third, despite the transnational nature of Wikipedia, the representation of transnational events on the online medium is likely to be placed in a nationalized framework, which is shaped by the geographic location of the dominating contributors.

Why should we care? Because people in our surroundings do. The fact that the encyclopedia is ranked as the sixth most visited website of today and its articles are the first- or second-ranked results for most Internet searches, perfectly illustrates the incredible popularity of the medium. This popularity of Wikipedia, and especially of its history articles, makes it, for better or worse, the most prominent public history project in the world. This automatically directs us to answering the second part of the main research question: *what are the implications for Western historiography?*

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[3] K.L. Riley and S. Totten, 'Understanding matters: Holocaust curricula and the social studies classroom', *Theory & Research in Social Education* 30/4 (2002) 546.

Specifically, the answer to this question is deeply embedded in the fact that Wikipedia's content, largely written by non-professionals, affects the understandings of, for example, journalists, scientists, teachers, and not in the last place, students. Accordingly, this means that Wikipedia –as most dominant digital storyteller– holds the power to teach people about important historical events, such as the Holocaust. Hence, the online encyclopedia plays a powerful role in shaping understandings of events we deem important, which is accordingly likely to have a significant effect on how people commemorate such phenomena. Thereby, it has, to a certain extent, taken over the role of history textbooks and academic historical publications. It is for this reason that historians, such as Roy Rosenzweig, are repeatedly urging their colleagues to make a concerted effort to collaborate with Wikipedians. To use the words of Archivist of the United States David Ferriero: 'You need to be where the people are.'[4]

Still, many historians hesitate to participate in Wikipedia because they see its open, collaborative editing model as contradictory to established processes within the academic world. However, a fact is that the work of academics is not in competition with Wikipedia, but rather is the key to its quality and development. Wikipedia is simply build on the research and findings of others, and in particular, on the results of scientific research. Also, for the historians who hesitate to participate in Wikipedia because they fear worthy contributions are not given proper recognition in a community of amateurs, I would like to urge that current findings have shown that Wikipedia does not undermine scholarly authority. Rather, the Wikipedia community welcomes expert contributions as they are in need for valuable additions to the entries.

In fact, Wikipedia, as a tertiary source, does not seek to 'crowdsource'[5] the interpretation of the past, but to document the state of the field on a given topic. Academics sensitive to this mission will accordingly understand Wikipedia's 'no original research' policy, which assures that all interpretive facts and claims are referenced to a published and accepted source. This insistence on verifiability is necessary to avoid that self-proclaimed experts promote unpublished interpretations and to maintain the reliability of contributions. Nevertheless, if expert historians do want to offer an interpretation that cannot be found in the secondary literature, there is always the possibility of propose the contribution on the talk pages of Wikipedia and enter the dialogue with other editors of the online encyclopedia.

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[4] David Ferriero, 'Remarks of Archivist of the United States David S. Ferriero' (Speech presented at the Wikipedia in Higher Education Summit, Simmons College, Boston, MA, July 9, 2011), www.archives.gov/about/speeches/2011/7-9-2011.html. Jimmy Wales quoted in Brent Hecht and Darren Gergle, 'A Beginner's Guide to Geographic Virtual Communities Research', in Ben K. Daniel (ed.), *Handbook of Research on Methods and Techniques for Studying Virtual Communities: Paradigms and Phenomena* (New York 2011) 342.

[5] Lori B. Philips and Dominic M. Parks, 'Historians in Wikipedia: Building and Open, Collaborative History', http://www.historians.org/publications-and-directories/perspectives-on-history/december-2012/the-future-of-the-discipline/historians-in-wikipedia-building-an-open-collaborative-history (29-07-2014).

As Rosenzweig wrote: 'historians probably have a professional obligation to make [Wikipedia] as good as possible.' While Wikipedia continues to reach millions of people with their information, the discipline of history risks to become increasingly isolated if historians do not become more engaged with this powerful open source platform. In doing so, expert historians can reach the general public through Wikipedia, while, in the meantime, they can continue to publish their work in academic journals. Thereby, contributing to Wikipedia would make the historian's work more accessible than ever before. As a platform that is open to everyone, Wikipedia only works if everyone feels empowered to be involved.

To this end, I would like to urge historians to make the first step in contributing and follow the words of Adriane Wadewitz: 'If you want to affect how the world understands a particular topic, you must edit Wikipedia.'[6] I hope we do, because the representation of the Holocaust on Wikipedia – and especially the Dutch version – could definitely use some improvement. So, do not be afraid, and click that edit button in the corner of your screen the next time you are visiting 'the greatest encyclopedia the world has ever known.'[7]

**Limitations and implications**

All in all, the findings of the study reported here may serve as valuable theoretical basis in current debates on Wikipedia as it provides essential insight in the (re)presentation of the Holocaust on Wikipedia and the implications for Western historiography. However, certain limitations must be acknowledged. Particularly, the Holocaust entries under study introduce certain limitations generalizability and may even be considered unrepresentative. For example, the three entries under study are only a very small minority of the total number of language versions of the main entry on the Holocaust (121 versions in total), and allegedly an even smaller minority when compared to all entries in which the Holocaust is covered. Still, the representativeness of the sample is strengthened by the fact that the articles are derived from the three largest language versions of Wikipedia.

In addition, the findings presented in this study are challenged by the dynamic and rapidly changing nature of Wikipedia, which means that the content under study may be edited or completely rewritten in days, or even in minutes. The information analysed in this study may therefore be changed by the time it is publically available, making the analysis of certain contents somewhat arbitrary. Nevertheless, fortunately, the verifiability of the findings is not threatened as older versions of the Holocaust entries can be consulted in the article's history page. However, in this respect it should also be noted that the first available version of the English language version of the

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[6] Adriana Wadewitz, 'Wikipedia is pushing the boundaries of scholarly practice but the gender gap must be addressed': http://en.wikisource.org/wiki/Wikipedia_is_pushing_the_boundaries_of_scholarly_practice_but_the_gender_gap_must_b e_addressed (05-05-2014).
[7] Philips and Sparks, 'Historians in Wikipedia'.

Holocaust entry on Wikipedia is presumably not the first version ever created of this page, implying that the findings related to this page should be interpreted with considerable scrutiny.

In addition, it is important to understand that this study is only a beginning in filling the gap in the academic field, leaving a need for further research on Wikipedia and its content. Especially important would be the application of a larger research sample. In doing so, a more reliable and comprehensive understanding could be attained, providing more insights in how (other) historical subjects are represented and being shaped on Wikipedia. Also, reception study would be needed to further analyze how the representations are received and to what extent they actually affect people's understanding of historical subjects. Likewise, a more thorough analysis of the contributors could be conducted to provide more insight into the identity of the editors and their motivations to participate, which would generate a better understanding of the (cultural) influence of these contributors on the representation of the subjects.

Nevertheless, despite these limitations, it is important to understand that the study reported here may provide an appropriate basis to step into the societal debates on the future of historiography in the electronic age, as well as discussions about the accuracy of Wikipedia as a reference work. Furthermore, this study can help determining the value of the Holocaust entries on Wikipedia for educational purposes, as well as providing practical guidance for a wide variety of potential contributors of Wikipedia.

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# Appendix 1

List of the 90 most active editors of the Holocaust entries under study

*English language version*

| Username | # of edits | Minor edits % | Personal Info (Yes/No) | Inactive | Academic degree | Admin/Bot |
|---|---|---|---|---|---|---|
| *SlimVirgin* | 724 | 45.4% | Y | | | Admin |
| *Crum375* | 351 | 47.6% | Y | | | Admin |
| *ColaXtra* | 271 | 29.2% | N | Banned | | |
| *Woogie10w* | 257 | 20.2% | N | | | |
| *Hoops gza* | 186 | 19.9% | N | | | |
| *Jpgordon* | 177 | 58.2% | Y | | | Admin |
| *Goodoldpolonius2* | 157 | 43.3% | Y | | Sociology | |
| *Jayjg* | 139 | 59% | Y | | | Admin |
| *HanzoHattori* | 136 | 51.5% | N | | | |
| *A.S. Brown* | 109 | 0% | N | | | |
| *Joel Mc* | 103 | 14.6% | N | | | |
| *Ahadland1234* | 91 | 0% | N | Banned | | |
| *Paul Barlow* | 81 | 16% | N | | | |
| *Humus sapiens* | 72 | 22.2% | Y | | | |
| *Squiddy* | 70 | 67.1% | N | | | |
| *Skäpperöd* | 69 | 23.2% | N | | | |
| *Hohum* | 67 | 4.5% | Y | | | |
| *Selfworm* | 62 | 38.7% | N | | | |
| *Tawkerbot2* | 61 | 100% | N | | | Bot |
| *Curps* | 60 | 100% | N | | | |
| *Hadseys* | 55 | 0% | N | Banned | | |
| *Antandrus* | 53 | 88.7% | Y | | Music Theory | |
| *El C* | 52 | 45.4% | N | | | |
| *Musical Linguist* | 51 | 47.6% | Y | | | |
| *Tasc* | 51 | 29.2% | N | Banned | | |
| *AntiVandalBot* | 49 | 20.2% | N | | | Bot |
| *RexNL* | 49 | 19.9% | Y | | | Admin |
| *Jacurek* | 46 | 58.2% | N | Banned | | |
| *Imacomp* | 43 | 43.3% | N | | | |
| *Jimhoward72* | 40 | 59% | Y | | Theogology | |

*German language version*

| Username | # of edits | Minor edits % | Personal Info (Yes/No) | Inactive | Academic Degree | Admin/Bot |
|---|---|---|---|---|---|---|
| *Jesusfreund* | 480 | 23.5% | N | Profile deleted | | |
| *Kopilot* | 271 | 6.6% | N | | | |
| *Ulitz* | 198 | 37.4% | N | | | |
| *Asdfj* | 121 | 32.2% | N | Banned | | |
| *Stefan Volk* | 79 | 16.5% | N | Profile deleted | | |
| *Phi* | 52 | 42.3% | N | | | |
| *Hardenacke* | 42 | 95.2% | N | | | |
| *Rita2008* | 40 | 10% | N | | | |
| *Holgerjan* | 37 | 32.4% | Y | | | |
| *Southpark* | 31 | 96.8% | N | | | |
| *Agp* | 24 | 16.7% | Y | | | |
| *Richard Lenzen* | 23 | 78.3% | N | | | |
| *Asthma* | 22 | 36.4% | N | | | |
| *Dingo* | 19 | 5.3% | N | Profile deleted | | |
| *Nocturne* | 18 | 77.8% | N | | | |
| *KarlV* | 18 | 22.2% | Y | | | |
| *Rolling Thunder* | 17 | 94.1% | N | | | |
| *Eisbaer44* | 15 | 80% | N | Profile deleted | Theology | |
| *Konsul* | 15 | 73.3% | N | Banned | | |
| *Captain-C* | 15 | 26.7% | N | | | |
| *Imre* | 14 | 92.9% | N | | | |
| *G* | 14 | 14.3% | Y | | | |
| *Radzuweit* | 14 | 0% | Y | | | |
| *MAK* | 13 | 53.8% | N | | | |
| *Benatrevqre* | 13 | 7.7% | Y | | | |
| *Volkes Stimme* | 13 | 0% | N | | | |
| *Klugschnacker* | 13 | 0% | N | Profile deleted | | |
| *Hafenbar* | 12 | 66.7% | N | | | |
| *Lung* | 12 | 33.3% | N | | Law | |
| *Saperaud* | 12 | 8.3% | Y | | | |

*Dutch language version*[8]

| Username | # of edits | Minor edits % | Personal Info (Yes/No) | Inactive | Academic degree | Admin/Bot |
|---|---|---|---|---|---|---|
| Bart Versieck | 105 | 85.7% | Y | | | |
| Wasily | 70 | 20% | N | | | |
| Richardw | 39 | 25.6% | Y | | | |
| Ellywa | 32 | 59.4% | N | | | |
| DennisPeeters | 22 | 40.9% | Y | | | |
| Rex | 19 | 26.3% | Y | | | Admin |
| Sswelm | 18 | 55.6% | N | | | |
| MrBlueSky | 17 | 58.8% | N | | | |
| 213.118.181.78 | 13 | 0% | N | | | |
| Jvhertum | 12 | 16.7% | Y | | | |
| WH1953 | 12 | 8.3% | N | Banned | | |
| Gidonb | 12 | 8.3% | Y | | | |
| Robbot | 11 | 90.9% | N | | | Bot |
| Zonnewiel | 11 | 0% | N | Banned | | |
| Ben Pirard | 10 | 30% | Y | | | |
| 217.166.250.65 | 10 | 0% | N | | | |
| Tasja | 9 | 55.6% | N | Profile deleted | | |
| ErikvanB | 9 | 33.3% | N | | | |
| GrouchoBot | 8 | 87.5% | N | | | Bot |
| Eve | 8 | 75% | N | | | |
| Jasper Coenraats | 8 | 62.5% | Y | | | Admin |
| Tjako | 8 | 62.5% | N | | | |
| Wikix-oud | 8 | 37.5% | N | | | |
| Bor Komorovski | 8 | 12.5% | N | Profile deleted | | |
| Kalsermar | 8 | 0% | N | | | |
| Mark79 | 8 | 0% | N | | | |
| EmausBot | 7 | 100% | N | | | Bot |
| RobotE | 7 | 100% | N | | | Bot |
| Just a member | 7 | 85.7% | Y | | | Admin |
| VR-Land | 7 | 28.6% | N | | | |

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[8] The tables present the key findings of an empirical analysis of the top 30 active users on the Dutch, English, and German language version of the Holocaust article on Wikipedia. These top 30 editors are selected on the total *number* of edits on the Holocaust article on Wikipedia. The top 30 of editors is based on statistics from the online tool 'Xtool', see: http://tools.wmflabs.org/xtools/articleinfo/index.php?article=holocaust&lang=en&wiki=wikipedia&begin=&end= (English language version), http://tools.wmflabs.org/xtools/articleinfo/index.php?article=holocaust&lang=nl&wiki=wikipedia&begin=&end= (Dutch language version), and http://tools.wmflabs.org/xtools/articleinfo/index.php?article=holocaust&lang=de&wiki=wikipedia&begin=&end= (German language version) (02-06-2014).

# Appendix 2

## Overview of persons mentioned in the Holocaust articles (14-06-2014)

**English language version of the Holocaust**[9]

*Perpetrators (Nazis)[10]*

1. Adolf Hitler
2. Heinrich Himmler
3. Dr. Josef Mengele
4. Adolf Eichmann
5. Reinhard Heydrich
6. Hermann Göring
7. Ernst vom Rath
8. Dr. Otmar von Verschuer
9. Dr. Erich Neumann
10. Fritz Sauckel
11. Josef Bürckel
12. Robert Heinrich Wagner
13. Joachim von Ribbentrop
14. Otto Ohlendorf
15. Karl Wolff
16. Hans Frank
17. Rudolf Höss
18. Ernst Kaltenbrunner
19. Karl Dönitz
20. Albert Speer
21. Joseph Goebbels
22. Heinrich Müller
23. Wilhelm Keitel

*Victims*

1. Walter Benjamin
2. Leon Feuchtwanger
3. Bruno Walter
4. Otto Klemperer
5. Albert Einstein
6. Sigmund Freud
7. Max Liebermann

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[9] Names are subtracted from the English language version of the Holocaust entry on Wikipedia. Wikipedia, 'The Holocaust', http://en.wikipedia.org/wiki/Holocaust (14-06-2014).

[10] Names are presented in order they are mentioned in the text of the Holocaust entries. To illustrate, this means that Adolf Hitler was the first person mentioned by name on the English language version of the Holocaust entry on Wikipedia.

8. Vera Alexander
9. Joseph Parnas
10. Adam Czerniaków
11. Chaim Rumkowski
12. Jacob Grojanowski (escapee)
13. Kazimierz Piechowski (escapee)
14. Stanisław Gustaw Jaster (escapee)
15. Józef Lempart (escapee)
16. Alfred Wetzler (escapee)
17. Rudolf Vrba
18. Elie Wiesel

*Other[11]*
1. Christian Wirth
2. Jan Karski (Polish resistance fighter)
3. Miklós Horthy (Hungarian regent Admiral)
4. Arthur Koestler (British journalist)
5. Anthony Eden (British foreign secretary)
6. Franklin D. Roosevelt
7. Witold Pilecki (Polish underground)
8. Colonel William W. Quinn (Colonel of US army)
9. Richard Dimbleby (British journalist)
10. Paul von Hindenburg
11. Houston Stewart Chamberlain
12. Paul de Lagarde
13. Hermann Ahlwardt
14. Heinrich Class

*Authors mentioned*
1. Yehuda Bauer and Lucy Dawidowicz
2. Canadian historian Michael Kater
3. Otto Dov Kulka
4. Peter Longerich
5. Timothy Snyder
6. Raul Hilberg
7. Jacob Lestschinsky
8. Yisrael Gutman
9. Robert Rozett
10. Wolfgang Benz

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[11] The list of people who are categorized as 'other' include people who were somehow involved in the Holocaust, but cannot be identified as either victim or perpetuator. People who are classified as 'other' include: journalists, regents, militants, resistance fighters and (sometimes) bystanders. Bystanders, in this respect, form a unique group in this respect, as people included in this category were aware, at least to some extent, of how the Nazi regime was treating the Jews. Nevertheless, they took no active position on the matter. See: T. Kushner, ''Pissing in the Wind'? The Search for Nuance in the Study of Holocaust 'Bystanders', *Holocaust Studies: A Journal of Culture and History* 9/2 (2000) 60.

11. Dr. Shimon Samuels
12. Adam Jones

*Authors quoted*

1. Michael Berenbaum
2. Israeli historian Saul Friedländer
3. Israeli historian and scholar Yehuda Bauer
4. German historian Eberhard Jäckel
5. German historian Hans Mommsen
6. German historian Detlev Peukert
7. Raul Hilberg
8. German historian Andreas Hillgruber
9. The German historian Jürgen Förster
10. Raul Hilberg
11. Ian Kershaw
12. the German historian Christof Dipper
13. Robert Gellately
14. German historian Hans Buchheim
15. Christopher Browning
16. Martin Gilbert
17. Paul Johnson
18. Ruth Linn
19. historian William W. Hagen

*Quotes from individuals expressing personal experience*

1. Rudolf Vrba (victim)
2. Rudolf Höss (Nazi)
3. Pieter Meerburg (victim)
4. Alexander Kime (victim)
5. Elie Wiesel (victim)
6. Heinrich Himmler (Nazi)
7. Adolf Hitler (Nazi)

**German language version of the Holocaust[12]**

*Perpetrators (Nazis)*

1. Adolf Hitler
2. Joseph Goebbels
3. Heinrich Himmler
4. Reinhard Heydrich
5. Albert Forster
6. Adolf Eichmann
7. Erich von dem Bach-Zalewski
8. Friedrich Jeckeln
9. Hans-Adolf Priitzmann
10. Otto Bradfisch
11. Friedrich Jeckeln
12. Hinrich Lohse
13. Viktor Brack
14. Felix Kersten
15. Hans Frank
16. Arthur Greiser
17. Rudolf Höss
18. Josef Mengele
19. Stella Goldschlag
20. Adolf Rögner
21. Wilhelm Boger


*Victims*

    None


*Other*

1. Georges Livschitz (resistance)
2. Robert Maistriau (resistance)
3. Jean Franklemon (resistance)
4. Hans Calmeyer (resistance)
5. Giorgio Perlasca (resistance)
6. Witold Pilecki (resistance)
7. Oskar Schindler (resistance)
8. Chiune Sugihara (resistance)
9. Raoul Wallenberg (resistance)
10. Helmuth James Graf von Moltke (resistance)
11. Hannah Arendt (resistance)
12. Henry Morgenthau (Secretary of state)
13. Franklin D. Roosevelt

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[12] Names are subtracted from the German language version of the Holocaust entry on Wikipedia. Wikipedia, 'Holocaust', http://de.wikipedia.org/wiki/Holocaust (14-06-2014).

14. Abba Kovner (resistance)
15. Oskar Schindler (resistance)
16. Fritz Bauer
17. David Ben Gurion
18. Konrad Adenauer
19. Pope Pius XII
20. Johannes XXIII

*Authors mentioned*
1. Dieter Pohl
2. Karl Schleunes
3. Raul Hilberg
4. Gerald Reitlinger
5. Martin Gilbert
6. Wolfgang Benz
7. Burkhard Asmuss

**Dutch language version of the Holocaust[13]**

*Perpetrators (Nazis)*

1. Adolf Hitler
2. Adolf Eichmann
3. Hermann Göring
4. Julius Streicher
5. Ernst vom Rath
6. Ion Antonescu

*Victims*

   None

*Other*
1. Georges Livschitz (resistance)
2. Robert Maistriau (resistance)
3. Jean Franklemon (resistance)
4. Hans Calmeyer (resistance)
5. Giorgio Perlasca (resistance)
6. Witold Pilecki (resistance)
7. Oskar Schindler (resistance)
8. Chiune Sugihara (resistance)
9. Raoul Wallenberg (resistance)

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[13] Names are subtracted from the Dutch language version of the Holocaust entry on Wikipedia. Wikipedia, 'The Holocaust', http://nl.wikipedia.org/wiki/Holocaust (14-06-2014).

# Appendix 3

Schematic overview of topics discussed in the Holocaust entries

**English language version (24,358 words)**

*Topics:*

1. Introduction (315 words)
2. The term Holocaust (215 words)
3. (Growth of) a totalitarian government (institutional collaboration) (703 words)
   a. (Racial) antisemitism in European culture
   b. Victimization of Jews
   c. Non-solidarity with Jews
   d. Public prejudice/hatred against Jews
4. Extermination camps (63 words)
5. Medical experiments (281 words)
6. **Development and origins (16,225 words)**
   a. **Rise of antisemitism (1364 words)**
      1. Middle Ages
      2. Second half 19th century
      3. Reichstag 1985
      4. National Socialist German Workers' Party (NSDAP)
      5. Post World War I Germany
      6. Adolf Hitler
      7. Nazi Party
   b. **Systematic oppression of Jews (1316 words)**
      1. Third Reich
      2. Nazis
      3. Legal oppression of Jews
      4. Legal oppression of non-Jews
      5. Concentration camps
      6. Adolf Hitler
      7. Nuremberg Laws
      8. Ethnic cleansing
      9. The final solution
      10. Annihilation of Jewish race
      11. Nazi propaganda
   c. Kristallnacht (263 words)
   d. Resettlement and Deportation (391 words)
   e. **Early measures (1398 words)**
      1. In German-occupied Poland
      2. In other occupied countries
      3. In North Africa

**German language version (16,748 words)**

*Topics:*

1. Introduction (72 words)
2. The terminology (478 words)
3. Background (873 words)
   a. Ideology of National Socialism
   b. Persecution of Jews in the German Reich
4. **Development (4269 words)**
   a. Escalation
   b. Mass murder and deportations
   c. Ghettos
   d. Deportation plans
   e. **The Final Solution (1709 words)**
   f. **Systematic mass shootings (1095 words)**
   g. **Extermination camps (1628 words)**
   h. Extermination of Jews throughout Europe (2358 words)
      i. Beginning of systematic deportations
      ii. Benelux
      iii. Bulgaria
      iv. German Reich
      v. France
      vi. Italy
      vii. Greece
      viii. Yugoslavia
      ix. Croatia
      x. Romania
      xi. Scandinavia
      xii. Slovakia
      xiii. Hungary
   i. Final Phase (495 words)
5. Total number of Jewish victims (603 words)
6. Perpetrators (607 words)
7. Awareness of the Holocaust in the Nazi era (756 words)
   a. Germany
   b. Allies
8. **Resistance and rescue attempts (2426 words)**
   a. Jews
   b. Non-Jewish German
   c. Occupied and allied States
   d. Switzerland
   e. Liberation of the survivors in the camps
      i. 1944
      ii. 1945
9. **Aftermath (2003 words)**

a. Traumatization of survivors
b. Legal processing
c. Compensation
d. Rebuilding the church
e. Causal research
f. Denial and trivialization
g. Commemoration

**Dutch language version (4,318 words)**

*Topics:*

1. Introduction (48)
2. The term Holocaust (95 words)
3. (Number of Jewish victims) (80 words)
4. Non-Jewish victims (of the Holocaust) (60 words)
5. Reasons for the Holocaust (183 words)
    a. (Growth of) a totalitarian government
    b. (Racial) antisemitism in European culture
    c. Enlightenment philosophy of ethnic cleansing
6. **Origins (1221 words)**
    a. Post-World War I Germany (292 words)
        1. Rise of antisemitism
        2. Rise of NSDAP
        3. Rise of Hitler
    b. Nuremberg Laws (288)
        1. Jewish life pre-Holocaust (130 words)
            1. Prejudice/stereotyping
        2. 1936 Olympics (52 words)
        3. Kristallnacht (88 words)
    c. The Final Solution (631 words)
        1. Antisemitism
        2. Ghettos
        3. Invasion of the Soviet Union
        4. Killings by gas (220 words)
            1. Auschwitz
        5. Wannsee Conference (90 words)
7. **Concentration and extermination camps (447 words)**
    a. Final Solution
    b. Hitler
    c. Jewish victims
    d. Non-Jewish victims
    e. Extermination camps (99 words)
        1. Chełmno
        2. Bełżec
        3. Treblinka
        4. Sobibór
        5. Maly Trostenets
        6. Majdanek, tevens concentratiekamp
        7. Auschwitz II (Auschwitz-Birkenau)
    f. Concentration camps (87 words)
        1. Dachau (only mentioned)
        2. Buchenwald (only mentioned)
        3. Breendonk (55 words)

       g.   Transit camps (160 words)
            1.   Westerbork (Netherlands)
            2.   SS-Sammellager Mecheln
            3.   Drancy
            4.   Theresienstadt

**8.  Response to the Holocaust (1358)**
       a.   Resistance (451 words)
            1.   Uprise in Warshaw ghetto
            2.   Active resistance
       b.   Collaboration/obedience (209 words)
            1.   Dutch cooperation
                 1.   Romania
                 2.   Baltics States
                 3.   Croatia
                 4.   Denmark
                 5.   Other
       c.   Revisionism and Holocaust denial (190 words)

9.  The Holocaust in archives
       a.   Statistics and reports (e.g. medical experiments)

10. The Holocaust in literature and film
       a.   23 films listed
       b.   19 publications listed