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**CONTRIBUTION**

by

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to the General Debate on

**“Keeping the permanent record of debates in parliament: what are the tools of  
today and tomorrow?”**

**Geneva Session**  
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**General debate**

**Keeping the permanent record of debates in parliament:  
what are the tools of today and tomorrow?**

**Moderation: Dr Kleemann**

Ladies and Gentlemen,  
dear Colleagues,

Stenographers, i.e. those responsible for taking minutes of meetings, are the best positioned but least noticed people during a plenary session. In many parliaments around the world – including in our Bundesrat and the German Bundestag – they are seated in the centre of the plenary chamber in front of the presidium and lectern. From there, they can see all members and are therefore also able to locate and record any heckling and applause.

Will stenographers be able to defend this prominent place in the future? Will they have to give way to modern technology, for example audio and video recordings or AI-supported applications? These are questions we want to explore in today's discussion. In addition, we will take a look at whether modern technology also has an impact on the publication and accessibility of records.

In order to assess whether audio and video recordings or automated speech-recognition software can adequately and fully replace human stenographers, we should remind ourselves why we document plenary proceedings and why we document them with such a high degree of accuracy.

The public nature of parliamentary debates and thus the transparency and traceability of political decision-making processes is essential for a democratic state. Stenographic records are one way of ensuring publicity and transparency. They are evidence of political debates and the background and development of legislation. They also constitute historical documents and “allow future generations an insight into the finest and darkest hours of parliamentarianism”. That is how the former President of the Bundestag, Wolfgang Schäuble, once described it. He also noted that stenographers ensured maximum transparency with a minimum of characters while at the same time achieving the highest levels of accuracy.

Today, it is unlikely for any stenographer to rely purely on taking simultaneous notes. Audio recordings have become the standard, while video recordings of parliamentary debates and live broadcasts have now also become widespread almost everywhere. The advantage of using videos over audio is that the speaker’s facial expressions and gestures as well as the reactions of the audience can also be captured. The link to metadata such as the names of the speakers or the agenda items enables targeted navigation. In this respect, video has almost replaced the written word as the leading medium, at least for a non-professional user group such as “interested members of the public”.

While video streaming and video archives therefore allow people to directly experience parliamentary events and thus open up easier access to parliamentary debates, written records offer advantages for those who – beyond merely looking for information about events – want to carry out detailed research at a later date or even analyse a topic on an academic level. In contrast to video and audio recordings, texts can be searched for keywords or merely skim-read and

can be further processed, linked and quoted in the context of other media. We can therefore presume that written parliamentary records will continue to be required.

The key question today is how an audio or video recording can be transcribed most efficiently, i.e. how sound can be converted into writing. Classic speech-recognition programs are speaker-dependent and can therefore only be used as a supporting tool for the recording of parliamentary debates lasting several hours. The live subtitling of video streams, which was introduced to comply with accessibility requirements, currently still has a very high error rate. This is why the type of subtitling only has a very limited use as a basis for a permanent written record. It requires always post-editing on the basis of the permanent written record.

However, other solutions are already on the horizon. At least since the rise of ChatGPT, everyone has been talking about artificial intelligence in the text sector. Less attention has been paid to the fact that AI opens up new possibilities not only when it comes to text creation but also with regard to the transcription of video or audio recordings – namely the speaker-independent capture of text. Unlike traditional speech-recognition software, AI-based systems (for instance, “whisper” or “ctranslate2”) are no longer tied to a specific speaker. In addition, they learn on the basis of a text corpus and not a dictionary. This increases the available vocabulary and makes it possible for the software to also recognise unknown words. Under ideal conditions, the recognition accuracy is just under 95 per cent.

However, the computing power required is currently still very high. And nor have all IT security issues been adequately resolved yet. Nevertheless, the prospects are extremely promising: in future, the transcription of audio or video

files could be automated and carried out almost in real time. Although human checks of such transcripts are still necessary, the often rather time-consuming process of simply capturing text should soon be a thing of the past.

As regards the question posed at the beginning – do our stenographers have to fear losing their place in the chamber? – I would like to start by passing this on to you and thereby opening our discussion. Allow me to leave you with a few more questions to debate:

- What is your experience with speech-recognition software for transcribing audio and video recordings?
- Is AI already being used in your parliaments? Which systems are used? Are you considering working with AI systems in the near future?
- In what form is it possible for citizens to access permanent written records or video or audio recordings? How are these processed?
- Do your parliaments analyse the use of the services by citizens (livestreams, downloads of meeting minutes, etc.) and what has the response been?
- What methods are used for the long-term archiving of image and sound recordings?

Dear Colleagues, I would hereby like to open the debate – and I hope there will be lively contributions and a productive discussion!