Wikipedia and History: A Worthwhile Partnership in the Digital Era?

Murray G. Phillips

Abstract

It is hard to ignore the changes that have occurred to history-making in the digital age. Historians in the academy have observed, critiqued and, in some instances, engaged in the different forms of contemporary history that are related to the integration of the internet and related technologies into everyday lives. While digital history takes many forms, this paper examines Wikipedia as a mode of historical expression in the context of a project on the history of the Australian Paralympic Movement. Wikipedia's key core content policies of verification, no original research, and neutral point of view as well as the collaborative premise that underpins the online encyclopaedia are the focal points of analysis. This analysis demonstrates that Wikipedia challenges historians who have traditionally produced the professionally approved artefacts of monographs and journal articles. In essence, Wikipedia requires historians to produce knowledge as part of a collaborative community of practice and, in the process, abandon popular theories of truth that underpin empirical-analytical history. Even given these challenges, the history of the Australian Paralympic Movement shows that Wikipedia can be important to history-making in the digital age in at least two ways. Wikipedia provides a mode of historical expression that is complementary to the narratives of traditional books, and the online encyclopaedia generates a community which has produced articles that have enhanced knowledge about the history of disability sport.

Key Words: Wikipedia, Digital History, Sport History, Mode of Historical Expression.

Contact Information

Associate Professor Murray G. Phillips, School of Human Movement Studies, The

University of Queensland, St Lucia, Brisbane, Queensland, Australia, 4072

Telephone: 61 7 3365 6637

Email: m.phillips@uq.edu.au

Notes on Contributor

Murray G. Phillips has written on the historical aspects of several sports, including swimming

and the Paralympics, as well as contributing to philosophical debates about sport history,

understanding the role of sport museums, and conceptualising changes to sport history in the

digital age. His most recent books are *Representing the Sporting Past in Museums and Halls of*

Fame (London: Routledge, 2012) and Richard Pringle and Murray G. Phillips (eds), Critical Sport

Histories: Paradigms, Politics and the Postmodern Turn (West Virginia: FIT, 2013), and Gary

Osmond and Murray G. Phillips (eds), Sport History in the Digital Era (Champaign: University of

Illinois Press, 2015).

2

Introduction

Cyberspace has everted, turned inside out (and outside in) (Jones 2014, 19). Jones is referring to the phenomenon whereby what was once known as cyberspace has become an integral part of the everyday world. Eversion, the process of being turned inside out, is a metaphor that articulates a change in our collective understanding, experiences and imagination of the digital network, which is characterised by increasingly enmeshed physical and virtual worlds. The appearance of social networks – My Space, Facebook and Twitter – and other digital technologies including Google Books, Google Maps and the release of the IPhone in the first decade of the 21st century are examples of eversion that have influenced scholarly life. This is epitomised by the emergence of digital humanities. Digital humanities which engages a range of disciplines, from geography, history, literary studies, musicology, performance studies, sociology and computer studies represents a new relationship between traditional humanities and humanities computing. As Jones summarises, 'the new digital humanities – the product of the same changes marked by eversion – is arguably humanities computing everted' (Jones 2014, 26). In these ways, digital humanities is both a response to eversion and a contribution to further eversion.

Historians have engaged with the process of eversion from the early work of Roy Rosenzweig (Rosenzweig 2003) and Dan Cohen (Cohen 2004) to more recent analyses by Toni Weller (Weller 2013), Jack Dougherty and Kristen Nawrotzki (Dougherty and Nawrotzki 2013). These historians, and the body of work between their pioneering efforts and the latest analyses, examine the relationship between eversion and historymaking (Brown 2008, Cohen et al. 2008, Turkel 2011, Turnbull 2010). As these

historians demonstrate, conceptualising history-making in the digital era is complex (Osmond and Phillips 2015). At one level, eversion has changed the archives. There is an ongoing, large-scale digitization of archival material which has provided unprecedented access, but has generated a raft of ideological, institutional, political and financial issues associated with what has been termed the 'new infinite archive' (Berry 2012). The infinite archive encourages historians to entertain the idea of working with data, datadriven techniques and visualisations (Theibault 2013). This is a long way from the linguistic turn in history (Drucker 2012; Gibbs and Owens 2013). At another level, historians have access to social media which not only facilitates communication amongst scholarly communities, but can assist historical work by providing material for analysis from Facebook, Twitter, Youtube and blogs (Goulding 2011). Social media also brings with it a host of methodological, ethical and legal issues (Manovich 2012). At the remaining level, eversion has generated new platforms for history-making. These platforms may be collaborative through community involvement, they may embrace the publish-then-filter model of knowledge creation, they may utilize multimedia, they may only exist online with no equivalent print version, and they may not be wedded to linear narratives (Burdick et al. 2012). In these forms, digital history challenges the very nature of traditional historical scholarship.

One relatively new and prominent platform of history-making is Wikipedia. Created in the first decade of the 21st century, Wikipedia has been described as 'the most comprehensive, representative and pervasive participatory platform for knowledge production ever created by humankind' (Burdick et al. 2012, 85). This generous portrayal is based on Wikipedia's popularity, scope and community involvement. Wikipedia is the sixth most visited site on the Internet attracting 470

million unique visitors per month, and its community of 76,000 regular editors have created over 31 million articles in 285 languages on a plethora of topics (Wikipedia, "Wikipedia: About." Accessed April 4, 2014",

http://en.wikipedia.org/wiki/Wikipedia:About).

This paper examines the phenomenon of Wikipedia through the lens of academic history, and more specifically the subdiscipline of sport history, and addresses three questions. What are the history-making processes embedded in Wikipedia? How do these processes relate to history-making in the academy? Should historians in the academy engage with Wikipedia if, as Burdick and others argue, it is one of the most prominent forms of history in the digital era? Ultimately it is concluded that Wikipedia poses a host of epistemological challenges that will likely deter professional historians, but Wikipedia is also recognised as effectively engaging a community of practice to produce popular forms of history. These conclusions are framed against a backdrop of Munslow's (1997) tripartite model of historical enquiry – reconstructionism, constructionism and deconstructionism - and acknowledgement that all modes of historical expression including books, films, monuments, museums, statues, television and encyclopaedias represent the past through a series of narrative choices (Munslow 2007). In Wikipedia, authors/editors/administrators use narrative modes to address 'when, why, how, what and to whom things happened in the past' (Munslow, 2007, 64-79, 144).

My initiation to Wikipedia as a mode of historical expression came after being commissioned to write a history of the Australian Paralympic Movement, a movement that represents athletes with disabilities who compete in national and international

competitions. The historical project about the Australian Paralympic Movement has three dimensions: a traditional, paper book; an e-history; and a series of Wikipedia articles about significant athletes, administrators and coaches. My position coming into this project was as a historian in the academy with interests in sport history, public history and digital history. My knowledge of Wikipedia was limited to browsing articles of interest and discussing with students its value in their education.

What is informative, and interesting, about Wikipedia is that its content policies are published. In this sense, what counts as legitimate research and writing is clearly visible in Wikipedia, much more visible than exists in many academic journals. This visibility is not surprising given the context of open access, global communication channels and the collaborative nature of Wikipedia. When Rosenzweig analysed Wikipedia almost a decade ago, there were 19 separate pages of content guidelines (Rosenzweig 2006). These policies have subsequently been altered, condensed and refined into seven policies, of which three core content policies are prioritised in Wikipedia: verifiability, no original research and neutral point of view. Examining Wikipedia through the core content policies of verifiability, no original research and neutral point of view will help evaluate the opportunities and challenges for historians in the academy who are considering engaging with the popular, online encyclopaedia.

Verifiability

One of the three core policies of Wikipedia is verifiability. As the dedicated page explains: 'In Wikipedia, verifiability means that people reading and editing the encyclopedia can check that the information comes from a <u>reliable source</u>' (Wikipedia,

"Verifiability." Accessed September 11, 2014,

http://en.wikipedia.org/wiki/Wikipedia:Verifiability). The online encyclopedia continues 'All material in Wikipedia mainspace, including everything in articles, lists and captions, must be verifiable. All quotations, and any material whose verifiability has been challenged or is likely to be challenged, must include an inline citation that directly supports the material' (Wikipedia, "Verifiability." Accessed September 11, 2014, http://en.wikipedia.org/wiki/Wikipedia:Verifiability). Verification is predicated on citing appropriate types of online and hard copy published material: academic and peer reviewed publications are viewed as the most reliable sources, while other acceptable sources include university level textbooks, books produced by respectable publishers, magazines, journals and mainstream newspapers. Wikipedia also warns contributors about sources that are considered unreliable. Unreliable sources include those that are self published - books, forums, newsletters and personal websites, blogs and wikis. In terms of verifiability, the burden of evidence resides with the creator or editor and any material on Wikipedia that is not verified by appropriate sources can be tagged on the "Talk" page and a citation requested, it can be moved to the Talk page with a similar request, or it can be entirely removed from the article (Wikipedia, "Verifiability." Accessed September 11, 2014, http://en.wikipedia.org/wiki/Wikipedia:Verifiability).

There are several philosophical positions that justify verification as a key dimension of Wikipedia. Firstly, there is a realist ontology. Wikipedians believe that not only did the past once exist but contributors through their articles have the ability to demonstrate the reality of the past to readers. Secondly, Wikipedia endorses a realist and referentialist view of language. Language has the ability to capture the past fairly, reasonably and accurately and present it for readers: word and world are one and the

same. Thirdly, Wikipedia endorses document referentiality. Documents provide the central mechanism for meaning-making as it is assumed that the meaning attributed to and derived from the sources can adequately provide the basis for writing articles. Fourthly, inductive inference is the basic instrument to determine meaning. Wikipedians consult appropriate sources, extract meaning from these documents and present their versions of the past for readers.

The ontological and epistemological premises that underpin verification in Wikipedia would not trouble most sport historians. As several analyses of sport history have indicated, the subdiscipline has endorsed realist ontologies, referential views of language, and inductive inference that relies on document refentiality (Booth, 2005; Phillips 2001; Phillips 2006; Pringle and Phillips, 2013). Furthermore, the referencing systems in both Wikipedia and history record the sources used to verify facts, events, concepts and arguments. In this sense, both Wikipedians and historians use their referencing systems to try to convince their readers that they have consulted the appropriate historical materials in order to create their narratives.

Beyond these similarities, there are considerable differences between the referencing system used by Wikipedians and historians. Historians use either footnotes or endnotes. Historians create footnotes that are positioned at the bottom of the page or, according to requirements from book and journal publishers, endnotes at the end of a chapter, book or article, or as an online companion in some circumstances (Curthoys and McGrath, 2011). In the majority of cases, historians create footnotes and endnotes with similar or identical content material. In some instances, however, with limitations placed by publishers or journals about the number and length of endnotes, there are

considerable differences with traditional footnotes. If endnotes are limited in some way, historians are forced to make authorial decisions about including material in the text, or in restricted endnotes, or online, or not at all.

There has also been little analysis of the relationship between readers and the type of referencing system. It can be argued that there is an intimacy between the reader and the text when footnotes are positioned at the bottom of the page as readers have the ability to continuously switch between text and footnotes. Historians recognise this intimacy and, as discussed shortly, it plays a very important part in the history-making process. The relationship is different to endnotes at the conclusion of chapters, books or articles, or online. The physical space between text and endnotes in paper publications, and the digital space between text and online endnotes, represents an altered, and unexplored, experience for readers compared to footnotes on the same page.

While there are notable differences between footnotes and endnotes, which remain largely unexamined by historians, both stand apart from the referencing system in Wikipedia. Historians' footnotes and endnotes (which will be collectively referred to as footnotes for convenience) go well beyond detailing the sources that characterises Wikipedia. Footnotes have been described as anthills that are 'swarming with constructive and combative activity' (Grafton 1997, 9). They document the thinking, reasoning and research in the text by providing empirical support for the arguments presented, the theories utilised and the narratives created. Footnotes, however, often go beyond the narratives of the text and become opportunities for reflexivity by historians and, in some cases, take on the form of a dramatic monologue, something akin to the

poetry of T.S. Elliot, which acknowledges valued opinions, criticizes or ignores specific works, and occasionally assassinates other scholars. In this sense, footnotes provide a twin discourse. One that moves with the narrative of the text that enables readers to reflect on the finished argument and the other that veers away in other directions towards personal preferences, inner thoughts and personalities. In contrast, Wikipedia's endnotes stick strictly to recording the sources that can be verified by contributors.

As much as footnotes in history have these characteristics, opinions are polarised about their meaning and function. At one end of the spectrum, footnotes are exulted. They have had, as one scholar contends, a transformative function turning history 'from an eloquent discipline into a critical discipline' (Grafton 1997, 24). That is, they provide the intellectual muscle for the historical narrative. Footnotes are perceived, according to two prominent Australian historians, as an 'assertion of authenticity and a form of humility' (Curthoys and McGrath, 2011, 206). Authenticity is created through the trail of sources for subsequent historians to assess, and humility is expressed through the recognition of the work of previous historians. In this context, footnotes can be criteria used to measure the competence of the historian. To publish a historical work without footnotes, within academia at least, incurs the wrath of the profession (Booth 2005). Footnotes that do not address the issue at hand, or fail to add additional understanding to the text or that are excessively long can attract criticism from reviewers, peers and readers (Nathan 2003). As Grafton summarises: 'footnotes matter to historians' (1997, vii).

At the other end of the spectrum, footnotes are lamented. Footnotes are powerful, but not in the ways understood by historians; rather they are just another

device, as Barthes has argued, to create a "reality effect" for historical accounts. According to Barthes, footnotes along with other strategies that include excessive detail in historical accounts, the examination of the minutiae of specific events, citations directly from historical actors and witnesses, compression of historical time and the production of author-evacuated texts combine to create the reality effect of traditional history (Barthes, 1967). As such, footnotes are one of several, popular and naturalised strategies used by historians to create an aura of objectivity and legitimise historical work (Munslow 1997; Pringle and Phillips, 2013). Footnotes of the abbreviated form, or in the expanded version, help create "real" histories about "real" pasts.

In relation to the verification policy, the realist, referential and inferential dimensions of endnotes in Wikipedia are similar to traditional history. Endnotes in both Wikipedia and history create the reality effect that legitimises historical narratives. The biggest compromise for historians is that the anthill dimensions of endnotes, the discursive space that Grafton argues turned history into a critical discipline, are not readily available on the front page of the article. The anthill dimensions of endnotes in history do exist in Wikipedia but they occur in a different space, a space not obvious for casual Wikipedians. There is a separate page in Wikipedia referred to as the Talk page. Talk pages are not the front pages that automatically appear when a topic is identified but another tab that can be assessed through the front page. In these spaces, contributing authors post opinions, confirm or refute the ideas of other authors, question sources, and make recommendations. These interchanges are grouped together by themes and are threaded to enable viewers to follow discussions, debates and disputes.

The level of engagement on the Talk pages involving the Australian and International Paralympic Movements vary considerably. Talk pages about articles on the Australian Paralympic Movement are overwhelmingly inactive. Well over half of the articles titled 'Australia at the Paralympic Games' contain no discussion or debate. This lack of activity may reflect the barrier of being 'one click away' from the main article, or the novice level of skill acquisition of the contributors, or the lack of contested material about Australians at the Paralympic Games. It is quite possible that the last issue – lack of controversial issues – is a key factor. Other articles on the Paralympic Games at an international level, for example, attract far more discussion on the Talk pages. As the example about Paralympic funding and Oscar Pistorius, that will be examined shortly, indicate Talk pages provide the opportunity for ongoing dialogues between contributors to Wikipedia. Talk pages functions as a kind of open forum where Wikipedians of all persuasions confirm, challenge and debate issues on the front page, as opposed to the individual, static and uncontested monologues that constitute endnotes in traditional history.

No Original Research

More confronting for historians is the Wikipedia policy of No Original Research. The No Original Research policy, with the emphasis included, states that: 'Wikipedia articles must not contain original research. The phrase "original research" (OR) is used on Wikipedia to refer to material—such as facts, allegations, and ideas—for which no reliable, published sources exist' (Wikipedia, "No Original Research." Accessed September 11, 2014, http://en.wikipedia.org/wiki/Wikipedia:No original research). At this point, historians of all persuasions – reconstructionists, constructionists and

deconstructionists – are challenged by the philosophical disparities between Wikipedia and the ways historians work with the past. Historians approach their work, not exclusively but in the majority, with an agenda of producing new, alternative and perhaps challenging versions of the past. OR places a philosophical straightjacket around the shoulders of historians.

The policy of OR is inextricably linked to the types of sources deemed appropriate in Wikipedia. Three types of sources – primary, secondary and tertiary – are identified. Definitions of primary and secondary sources are similar to those espoused in standard historical works (Tosh 2000; Polley 2007; Marwick 2001). In Wikipedia primary sources are those recollections that are close to an event, situation or a person - written records, insiders' views, witness testimonies, diaries and political decisions - essentially accounts of the past by participants or witnesses. Secondary sources are 'generally at least one step removed from an event' (Wikipedia, "No Original Research." Accessed September 11, 2014,

http://en.wikipedia.org/wiki/Wikipedia:No original research) and written analyses such as books (in history), review articles (in the sciences) and headnotes (in legal studies) are preferred to other forms of representations such as film, music or art (Wikipedia, "Secondary Source." Accessed August 18, 2015,

https://en.wikipedia.org/wiki/Secondary source). Tertiary sources are publications such as textbooks, encyclopedia and compendia.

Overwhelmingly Wikipedia endorses the use of secondary sources and, to a lesser extent, tertiary sources and, only on rare occasions, primary sources. The section

on the OR page, including its in-text emphasis, is worth quoting because of the clarity about primary sources:

Do not analyze, synthesize, interpret, or evaluate material found in a primary source yourself; instead, refer to reliable secondary sources that do so. **Do not** base an entire article on primary sources, and be cautious about basing large passages on them. **Do not** add unsourced material from your personal experience, because that would make Wikipedia a primary source of that material (Wikipedia, "No Original Research." Accessed September 11, 2014, http://en.wikipedia.org/wiki/Wikipedia:No original research).

Primary sources are only used in specific circumstances: 'to make straightforward, descriptive statements of facts that can be verified by any educated person with access to the primary source but without further, specialized knowledge' (Wikipedia, "No Original Research." Accessed September 11, 2014,

http://en.wikipedia.org/wiki/Wikipedia:No_original_research). The specific, documented and strategic preference for secondary sources, and the peripheral status of primary sources, is intended to ensure contributions do not produce original research.

In addition to the preference for secondary sources, there is an important, but rarely discussed, subculture of utilising digitized materials in Wikipedia. The majority of sources in Wikipedia articles on Australia at the Paralympic Games are hyperlinked – that is they cite materials available online which are accessible for contributors around the world. This preference is understandable on a number of levels: Wikipedia is a

product created by and in the digital world; Wikipedia is viable as an encyclopaedia because of the ever expanding 'infinite' archive; and digitally copied and hyperlinked sources are the most convenient for potentially global contributors to Wikipedia. These factors contribute to practices in Wikipedia where online availability is one of the key criteria for the selection of sources.

At this point, many historians might be wondering how they could contribute to Wikipedia as the subculture of citing hyperlinked digitised material, the reliance on particular forms of secondary sources, and the marginal and problematic status of primary sources confronts the epistemological premises of their work. Combining critical analysis of primary sources with specialised knowledge is a fundamental dimension of the labour of the professional historian. Consider, for example, the reconstructionist strand of history as epitomised by G.R. Elton, Arthur Marwick, and Miriam Dobson and Benjamin Ziemann. As Elton argues: 'the reality – yes, the truth – of the past exists in materials of various kinds, produced by that past at the time it occurred and left behind by its testimony' (Elton 1991, 52). Marwick continues the logic of this position: 'The discovery and analysis of primary sources alone does not make history, but without the study of primary sources there is no history' (Marwick 2001, 156). On this basis, historians have gone to great lengths to produce taxonomies of primary sources that highlight their distinctive and unique characteristics. With this distinctiveness in mind, Marwick created a "catechism" to identify the strengths, weaknesses and defining features of primary sources. Marwick's catechism provides guidelines to develop the technical and analytical skills required to assess the type and authenticity of sources, the reliability and motivations of the author, the meaning behind the source at the time of production and how the source fits into the contextual

knowledge of the historian (Marwick 2001). Marwick's focus on issues of verification, authenticity and veracity has been critiqued by Dobson and Ziemann who favour a textual approach to understanding and utilising primary sources. Poststructuralism, postmodernism and the literary turn has prompted them to be more interested in binary distinctions, metaphors, narration, emplotment, reality effects and the context of primary sources (Dobson and Ziemann, 2009). What Elton, Marwick, and Dobson and Ziemann, however, have in common is the belief that primary sources are the key to history. Empirical scepticism in the form of careful, calculated, craft-like and impartial examination of the evidence and the inductive inferences drawn from this process provide the basis for the reconstructive historical method (Munslow 2010).

Inductive inferences from the evidence also play an important part for constructionist historians. Constructionist historians combine the inductive inferences drawn from primary sources with deductive inferences that emerge from the tools of analysis provided by social theory. Organising theories and concepts about class, ethnicity, gender, Marxism, nationalism, postcolonialism and race provide lenses through which primary sources are selected, interpreted and analysed. For Marxist historians, for instance, concepts and theories based around the social relations of production, base and superstructure, class consciousness and struggle, modes of production, ideology and hegemony guide the collection, analysis and explanation of the evidence. On this basis, Matt Perry argues that Marxist history is ideally positioned to marry theory and practice (Perry 2002). While it is appropriate to recognise the diversity of approaches from E.P. Thompson's humanism to Althusser's structuralism, Marxist historians use a combination of deductive inferences from theories and concepts and inductive inferences from the evidence to amplify the explanatory power

of history. Where constructionist historians are similar to their reconstructionist counterparts is that 'they still insist on the interrogation of the sources to explain how events happened as they did' (Munslow 1997, 50). Empirical scepticism of the evidence is crucial to both constructionist and reconstructionist historians.

Deconstructive historians are often, and inappropriately, perceived as denigrating the importance of primary sources to history. Certainly they raise questions about the contrived nature of the archive; they question the absences, gaps and silences in the evidence; they question the effectiveness of inductive inferences from the sources; they raise questions about referentiality and representation in reading evidence; and they question the ability to recover the intentionality of authors of primary sources. The emphasis instead is placed on concerns about the structure of knowledge (epistemic scepticism), the nature of being (ontological scepticism) and language and representation (semantic scepticism) (Munslow 2010). In this sense, deconstructive historians understand historians as authors, and place them at the centre of creating history by giving prominence to the aesthetics and structure of the imposed narrative. Nevertheless, deconstructive historians still demand attention to the evidence and recognise that historical narratives are limited by the nature of the evidence. Adding to the empirical scepticism endorsed by reconstructionists and deconstructionists, deconstructive historians seriously entertain concerns about epistemology, ontology and semantics. Munslow sums up the deconstructionist history: 'history is not only about the sifting of evidence and constitution of facts, ... interpretation itself is an act of linguistic and literary creation' (1997, 74).

The position of Wikipedia in relation to excluding original research differentiates the online encyclopaedia from other encyclopaedias. The prominent historical encyclopaedia created in the Southern Hemisphere, the *Australian Dictionary of* Biography, encourages authors to 'undertake original research rather than just rely on secondary sources' (Email from Christine Fernon, Online Manager, National Centre of Biography, October 26, 2011), while national and international sport history encyclopaedias – the Berkshire Encyclopaedia of World Sport, the Encyclopaedia of British Sport, the International Encyclopaedia of Women's Sport and the Oxford Companion to Australian Sport - specifically include documents, illustrations and photographs from the period under investigation, library collections, archives as well as secondary sources. What is important to note is that, unlike Wikipedia, these encyclopaedias permit contributors to make decisions about the appropriate sources for their entries – often a combination of primary and secondary sources – and none of these encyclopaedias actively deter the use of primary sources. For historians of all persuasions – reconstructionists, constructionist and deconstructionist – writing for Wikipedia requires an epistemological shift that eschews primary sources and privileges secondary sources, clearly demarcating history-making in Wikipedia from other encyclopaedias.

Neutral Point of View

The third core content policy is Neutral Point of View. As the appropriate Wikipedia page details:

Editing from a neutral point of view (NPOV) means representing fairly, proportionately, and, as far as possible, without bias, all of the significant views that have been <u>published by reliable sources</u> on a topic. All Wikipedia articles and other encyclopedic content must be written from a <u>neutral</u> point of view. NPOV is a <u>fundamental principle of Wikipedia</u> and of <u>other Wikimedia projects</u>. This policy is nonnegotiable and all editors and articles must follow it (Wikipedia, "Neutral Point of View." Accessed September 11, 2014, http://en.wikipedia.org/wiki/Wikipedia:Neutral point of view).

As indicated above, Wikipedians are required to put aside their own opinions, report all verifiable positions, articulate a debate rather than one side of the debate, and to describe a controversy rather than partake in it. Wikipedians, in essence, need to be disinterested judges: impartial, dispassionate and objective. Wikipedia assumes that this is not only possible but that this philosophical position is enforceable amongst contributors. In these ways, NPOV is recognized as 'the epistemic foundation of the project and intentional stance of contributors' (Reagle 2011, 58) and subsequently one of the greatest sources of debate between contributors (Rosenzweig 2006).

The NPOV policy has much in common with the concept of objectivity in history as articulated in Novick's *That Noble Dream: The 'Objectivity Question' and the American Historical Profession* in the late 1980s. In this version of objectivity, there are clear distinctions between known and knower, fact and value, history and fiction that enable historians to identify and describe patterns and features of the past. The objective historian works in an even-handed way with the evidence, avoids being an advocate or propagandist, and produces a narrative of the past that is truthful. Novick's concept of

objectivity and Wikipedia's policy of NPOV share the philosophical position that the historian and Wikipedian can and should act as disinterested judges in order to represent the past.

Even historians who advocate this conservative view of objectivity would find difficulties with the NPOV policy. Consider, for example, a dispute over NPOV on the Talk page for the main article on the Paralympic Games. One editor (176.26.20.173) found the following statement violated NPOV: 'Paralympians strive for equal treatment with non-disabled Olympic athletes, but there is a large funding gap between Olympic and Paralympic athletes. There are also sports, such as track and field athletics, that are resistant to Paralympians who wish to compete equally with non-disabled athletes'. This editor (176.26.20.173) requested that the statement be removed because it represented a point of view (POV). The original editor responded that: 'The statements you call POV are objective facts: funding is unequal - it is not a matter of opinion' (Wikipedia, "Talk: Paralypmic Games." Accessed September 12, 2014 http://en.wikipedia.org/wiki/Talk:Paralympic Games). There is, indeed, a considerable difference between the funding for Olympic and Paralympic Games driven by disparate income from ticket sales, sponsorship and media rights (Brittain 2010). Continuing his defence, the original editor responded by detailing the challenges that faced one of the highest profile, and now infamous, athletes with a disability, Oscar Pistorius, when he tried to enter able-bodied competition. The administrative body for track and field, the International Amateur Athletic Federation, initially changed the rules to exclude athletes who used technical devices to run and, following additional biomechanical testing, athletes who run with prosthetics, like Pistorius, were banned. Pistorius appealed the decision and a subsequent court case upheld his appeal. As a

consequence of the court case, Pistorius was the first amputee runner to compete at the Olympic Games in 2012 (Wikipedia, "Talk: Paralypmic Games." Accessed September 12, 2014 http://en.wikipedia.org/wiki/Talk:Paralympic Games).

After the original editor provided this synopsis of the Pistorius case and other examples of athletes with disabilities being barred from able-bodied sport, editor (176.26.20.173) retorted:

They are facts, but the wording is biased. The phrase "but there is a large funding gap" implies that there should not be a large funding gap. And the phrase "certain sports...are resistant to Parlaympians" may also be a fact, but it implies that there isn't a good reason that they are resistant to them. Both these lines very clearly sound like they are written by a disabled person, when the whole point of neutrality is that we shouldnt [sic] be able to infer anything about the author' (Wikipedia, "Talk: Paralypmic Games." Accessed September 12, 2014 http://en.wikipedia.org/wiki/Talk:Paralympic Games).

In this case, NPOV was initially invoked to dispute facts, and then to rebuke any kind of criticism, and illustrates Rosenzweig's point that 'the repeated invocation of the NPOV policy means that it tends to avoid controversial stands of all kinds' (2006, 131). In the end, a compromise was reached and one of the offending sentences was removed. The statement on the article page currently reads: 'Paralympians strive for equal treatment with non-disabled Olympic athletes, but there is a large funding gap between Olympic and Paralympic athletes' (Wikipedia, "Talk: Paralypmic Games." Accessed September 12, 2014 http://en.wikipedia.org/wiki/Talk:Paralympic Games).

As this example demonstrates, while Wikipedia is perceived as a democratic, utopian, digital enterprise, the online encyclopaedia through the NPOV policy actually functions to constrain knowledge production. Knowledge that is normalised – for example, the perception that the Olympic Games are a superior sporting and cultural event to the Paralympic Games and, therefore, deserve more government support, sponsorship and media coverage – elicits less questions because it is assumed to be based on objective statements of fact. In this case, neutrality, objectivity (and as will be shown shortly) civility work to privilege hegemony, dominant discourses and individual and institutional power. Wikipedia, similar to some other online forums, appear to encourage a plurality of views, but in reality 'promote dominant paradigms through gatekeeping mechanisms' (Segev 2010, 11).

While NPOV is a central feature of Wikipedia, neutrality has been shunned by historians and replaced by other philosophical positions about history-making. This reconceptualization is epitomised in the title of Thomas Haskell's book, *Objectivity is Not Neutrality: Explanatory Schemes in History* (1988). This shift from neutrality to reconceptualised versions of objectivity acknowledges the limitations of language, the influence of the perspectives of historians and the complexities of narrative as a form of representation. Under these premises, the self-styled practical, realist historian believes that with well-honed, craft-like skills and diligence they can discover the most likely narrative of the past, which is inferred from the available evidence, and they have the capacity to convey these inferences, explanations and meanings through their written work. Practical, realist historians advocate a version of qualified objectivity that acknowledges the subjectivity of historical interpretation but still seeks to provide

histories that strive for veracity, accuracy and objectivity and, ultimately, getting close to telling the truth about the past (Appleby, Hunt and Jacob 1994).

The other form of reconceptualization of objectivity rejects the logic of the practical, realist position and argues that history is unavoidably a subjective exercise. This view sees history as primarily a narrative-making activity that essentially negates the possibility of an objective historian. As opposed to an objective historian working honestly and judicially with the sources and applying appropriate methods and theories to represent the findings, it is contended that historians cannot step beyond their beliefs, ideologies, arguments, emplotments, theories and authorial decisions to produce objective accounts. What is stressed are the narrative-making strategies that are not only central to history-making but that also negate the validity of objectivity in history (Munslow 1997, 2007). Whether historians understand the process of working with the past as an exercise in qualified objectivity or being saturated by subjectivity, both of these philosophical positions are at odds with the NPOV policy of Wikipedia.

Collaborating with 'Citizen Scholars'

Overlaying the three core content policies – verification, no original research and neutral point of view – is the collaborative ethos and practice of Wikipedia. It is unlike other encyclopaedias, mentioned previously, which have contributions by mostly single authors, usually experts in their fields, who produce articles that are fixed in time, or fixed until the next edition is created. Wikipedia is radically different. Wikipedia is an encyclopaedia, no doubt, but just not of the traditional genre. One of its central pillars is that 'Wikipedia is free content that anyone can use, edit, and distribute' (Wikipedia,

"Five Pillars." Accessed September 11 2014,

http://en.wikipedia.org/wiki/Wikipedia:Five pillars). As a consequence, Wikipedia is collaborative, written and edited by interested parties (some novice, some expert) or what digital historians have referred to as 'citizen scholars' (Sikarskie 2013), and the content is fluid, momentarily fixed in time. Moreover, Wikipedia explicitly facilitates collaboration. It has created an environment with very low barriers to engagement and which provides support for creation and sharing, encourages forms of mentorship and socialisation, and acknowledges those who make contributions (Reagle 2011). The titles of recent books on Wikipedia - *A New Community of Practice* (2009) and *Good Faith Collaboration* (Reagle 2011) - capture the collaborative dimensions of this community.

While collaboration is central to knowledge production and contributes to the encyclopaedia's democratic ethos, Wikipedia is unavoidably shaped by the digital divide. Wikipedia is limited to those who have access to the internet which is dependent on the global divide (differences between countries) and the social divide (differences according to age, education, gender, income and occupation) (Segev 2010). Perhaps not surprisingly, given the global divide, the English Wikipedia with a preponderance of white editors is the most popular online version, and the social divide is most striking in relation to gender as several surveys since 2010 reveal that women only constitute a minority (between 10-16%) of Wikipedia editors ("Wikipedia's Gender Problems Get a Closer Look." Accessed August 16 2015, http://www.livescience.com/48985-wikipedia-editing-gender-gap.html). The Paralympic History Project's intersection with the digital divide does not change racial diversification as the editors are predominantly from Anglo-Saxon backgrounds, but there is a different dynamic in terms of disability and gender. Since the commencement of the project in 2011, there a number of former

Paralympians and people with disabilities who are regular editors and approximately half of the contributors to Wikipedia articles are women.¹

Given the way that disability, gender, nationality and race operate online to deconstruct the notion of citizen scholars, Wikipedia works on a model of consensus view of truth. Philosophers including Thomas Kuhn and Richard Rorty have discussed this view, but Habermas has developed the idea of the consensus view of truth in the context of debates about ideal speech and communicative reason in the public sphere (McCullagh 1998). The consensus view of truth implies that groups work sincerely, earnestly and honestly to seek agreement and produce rational consensus about their object of study (McCullagh 1998). In Wikipedia this processes of rational consensus is endorsed through the mantra of "assuming good faith". Central to this assumption is that the vast majority of contributions are made with the best intentions to improve the quality of articles, rather than damage the project. Good faith collaboration underpins the process of creating, discussing and editing pages but it is discarded when there are obvious, intentional attempts to derail articles through vandalism (Wikipedia, "Assume good faith." Accessed September 11 2014,

http://en.wikipedia.org/wiki/Wikipedia:Assume good faith). Contributors are encouraged to follow Wikipedia etiquette in order to achieve good faith. As the dedicated Wikipedia page summaries: be polite and civil; argue facts, not personalities; justify edits and explain re-edits; recognise your own biases; address questions from other contributors; give praise where due; and work toward agreement (Wikipedia, "Etiquette." Accessed September 11 2014,

http://en.wikipedia.org/wiki/Wikipedia:Etiquette). Even though good faith fills the collaborative heart of Wikipedia, conflicts do occur and there is an established process for dispute resolution. Contributors are encouraged, firstly, to resolve disputes through civil discussion and consensus building via relevant discussion pages; failing this, to seek opinions from editors outside the dispute, and if the conflict continues there are mechanisms for mediation and, finally, arbitration which may involve blocking offensive users and protecting pages (Wikipedia, "Dispute Resolution." Accessed September 11 2014, http://en.wikipedia.org/wiki/Wikipedia:Dispute resolution). It is through the mantra of assuming good faith and established procedures for resolving disputes that Wikipedia attempts to achieve rational consensus within its collaborative community.

The notion of consensus also exists in history-making contexts. Holocaust denial is a prime example. In this case, historians have collectively united as public intellectuals on paper, in the media, and in court to expose as frauds those who deny the existence of the Holocaust (Evans 2001; Lipstadt 2005). Similarly, sport historians have collectively refuted some of the foundational myths associated with the origins of sport like baseball and rugby union, and amateurism and the Ancient Olympic Games (Booth 2005). Historians may also invoke notions of truth by consensus when advocating the process of knowledge production (objectivity, sources, induction etc) as depicted in many of the practical guides targeted at undergraduate and graduate students (Tosh 2000; Marwick 2001; Hill 2011; Polley 2007). As Munslow contends, consensus can become a rallying cry when theories of truth held by traditional historians are contested: 'as they say, all "sensible", "fair", "rational" and "honest" historians agree on the priority of correspondence-correlation and its findings' (Munslow 2003, 92). Munslow's overall point, however, is that historians use correspondence theories of truth on rare occasions and much more frequently employ correspondence-correlation, as detailed previously, as part of the empirical and analytical foundation of traditional

history. In essence, the consensus view of truth that is central to Wikipedia poses epistemological challenges for historians.

The collaborative nature of Wikipedia that drives the consensus view of truth is also at odds with sport historians as a community. Sport history, like history more generally, as Rosenzweig contends 'is a deeply individualistic craft' (2006, 117). This is not to deny collaborative dimensions – national and international organisations, conferences and journals – but the raison d'etre of sport historians is working independently to produce single-authored theses, articles and manuscripts. One only has to scan sport history journals - The International Journal of History of Sport, the Journal of Sport History, Sport History Review, Sport in History, Sporting Traditions and Stadion – and their book review sections to recognise that historians are solitary beasts. Munslow sums up historians by combining dominant work practices with epistemological issues: 'Historians by nature are not herd animals. Most of the time we are loners only persuaded by the data in the archive and not our colleagues' assertions/interpretations' (Munslow 2003, 93). Contributing to Wikipedia not only requires historians to abandon popular theories of truth that underpin empiricalanalytical history, but necessitates that they buy into a collaborative community of practice (Townsend et al. 2013).

Conclusion

One key issue that emerges from the analysis of Wikipedia is that it confirms what numerous scholars from Raphael Samuel (Samuel 1994), to Roy Rosenzweig and David Thelen (Rosenzweig and Thelen 1988), to Jerome de Groot (De Groot 2009) have

detailed: historians are not sole arbitrators of what constitutes history in the public domain. For historians who have engaged with films, genealogy, historical sites, libraries, novels, memorials, monuments, museums, plays, public spaces, re-enactments, television and textbooks, this is not a revelation. Historians, in fact, have a long tradition of contributing to public history and broader memory projects (Banner 2012; Cubitt 2007).

The digital era, however, has amplified the means, opportunities and resources for history-making. As digital historians contend: 'two decades of the web have expanded the range of creators of historical works, the types of products generated, and the processes of distribution and evaluation, all of which stand out because they diverge from established practices in our profession' (Dougherty, et al. 2013, 260-261). This process poses significant challenges for historians and raise questions about the engagement of professional scholars in digital history-making. Are historians in the academy happy to continue producing the professionally approved artefacts – books and journal articles - that communicate with a relatively small and specialised readership who are familiar with the discursive traditions of the field? Or should scholars engage in public historical discourses that have emerged through the process of eversion in the digital era and communicate with far larger communities of practice? Is there something unique about digital history-making, something more compelling than before the development of the Web, which demands attention from historians in the academy and forces them to engage with, evaluate and even contribute to new, and often confronting, forms of history in the digital era?

Wikipedia, as a popular form of history-making in the digital era, is a case in point. As argued in this paper, Wikipedia through its epistemic and ontological principles is different to academic history, demonstrating how the form of Wikipedia determines its content (White, 1973, 1987). Wikipedia compels historians to reconceptualise the function of endnotes, to exclude primary sources, to attempt to write from a neutral point of view, and to collaborate with citizen scholars. This is an uncomfortable epistemological space for historians, a space that many historians may not chose to engage with because Wikipedia restricts what many historians pride themselves on – creating narratives that, in part, are based on primary source materials; it mandates what many historians believe is untenable – writing from a neutral point of view; and it requires historians to collaborate with citizen scholars and engage in consensus versions of truth – rather than work on their own using correspondence-correlation forms of truth. For any combination of these reasons, historians might view Wikipedia as producing history that is light on critical and reflective insights or that it simply violates the basic principles of academic history.

I held these positions until I engaged with Wikipedia through my involvement in the history of the Australian Paralympic Movement project. Similar to Rosenzweig's position a decade ago, I believe Wikipedia has an important role in digital historymaking. It is hard to deny Wikipedia's appeal, reach and ubiquity and, in the case of the tripartite history of the Australian Paralympic Movement, Wikipedia is an essential component. The remit of the Paralympic paper book and e-book is to explore the degree to which sport has provided an avenue to challenge and disrupt ableism at the same time as societal perceptions and practices have transitioned from medical to social and biosocial models of disability. As part of this analysis, the narrative of the paper book

and e-book will detail the origins of Australian involvement in the Paralympic Games, the differential inclusion of disability groups in national and international competition, and the transition of participation from recreational sport to highly competitive, elite sporting competition with specialised and expensive equipment, dedicated coaching and training programs, and athletes who dedicate their lives to winning, medals and records. The paper book and e-book, to invoke a flora analogy, represent the trunk of the history of the Australian Paralympic Movement through the conceptual framework of ableism and related themes.

Wikipedia articles take on a complementary role in the history of the Paralympic Movement project. The content of Wikipedia articles tells stories not fully realised, or not written about at all, in the paper book and e-book. Wikipedia provides the opportunity to describe the unique situations and contributions of athletes, coaches and administrators with a level of detail that cannot be achieved in books with limitations on word length and number of illustrations. In these ways, Wikipedia facilitates the growth of the Paralympic history tree with branches and leaves by telling in-depth stories of those people who generated disability sport in Australia. Continuing the flora analogy, the branches and leaves continue to grow because they are fertilised by volunteer citizen scholars. Not only does Wikipedia tell untold or marginalised stories but there is a community of practice who have been involved in history-making about the Australia Paralympic Movement. A regular group of sixty male and female editors have produced 800 new Wikipedia articles on Australian athletes, coaches and administrators at the various Paralympic Games since 1960. These articles were viewed almost two million times during the 2012 London Paralympic Games (Naar 2013). On its own, Wikipedia is history-making in the digital age that is generated and sustained

by a community of practitioners for a potentially global audience; in tandem with traditional forms of history, Wikipedia tells additional stories, stories that historians may struggle to include within the limits placed by publishers, but which greatly expand the range of freely available knowledge about the Australian Paralympic Movement.

Notes

¹ As of August 2015, there have been 61 contributors to the Paralympic Wikipedia project. The gender composition of these contributors include 31 females, 28 males and 2 people whose gender is not possible to determine. There are 46 able-bodied contributors and 10 people with a disability (6 former Paralympians) who have contributed to the Wikipedia project, and 5 who are not known.

References

Appleby, Joyce O., Lynn A. Hunt, and Margaret C. Jacob. 1994. *Telling the Truth about History*. New York: Norton.

Banner, James M. 2012. *Being a Historian: An Introduction to the Professional World of History*. New York: Cambridge University Press.

Barthes, Roland. 1967. "Le discours de l'histoire." *Information sur les sciences sociales* 6 (4):65-75.

Berry, David M. 2012. "Introduction: Understanding Digital Humanities." In *Understanding Digital Humanities*, edited by David M Berry, 1-20. Houndmills: Palgrave Macmillan.

Booth, Douglas. 2005. The Field: Truth and Fiction in Sport History. London: Routledge.

Brittain, Ian. 2010. The Paralympics Explained. London and New York: Routledge.

Brown, Joshua. 2008. "Forum: History and the Web." Rethinking History 8 (2):253-275.

Burdick, Anne, Johanna Drucker, Peter Lunefeld, Todd Presner, and Jeffrey Schnapp. 2012. *Digital_Humanities*. Cambridge, MA: The MIT Press.

Cohen, Daniel J. 2004. "History and the Second Decade of the Web." *Rethinking History* 8 (2):293-301.

Cohen, Daniel J., Michael Frisch, Partick Gallagher, Steven Mintz, Kirsten Sword, Any Murrell Taylor, William G. Thomas III, and William J. Turkel. 2008. "Interchange: The Promise of Digital History." *The Journal of American History* 95 (2):452-491.

Cubitt, Geoffrey. 2007. History and Memory. Manchester: Manchester University Press.

Curthoys, Ann, and Ann McGrath. 2011. *How to Write History that People Want to Read*. New York: Palgrave Macmillan.

de Groot, Jerome. 2009. *Consuming History: Historians and Heritage in Contemporary Popular Culture.* London: Routledge.

Dobson, Miriam, and Benjamin Ziemann, eds. 2009. *Reading Primary Sources: The Interpretation of Texts from Nineteenth- and Twentieth-Century History*. London: Routledge.

Dougherty, Jack, and Kristen Nawrotzki, eds. 2013. *Writing History in the Digital Age*. Ann Arbor, MI: University of Michigan Press.

Dougherty, Jack, Kristen Nawrotzki, Charlotte Rochez, and Timothy Burke. 2013. "Conclusions: What We Learned from *Writing History in the Digital Age*." In *Writing History in the Digital Age*, edited by Kristen Nawrotzki and Jack Dougherty, 259-278. Ann Arbor, MI: University of Michigan Press.

Drucker, Johanna. 2012. "Humanistic Theory and Digital Scholarship." In *Debates in the Digitlal Humanities*, edited by Matthew K. Gold, 85-95. Minneapolis: University of Minnesota Press.

Elton, Geoffrey R. 1991. *Return to Essentials: Some Reflections on the Present State of Historical Study*. Cambridge: Cambridge University Press.

Evans, Richard J. 2001. *Lying about Hitler: History, Holocaust, and the David Irving Trial.*New York: Basic Books.

Friedländer, Saul, ed. 1992. *Probing the Limits of Representation: Nazism and the "final solution"*. Cambridge, MA: Harvard University Press.

Gibbs, Fred, and Trevor Owens. 2013. "The Hermeneutics of Data & Historical Writing." In *Writing History in the Digital Age*, edited by Kristen Nawrotzki and Jack Dougherty, 159-170. Ann Arbor, MI: University of Michigan Press.

Goulding, James. 2011. "Historical Thinking and Social Media." Agora 46 (3):11-19.

Grafton, Anthony. 1997. *The Footnote: A Curious History*. Cambridge, MA: Harvard University Press.

Haskell, Thomas L. 1998. *Objectivity is not Neutrality: Explanatory Schemes in History*. Baltimore, MD: Johns Hopkins University Press.

Hill, Jeffrey. 2011. Sport in History: An Introduction. New York: Palgrave.

Jones, Steven E. 2014. The Emergence of Digital Humanities. New York: Routledge.

Lipstadt, Deborah E. 2005. *History on Trial: My Day in Court with David Irving*. New York: Ecco.

Manovich, Lev. 2012. "Trending: The Promises and the Challenges of Big Social Data." In *Debates in the Digitlal Humanities*, edited by Matthew K. Gold, 460-475. Minneapolis: University of Minnesota Press.

Marwick, Arthur. 2001. *The New Nature of History: Knowledge, Evidence, Language*. Hampshire: Palgrave.

McCullagh, C. Behan. 1998. The Truth of History. London: Routledge.

Munslow, Alun. 1997. Deconstructing History. London: Routledge.

Munslow, Alun. 2003. The New History. Harlow: Pearson.

Munslow, Alun. 2007. Narrative and History. Houndmills: Palgrave Macmillan.

Munslow, Alun. 2010. *The Future of History*. Houndmills: Palgrave Macmillan.

Naar, Tony. 2013. *The Value of the Wikipedia Paralympic History Project*. Sydney: Australian Paralympic Committee.

Nathan, Daniel A. 2003. *Saying It's So: A Cultural History of the Black Sox Scandal*. Urbana: University of Illinois Press.

Novick, Peter. 1988. *That Noble Dream: The "objectivity question" and the American Historical Profession, Ideas in context.* Cambridge: Cambridge University Press.

Osmond, Gary, and Murray G. Phillips. eds. 2015. *Sport History in the Digital Era.* Champaign: University of Illinois Press.

O'Sullivan, Dan. 2009. *Wikipedia: A New Community of Practice*. Surrey: Ashgate Publishing.

Perry, Matt. 2002. Marxism and History. New York: Palgrave.

Phillips, Murray G. 2001. "Deconstructing Sport History: The Postmodern Challenge." *Journal of Sport History* 28 (3): 327-45.

Phillips, Murray G. ed. 2006. *Deconstructing Sport History: A Postmodern Analysis*. New York: SUNY.

Polley, Martin. 2007. Sports History: A Practical Guide. Hampshire: Palgrave.

Pringle, Richard, and Murray G. Phillips. eds. 2013. *Examining Sport Histories: Power, Paradigms, and Reflexivity*. Morgantown, WV: FIT.

Reagle, Joseph Michael. 2011. *Good Faith Collaboration*. Cambridge, MA: The MIT Press.

Rosenzweig, Roy. 2003. "Scarcity or Abundance? Preserving the Past in the Digital Era." *The American Historical Review* 108 (3):735-762.

Rosenzweig, Roy. 2006. "Can History Be Open Source? *Wikipedia* and the Future of the Past." *The Journal of American History* 93 (1):117-146.

Rosenzweig, Roy, and David Thelen. 1988. *The Presence of the Past: Popular Uses of History in American Life*. New York: Columbia University Press.

Samuel, Raphael. 1994. Theatres of Memory. London: Verso.

Segev, Elad. 2010. *Google and the Digital Divide*. Oxford: Chandos.

Sikarskie, Amanda. 2013. "Citizen Scholars: Facebook and the Co-Creation of Knowledge." In *Writing History in the Digital Age*, edited by Kristen Nawrotzki and Jack Dougherty, 216-221. Ann Arbor, MI: University of Michigan Press.

Theibault, John. 2013. "Visualizations and Historical Arguments." In *Writing History in the Digital Age*, edited by Kristen Nawrotzki and Jack Dougherty, 173-185. Ann Arbor, MI:University of Michigan Press.

Tosh, John. 2000. *The Pursuit of History: Aims, Methods and New Directions in the Study of Modern History*. Third ed. London: Longman.

Townsend, Stephen, Gary Osmond, and Murray G. Phillips. 2013. "Wicked Wikipedia: Communities of Practice, the Production of Knowledge and Australian Sport History." *The International Journal of the History of Sport* 30 (5):545-559.

Turkel, William J. 2011. "Intervention: Hacking history, from analogue to digital and back again." *Rethinking History* 15 (2):287-296.

Turnbull, Paul. 2010. "Historians, Computing and the World-Wide-Web." *Australian Historical Studies* 41:131-148.

Weller, Toni. 2013. History in the Digital Age. Oxon: Routledge.

White, Hayden. 1973. *Metahistory: The Historical Imagination in Nineteenth-Century Europe*. Baltimore, MD: John Hopkins University Press.

White Hayden. 1987. *The Content of the Form: Narrative Discourse and Historical Representation*. Baltimore, MD: John Hopkins University Press.