Talking to journalists about AI

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Abstract

"AI is testing the boundaries of human intelligence. AI will shape your soul. This AI really wants to know you. AI loves you. We still know little about how AI thinks. AI is racist and sexist. AI lies. AI does not want to be regulated. AI doesn't care about you. AI cooks perfect steaks." Scientists involved in developing AI technology might laugh when they read these statements actually published in the news media, but this laughter would mask a deeper concern about the widespread misconceptions they reveal. This kind of reporting can foster public fear, distrust or unrealistic expectations about what AI technology can and cannot do. The challenge for AI researchers is to communicate the realities of AI clearly and effectively so that public discourse is informed by accurate, nuanced and responsible information. While journalists have their own role to play in shaping public understanding, this tutorial focuses on equipping AI researchers with the tools and strategies they need to bridge this gap and ensure that their expertise is well understood and reported.

1 Understanding journalism and journalists

Talking to journalists first requires a solid understanding of what journalism is - a central and often controversial topic in journalism studies for decades. But it also means understanding what journalism does and how journalists work to gain a clearer picture of their role. This understanding fosters empathy, which allows for more effective communication.

1.1 What is journalism?

Journalism is not simply a set of tasks consisting of choosing a topic and an angle, interviewing sources, gathering evidence, and then producing a narrative. Journalism is both a professional activity and a professional ideology, rooted in shared values and norms among journalists that help legitimise their role in society. It encompasses the belief that journalists perform a critical function in democratic societies by providing information that contributes to the public good [6].

The practice of journalism is underpinned by a professional ethic based on respect for the facts, which means that it relates to values such as accuracy and fairness. These principles are very subjective to assess, but they are what guarantee the honesty of information. They are also a means of making journalism accountable to audiences [41]. At the same time, journalism is seen as an 'epistemic contest' as the struggles between different stakeholders - such as journalists, media organisations and audiences - shape and define the norms and practices of knowledge production in journalism [2]. This means that the process of creating and reporting news is influenced by the competing interests and perspectives of these different groups, which ultimately define what is considered credible, important and newsworthy.

Journalism is not only a profession, but also an industry, a culture and a phenomenon. It encompasses a wide range of professionals, including reporters, photographers, field producers, internet providers and bloggers [43]. Journalists are distinguished from fact-checkers, as they verify facts prior publication while fact-checkers verify facts after they have been published [17]. Such a diversity of professional roles adds to the complexity of defining what journalism is, as it transcends simple professional boundaries.

As a basic definition, we can assume that journalism is about reporting facts or, as the French writer Albert Camus used to say, reporting the history of the present.

1.2 What do journalism do?

Journalism is considered a pillar of democratic systems - either a fourth estate or a watchdog of democracy [21]. It provides a factual and documented approach to public issues, which is essential for informed citizenship. However, journalism is not only about reporting facts, but also about shaping public discourses and societal values. Therefore, it involves interpreting facts and giving them meaning [35].

As an institution, journalism is regularly criticised for several key reasons that contribute to undermining trust in news media and journalists. One major problem is that many news outlets prioritise sensational headlines and dramatic stories over accurate reporting. This can lead to biased and incomplete reporting that favours certain perspectives over others.

In addition, economic pressures and limited resources can lead to superficial coverage of complex issues, leaving readers with a superficial understanding of the issue. Furthermore, the rise of digital media and social platforms has raised concerns about the spread of misinformation and disinformation. With the ease with which false information can be shared and amplified, it's becoming increasingly difficult for journalists to maintain quality standards and ensure the accuracy of their reporting [14, 18, 20].

1.3 How do journalists work?

The usual tasks of journalists include selecting, documenting, verifying and reporting information. Information is based on facts, which refer to what is objectively verifiable, consistent with reality and supported by credible evidence or authoritative sources. Nevertheless, the methods used by journalists, while based on ethical standards of accuracy and objectivity, are less demanding than those of scientific methods [16].

How journalists perform their tasks depends on a number of factors, including the time available, the accessibility of sources and resources, and the methods used - whether traditional, such as telephone interviews, or digital, such as online research. In addition, the format of the final product, whether written or audiovisual, affects the way these routines are implemented. These routines are also guided and shaped by the wider organisational, economic and socio-professional context in which journalists operate [23, 37, 42].

Interviewing sources and experts is an essential part of the journalistic process as it adds credibility, depth and context to a story. Unless explicitly stated otherwise during an interview, it is generally assumed that everything said can be reported. Journalists are expected to use their discretion in deciding what to include and how to present it. It is not a common practice to ask journalists to check their piece, because journalists act independently and freely, but in some cases or contexts you may be allowed to ask them to check your own quotes.

Journalists may also ask for background information with a promise of anonymity for sources, which is common practice in reporting. This approach allows valuable insights to be included while protecting the identity of sources, often framed as "according to a source close to the matter". This practice underlines the balance that journalists must maintain between transparency, accuracy and confidentiality in their reporting in order to comply with their ethical standards [19].

Journalists are primarily trained as generalists, meaning they are expected to cover a wide range of topics - from natural disasters and royal anniversaries to international conflicts and political elections. Specialist journalism, on the other hand, focuses either on specific sub-genres, such as investigative journalism, multimedia journalism or data journalism, or on specific areas of expertise, such as business, politics, technology or sport [3, 33, 26].

As their primary aim is to inform diverse audiences, journalists need to tailor their reporting to the needs and interests of different groups. For example, the approach to reporting for a teenage audience will be very different from that for business and finance professionals. This adaptability ensures that information is relevant and engaging for each specific audience. The practical implication is that it often involves popularisation, which consists of making complex scientific or technical information accessible to the general public, and simplification, which involves avoiding the trap of oversimplification as it can lead to inaccuracies [29].

2 Understanding AI from the perspective of a journalist

Considering how journalists perceive and interact with this technology helps to identify knowledge gaps, usage patterns and narrative approaches that could lead to misinterpretation or misunderstanding.

2.1 What do journalists know about AI?

It is difficult to assume what journalists do or don't know about AI. As for many areas of expertise, journalists strongly rely on experts to shape their perceptions. However, there is a general recognition among scholars that journalists don't know enough about it and that they should develop AI literacy to better understand the capabilities and limitations of AI systems [7]. According to Long & Magerko [25], "AI literacy is a set of competencies that enable individuals to critically evaluate AI technologies, communicate and collaborate effectively with AI, and use AI as a tool online, at home, and in the workplace". In addition, journalists often lack data literacy, which refers to the ability to extract meaning from data and includes computational problem-solving skills [11, 15].

However, we can assume that one major problem related to what journalists know or don't know about AI is related to the terminology in itself. What is AI? For what is it used for? Unfortunately, the term "AI" is often used loosely and without a clear definition, which can lead to misconceptions and biases. For instance, some people may think that AI is only about machines that can think and learn like humans, while others may believe it is solely about automation and efficiency.

Furthermore, the common definition of AI as a technology that enables machines to emulate various complex human capabilities often oversimplifies the diverse and complex systems that underpin it. This definition tends to obscure the sophisticated mathematical models, statistical methods, probabilistic reasoning, algorithms and vast data sets that are essential to its functioning [36]. On the other hand, some of the terminology used in the field can be overly complex and technical, making it difficult for journalists to understand and accurately report on AI-related issues. Scientists should be aware that terms such as gradient descent, backpropagation, overfitting, convolutional neural networks or support vector machines are highly specialised and it can be difficult for those outside the field of AI to fully grasp what concepts they cover. For most journalists, these are probably just abstract words.

2.2 How do journalists make use of AI?

The way journalists make use of AI-based systems and the challenges it represents for their work and profession participates in shaping their overall perception of AI technology, either in terms of benefits or risks. However, journalists are increasingly relying on AI technology in their daily work, often without realising it [5, 10]. These tools have become an integral part of their workflow, whether it's automatically translating documents, checking the spelling and grammar of their articles, transcribing interviews or using the advanced capabilities of search engines, many of which now include large language models.

In many ways, AI technology disrupted the news ecosystem as it involved radical changes in the way news is produced and disseminated. AI-powered tools have automated various tasks, including research, data analysis and even news writing. These technologies have enabled the creation of personalised news feeds and increased the visibility and shareability of news stories on social media platforms. In addition, AI-driven fact-checking tools have been developed to verify the accuracy of news, helping to reduce the spread of misinformation and disinformation. All these applications can be viewed as augmenting or remixing parts of the editorial process that was traditionally performed by human journalists [9, 8].

While the integration of AI into news production has led to numerous benefits, it also raises critical ethical concerns. For example, AI-generated content has the potential to manipulate public opinion or reinforce existing biases, challenging the integrity and impartiality of journalism. On the other hand, it leads to consider transparency as a new ethical principle, aiming to inform audiences on the use of AI for news production and dissemination, which might involve legal issues related to the collect and use of personal data [12, 28].

As AI technology increasingly takes an important part in journalistic processes and workflows, it challenges the traditional view that journalism is a practice merely performed by journalists. That means that the production of news is a collaborative effort involving both human and non-human actors, which transforms how journalism is created and consumed [32].

2.3 How do journalists talk about AI?

The way in which journalists discuss AI may reflect the complex and often contradictory relationship that professionals have had with technology for over four decades [31]. This relationship is characterised by a dual set of fears and promises: the fear of being replaced by machines that can perform tasks more quickly and efficiently, and the fear of losing professional agency and authority [39].

On the one hand, utopian narratives highlight the potential of AI to positively revolutionise society, while on the other, dystopian discourses warn that machines will surpass human intelligence and, therefore, make most of the humans useless. These competing narratives contribute to a distorted understanding of the real capabilities and risks of AI technology, and do not favour a pragmatic and objective approach [24, 22, 38].

Using metaphors is not uncommon when journalists talk about AI, which is already a metaphor that subtends a form of made-up intelligence that looks like human intelligence but is actually not. Another example is the robot metaphor to describe computational processes that perform tasks usually performed by humans, which has also contributed to dystopian views of technology [24]. The use of the image of the robot is a recurring pattern but it is not the only representation journalists give to AI, they also use abstract patterns to depict abstract systems, human brains powered by electronic circuits, or futuristic representation that include Hollywood blockbusters, between the sympathetic Wall-E and the frightening Robocop. Nevertheless, journalists tend to depict AI in a more positive way when their paper does not relate to ethical concerns or on potential negative impacts of technology on society [4].

Journalists also tend to personify AI technology by using anthropomorphism approaches in their stories. That means that they portray AI as an almost human-like entity capable of making decisions or exhibiting biases, rather than as a tool created and controlled by humans. Anthropomorphism can exacerbate fears and anxieties by blurring the line between human and machine roles, making AI appear more autonomous and therefore more of a potential rival [40]. Journalists are also likely to be fooled by large language models in their ability to generate human-like text, blurring the stochastic nature of these systems and the fact that imitation does not mean understanding [1, 13].

3 Effective strategies to communicate scientific messages

Successfully communicating scientific ideas to the public requires more than accuracy; it requires clarity, relatability and strategic communication. This is especially true in complex areas such as AI, where misunderstandings can easily arise.

3.1 What is science popularisation and why does it matter?

Science popularisation involves translating complex scientific concepts into language that non-experts can understand. Its main aims are to inform public discourse, build trust in science, encourage critical thinking, promote scientific literacy and counter misinformation [27]. However, these efforts carry the risk that audiences may become overconfident in their ability to evaluate scientific claims, potentially leading to misinformed judgements. A balance between accessibility and accuracy is therefore critical for effective science communication [34].

The paradox of science popularisation lies in the tension between the inherent complexity of scientific knowledge - based on specialised expertise, data interpretation and rigorous experimentation - and the need to make these ideas accessible to the general public. While popularisation seeks to simplify and communicate science in a more understandable way, it often does so at the expense of depth and nuance, potentially diluting the original concepts. Hence, viewing science popularisation as a straightforward transfer of knowledge from experts to the public risks oversimplifying the dynamic relationship between experts and lay people [30].

3.2 How to improve your science communication?

Be well-prepared by putting yourself in the journalist and the audience's shoes. The most important thing is to convey your message clearly, without oversimplifying it. In addition, don't underestimate the non-verbal aspects of your communication, especially when you are interviewed for audiovisual media. Remember, how you say something can be just as impacting as what you say. Therefore, preparation and self-awareness are key to a successful interview.

You can prepare yourself by self-filming you with your phone or your computer. It will allow you to see how you present yourself. This way, you can evaluate your body language, facial expressions, and overall demeanour. It also allows you to adjust your tone, pacing, and clarity, ensuring your delivery is both effective and engaging. An effective way to prepare for communicating complex ideas such as AI is to practise presenting your research in just three minutes. This exercise forces you to distil your key messages down to their most essential points, making sure they are clear, concise and powerful. It trains you to focus on what really matters. Further, these tips should help you to refine your message.

Journalists can reach AI researchers for different purposes, as an expert or a witness, and it does necessarily relate to their own research but to their overall knowledge about IA. Therefore, be sure about the object of the interview.

1. Keep in mind the purpose and your audience

Journalists write for different audiences, and understanding who the article is meant for can help AI researchers tailor their explanations accordingly. The level of detail and complexity may vary from one new media to another. A story that is aimed at a general audience may require more simplification and analogies, while a piece for a tech-savvy readership can handle more technical depth. Further keep in mind what's the topic of the piece on which the journalist works.

- 2. Simplify your message but not too much Communicate complex AI concepts to journalists in a way that is both accurate and accessible. Analogies and metaphors can help make abstract concepts more relatable. However, do not oversimplify your purpose, as this runs the risk of being inaccurate.
- 3. Focus on the key points Journalists have limited space and time, so it's essential to focus on a few key messages that are clear and easy to convey. This can involve reiterating the main points or using summary statements. Keep in mind that even all that you say is likely to be reproduced, it does not mean that all that you say will not necessarily be reproduced. Also, journalists will probably proceed to some cuts and this part of their work is beyond your scope.
- 4. When possible, provide visual support Sometimes diagrams, charts and infographics help to simplify complex information and to make them better understandable.
- 5. **Provide background information, context and examples** Providing context helps journalists understand the relevance of the AI concept in a broader framework, such as societal impact, ethical considerations, or real-world applications. It helps to see a bigger picture. In addition, concrete examples and use cases make abstract concepts more tangible and illustrate the practical implications of AI technologies.

6. Be open and transparent

Don't avoid talking about the limitations of the technology that you are presenting and don't avoid ethical implications. Don't forget that journalism is also about being critical.

7. Anticipate misinterpretations

Misinterpretations can lead to misinformation, which is particularly problematic with complex technologies like AI. It is a risk mitigation for reducing the likelihood of errors in the final report.

8. Encourage interactive dialogue Effective communication is not one-sided. Researchers should be open to questions and ready to clarify points that may be confusing.

- 9. Non-verbal attitudes matter Maintaining a positive and confident non-verbal attitude, including open body language, aligned facial expressions and a steady tone of voice, can help build trust and credibility with journalists.
- 10. Be available Tell the journalist that you remain available for follow-up questions and further need for clarification, to make sure the journalist will eventually come back to you in case of doubts, misunderstandings or need for additional information.

4 Conclusion

Communicating effectively with journalists about AI requires simplifying complex concepts and technologies while maintaining accuracy and avoiding misinformation. It also requires a good understanding of who you're talking to, whether the journalist or the audience. The goal of effective communication is to foster a better understanding of the impact and implications of AI. Therefore, it participates in fostering trust in AI and encouraging more nuanced discussions about what AI can and cannot do.

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