The modernisation of *Hansard*: the effect of new technology on the 'official record' of the New Zealand Parliament

Introduction

There is a worldwide push towards digitising Parliament—or e-Parliament. Information and communications technology (ICT) is now embedded in our lives. Not only do we expect to access information by electronic means but new technologies have improved the ways that parliaments operate—by increasing efficiency, information access and dissemination, and ways of connecting with Parliament and MPs.

In New Zealand, changes in information and communications technology (ICT) have affected the presentation of the official record of the proceedings of the House of Representatives, or *Hansard*, as it is commonly known as in both the New Zealand legislature and in many other countries. New developments such as the online digital version of the parliamentary debates, radio and TV broadcasting, live web-streaming, video on demand, live captioning, and services for the hearing impaired and translation services have made the proceedings of Parliament far more accessible than was historically possible.

Hansard—in the broader sense of both the published written record and the coverage of debates available via these other media—is no longer static, unadorned and delayed; it is dynamic, interactive, and transmitted in an instant. This should be having a very positive effect: increasing the transparency and accountability of Parliament and strengthening our democratic system. But Hansard must continue to keep pace with this technology lest it fail to meet its original aim of holding members accountable for what they say and do in Parliament.

Conversely, it must also ensure the uptake of technology translates into increased access to information and does not disenfranchise those without ready access to these means of communication. That is because Parliament has an obligation to make its proceedings available to us: under section 3 of the Clerk of the House of Representatives Act 1988, the Clerk is "responsible, under the direction of the Speaker of the House of Representatives, for the official report of the proceedings of the House of Representatives and its committees." (Section 3(e)). All debates in the House must be accurately recorded, published, and maintained in accordance with the Standing Orders 9(1)-(3) and practices of the House.

Further, there is international guidance for the production of *Hansard* throughout the Commonwealth. The Declaration on Parliamentary Openness, launched at the World e-Parliament Conference 2012, calls on all parliaments to "create, maintain and publish readily accessible records of its plenary proceedings, preferably in the form of audio or

video recordings, hosted online in a permanent location, as well as in the form of a written transcript or *Hansard*." ¹

This paper discusses the history of the New Zealand *Hansard*, its modernisation, and the effects of ICT on its processes. I first traverse the key developments and technological advances in New Zealand's *Hansard* between 1867 and the 1990s. I then describe the contemporary range of ways the parliamentary debates are made available, from the ongoing official written record to the video version captioned online. I then discuss the issues that arise from these technological advances in terms of the future and status of the traditional reported and edited version. In doing so, I explore the potential obstacles and barriers that might prevent Hansard from continuing to maintain an accessible record and thus fail in its original purpose.

Before proceeding, there is one matter of terminology to address. In New Zealand, the bound volume print version remains the official *Hansard*, but de facto, other versions now in the broad sense are Hansard also—for example, the *Hansard* online and television coverage of debates. An attempt has been made throughout to acknowledge this distinction, but it should nevertheless be borne in mind when reading the paper.

A brief history of the modernisation of *Hansard*

Hansard has its origins in the establishment of the official record of the Westminster Parliament in the 1770s. (Vice and Farrell, 2017, p 4). Reconstructions of debates were first pieced together with newspaper reports and speech notes until 1803, when William Cobbett began what is regarded as the beginning of the official record with his publication of parliamentary debates (Vice and Farrell, p 19). The business was taken over in 1813 by Thomas Hansard who hired a team of reporters and established the reputation of The Parliamentary Debates as the authoritative record. His publication outlived the competition to become an institution of parliament (pp 21-22). In 1889, the Hansard name was added to the title page. The Parliamentary Debates came to be relied upon by members of the public and members of parliament equally, receiving Government grants from 1855 onwards. However, Hansard's company went bankrupt. It was then passed into the hands of several publishers until finally, in 1909, upon the recommendations of a select committee, responsibility for the Official Report, now commonly referred to as the Hansard, was taken up by both Houses of Parliament. (p 12). In their text Legal Skills, Finch and Fafinski (2017, p 157) note that the authorised version was to be that of a "full report, in the first person, of all speakers alike."

¹ https://www.openingparliament.org/declaration/

No longer incomplete or accused of bias because of newspapers' ties to political parties, the tone for a transparent record of parliamentary proceedings was set, and the *Hansard* model was adopted throughout the parliaments of the British Commonwealth.

The only comprehensive history of the growth of the New Zealand *Hansard* has been written by John Martin included in his book *The House* (2004) about New Zealand's House of Representatives. I have relied heavily on Martin's work to learn about the main technological adaptions to the production of the official record here. Martin himself was often able to discover when changes were made by reading *Hansard* debates in which new production developments were referred to.

In New Zealand, the debates of the New Zealand Parliament were first officially transcribed by independent reporters in 1867, 42 years before an independent *Hansard* team was established in the UK Parliament in 1909.² As was the case for the UK Parliament, newspapers were the first to report the debates, beginning with the first Parliament in 1854 (California Digital Library, 2017). Five bound volumes covering these years were compiled by Maurice Fitzgerald with what he could scrape together from newspaper accounts and drafts of speeches submitted from still-living members.

Accurate and authentic reports had been pleaded for by MPs such as William Fitzherbert on constitutional grounds: "Without such public opinion, Responsible Government would virtually cease to exist, that chamber might as well have no reporters' or strangers' gallery, they might close their doors and transact their business in a small comfortable parlour." (Martin, p 53) A staff of parliamentary reporters was put together and the *Hansard* service began, as noted, in time for the 1867 session of Parliament. A transcription room was established adjacent to the printing office and in the House the gallery above the Speaker's chair was set aside for the reporters. (p 53)

Reporters took shorthand in 15-minute long 'takes' (now known as 'turns') in the Chamber and would then transcribe these back in their room. A reader was employed in the printing room to check proofs once they had been reviewed, and often revised, by the members. At this time, members were able to revise their speeches on the understanding that they would only make the reports "more in accordance with the remarks actually uttered in the House." (p 54) This often led to them freely changing their proofs because they were either sceptical that *Hansard* had recorded them accurately or took this as an opportunity to 'improve' what they had said.

At this point in time, distribution of the *Hansard* was very limited. Members received copies of weekly *Hansard* pamphlets to keep and to distribute, and they were able to obtain special prints of particularly notable speeches that they had made to give out. (p 55) In the 1880s, *Hansard* became a means of advancing the political education of the colony and making

² https://www.parliament.nz/en/pb/Hansard-debates/for-the-record-150-years-of-Hansard/how-Hansard-replaced-the-press/

Parliament more accessible. (p 87) Although it had been claimed by member of Parliament John Sheehan that *Hansard* was to be found "in almost every hotel, club, or library—in fact, in all the public institutions", as Martin notes, this claim was rejected by MP Fox who said that "it had never been his good fortune to see the farmers in the district with the ploughhandle in one hand and *Hansard* in the other." (p 87)

In the last two decades of the 19th century, efforts were made to increase circulation. Members were supplied with many more copies to distribute, annual subscription rates were reduced, free copies were given to all local authorities and libraries, and *Hansard* was advertised in post offices and other public buildings throughout the colony. (p 87)

The production process and distribution were both understandably constrained by the times, but in 1884 came the 'Caligraph'—an early form of typewriter—heralding one of the first attempts to increase the efficiency of transcription. Improved typewriters soon followed, revolutionising production by avoiding the time-consuming stage of sending typeset proofs to members. The huge cost of typesetting member's revisions was also avoided, and the final printed version was now available in days rather than weeks or sometimes months. (p 88)

The production process remained much this way for many years. Martin explains that: "Transcriptions were made in a large room occupied by all the reporters and typists, dictating and typing alongside one another. While the typewriters did have 'silencing' cabinets, the noise cannot be imagined." (p 219) Three accurate copies were produced, which were checked by the editor before being sent to the printer. (p 219) For a long period of time increasing demands on *Hansard* staff were remedied by a combination of more efficient typewriters and the employment of extra reporters.

At the end of World War II, the reporting process was modified with a second reporter backing up the main reporter for their segment, helping with the noting of interjections and the checking of names and other matters.

Hansard took a great leap forward in 1964 in terms of providing an accurate record, when tape-recording of proceedings was adopted. This technological advance was not used to full advantage to begin with, however, as ingrained training meant that shorthand continued to be used fastidiously by reporters in the House, with the tapes serving as a back-up. In 1973 reporters began using portable tape recorders and stethoscope headphones in the Chamber. These were plugged into the amplification system. (p 297)

The next technological leap occurred in the late 1970s with the introduction of word processors, which greatly accelerated the speed of production. Due to a shortage of reporters skilled in shorthand at the time, the idea of recording debates and using teams of typists and subeditors to transcribe them was first mooted. Other technology such as the

stenography machine had become available. However, unlike many Australian legislatures, it was not used in Wellington.

The 1980s brought automation to Parliament. A radical modernisation occurred with the adoption of personal computers and printers installed in offices. Personal computers meant that text could now be transmitted electronically to the printer, with no need for hard-copy camera-ready versions.

In the early 1990s, the use of digital audiotape and the removal of the high-speed shorthand stage was another important advance for *Hansard*—this method remains the main means of production in the New Zealand Parliament today. The advent of digital recording meant that staff no longer had to deal with cumbersome tapes; they could access the audio record of the debates instantly via their computers, create digital word processing files, and, using headphones, transcribe their assigned speeches. Recordings did not eliminate the need to observe their allotted turns in the Chamber—it still remains the best means of picking up interjections and the context of the speech, thereby informing the way the speech is reported. The actual size of *Hansard* has grown markedly over the years also, mainly due to more debates and proceedings being reported in full, and the longer sessions that have been introduced over time. (p 311)

Hansard today

Over the past 25 years the birth of the internet and rapid development of digital technology has completely changed and challenged the way that representative democracy operates. People have more sources of information that ever before and they expect their Government and representatives to communicate and provide information to them in these new ways, using the technology that they themselves use. Now that most information has been transferred online, and hard copies of parliamentary information (such as legislation, *Hansard*, and select committee reports) are printed in only small quantities or are self-printed, Parliament has a responsibility to keep up to date with the rapid technological changes in order to keep the information flowing.

Using the ICT tools available today, there are three well-established methods of capturing members' speeches in Parliament. The first is computer-assisted stenography—the process of typing shorthand on a stenographic machine—which produces readable text. The second is by listening to the video or audio recording of proceedings and typing directly on a PC. The third method involves dictation while listening to the recording, using voice recognition technology that converts voice to text and has been adapted to the reporter's voice to produce accurate text. (Kingham, 2003, p 9) New Zealand *Hansard* employs the latter two methods with the majority of staff directly transcribing from an audio recording using FTR—

For The Record—a widely used and reliable digital recording system, and with some using the voice to text method.

At this stage in the process, procedural formatting and initial editing is undertaken by reporters who often use their handwritten notes of interjections taken during the monitoring of their turn in the Chamber. A specialised workflow program called HPS (Hansard Production System) is used to manage the workflow as documents are assigned, edited, assembled, and published to complete the full daily record. Customised Microsoft Word 10 software is used to produce the transcripts. Currently, the first draft is sent to members within 2.5 hours of the speech being given. Editors then re-listen and edit speeches, take in changes from members, if they have been accepted, and then compile transcripts of complete debates before these are then proofread and quality assured.

With the internet at their disposal the role of the *Hansard* editor has advanced a long way from the post-war days when two reporters worked together on a 'turn', with the backup reporter helping to record and check interjections and references. The modern editor has endless online resources at their desktop to check any references that have occurred during the speeches they are reporting. Votes and Maori translations are imputed as they become available, and documents are then re-published.

The introduction of additional channels of communication, namely, Parliament's own website, www.parliament.govt.nz in 2006 and its own television channel, Parliament TV, in 2007 have been further milestones in the evolution of the official record.

Website

The website is a core asset of Parliament and it is the main portal for providing information, documentation and data. It has replaced hard copy as the more permanent repository of information. Since 2011, the draft Hansard has been published on the website, and *Hansard* dating back to 2003 is archived here.

Based on the attributes that the Inter-Parliamentary Union uses to measure the effectiveness of online parliaments, the New Zealand Parliament website measures up well in terms of usability and accessibility. (Inter-Parliamentary Union, 2016, p 53) Enhanced search functions and filters, and the redesign of the home page and site structure have made it easier to navigate and simpler to use. The website provides live audio and video web-streaming, and it has automated email alerts, RSS feeds, and a mobile service enabling access to information as it is made available on the website. New interactive features, such as the alert service and interest-based links to related video and documents, have made it possible to target users based on their interests in different areas of policy, rather than simply providing a single version of information to suit everyone. (Williamson and Fallon, 2011, p 786). The latest re-design also made the website more accessible across a range of devices, especially smart phones and tablets.

An impression of the number of users of *Hansard* can be seen in the recorded page views on a single day, chosen randomly. On 8 November 2017, a sitting day, the *Hansard* section of the website registered 343 pageviews and the Parliamentary TV page registered 775 page views. Total unique pageviews for the entire website for that day totalled 4,906; just under a quarter of all users of the website accessed the record of the debates in either digital or audio-visual form.

Broadcasting

The New Zealand House of Representatives was the first legislative chamber in the Commonwealth to broadcast its debates, in 1936.³ Proceedings are broadcast live on Radio New Zealand's AM network as a condition of holding the licence for the network.

Parliament TV (PTV) was established in 2007 by Parliament in an effort to provide greater access to the legislature and also to help improve its image in the eyes of the public. It has led to much increased access to the debates of the House of Representatives. Before then, coverage was limited mainly to question time or special occasions, or to footage shot by private television companies. Today, full, live coverage is captioned and available on several digital channels. It can be accessed by 86 percent of New Zealanders via Free to Air television. (Office of the Clerk, *Annual Report*, 2017, p 13) Live coverage can also be webstreamed on computers, tablets, smart phones, and viewed using Parliament's Virtual House app.

When the House is not sitting, question time is replayed and parliamentary information about upcoming business is shown. PTV's video on-demand service began in 2009. Since the Parliament website was upgraded, it now has the capacity to include video—a separate dedicated website is no longer necessary for hosting the 30,000-plus videos that are available to view. Footage is uploaded to Parliament's YouTube channel *In the House* and RSS feeds send the video to the Parliament website. Video footage is of high quality and can be used by the public and the media without charge and without unreasonable copyright restrictions, so that it can be easily shared and embedded, and seen by more people.

Captioning

The New Zealand Parliament provides a live, closed captioning service on PTV.⁴ Beginning with a trial period of a few months, the service was launched in August 2016 and now covers all sitting hours. The service is provided by a Sydney-based company and captions are provided by stenocaptioners, using machine stenography. The service has been very successful: captions are broadcast with little delay and are highly accurate, through a combination of extremely fast telecommunications and highly skilled (human)

³ https://www.parliament.nz/en/visit-and-learn/how-parliament-works/parliamentary-practice-in-new-zealand/chapter-6-administration-of-the-house/#_ftn37)

⁴ Live closed captioning is done in real time by stenographers while the event is happening. Closed captioning is done after the event has taken place.

stenographers. Live, closed captioning is also web-streamed on the Parliament website, although there is currently a transmission delay of 25-30 seconds due to technical reasons.

These technological developments have enabled greater inclusiveness by making parliamentary proceedings immediately accessible to the hearing-impaired community. Captions are also available when watching video on-demand. For visually-impaired users, the website has been designed to be accessible to all users—it is structured to be compatible with screen readers.⁵

Translation services

Access to the record has been increased by the providing translation into official languages. As an official language of New Zealand, and one that is becoming heard more and more in the House, the translation of speeches spoken in te reo has greatly enhanced inclusion and accessibility. PTV provides simultaneous interpretation from Māori into English via an audio channel so that when Māori is spoken on Parliament TV, English-speaking viewers can hear an interpretation by selecting the language option available on their television. This audio is also available for web-streamed video. There has been a trial of simultaneous captioning of Māori text, with the aim of implementing this service soon. For *Hansard*, an authorised translation of all Māori spoken in the course of the debates is provided by in-house translators.

New Zealand's other official language apart from English is New Zealand Sign Language. Interpretation is provided when significant events are televised from Parliament and is always available for the Budget statement and the speeches of the party leaders in the Budget debate.⁶

There is also now a free app, The Virtual House. It provides instantly accessible parliamentary information via smart phone about Parliament and gives its users the ability to access *Hansard* or watch or listen to PTV anywhere. In addition, in-depth coverage of the work of the House and committees is brought to light via items on a second YouTube channel (NZ Parliament) and Radio New Zealand programmes funded by Parliament, such as *The House*, also available on demand.

Open data

Open data is data that anyone can access, use and share. It becomes usable when made available in a common, machine-readable format such as Extensible Mark-up Language (XML). Documents can be easily accessed and exchanged, and open data standards support their preservation and permanent access. As yet, the Parliament website does not provide

⁵ A screen reader is a software program that allows blind or visually impaired users to read the text on the computer screen using a braille display or a speech synthesiser.

⁶ (https://www.parliament.nz/en/footer/website-help/the-parliament-tv-and-radio-page-explained/)

open access to *Hansard*-related information, such as the Parliament of NSW does with its public Application Programming Interface (API). Its future intention is to do so.⁷

In the meantime, in line with Government open data standards, the use and re-use of material is greatly encouraged by Parliament: Parliamentary debates (along with Government bills and select committee reports) are free to be re-used without a Creative Commons licence. They are public domain content and are not covered by copyright. PTV content can also be reused, but some conditions are attached to this use.⁸

Social media platforms

The work of *Hansard* is being promoted through the use of Facebook and Twitter. As of January 2018, @NZParliament had 15,000 Twitter followers and the New Zealand Parliament Facebook page is liked and followed by 4,534 people. Both accounts keep the public up to date with the work of Parliament. Posts often feature links to *Hansard*, embedded video of debates in the House, and the Speaker's daily 'Today in the House' video, a short summary by the Speaker of upcoming business,

Digitisation of Hansard's archives

A recent project of the Office of the Clerk, Google Books Library Project, and HathiTrust Digital Library has involved the full digitisation of the New Zealand *Hansard* record and its full public access online. Although not yet available from the one location because *Hansard* from 2003 onwards is housed on Parliament's website, since 2017 it has become possible to search all 723 volumes of New Zealand's *Hansard*, dating back to 9 July 1867 and spanning 150 years of debates.

Summary of technological changes

In summary, over time, the New Zealand Parliament has adapted new technologies to more produce *Hansard* more efficiently and encourage greater interest in and use of the official record. These new tools have improved production methods and timeliness and have allowed *Hansard* to become accessible to a much wider audience than ever before. As in all areas of publishing, new technology and ways of doing things have radically changed the way that *Hansard* operates, changing it from a print-based product to a largely virtual product in a short space of time. The delivery of the official record has evolved from a slow and difficult process to a fast and streamlined one. The printed and online versions of *Hansard* have been complemented by a range of other digital tools aimed at communicating and engaging with citizens, and the public is able to watch, listen, or read *Hansard* (that is, the official written version and its multimedia variations) anywhere. The source material remains the same but the record continues to evolve into different a suite of products aimed at making full use of the rich resources found in the debates.

⁷ https://www.parliament.nz/en/pb/hansard-debates/rhr/combined/HansDeb 20170621 20170621 04)

⁸ https://www.parliament.nz/en/get-involved/media-centre/parliament-tv-terms-and-conditions/

Discussion

Changes brought about by new technology have transformed the way that the official record is viewed; it has also impacted *Hansard* itself. Below I discuss several notable areas of impact.

Traditional print vs digital version

Traditional print has been greatly impacted in the parliamentary sphere. Some legislatures overseas, such as the NSW Parliament, no longer print a hard copy version. In many respects, the digital version of *Hansard* has taken the place of the printed version—in New Zealand only small numbers of the bound volume are now produced, but it has not (yet) been completely replaced. New Zealand *Hansard* does not print a hardcopy daily *Hansard* and publication of the hard copy weekly *Hansard* was discontinued in 2011.

At the end of 2011 the print run for bound volumes of *Hansard* was 259. At the end of 2017 it was 147 bound volumes and reducing. These are produced approximately three months after the last sitting day included in the volume. People such as members, the Clerk's office, and the *Hansard* team still receive a bound volume, but fewer copies are to be found around Parliament than used to be the case. This number is set to further reduce in the current Parliament because they will no longer be offered to new members; they are available on request. Many libraries no longer want to hold copies because they take up too much space.

Print-based publishing is at an in-between stage at the moment. The bound volume is still referred to as the official version but the way most people access it is online. The citation of *Hansard* has caused issues that are yet to be satisfactorily resolved: *Hansard* is a product that needs to be able to be cited with page numbers; it is difficult to achieve this when the product is all online. In legislatures such as the NSW and the Parliament of Australia, where all of its *Hansard* is now online, a work-around for this problem has been found by also publishing a PDF version of *Hansard* that provides page numbers. New Zealand *Hansard* indexes have not yet been adapted to suit the online environment: annual and sessional indexes are available only as PDFs.

In other words, traditional print-based publishing is still ongoing at this stage. While numbers have reduced there is still value in the hard-copy version and no plans at this stage to abolish it entirely.

By the same logic, some believe that the use of video is pushing online publishing to the side-line as more people follow what is going on in the legislative chamber through audio-visual media with moving pictures rather than through written words. But the video and the written report are two different things: they have different purposes, and they are used by different people in different ways. Despite the advantages of the audio-visual record (such as capturing the atmosphere of the chamber, tone of voice and facial expressions), a purely

audio-visual record would not be sufficient, because context and meaning would be lost. As much as possible, the official written record prepared by *Hansard* ensures that the meaning of the spoken word is clear. It "is necessary to record the way of the debate and all the stages of the legislative process. [The digital version] also records what was said but not necessarily what was meant, which is what the official record aims to do." (BIPRA, p 1). The report is the authoritative record and members treat it as such – they are often in the chamber heard making the point that they want things "on the record". The development of digital archives also provides an enduring place for these important public records, where they can be preserved and easily searched.

Timeliness

Currently, a staggered transcript is released throughout the sitting day. As noted, a draft transcript is available 2.5 hours after a speech has been given. Since 2011 members are emailed their draft speeches at the same time as the draft is published to the web. Members are given 6 hours to return corrections. The *Hansard* transcript for an entire sitting day (the Daily) is published when all of the debates for the day have been edited and proofread—usually within 11.5 working hours of sitting day. Smaller segments containing a complete item of business, such as the whole first reading of a bill, are published as soon as they are available. All text is subject to correction until it is published in the bound volume. PTV coverage is a real-time service. Videos are usually available on the same day as the live broadcast, but sometimes take up to 24 hours to appear.

The speed of production could probably be further improved. However, improvements in timeliness must not jeopardise the core principles of its work: the time spent on achieving accuracy and readability versus the accessibility and timeliness of its production must be carefully balanced.

Improvements are currently being trialled investigating options available to make the production process more efficient by removing the need for the transcription stage. The recent introduction of fully captioned debates (first with question time and then for all debates) has provided the option of procuring the caption text as a large text file, editing it as usual, and re-purposing it for the main body of the debates. This would effectively eliminate the need to transcribe word for word. With the bulk of the text provided in this way, editors can spend less time typing and produce checked and tidied transcriptions significantly quicker. Increased use of voice recognition software is also being considered—and experienced re-speaker can prepare a speech in roughly a third of the time it takes to type it. Audio-to-text conversion software provides another potential option.

New technology such as this provides the potential for even faster transcription of the debates, allowing the public to access content of the debates sooner, with very little delay. However, the issue of accuracy remains. Time may be gained by quicker transcription techniques, but the quality of the transcription is still dependent upon the software or the

skills of the stenographer. Depending on their level of proficiency, it may still take time is still required to correct and tidy up the source material. Overall, however, trials have shown that significant time can be saved.

Changes in reporting style

The principles and rules contained in *Hansard's* house style guide are used by its reporters and editors in their work, as a guide to the approach they must take when reporting and editing speeches for publication.

Hansard's overarching editing principles include retaining members' words wherever possible so that the meaning or emphasis is not changed and the particular flavour of the language —the individual way of speaking—is preserved. The member's words can be set aside only to convey otherwise obscured intended meaning, to correct slips of the tongue, to omit false starts and redundancies, to complete partial references to names, to correct grammatical errors in keeping with house style, and to omit minor procedural matters like the presiding officer calling for quiet in the House of giving someone the call to speak.

Principles of accuracy remain unchanged. As the Parliament website explains: "Members are tied to what they have said in the House and may make only minor or grammatical alterations to the draft report. The meaning or substance of what was said cannot be altered in any way, though occasionally there may be controversy as to whether this has happened."

Hansard has adapted its style of reporting to meet the changes that new technology brings. The style guide has been revised several times over the years to reflect changes to agreed principles underpinning the way that speeches are edited. The introduction of taping, followed by digital recording and developments such as the publishing of the draft Hansard online since 2011, meant that the traditionally 'substantially verbatim' style—meaning text is tidied up so that speeches are grammatically correct and more formal in style—began shifting towards a more 'near-verbatim' style.

'Substantially verbatim' tended to reflect the older production process—the reporting of a speech using shorthand with no more than the memory and shorthand notes of the reporter to render an accurate record, followed by editing, proofreading, and then the printing of the final version in hard copy. In the early years of *Hansard* this approach gave reporters licence to translate "often extremely disorganised and chaotic speech into organised prose." (p 88, Martin) The difference between what was said in the House and what was reported in *Hansard* was therefore considerable. The 'near verbatim' style is less formal and a closer reflection of the speech and style of delivery, yet still edited so that it is readable and makes sense.

⁹ https://www.parliament.nz/en/visit-and-learn/how-parliament-works/parliamentary-practice-in-new-zealand/chapter-6-administration-of-the-house/# ftn36

Recently, the use of audio-visual technology has further impacted on text editing practices. The live TV and video on-demand version of the proceedings of Parliament, running in tandem with the printed and online *Hansard*, has created further shift to a 'more verbatim' reporting style to better match the audio-visual record.

More audio-visual broadcasting has had the effect of questioning the need for changes in the way that the record of proceedings is reported. AV and it's wider dissemination brings a much greater opportunity to compare the words spoken by members against the official record and thereby call into question the authenticity or accuracy of the official record when it differs to the 'live' recording. Thus, the New Zealand *Hansard* has recently made a further shift to a 'more verbatim' reporting style to better match the audio-visual record. Editing has become further restricted but clarity is still provided so that it is still readable: if the record is to be an accurate reflection and record of intended meaning then if must be edited for clarity or it will be worthless—the inclusion of mumbles, stutters, repetitions, false starts, inconsistencies would make it impenetrable.

Over time *Hansard* has become a more accurate and true reflection of what is said in the House. Once based on the interpretation and shorthand skills of the reporter, with no audio or video record to fall back on, with more liberal rules controlling corrections allowed to be made by members. Now, with first the audio record and subsequently the video record, the increasing use of technology has removed any grey areas between what was said and what is officially recorded.

Future technological improvements are also likely to include fully searchable video, better integration of *Hansard* reports of debates and other information with the audio-visual content, online digests that summarise current legislation and its progress, and alternatives to transcription.

Barriers facing Hansard

Modern Parliaments have at their disposal powerful ICT systems that make it easier to communicate with citizens and for citizens to access the work of their representatives. Data can be published in formats that citizens can reuse and bring to a wider audience. (Digital Democracy Commission, 2015, p 3) As the people's representative, Parliament has an obligation to make this happen. However, barriers stand in the way of achieving optimal access, and these must be addressed to ensure the flow of information. I will discuss some I consider to be of most importance.

The digital divide

The Digital Democracy Commission has stated that "As democracy becomes more digital it becomes more important to ensure that people who are less able to take advantage of digital are not left behind." (Digital Democracy Commission, p 28)

The New Zealand Government recently invested heavily in two major initiatives, the Ultra-Fast Broadband (UFB) Initiative and the Rural Broadband Initiative (RBI), to improve internet delivery throughout the country. Its programmes aim to bring the benefits of improved internet connectivity to 97.8 percent of New Zealanders.¹⁰

New Zealand is ranked highly against other countries in terms of its digital infrastructure, and, according to Statistics New Zealand, connectivity to the internet by New Zealanders has grown rapidly in the years from 2012 to 2017. ¹¹

Although the total number of residential broadband connections from 2013 to 2017 decreased by 3 percent, business and government connections increased by 12 percent and mobile phone internet connections increased from 3,847,000 connections in 2014 to 4,985,000 connections in 2017, a 29.6% increase. Broadband internet download and upload speeds have greatly increased, and monthly data use for both residential and business connections, and for mobile phone internet connections, doubled in the 5-year period. 12

These figures show a sharp overall rise in connectivity and a huge increase in data use, but most noticeable is the increase in mobile phone internet usage. ¹³ Out of a population of 4.7 million, at 30 June 2017, New Zealand had 3.8 million mobile phones with active internet connections. These statistics also illustrate the expansion in multimedia sources of connectivity that have happened very recently. Mobile devices and tablets are becoming more likely to be the conduit to parliamentary material. (Digital Democracy Commission, p 59)

Despite good infrastructure, affordability of access remains an issue for some—an issue that was recently recognised by the Government: "New Zealand is ranked amongst the world leaders in terms of digital infrastructure, but is behind in terms of internet affordability." (p 3, MBIE) It also recognised that that the benefits of the digital world can only be realised if digital inclusion is addressed in digitally disadvantaged groups such as young children, people with disabilities, older age groups, people with low qualifications, and those living in low socio-economic communities. (Ministry of Business, Innovation and Employment, 2017, p 2)

¹⁰ http://www.mbie.govt.nz/info-services/infrastructure-growth/national-broadband-initiatives

¹¹ These figures come from the annual *Internet Service Provider Survey*, which is sent to all internet service providers in New Zealand.

¹² Monthly data use for both residential and business connections increased by 93 percent from June 2012 to June 2017 (the number of these connections increased from 143,109 to 275,579 in the period between June 2016 to June 2017 alone). Monthly data use by mobile phone internet connections doubled from June 2016 to June 2017. The amount of data consumed by mobile phone internet connections was assessed for the first time in 2016.

¹³ Mobile phone internet usage increased in June 2017 was measured at around 1,700 megabytes for each mobile phone connection, compared with 900 megabytes in June 2016.

According to the 20/20 Trust, a New Zealand digital literacy agency: "Digital exclusion affects all ages and many groups. For example, up to 120,000 school-children in year 4 and above are without home internet... This drives a huge wedge into New Zealand society." ¹⁴

It is easy for those living in an urban environment to think that all New Zealanders have access to the internet. Although these figures are nearly 5 years out of date, at the 2013 census, 86 percent of households in Wellington had access to the internet. However, the reality is that in poorer, rural, heavily Māori areas such as Wairoa, Ōpōtiki and, Kawerau, internet access was still absent from 50 percent of households at the 2013 census. A higher number of people have access to mobile phones than used to be the case, but this does not necessarily mean they will use it for browsing *Hansard*.

Digital literacy must also be considered if the majority of publications are published in digital formats. According to a recent Government report, a section of the New Zealand population does not engage with the digital world or has only intermittent contact and "our lead on digital infrastructure does not seem to have translated to world-leading rates of digital inclusion." (MBIE, p 2) "Some people go online and use digital every day on their phone, tablet or other device, whereas others rarely, if ever, go online. The division between these groups is sometimes referred to as the digital divide. In practice, there will be people with a range of digital skills in between, but there is still a clear division between those who have the means and confidence to use digital and those who do not." (Digital Democracy Commission, p 50)

Low literacy is another barrier to consider. The international Adult Learning and Life Skill (ALL) survey, ¹⁷ run by the Ministry of Education in 2011 found that 40 percent of New Zealand's working population have lower literacy skills, substantially affecting how they interact with websites and affecting their ability to find information. ¹⁸

As more and more of the work and transactions of daily life take place online, basic digital literacy skills have become a universal requirement. A lack of comprehension is a very real and common barrier. Websites and publications must be simple and easy to understand for lower-literacy users. The House of Lords in the United Kingdom recently stated that digital

¹⁴ https://2020.org.nz/blog/2017/12/20/digital-literacy-digital-inclusion/

¹⁵ In New Zealand, Wellington City has among the highest per capita income and the highest education levels among its population. I have made the comparison with Wellington because it has the highest household percentage of access to the internet in New Zealand. Previously, North Shore City had a higher proportion than Wellington City but North Shore City has since, along with several other territorial authorities, become part of the Auckland Council.

¹⁶ At the 2013 census, 54.7 percent of households in Wairoa had household internet connections; in Ōpōtiki, 55.9 percent; and in Kawerau, 56.1 percent. Wairoa, Ōpōtiki, and Kawerau are consistently (across the last 3 censuses) the three territorial authorities with the lowest household access to telecoms including the internet. They are also the three authorities with the highest proportions of Māori.

¹⁷ http://www.educationcounts.govt.nz/publications/80898/16746

¹⁸ https://webtoolkit.govt.nz/blog/2015/05/assisted-digital-tradeshow-helping-people-use-shift-and-stay-digital/

skills should be treated with the same importance as numeracy and literacy. ¹⁹ Information may need to be broken down into smaller pieces that are more easily digested without being 'dumbed down'. In the future, *Hansard* might need to be presented online in a more digestible format, especially if increasing numbers of people are reading on smaller devices.

It goes without saying that, in the pre-digital era, not everyone was literate or had access to the written record. That, however, is beside the point. What we are considering here are the twenty-first century obligations of a modern government service to New Zealand society.

Dependence on technology

Technology has brought a whole new way of working but also the risk of absolute reliance on it: if the internet does not work then the system does not work. To this end, it is essential to have strong business continuity plans in place to carry out essential parliamentary work without technology. Radio and broadcast television always hold an important place in case internet access is a challenge, and the paper system can be used as a business continuity process in the event of a system failure.

In 2014, the NZ Parliament's ICT network experienced a 48-hour system-wide network failure caused by system instability. Parliament and its communications were disrupted, highlighting the weaknesses in the system, which no longer had the stability to handle the scale of usage required. Several initiatives have been taken, including faster internet and connection to the parliamentary network, and a back-up system to ensure that the outage does not occur again.

Heavy reliance on outside contractors also involves risk to continuity of service. Currently, live verbatim captions of the proceedings of Parliament are produced by stenographers based in Australia. Video production for PTV is also outsourced and the PTV commercial archive service is provided off-site. This does leave these aspects of the official record vulnerable to the reliability of private contractors. Efficiencies gained by outsourcing have to be weighed up alongside the possible pitfalls such as delays or loss of service, inconsistency of quality of service, or contractual difficulties.

Adaptions designed to make Parliament more modern, engaged, and engaging should be used with care. (Williamson and Fallon, p 790). As discussed at the 2016 Australia and New Zealand Association of Clerks-at-the-Table (ANZACATT) conference: "Parliamentarians must operate within the confines of long-standing procedures and practices, and at the same time represent the ever-changing needs of their constituents. It is challenging for parliaments to strike the right balance between upholding traditions and utilising new technologies." (ANZACATT, 2016) Initiatives such as encouraging the use and re-use of information and allowing parliamentary data to be linked via social media platforms require

_

¹⁹ https://2020.org.nz/blog/2017/12/18/report-shows-growing-digital-skills-shortage

a balancing act to ensure that the dignity and tradition of Parliament is maintained and *Hansard* remains at its core respected as the official record. (Williamson and Fallon, p 790).

The pressure to keep pace with technology

The rapid pace of change has forced *Hansard* to consider what kind of information and usability members and the public will expect from it in the future. There is pressure in having to keep up with technological advances, an increasing demand for instant communication that shows no sign of slowing, and the expectations of the online delivery of a multimedia record.

The adoption of new technologies by parliaments is often hampered by lack of resources. This is evidenced in the fact that Parliaments such as New Zealand's have not yet made all data available in this form, even though its importance continues to grow. (Digital Democracy Commission, p77). There is a high cost involved with acquiring and maintaining suitable technologies, finding and retaining the right staff skill sets, preparing for systems outages and cyber-attacks, and managing issues like data ownership and security, trolling, and an increased volume of work. Risks must be identified early on so they can be managed.²⁰

Parliament does not have the resources to turn all information into more usable formats—and tools that are developed don't necessarily take off or get used widely—for example, the Virtual House app which has had a low level of use. This is all the more reason to make open data freely available to the public. The House of Commons report recommended that "Parliament should release all of its published information freely online in re-usable formats—so that individuals or businesses can develop and market digital tools and apps if they see a gap which they think ought to be filled." (Digital Democracy Commission, p 66) Benefits include transparency, empowering the public, and encouraging innovation in public services. (p 66)

Conclusion

Adopting new ways of presenting the record of parliamentary proceedings has enhanced transparency and accessibility. There can be no doubt that digital tools are helping to better scrutinise and monitor those who represent us. Overall, the uptake of new technology has meant a corresponding rise in access to, and dissemination of, parliamentary information.

New technology allows *Hansard* to be produced faster, accessed more easily, and used in a more interactive way—it can now be easily linked and shared, and its video embedded in communications. Feedback is regularly sought to improve the service and ICT has created

²⁰ (https://www.parliament.nz/resource/en-nz/00CLOOCanzacatt1/f3813acc482b8a890e86b1a6dbafa9eefc8ec57c)

better ways of connecting with users, tailoring information to their needs, and keeping them up to date. All this has made the use of *Hansard* more of a two-way relationship: it is no longer simply publishing a digital version of documents; it is listening to its users and allowing them to re-publish the record themselves. The 2016 World e-Parliament Report notes: "No longer passive recipients of information broadcast by parliaments, their members, or the media, citizens today can be active participants by drawing from the information, documents and data parliaments generate." (Inter-Parliamentary Union, p 20)

Keeping pace with ICT developments in technology is important—slow uptake of technology risks creating barriers to engagement. As discussed in 2016 at an ANZACATT forum: "In order to meet responsibilities, Parliament must go to the public rather than expect the public to always come to it. People are now working and communicating online and mobile and so information needs to be tailored to meet this or risk becoming increasingly inaccessible and irrelevant." Secure and fully searchable digitised records are also very important so that accessibility is ensured—the historical record must survive technology changes.

However, it is also true that the adoption of new technologies has not been wholly successful—it is one thing to adopt new publishing methods but if a digital divide means that the public is not able to wholly benefit then the aim has not been achieved.

Several obstacles must be overcome, and risks mitigated, for *Hansard* to continue to uphold its value in an increasingly digital age, particularly regarding accessibility. As access to the official record—and all government information for that matter—becomes more and more dependent on access to technology, the Government has an obligation to ensure that barriers are identified and addressed. *Hansard* as a product must endeavour to be as accurate and timely as ever, but equally, its platform must be reliable, and its interface designed in a way to be easy to use, re-use, and search.

Within a relatively short space of time digital has become the default version, with the 'official' print version seen as the 'nice to still have' version. Website pageview statistics and PTV statistics suggest that the modern incarnations of the official record are being well utilised, but little or no research has been done to quantify this. Nor has there yet been any reflection on the impact of these changes for the relevance of the written record in the future compared with the audio-visual record. It is not clear whether the written record is more effective in terms of reach.

As publishing of *Hansard* (in broad terms) continues to undergo the transformation from being available solely in traditional print product to being mostly available in digital formats, it is not yet perfectly democratic in its availability. As Lusoli remarked in 2006: "A primary premise when publishing parliamentary information must surely be that, given access to the

18

_

²¹ https://www.parliament.nz/resource/en-nz/00CLOOCanzacatt1/1d5a5d30f1db5b8e4205dfa8cd565f412f389051

Internet is still limited, there is a need to retain hardcopy publishing and the move to utilise ICTs must be made cautiously." (Lusoli, p 414). Throughout all the changes however, the basic core values of *Hansard*—accuracy, timeliness, readability, and impartiality—remain unchanged. Certainly, *Hansard*'s founders could hardly have imagined the speed of its publishing process now, and its instantaneous transmission via multimedia channels.

Upon consideration of the many publishing advancements brought about by new technology, the ongoing obstacles, and the risk of a digital divide between those who can access new ICT and those who cannot, I conclude that *Hansard* is upholding its original purpose in an increasingly digital age. Accessibility is increasing, and technology required to access information is becoming more readily available. Modernisation is strengthening rather than diluting Hansard's original aim of Government transparency.

The official record is a valuable resource containing not only all the debates but also procedural matters and voting actions. In a way, it is an oral history of New Zealand—most events of any significance have been discussed in some way in the House. It stands alone as the record but can also be re-used—a potential as yet largely untapped by technology—to increase engagement with Parliament and the democratic process. (Digital Democracy Commission, p 29)

ICT offers the opportunity to open up the work of *Hansard*, and thereby, through that greater accessibility, build interest in the democratic process and allow the citizenry to better hold parliamentarians to account. *Hansard*'s challenge is to keep up with changes in ICT and with the ways that people use technology to access the internet. The benefits of new technology are great, but they come with a catch: the high cost of keeping pace with change while ensuring that modifications are effective and can be used by all. However, with the promise of democratic access to information and an ongoing commitment by Parliament to adapt quickly to improvements in ICT, *Hansard* has the potential to help Government achieve the highest standards of openness and transparency.

Bibliography

ANZACATT, Workshop 5B notes: Technology as an enabler in the House and Beyond, notes and New Zealand case study. (2015). Australia and New Zealand Association of Clerks-At-The-Table conference, Sydney, 2015

British-Irish Parliamentary Reporting Association (BIPRA) Learning and Development Symposium, 2016, Northern Ireland Assembly Conference notes, 23-26 August 2016, Belfast (http://bipra.org/wp-content/uploads/2016/11/Symposium-Report-2016.pdf)

Commonwealth *Hansard* Editors Association. 2017. The Australian and New Zealand Parliamentary Reporting Service Benchmark Survey 2017. Not publicly accessible.

Digital Democracy Commission, Open Up! Report of the Speaker's Commission on Digital Democracy, United Kingdom, 26 January 2015. Retrievable from: http://www.digitaldemocracy.parliament.uk/

Finch and Fafinski. (2017). Legal Skills (6th ed). Oxford: Oxford University Press

Francoli, Mary. (2008). Parliaments Online: Modernizing and Engaging? Oxford: Oxford Internet Institute

House of Lords. (2009). Are the Lords listening? Creating connections between people and Parliament. United Kingdom: Information Committee Publications

Inter-Parliamentary Union, World e-Parliament Report 2016, France: Imprimerie Courand et Associés, 2016. Retrievable from: http://www.ipu.org/pdf/publications/eparl16-en.pdf

Jack, Sir Malcolm (ed). (2011). Erskine May's Treatise on The Law, Privileges, Proceedings and Usage of Parliament (24th ed). United Kingdom: Lexis Nexis

Jenkins, Leah. (2016). A Year in the Life: National Assembly for Wales. Paper presented at Northern Ireland Assembly Conference, Belfast. Retrieved from http://bipra.org/wp-content/uploads/2016/11/Symposium-Report-2016.pdf

Kingham, Tess. (2003). e-Parliaments: The Use of Information and Communication Technologies to Improve Parliamentary Processes. Washington USA: The World Bank, WBI Working Papers

List of publications. (2017). Australian Department of Parliamentary Services. Retrieved from

http://www.aph.gov.au/About Parliament/Parliamentary Departments/Department of Parliamentary Services/Publications

Lusoli, W., Ward, S., and Gibson, R. (2006). (Re)connecting Politics? Parliament, the Public and the Internet. Parliamentary Affairs 59(1), 24-42.

Martin, John. E. (2004). *The House: New Zealand's House of Representatives, 1854-2004*. Palmerston North: Dunmore Press.

Ministry of Business, Innovation and Employment. (2017). Digital New Zealanders: The Pulse of our Nation. A Report to MBIE and DIA. Wellington: The Digital Inclusion Research Group

McKeown, Gary. (2016). Human language: Is what is written what is said? Paper presented at Northern Ireland Assembly Conference, Belfast. Retrieved from http://bipra.org/wp-content/uploads/2016/11/Symposium-Report-2016.pdf

Newton, Alex. (2016). A Year in the Life: House of Commons. Paper presented at Northern Ireland Assembly Conference, Belfast. Retrieved from http://bipra.org/wp-content/uploads/2016/11/Symposium-Report-2016.pdf

Office of the Clerk. 2017. Hansard Style File. Wellington: New Zealand Parliament

Office of the Clerk. 2017. *Office of the Clerk Self-Review*. Wellington: New Zealand Parliament.

Parliament of Australia. 2013. Parliament of Australia ICT Strategic Plan 2013–2018. Retrieved from

http://www.aph.gov.au/About Parliament/Parliamentary Departments/Department of Parliamentary Services/Publications/ICT Strategic Plan 2013 - 2018

Palmer, G. and Palmer, M. 2004. Bridled Power: New Zealand's Constitution and Government (4th edition), Melbourne: Oxford University Press.

Parliament of South Australia (2017). A Longitudinal Review of the Australian and New Zealand Parliamentary Reporting Service Benchmark Surveys 2009-2016, (Australian and Pacific *Hansard* Editors Association conference report), Adelaide: Grace Mowat

Rob Sutherland, Rob. (2016). A Canadian Perspective. Paper presented at Northern Ireland Assembly Conference, Belfast. Retrieved from http://bipra.org/wp-content/uploads/2016/11/Symposium-Report-2016.pdf

Senate Finance and Public Administration Legislation Committee. 2016. Inquiry into the DPS, recommendation 10: Information on *Hansard* staffing, subediting and the *Hansard* Forum (Annex F), Canberra, 2016

Surtees, Claressa. (2008). Parliament's Relationship with the Media. Australian Parliamentary Review 23(1), 203-211.

Transcription of annual conference. (2016). Australasian Study of Parliament Group, Adelaide, 2016

Transcription of conference (2017). Commonwealth *Hansard* Editors Association (CHEA) conference. 2017. Hobart, January 2017. Retrieved from http://www.commonwealth-Hansard.org/uploads/4/6/0/6/46064091/aphea day 1 31 jan 2017.pdf

Transcription of meeting . (21 February 2011). Parliament of Australia, Finance and Public Administration Legislation Committee, Department of Parliamentary Services, Parliament of Australia, Canberra, 2011. Retrieved from:

http://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;query=(Dataset%3Acommsen,commrep,commint,estimate,commbill%20SearchCategory Phrase%3Acommittees)%20Department Phrase%3A%22department%20of%20the%20senate%22;rec=2

United Nations. (2014). Technological Options for Capturing and Reporting Parliamentary Proceedings. New York: United Nations

Vice, John, and Farrell, Stephen. (2017). The History of *Hansard*. United Kingdom: House of Lords *Hansard* and House of Lords Library

Williamson, Andy., and Fallon, Freddy. (2011). Transforming the Future Parliament Through the Effective Use of Digital Media. Parliamentary Affairs 64(4), 781-792. Retrieved from: https://assets.contentful.com/u1rlvvbs33ri/70EXd8I1NeiC2EcW62moQM/af8948891c7df1a 72474fb9a749cd067/Publication Parliament-2020-Visioning-the-future-Parliament-2011.pdf

Zech, Tanja. (2016, October). Bringing Australia's first parliamentary records into the digital age: The Digitisation and Preservation Access Program at the Parliament of New South Wales. Paper presented at the Australasian Study of Parliament Group conference, Adelaide. Retrieved from:

https://www.parliament.sa.gov.au/ASPG/Documents/Paper%20Zech%20Tanja.pdf