

From Hype to Responsibility: How researchers navigate expectations in communicating (medical) AI

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Narratives on the Future (of Medical AI) are important



I think if you work as a radiologist, you're like the coyote that's already over the edge of the cliff but hasn't yet looked down, so doesn't know there's no ground underneath him. People should stop training radiologists now. It's just completely obvious that within 5 years, deep learning is going to do better than radiologists, because it's going to be able to get a lot more experience. It might be 10 years, but we've got plenty of radiologists already.

Geoffrey Hinton in 2016

(Hinton received the Turing Award)

(Hinton received the Turing Award and the Nobel Price (physics) for his work in Machine Learning)







'Responsible Innovation Communication' speaks to three bodies of literature

<u>Literature on Expectations &</u> Narratives

Expectations and narratives are performative as they ...

... raise attention & legitimise investments.

... provide direction in the search processes of science and technology. ... coordinate actors in research and innovation processes (Borup et al. 2006).

Literature on Responsibility & Hype

Issue of responsibility in communication is particularly visible due to Al hype.

Specific constellation of hyperbolic expectations and actors staging them in ways that garner affect and attention (Bareis, Bordignon, Roßmann 2023).

Literature on Researchers' Identities & Practices

Researchers regularly have to navigate situations of ambivalence (Audétat 2015) or value tensions (Hackett 2005; Müller 2025).

For instance, they navigate the ambivalence between making promises about societal relevance and remaining veracious in their extrapolations.



Our research interest: We trace how **researchers** perceive of the **wider expectations and narratives** around AI and how they perceive of **,responsibility** in communicating their work.





We conducted interviews and a workshop to understand how experts deal with ambivalences

Interviews

- Researchers working on medical AI systems
- n = 12 (10 Professors, 2 Postdocs)
- Backgrounds: Physics, Mathematics, Computer Sciences,
- (second round of interviews ongoing)

Research Questions

How do researchers working on/with Medical AI perceive of and engage with expectations towards their work?

Findings

Researchers navigate situations of ambivalence, in which they have to decide between two opposing communicative goals, through three Narratives of Limited Agency.

Lego Serious Play Workshop

- Multi-stakeholder Workshop
- Participants (n=9) from AI-related research, science communication, Science and Technology Studies (STS),

What role can we assign to communication when discussing responsible research and innovation?

Open question: how to address structures that *dis*incentivize responsible communication?





Narrative of Limited Agency (a): Going along with the hype to secure funding

Ambivalence

Wanting to accurately represent one's work



Wanting to secure funding

"

It's so pointless to talk about intelligence here, because what is it? But that's just the result of the hype. You have to go along with it every now and then if you want to have money for your own research. Statistics are just boring. Nobody understands it and it's hard to sell. But if we say we have an intelligent system, then the politicians, the donors will usually be all ears and society too, of course.

Prof_02_CS





Individual researchers feel like they have no choice but to go along with the hype, assuming that others will do the same.





Narrative of Limited Agency (b): Narrating what the media wants

<u>Ambivalence</u>

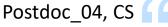
Wanting to accurately represent one's work



Wanting to secure funding



"Sat.1-breakfast TV, don't laugh, they were here once and filmed a short programme. It was about the fact that AI will soon be able to assess scans independently. I then tried to contextualise it by saying that we were researching it and were very optimistic that it would be a great method, but in the end, of course, the clip was edited to show that this company is now on the verge of bringing it into routine".





Individual researchers feel like they have no choice but to go along with the hype, assuming that others will do the same.





Narrative of Limited Agency (c): Failing to change narratives by private stakeholders

Difficulty

Wanting to be an authoritative voice in Al discourse



Being constantly outcommunicated by private stakeholders.



We do black magic with AI. It's driven by companies that are selling stuff. There's a marketing machinery behind that is disgusting [laughs]. There's a lot of this culture, the Californian Tech thing rebranding basic terms with fancy general intelligence. I mean, you can see that I find a bit frustrating. (Prof_08, CS)



Individual researchers feel powerless in the face dominant corporate PR around AI.

What is a problem, are **these American CEOs who preach us something**. (Prof_07, Physics)







Narratives of limited agency highlight structural factors hindering 'responsible communication'

Narratives of limited agency

Structural factor hindering responsible communication

i) Going along with the hype because AI sells



i) Assumed hyperbolic expectations of funders and policy-makers

ii) Narrating what the media wants



ii) Media Logics

iii) Trying to change narratives, but failing



iii) Dominance of private communicators & the narratives they disseminate





Workshop: Imagining a concrete programme of action to foster responsible communication is difficult

Recap - Three structural Visions of Responsible Programme of factors hindering Communication: **Action:** responsible Including diverse communication: stakeholders, Assumed hyperbolic Taking a expectations of funders communicative Media Logics break, Dominance of private stakeholders





Where to go from here?

What sets the current communication ecosystem around AI apart from other cases?

- Expectations across societal and economic domains,
- Role of private research and *communication* about private research,
- Strong problematisation of private research communication by researchers in public institutions.

Challenges for TA & STS

- Understand the limitations of ,responsible' visions and narratives in fields symbolically/discursively/materially dominated by private research stakeholders.
- Paying attention to the incentive structures governing communication around emerging technologies (to publics, funders, ...) – what is necessary for incentive structures that foster ,responsible' communication?

Literature

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