Can AI make you a better journalist?

by Robert McKenzie

It seems counterintuitive, but most journalists are actually quite conservative. We have a set of skills which work for us. We are often fearful of new technologies and change. In many cases that's understandable. If you're working up against a tight deadline in a shrinking newsroom with a focus on efficiency, you don't want to risk wrestling with new technology which might let you down.

The current hype about AI stealing jobs doesn't help open people's minds to the possibility that Artificial Intelligence , if properly understood and utilised, could make us better journalists. It can open up possibilities which have previously been too time consuming to pursue and free us from the mundane tasks which soak up time and drag down our morale.

For years I used to quote Tesler's Theorum, which is attributed to the influential computer scientist Larry Tesler. It states that "AI is whatever hasn't been done yet". In other words: if it's possible, we call it technology. Tesler later asserted that what he'd actually said was "Intelligence is whatever machines haven't done yet". Whichever is correct, the world has moved on. So rather than AI always being the future, these days everybody wants to be seen to be using it. A 2022 report for the UK government defined use of AI as "machine learning, natural language processing and generation, computer vision and image processing/generation, data management and analysis, and hardware. A business is classed as having adopted AI if it uses at least one of these technologies."

But that list isn't what most people think of when AI is mentioned. Since 30 November 2022, when OpenAI launched ChatGPT, the focus has been on generative AI. Generative AI is in some ways a huge step forwards, as it enables machines to use probability to generate new creative content, such as images, text, audio or even video. And generative AI is getting better all the time. It's now possible to create content to such a high quality that it can be hard to tell whether it has been created by computer or captured by a human using a camera, microphone or their own writing skills. That is both terrifying and potentially extremely useful for journalists.

Generative AI comes with some significant problems for journalistic use. We know the content it generates is based on huge numbers of examples (called training data), but we don't understand how it applies that to create each piece of content. In addition, generative AI is prone to what are euphemistically known as "hallucinations". Put less politely, generative AI makes things up – and does so in such a way that the fantasies look extremely convincing. That is an enormous problem for its use in frontline journalism.

With that caveat, if you are prepared to check the facts, sources and everything else about the material which has been generated, generative AI has great potential for journalism. The best way to think about AI in journalism is that it's a poor journalist, but a good assistant. Journalists are experimenting with AI's potential to summarise huge amounts of information or identify key moments from council meetings and other high volume, low news sources. Translation is better and available between a much wider range of languages, thanks to the technology behind generative AI. Partly because it is untethered by reality, generative AI is very good at suggesting different approaches to stories. It can also be used to inspire thinking about the best questions to ask interviewees. Basic transcription of those interviews is much easier with an AI assistant.

Elsewhere, organisations are experimenting with compiling newsletters using AI and reversioning content to change the style or length (or both) to be more appealing to a wider range of audiences. Others are investigating sharing their expertise in a more accessible form by allowing audiences to ask questions via chatbots or explore archive content. Those examples are just the tip of the iceberg – journalists are experimenting with generative AI all over the world.

But before you get too carried away with the possibilities of generative AI, it's worth thinking about what you can achieve with older, more predictable kinds of AI. In the days before widely available generative pre-trained transformers (the GPT in ChatGPT), my colleagues at BBC News Labs and many other organisations were having success at building reliable and controllable prototypes to help journalists. Our objective was to get the machines to do the boring, repetitive work and free up journalists to do journalism. It seemed to us that far too much expensive and talented journalistic effort was going into dull tasks, such as producing multiple versions of stories or important jobs which people weren't qualified for, such as putting tags onto stories to classify their content.

One of the great advantages of some of the older forms of machine assistance is that they do exactly what they are told to. That means a lot of work setting them up, but once they are up and running, the only mistakes (or "hallucinations") are the ones generated by the human journalists. A fabulous example of this was for the UK's 2019 general election. There are 650 constituencies in the UK parliament, each represented by a directly elected Member of Parliament. On election night the BBC has traditionally only had the resources to publish basic data for each constituency: the names and political parties of each candidate, how many votes they got, whether the winning candidate was from the same or a different party than at the last election and so on. Our ambition, inspired by our Executive Product Manager, David Caswell, was to go beyond a simple results table and publish a well written news story for every constituency as the results were declared. We wanted every licence fee payer to have a story about their MP, to show that we didn't just care about the "newsworthy" constituencies. Just to make it more challenging, we decided to write separate stories for the 40 constituencies in Wales in Welsh as well as English.

National election nights are one of the biggest and most important events for BBC News and total accuracy was vital. We had been experimenting with natural language generation for a while, first to publish stories about health service performance for individual hospitals, then to cover the local effects of a national tree planning initiative. To do all that, we created a tool called Salco (**S**emi-**A**utomated **L**ocal **Co**ntent. Salco was based on software from an external supplier and allowed us to create complex templates for every possible outcome in each constituency, all driven by the results coming in from the BBC's election results collation system. For us the attraction was that, in contrast to generative AI systems, every single word was written by a human journalist. The machine merely assembled the story from the data it was fed.

It took us weeks to put together all the different elements, including some fascinating conversations with the BBC's politics team where we defined election terms such as "landslide victory" and "significant swing" in order to establish the rules for our story generation. On election night itself we checked every single story before publication, which substantially slowed down the service. Of the 689 stories published that night (one constituency didn't declare its results before we went home at 10am), only one contained an error. That error was introduced by a journalist who altered the correct version produced by the machine. Machines don't get tired enough to make mistakes at the end of a 12-hour nightshift, but human journalists do.

Taking so much data and turning it into interesting and well-written stories about local areas would be impossible without machine assistance. No news organisation could justify the expense of writing

hundreds of different stories for small local audiences. But for the audiences themselves it's a valuable service. Research shows that most people care more about their local area than they do about national news. A system that can give them that information, rather than expecting individuals to wade through tables to find the relevant information themselves is an aid to democracy and the attractiveness of the media providing the service. In the UK, RadarAI, a joint venture between the Press Association and Urbs Media, has produced tens of thousands of stories based on this idea.

Basic AI can also provide expertise that ordinary journalists may not possess. Getting the best image as a thumbnail on a story is a vital part of attracting audiences. But many organisations can't afford to have an image specialist on duty all the time. At BBC News Labs we overcame this by developing an AI-assisted prototype which encourages journalists to take account of best practice 24 hours a day, wherever in the world they are working. Called Guiding Hand, it uses machine assistance to immediately highlight faces in any image uploaded to its webpage. The journalist can choose which face best illustrates the story, at which point the machine applies the "rule of thirds" to offer versions of the image with the left eye one third of the way into the left of the image, the right eye a third of the way into the right of the image or the face simply centred in the image. Research shows this is the most pleasing view for users. A preview on the page shows the writer what their headline looks like next to the image, allowing them to alter both to maximise their audience impact. Journalists have welcomed the ease of machine assistance in an area where many of them are inexperienced.

You don't need the latest AI technologies to make your life as a journalist easier and more productive. What you do need is a clear understanding of what you're trying to achieve and what your limits are. You must ask yourself questions such as "how important is accuracy?" and "does this need to work within my existing systems?" If 100% accuracy matters to you, do not invest time in unchecked generative AI. If it has to work on your existing platform you need to know what restrictions that puts on your exploration.

AI has the potential to transform your career prospects. The best will still be the best and the worst will still be bad at their jobs, but for the bulk of journalists in the middle of the profession, the expert assistance offered by well checked and well understood AI tools means an opportunity to impress employers and commissioning editors with your versatility and expertise. All heighted by your team of AI assistants.

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