Australia’s women surfers: history, methodology and the digital humanities

The emerging field of digital humanities offers many potential innovations for historians, but also generates a host of methodological and philosophical challenges and issues. This paper focusses on one feature of digital humanities, distant reading, to analyse the history of women’s surfing in Australia in the early twentieth century. As a form of quantitative analysis involving data mining and visual representations, distant reading is used in tandem with traditional historical research methods to deconstruct the mythology of early Australian surfing. The paper argues for the value of blending digital technologies with traditional qualitative methods to reveal new historical insights.

The historiography of Australian surfing is virtually silent on women’s involvement in the development of surfboard riding. Douglas Booth names several women who were active participants in the nascent Sydney surfing culture of the early nineteen hundreds; Leonie Huntsman describes the formation of and resistance to women’s lifesaving clubs from as early as 1908; and Ed Jaggard contends that women competed nationally in surf lifesaving from the 1920s onwards.¹ Yet academic writing on surfboard riding has focussed on male participation, largely in pursuit of foundation chronologies and myths.² Popular memory, on the other hand, singles out one woman, Sydney’s Isabel Letham, but even here her surfing exploits are limited to supporting Duke Paoa Kahanamoku’s surfboard demonstration in the summer of 1914-15.³ Given Letham’s abilities, and the known presence of other women on
the beach, a full understanding of pioneering female contribution to what would become a culturally defining physical activity in Australia remains a challenge.

Historians’ ability to investigate women’s surfing activities has been hampered by the paucity of sources, particularly written evidence and oral histories. Newspapers, the most likely source of information in the absence of other archived documents, have frustrated surf historians because of the sheer volume of pages and time-consuming technologies for searching (microfilm especially) in the pre-digital age. The large-scale digitisation of newspapers and other records in recent years, however, offers new research opportunities to approach such previously unreachable topics.

There is an unprecedented volume of data available in the digital age. In 2012, there were approximately 21 billion indexed web pages, Google had scanned 14 million books and indexed a trillion web pages, JSTOR provided access to 7 million articles from 1000 publishers, and Facebook provided five million pieces of content weekly. Public institutions also make significant contributions to what has been referred to as the ‘new infinite archive’. The National Library of Australia (NLA), one of many similar public institutions, has a diverse and growing digital collection which includes 393,937,615 individual items. For historians, this is a new world, a new economy of knowledge: it is a world of abundance, not scarcity. This new economy of knowledge, however, is not a utopia. Copyright prevents many twentieth century newspapers from being digitised. There are issues about who decides what is kept of the digital archive because total storage is impossible, tensions over ownership between public institutions and private companies, and questions about whether free or paid access potentially increases inequities between professional and amateur
The 'new infinite archive', like its non-digitised counterpart, is shaped by ideological, institutional and political factors.

The digital archive poses epistemological, methodological and practical challenges for historians. These challenges have been accommodated in the qualitative schools of the humanities through the ‘computational turn’, initially in literary studies and then in other fields. A decade ago, Franco Moretti used quantitative methods to examine 7,000 British novels of the eighteenth and nineteenth centuries. Moretti created and popularised the concept of ‘distant reading’, which refers to assessing descriptive data (metadata) that is derived, but one step removed, from the textual content. Recently, historians have engaged with distant reading as a way of enabling the investigation of large amounts of historical texts that are now available through major repositories like the NLA. In this article, we employ ‘distant reading’ as an umbrella term that embraces many practices including data mining, aggregation, text analysis and the visual representations of these practices in the forms of charts and graphs. We use ‘close reading’ as a descriptive term for traditional historical practices involving provenance assessment, critical evaluation and contextualisation of archival material. We see distant and close reading as complementary and most effective when used synergistically, rather than as competing research paradigms, a model commonly employed in literary studies.

This article engages several dimensions of distant reading: the ability to identify broad historical trends, specifically the emergence of surfing in Australia; the capacity to drill down through historical trends to identify specific issues which, in this case, are the emergence and reporting of female surfers and surfing; and finally, the capability of distant
reading for discovery – to find people, events and related material that literally could have taken a lifetime using traditional research methods. We argue that while distant reading is not the magic bullet for historians, it has the potential to change research approaches and patterns. Finally, we contend that distant reading is most revealing, informative and valuable, not as a free-standing methodology, but when used in tandem with traditional close-reading practices employed by historians. In this sense, being able to change the research lenses – switching from afar, to up close, and back again – is central to the approach in this article. While acknowledging that engaging with quantitative approaches creates ‘epistemological jitters’ for historians, including ourselves, we believe distant reading has something to offer to historical research, particularly in the context of the infinite archive.\textsuperscript{15} Tanya Clement makes the point that approaches like distant reading ‘defamiliarize texts, making them unrecognizable in a way (putting them at a distance) that helps scholars identify features they might not otherwise have seen, make hypotheses, generate research questions, and figure out prevalent patterns and how to read them’\textsuperscript{16}

Promoting quantitative approaches to history making is likely to raise the philosophical hackles of many historians.\textsuperscript{17} Over the last couple of decades, historians influenced by post-structuralism, postmodernism and the ‘literary turn’ have pursued in great depth the narrative-making aspects of their work, especially aesthetics, authorship, ethics, form and content, and reflexivity.\textsuperscript{18} There has been little interest in examining the quantitative aspects of history making and, if anything, tables, graphs and figures have been spurned, as much more effort has been directed toward understanding the literary qualities of history. Bob Nicholson captures this tension: ‘The linguistic turn and the advent of
postmodernism have made us much more comfortable with ambiguity, plurality and subjectivity of “texts”, but correspondingly suspicious about the rigidity of numbers'.19 We are acutely aware that advocating quantitative research approaches cuts against the grain of recent historiographical trends.20

Our justification of quantitative approaches in history making is three-fold. First, as much as the digital age has created an abundance of historical material, there are appropriate, computer-based tools to manage, investigate and utilise the infinite archive. It seems counterintuitive not to explore these tools. Second, employing quantitative methods is premised on the absolute necessity of examining the rhetorical dimensions of data collection, analysis, interpretation and presentation by embedding core humanities concepts of subjectivity, ambiguity and contingency into knowledge production in the digital age.21 Third, in an attempt to demonstrate the strengths and limitations of quantitative approaches, this paper will follow best practices in the digital humanities.22 If quantitative approaches are employed as a research methodology, the data has to be available and reproducible, assumptions about data must be made explicit, and a variety of representations should be explored.23

**Distant Reading: Methodological and Rhetorical Analysis**

The database used here for the analysis of women’s surfing is ‘Trove’, which is the digitisation program of literary, visual and multimedia material held by the NLA. More specifically, we utilised the database of 789 digitised Australian newspapers, which currently
holds a collection of 14,633,740 pages. Trove’s newspaper collection, unlike other newspaper archives, provides access to titles, issues, text and images and, through an application programming interface (API), supports more detailed, offline forms of text analysis. Trove, like other newspaper archives, is limited by copyright issues which have resulted in an archive characterised by inconsistency in terms of time frames, spans and continuity of coverage. Even given these limitations, the advantages of digital access to the newspaper archive are incredible—an unprecedented glut of documents that enables the boundaries of research to be extended quickly.

The availability of digitised material, though, has generated many issues for historians. Some of these include: What is the relevance of the non-digitised archive in the digital age? How important is the traditional archive research experience? What happens to sources through the digitisation process? And how do digitised sources demand different methodologies of newspaper research? While these questions require responses that are difficult to address briefly, we will make a few key points. While the digital archive is impressive, only a small quantity of the total archive has been digitised and, as a consequence, available online sources will be insufficient for many historical projects. Furthermore, communication theorists contend ‘media do not simply convey messages, they affect our very relationship within the world.’ Digitised newspapers, for instance, are not surrogates for the originals, but remediated in ways that may reduce or strip their context, yet provide new modes of accessibility, organisation and analysis. Digitisation also shifts the research methodology from a ‘top-down’ approach common in conventional newspaper research to a ‘bottom-up’ keyword search in digitised newspapers. In essence,
it is relevant to acknowledge that the process of digitisation ‘takes place in an economy of loss and gain’.\textsuperscript{28}

As we demonstrate in this paper, acknowledging and working with digital archives does not diminish traditional archival research. For many historians, the archive has a special place in the practice of history.\textsuperscript{29} Robert Darnton refers to archival research as a ‘kind of marinating’, an aesthetic, sensorial and embodied experience where sifting through documents and other traces of the past enables historians to deeply engage with other worlds.\textsuperscript{30} The delights of this kind of research are balanced with a healthy scepticism. A scepticism that recognises the contrived nature of archives which are characterised by incompleteness, exclusion, concealment and selectivity, often limiting scholars as much as assisting them. As Foucault, Derrida and, more recently, Steedman have argued, archives are sites of power for states, organisations and corporations. The challenge for historians is to use their close reading skills to determine authenticity, trustworthiness and reliability of the archive, and to convey how this largely interpretative dimension shapes the subsequent historical narrative.\textsuperscript{31}

If we accept that distant-reading practices differ from traditional historical close reading, with some obvious advantages, some evident limitations, and several unexplored issues, what dimensions do we need to understand? Our training as historians does not provide the expertise to comfortably utilise offline, advanced metadata and text analysis or to create computer programs for distant reading. But a degree of critical technical literacy is needed in keyword searches to effectively and rigorously engage with Trove. Most often historians rely on tools such as Optical Character Recognition (OCR), which convert digitised
sources into machine-readable text. The accuracy of OCR, not surprisingly, is dependent on a number of factors—quality of the original source is the key issue for newspapers—which all contribute to an imperfect system.\(^\text{32}\) The current accuracy of the OCR program of digitised newspapers in Trove, as a consequence of a successful crowdsourcing project, is slightly above 85 per cent for the entire range of newspapers over 150 years.\(^\text{33}\) The consequence of an imperfect process, as Jim Mussell summarises, is that ‘the searchable index only provides a partial representation of the text printed upon the page and reproduced on the scanned facsimile images’.\(^\text{34}\)

**Digital Searches**

When analysing newspapers, or any digitised text, data mining employs keyword searches. Type in the appropriate keyword/s and Trove will reveal the number of articles with positive search results. This process might sound simple but terms can be hard to identify because words may be spelled in different ways, words often have multiple meanings, and the meaning associated with words changes over time. In acknowledgement of the complexities of language and the demands of working with large amounts of data, Trove has a range of search options, including Stem, Fulltext, Proximity and Boolean, which help locate appropriate words, combination of words and phrases. After considerable experimentation, we excluded Fulltext (exact) and Proximity searches because the first does not identify some important word extensions, and as much as the latter reduced the number of false finds, it did not guarantee search relevance and can omit key articles. We opted for a combination of Stem and Boolean searches. Stem searches detect the identified keyword and its extensions. In our case, the stem searches for ‘surfboard’ and ‘surf-board’ also found
surfboards and surf-boards, surfboarder and surf-boader, surfboarders and surf-boarders, and surfboarding and surf-boarding. ‘Surfboard’ and ‘surf-board’ were preferred to the other obvious keywords such as ‘surf’ and ‘surfing’ because these terms were too general and returned responses related to virtually any activity in the surf. Boolean searches enable the combination of keywords to narrow the focus of the search process. In relation to women’s surfing, we created a Boolean search by adding ‘female’, ‘girl’, ‘lady’, ‘woman’ and ‘women’ to ‘surfboard’ and ‘surf-board’.35

Two further decisions were made in relation to data mining. The searches included all Australian States and Territories to capture the widest representation of surfboard riding, and the searches only included articles (not advertising, lists, results, guides and family notices) as we were specifically interested in reports of the activity. What emerged from our decision making and experimentation was that data mining is indicative, rather than definitive, and is most helpful and powerful as an indicator of trends, patterns and anomalies. Finally, this process highlighted that while understanding the differences between distant and close reading is important, representing them as dichotomous research paradigms is misleading because we constantly toggled between large data and individual newspaper articles to create, implement and interpret the search strategy.

**Visualisation**

The second dimension of our distant reading of women’s surfing in Australia is visualisation of the results from Trove. Visualisations come in many shapes and forms. In this project, a form of visualisation – the graph – that can be both static and interactive, depending on the supporting platform, was utilised. The appropriate graphical visualisation was generated by
an online computer application, QueryPic. At one level, QueryPic is a visualisation tool that develops graphical representations from search results in Trove; at another level, QueryPic is a product of an ongoing research venture with a fully accessible programing code.\textsuperscript{36} While QueryPic illustrates the significance of creating computer-based tools for researching in digital humanities and the promise of similar applications in the future, the capacity of QueryPic to create graphs of surfboard riding and women’s surfboard riding was specifically utilised. Here, search results are represented as a static visualisation (Figure 1), but on QueryPic’s website the graph is interactive and available for other researchers to explore the data and interrogate the conclusions.\textsuperscript{37}

As QueryPic emphasises, the visualisation tool generates ‘sketches, not arguments’ and, as such, it is important to examine the decisions that shape the rhetorical features of the graphs.\textsuperscript{38} The options for graphic representation were limited in QueryPic to plot either the number or the proportion of articles in Trove. The latter approach provides a more accurate representation because it accommodates the inconsistency of the digitised newspapers in Trove.\textsuperscript{39} For this reason, representing surfboard riding and women’s surfboard riding as a percentage of overall articles was adopted in this project. The next decision that shaped the rhetorical dimensions of the graphs was the time frame. We truncated the early years of the graph to remove pre-1900 information because very little was reported in terms of surfboard riding in the Australian press during the nineteenth century. At the other end of the time frame, QueryPic automatically truncates the data at 1954 when copyright is invoked.\textsuperscript{40} As a consequence, there is no opportunity to see the period up to the mid-twentieth century in any comparative sense, no ability to reflect on the
subsequent growth in surfing as detailed by social historians.41 In these ways, voluntary and involuntary truncations of the graphic visualisation had rhetorical implications on the representation of surfboard riding.

Given these rhetorical features, what can be determined from the visualisation of surfboard riding offered in Figure 1? The graph reveals the noteworthiness of surfboard riding; it does not necessarily inform us about the popularity of the activity for men or women. Noteworthiness may be related to a whole host of factors: it could be about the novelty or dangers of surfboard riding, international surfing, or it could be that more Australians were taking up the activity. Any one or a combination of these circumstances provides valid explanations for newspaper coverage of surfboard riding in Australia.

Figure 1. Percentage of articles in Trove that mention surfboards, 1900-1954.

Two key graphic dimensions enhanced understanding: the limitations of the Trove search and the broader social, political and economic context of the first half of the twentieth century. Beyond the gradual increase in reportage that marks the early decades,
the high spike in 1935 was the consequence of a successful racehorse named ‘Surf Board’, and the graph dived once his career declined. In relation to broader contexts, there is a notable spike in the late 1930s, but what follows is a major fall, and sustained trough, in the noteworthiness of surfboard riding during the Second World War. In this context, historians would be interested in examining the influence of the war on sporting activity and the relationship between the noteworthiness of sport coverage and world affairs during this period in the Australian press. Following the cessation of the war, the noteworthiness of surfboard riding increased to exceed previous levels of recognition in the newspapers. It would be productive to map this recognition in the context of the increasing popularity of surfing from the 1960s with the growth of surf clubs, with the development of recreational surfing all around Australia, and with the institutionalisation of competitive surfing at local, state, national and international levels.42

If the relationship between the two searches of surfboard riding and women’s surfboard riding is examined, there are several obvious features. The graph of women’s surfboard riding virtually mirrors the representation of surfboard riding overall. There are, however, two notable exceptions. From the mid-1940s, the newsworthiness of surfboard riding increases quickly and beyond any previous level, but the coverage of women’s surfboard riding does not match this trajectory. In fact, the biggest difference between surfboard riding and women’s surfboard riding over the first six decades of the twentieth century is in 1954. The second major exception is in the second decade of the twentieth century. In this period, the noteworthiness of women’s surfboard riding almost equals the coverage of surfboard riding more broadly. If our interest was in the increased
news worthiness of surfboard riding in general, distant reading would be used as a cue to pursue newspaper coverage from 1945 in a more detailed way. Our interest, though, is in women’s surfboard riding, and distant reading points to the period of the second decade of the twentieth century when the coverage of women’s surfboard riding almost equates the total coverage of surfboard riding. The second decade of the twentieth century, as indicated in the graph, is not the period of the greatest coverage of women’s surfboard riding but it signifies a time-frame when the gap in coverage is the least. In 1916 and 1917, for instance, most of the sixty-seven articles about surfing in the Australian press involved women in some capacity. It is during this period that we will flip the lens from distant reading to close reading.

Close Reading: Deconstructing the Kahanamoku and Letham Myth

Trove facilitated a close reading of surfing articles from the second decade of the twentieth century by providing direct links to those stories in the digitised Australian press. While digital tools aided and expedited the process, the close reading itself represented a return to traditional empirical research of a key historical source, newspapers. We approached this task with a strong expectation that one woman would feature prominently: Isabel Letham. Letham dominates the popular memory of Australian women’s surfing because she rode tandem with Duke Paoa Kahanamoku, the visiting Hawaiian Olympic swimming champion, for several intervals during an hour-long exhibition at Dee Why Beach on 6 February 1915. Decades later, Letham recalled her experience on that day: ‘I was really frightened, but the
Duke took me by the scruff of the neck, stood me before him, and we took the shoot’. 44

Letham was ‘hooked for life’. 45

That ride is folkloric in Australian surfing, celebrated across a range of social memory sites and recently the subject of a book romanticising the relationship between Letham and Kahanamoku. Letham is frequently credited as Australia’s first surfboard rider and only female Australian surfer of the era. Her own archive confirms her extensive aquatic involvement, but also reveals that Letham acknowledged prior experimental surfboard riding in Sydney and that she herself did not promote the mythologising of her links with Kahanamoku. Our close reading of the newspapers corroborated her ability as a ‘fine performer on the surf-board’, but she appeared in only three surfing-related articles between 1915 and 1918, after which she spent eleven years in the USA. While she may have been surfing more frequently without receiving press attention, as indicated in her archive, in that same general period another Sydney woman received much more detailed press attention for her surfing efforts. Yet that woman has been forgotten. Her name was Isma Amor. 46

Amor occasionally cropped up in the non-digitised archive. She was acknowledged in surfing-related manuscript collections, official reports, surf club and municipal committee minutes held by libraries, archives and councils, but there was little detail. A history of Manly Life Saving Club, for example, notes: ‘in the 1912-13 season a number of … members decided to persevere and master the art [of surfboard riding]. They included … an outstanding woman surfer, Miss Esma [sic] Amor.’ 47 Amor also appears in transcriptions of unsourced newspaper articles found in the files of surf historian C. Bede Maxwell. 48 And a
clipping from 1918 found at the Manly Library referred to Amor as an ‘expert plank surfer’.49

Through such references, Amor became a tantalising but elusive identity.

Given these recurring encounters, we opened a research file on Amor. We located her birth certificate, corresponded with her daughter in England, obtained her school records, and investigated her family via various sources. A picture of Amor gradually took shape. Isma Amor (16 March 1898–7 August 1985) was born in Sydney to a middle-class family – her father was a well-known engraver and her mother the daughter of the Royal Mint’s chief engineer.50 After Isma contracted polio as a child her family moved to Manly ‘where she became a very good swimmer and, eventually, surfer’.51 Known to her family and friends as ‘Billee’, she became a noted swimmer at the Church of England Girls’ Grammar School and the Metropolitan Ladies’ Club.52 She was also a keen golfer and appeared in amateur theatrical fund-raisers for soldiers in the First World War.53 In 1920, she married, became Mrs. Angus MacPhillamy, moved to the country and disappeared from the sporting pages. While she taught her children to swim and surf, her public association with aquatic activities ceased at this point.54

The digitised press aided research, reporting Amor’s involvement in competitive swimming and her participation in the 1913 national ladies’ swimming championships with teammates Fanny Durack and Mina Wylie, gold and silver medallists respectively in the 100 metres at the 1912 Stockholm Olympics.55 In the following year, her abilities as a body surfer captured attention: ‘Another charming young person of 15 or 16 summers, distinguishable by a red bathing cap and a figure of slight and graceful type, has been very much in evidence of late in the Village by the sea [Manly]. She manipulates the waves as if
to the manner born, and crowds of visitors have been delighted by her expositions of surfcraft’. Just months later, the same newspaper suggested that her surfing abilities extended to board riding: ‘The use of surf-boards of the Honolulu variety has become the rage at Manly of late... Miss Amor is the best lady exponent so far produced as, in the case of the ordinary form of breaker-shooting [body surfing], she makes a very clever showing’. By 1916, the press acknowledged that she was a proficient surfer ‘with both the body and the board’, and named her as one of several well-known surfers who rode a ‘Kahanamoku Board’ at a fundraising event. In 1917, the Sunday Times elaborated on her renown and abilities:

Surfers and swimmers of Manly are quite familiar with the sight of a laughing-faced girl, radiant with health and the joy of living, breasting each curling breaker, swooping in on her surf board ... They all know her as Billee, and claim her as Manly's own; but to her inner circle of friends she is known as Miss Ismar [sic] Amor.

This uncovering of Amor via close reading of archival sources (both digital and non-digitised) disrupts the linearity of the Kahanamoku/Letham surfing story and enriches the history of Australian surfing. This opens another chapter not only for women’s surfing history but also for the development of Australian beach cultures more broadly. In her earliest efforts Amor was almost certainly experimenting with standing on her board, and the reports of her activities uncover evidence of women’s successful experimentation with surfing independent of Kahanamoku’s visit.

Despite Amor’s surfing abilities, and the attention of the contemporary press, the Kahanamoku/Letham myth has been the dominant narrative. Two factors help contextualise Amor’s neglect: the appeal of the Kahanamoku story, and the gendered and racial
representation of early Australian sport. First, the mythologising of Kahanamoku’s contribution to Australian surfing has until recently deflected attention from prior Australian surfing. The extensive historiography and wider social memory of Australian surfing overwhelmingly contends that Duke Kahanamoku introduced surfboard riding to Australia in 1914/15. Specifically, the Hawaiian demonstrated surfing to public acclaim at Dee Why in February 1915, and inspired onlookers to adopt the pastime. When prior Australian surfing is acknowledged, typically it is dismissed as frustrated experimentation that awaited the Kahanamoku blueprint for development. Recent research has challenged this claim, and revealed that Sydney-based surfers previously were experimenting successfully with surfboards, and Amor is an important part of this new narrative.

The second factor contextualising Amor’s elision is the gendered and racial representation of Australian surfing history that positions Letham and Kahanamoku in totemistic roles. A key aspect of this story is its gendered carriage of what we have previously identified as the ‘nimble savage’ racial stereotype, which ascribed natural aquatic prowess to Pacific Islanders in the late nineteenth and early twentieth centuries, and its associated mythology which holds that Australian swimming and surfing prowess derived in no small part from lessons taught by Islanders. Kahanamoku reified this stereotype through his abilities as a swimmer and surfer. In this iteration of the myth, Kahanamoku imparts his wisdom to Australia via a young woman, Letham. Like tales of the legendary Honolulu beach boys who taught visiting white women to surf, this Australian version also alludes to sexual fantasies involving native men and white women. Kahanamoku and Letham can be read as an Antipodean version of this ‘Tarzan and Jane’ racialised gender
dynamic. In this case, Letham is the stereotypical ‘civilised’ girl while Kahanamoku is a specific type of noble ‘primitive’, ‘civilised-uncivilised’, or ‘gentleman-savage’ – the aquatic ‘nimble savage’.\(^6\) As a consequence of the domination of the Letham surfing story, the identities and activities of early female surfers such as Amor remain under-researched and, in effect, hidden.

**Close Reading: Isma Amor and a Photographic Discovery**

The digitised sources were crucial to deconstructing the Kahanamoku/Letham myth. Like many historical projects, key sources about early Australian surfing are not available. Sydney beachside newspapers—including the *Manly Daily, Manly Argus* and the *Manly and North Sydney News*—which reported on newsworthy surfing activities, have not survived in any form, except for occasional press clippings in scrapbooks. Other important Sydney-based newspapers such as the *Arrow, Referee, and Sunday Times* were only available in hard copy or on microfilm. Trawling these sources posed a Herculean task that was daunting in scale, until 2013, when these newspapers were digitised.\(^6\) Trove not only enabled the distant reading of women’s surfing that we conducted above, and will continue to allow this as more papers are digitised, but also facilitated the closer reading of Amor’s involvement in beach culture by guiding us to particular digitised articles.

In that close reading, one finding from a search for ‘Isma Amor’ leapt off the screen. It was a photograph, published in the *Sunday Times* in Sydney on 1 March 1914. It pictures a woman standing upright on a surfboard cutting through a broken wave. A headland is visible
in the background, and in the foreground an apparently naked figure rests in the shallows. A higher-resolution version of the picture obtained directly from the original newspaper (Figure 2) provides additional detail including the presence of a third figure standing in the water. The caption refers to Amor:

Sydney can boast of possessing several young ladies (notably Miss Amor, of Manly) who can “shoot” the breakers in the method in vogue here almost as expertly as the best men exponents. Our waves are of a different formation to those which roll in at Wikiki [sic] Beach, Honolulu, and are not suitable for surf-board riding, consequently we are not able to emulate the Hawaiians in their exhilarating pastime of utilising boards to assume a horizontal [sic] position whilst dashing shorewards. To manipulate the surf in this fashion requires the greatest skill and dexterity, and for a long while no white man capable of imitating the natives could be produced, and there are very few in existence today. These facts combine to make the accomplishment of the white girl depicted in the above picture all the more extraordinary. The photo was forwarded by Mr. George Walker.

We were especially alert to illustrated articles of Amor not only because we wished to find her likeness but also because there is an intense interest in Australia for early surf photographs. This photograph therefore appeared to be a significant find, deserving of a close reading in and of itself. As vehicles for that reading, we have opted for content, semiotic and material analysis.
The photograph and caption together draw several connections with Amor and Sydney. Amor is named as a surfer, although it is unclear whether she is the surfer depicted in the photograph. The caption acknowledges that Hawaiian-style surfing was a rare skill, which was certainly true for Australia in 1914, and it praises the ability of the ‘white girl’ depicted in light of the rarity of the accomplishment. Reinforcing the likelihood that this image was taken locally, the person credited with supplying the picture to the newspaper, George Walker, was a Sydney surfer who was linked to Kahanamoku’s visit. The most superficial of readings suggested that this was, or possibly was, a photograph of Isma Amor. For us, as researchers who understand something of local surfing history, the appearance of...
this wonderful image at the end of our data-mining exercise was exciting. Like a nugget uncovered in the gold-miner’s pan, this seemed like a glittering find. But is it fool’s gold?

Ultimately, this is a difficult question to answer. We cannot be certain if this is Amor or another local woman at an Australian beach or whether it is a woman in Hawaii or elsewhere. An article published in 1917 supports an Amor reading by implying that she began surfing around 1914, when this picture was published: ‘About three years ago Billee found an old surfboard abandoned on the beach. She took this trophy into the waves and after suffering countless duckings and scraping her shins ... she succeeded in mastering the difficulties of surfboard riding.’68 The caption, however, sews seeds of doubt through its reference to the ‘white girl depicted in the above picture’ rather than naming her as Amor and through its inference that Australians could not surf like Hawaiians and that local surfing was limited to another form of ‘shooting’ the breakers. Context does not help here, as we know that board riding was practiced in Sydney as early as 1912.69 At best, the caption is ambiguous. Other content elements raise different issues. A topographical analysis of the background headland could be done, for instance by checking it against other historic photographs. Elements of the distant landmass do seem to correspond with some images of Diamond Head at Waikiki, but could it be one of the headlands on Sydney’s northern beaches?70 In the future it will likely be possible to search digitised newspaper databases globally for specific images, or cropped features of images such as this landscape feature, and to seek a match for this photograph, but we do not currently have this ability. In terms of content, then, we cannot say with any certainty whether this is Amor.
Semiotically the photograph also deserves a close reading. For the Sydney reader of the Sunday Times, a weekly publication that was heavily pictorial in format, a woman riding a surfboard standing up was a rare image. The few illustrations of female surfers that did appear in print, such as a woman cresting a wave and standing on shore with a board in the Lone Hand in 1911, could be read differently by different audiences.\textsuperscript{71} For some, probably including many young women, they may have signalled freedom, opportunity or empowerment. For others, like the father of Isabel Letham whose refusal to allow his daughter to surf compelled her to pursue the activity behind his back, the image of a young woman in a tight and revealing costume mastering a wave may have represented an act of transgression.\textsuperscript{72}

Reading the image also requires consideration of the photographer, who is unknown. Given technical limitations on early surf photography, to avoid damaging the camera the photographer would have erected a tripod in very shallow water or on a rocky outcrop near the breaking surf.\textsuperscript{73} The scene was likely posed, with the presence of the naked swimmer in the foreground an intriguing inclusion. It is unclear whether this person is male or female; in either case a nude, public bather in daylight would not have been common in either Sydney or Honolulu. The fact that the picture was published without alteration or deletion of the naked figure, or any commentary in the caption, indicates that it was not deemed to be scandalous. Instead, the picture can be read as conjuring nature, innocence, and purity, elements recognisable to readers of tales of idyllic South Seas isles. For today’s viewer, the photograph is special because images of early female surfers are rare. Joanna Gilmour helps contextualise its modern appeal for surfing audiences inundated
with images and narratives of male surfers: ‘the sport’s iconography of chiselled jaws and bare, bronzed pectorals has left little room for images of feisty femininity’.\textsuperscript{74} The sudden appearance of this ‘feisty’ female on our computer screen certainly arrested our attention because it disrupted the dominance of male surfing culture in Australia in the early decades of the twentieth century.

In addition to content and semiotic analyses, a materiality perspective focuses on photographs as objects, and shifts the emphasis of study ‘from image content to the material contexts of creation, use and preservation’.\textsuperscript{75} Importantly, it argues that we come to know the past not only through image content, but also through the context of how and where we encounter photographs.\textsuperscript{76} Digitisation presents a unique context of encounter and usage, and several material dimensions are notable in the case of this photograph. For example, the quality of the digitised image was poor; only by obtaining a high-resolution photograph from the original newspaper were we able to discern some key details such as the other bathers and the surfer’s attire. Whether viewed on screen or in enhanced, reproduced form, the image is removed from its original publication context. It is presented on screen as a search finding without a full sense of its placement on the page or in the newspaper, similar to an individual press cutting found in a clipping file or scrapbook. While it is possible to zoom out to see the whole, original page and therefore identify its placement context in the newspaper, it is the image itself that commands the viewer’s full attention.\textsuperscript{77}

Captions on photographs are vital to their reception and meaning, a material dimension that serves ‘to guide the reader or suggest one of several possible meanings’.\textsuperscript{78}
Digitisation of newspapers enhances the vitality of captions because digital searches are based on OCR recognition of words, not of images themselves. When a researcher finds a photograph while leafing through a hard copy of a newspaper, it is the image that initially captures the eye, not the caption. In that scenario, the caption is secondary to the image. If the same researcher conducts a digital search of the same topic, the words are recognised by the OCR, not the image, thus the caption is primary. Because of this primacy of captions, when a digital search engine finds an image based on a word search, there is a presumption of accuracy. This presumption of accuracy is heightened when a glance at the image appears to confirm the connection. This is what happened to us in finding the photograph of the surfing woman in Figure 2. Because it was based initially on a distant reading of women’s surfing and then on a search for ‘Isma Amor’, and the image showed a female surfer with related terms in the caption, we initially accepted it as a representation of Amor. A closer reading, however, problematised this assumption. Here meaning was instantly created, and complicated, by the specific material use of the image – its digitisation and encounter via digital search tools.

The ambiguity of the photograph confirms the continued importance of close reading in the digital age. Distant reading of newspapers identified a spike in coverage of women’s surfing in the second decade of the 1900s, but a closer reading of a variety of sources from that period helped to confirm the activity of one surfing woman – Isma Amor – before Isabel Letham’s exploits with Duke Kahanamoku in 1915. A closer reading of the digitised sources, guided by a keyword search for ‘Isma Amor’, then led to the discovery of
this unknown photograph, which itself invites a close reading via content, semiotics and materiality and contributes to the understanding of Australian women’s surfing history.

**Conclusion**

[F]ault lines have emerged within the DH [Digital Humanities] community between those who use new digital tools to aid relatively traditional scholarly projects and those who believe that DH is most powerful as a disruptive force that has the potential to reshape fundamental aspects of academic practice.  

The response to the ‘fault line’ depends on how the parameters of digital humanities are defined. At its most expansive end, digital humanities is inextricably linked to a new economy of knowledge characterised by a screen-based culture encompassing non-linear historical narratives, decentralisation of information accompanied by large-scale distribution of knowledge, an open-source culture built around creative commons, public collaboration involving citizen and professional scholars, and publish-then-filter models of circulation often involving multiple versioning of materials. Digital humanities, in this context, is radical. It challenges the defining features of scholarly history: a (mostly) solitary enterprise that is (often) expressed in the form of a peer-reviewed, paper book under the imprimatur of a university press, read (usually) by audiences familiar with the discursive traditions of the field. In this paper, however, digital humanities is employed in a much more conservative way. The dimension of digital humanities central to examining Australian women’s surfing is distant reading, which is understood as a collection of digital tools that facilitate the analysis of digitised material.
The advantages of distant reading are obvious. Distant reading provides historians with several assets: the ability to examine large amounts of digitised material, which may be unachievable with traditional historical methods; the scope to generate new research questions and hypotheses; the platform to identify and visually represent historical trends, patterns and anomalies; and the capacity to drill down to identify specific topics. In our analysis of women’s surfing, distant reading enabled us to examine large amounts of digitised newspapers, to develop hypotheses about the notoriety of surfing particularly in the first half of the twentieth century, to recognise a specific time period when women’s surfing featured in newspaper coverage, to identify key female identities, and to discover an iconic photograph of a female surfing figure. It is possible that this photograph may never have been found without distant reading tools.

Equally significant as the insights provided by distant reading is the importance of traditional close-reading practices. Close reading is perceived as the analysis of archival sources, accessed either digitally or non-digitally, through a process of provenance assessment, critical evaluation and contextualisation. Close reading of the digital and non-digital archival sources facilitated a new understanding of women’s surfing in Australia. This traditional historical practice contributed to a deconstruction of the Kahanamoku and Letham myth, illuminated the role of Isma Amor in early surfing, and facilitated the content, semiotic and material analysis of a seminal photograph. Nevertheless, even with all of the advantages of close reading, key aspects of the photograph remain elusive. In the future, it is quite likely that digital technology will be able to resolve questions about the identity of the female surfer and the location in this iconic photograph.
Historians have traditionally worked in the close-reading paradigm and, as this paper highlights, these skills remain central to history making in the digital age. But the infinite archive and distant reading pose challenges for historians. The challenge is both philosophical and methodological. Philosophically, historians have to grapple with the rhetorical dimensions of quantitative tools and, methodologically, they benefit from critically employing data mining, aggregation, text analysis and visual representations. Armed with these philosophical and practical tools, historians are able to balance traditional and digital research methods, to exploit ‘conjunctions between the macro and the micro, general surface trends and deep hermeneutic inquiry, the global view from above and the local view on the ground’. As we have argued in this paper, and as digital humanities scholars recommend, viewing distant and close reading methodologies as diametrically opposed is counter-productive. Instead, we emphasise the complementarity of the two approaches and the potential benefits to historians of digital technologies.


5 Burdick et al., *Digital_Humanities*, 37.


9 Carolyn Hamilton, Verne Harris, Jane Taylor, Michele Pickover, Graeme Reid and Razia Saleh, eds, *Refiguring the Archive* (Cape Town: David Philip, 2002).

10 See Berry, *Understanding Digital Humanities* for a detailed discussion of the computation turn in the Humanities.


18 See, for example, Alun Munslow, *The Future of History* (Houndmills: Palgrave Macmillan, 2010).


Foucault’s and Derrida’s analysis of the archive are discussed and expanded upon in Carolyn Steedman, *Dust: The Archive and Cultural History* (New Brunswick, NJ: Rutgers, 2001).


Paul Hagon, ‘Trove Crowdsourcing Behaviour’, National Library of Australia, 


Some individual Australian newspapers have been digitised beyond 1954 on other platforms, but no data-mining software exists for these.

42 See for example, Tim Baker, *Australia’s Century of Surf* (Sydney: Random House, 2013); Booth, *Australian Beach Cultures*; Huntsman, *Sand in Our Souls*.

43 *Sunday Times*, 7 February 1915, 13.


49 Herald (Melbourne), 9 February 1918, 4.


51 Bettina Kinnear (Amor’s daughter), letter to authors, 30 December 2008.

52 Lux, July 1913, 11; Lux, April 1915, 4, 10–11.

53 SMH, 18 April 1918, 8.

54 Kinnear, letter to authors, 30 December 2008.

55 Brisbane Courier, 10 March 1913, 4.

56 Sunday Times, 4 January 1914, 15.

57 Sunday Times, 5 April 1914, 15.

58 Referee, 2 February 1916, 16.

59 Sunday Times, 18 March 1917, 27.

60 For an overview, see Osmond, ‘Myth-Making in Australian Sport History’.

61 Ibid.

62 Ibid.


68 *Sunday Times*, 18 March 1917, 27.

69 *Daily Telegraph* (Sydney), 27 January 1912, 21.


71 *Lone Hand*, 1 June 1911, 92, 100.


Joanna Gilmour, ‘Like wow’, *Portrait* On the cover of this journal, the title ‘portrait’ is spelled with a lower case ‘p’ 34 (Summer 2009): 26–27.


Gary Osmond, ‘Reflecting Materiality: Reading Sport History through the Lens’, *Rethinking History* 12, no. 3 (September 2008): 339–60.

Viewing the image in the newspaper, read with accompanying articles, did not reveal any additional information to help contextualise it.


Burdick et al., *Digital Humanities*, 39.

Turnbull, 131.