

## **Workshop A - Technology, Algorithms & Journalism**

**Location: Langeveld 0.18**

### **ABSTRACTS OF THE TOPICS**

#### **Unboxing Journalistic AI: Understanding Algorithmic News Distribution in Chinese Newsrooms**

*Joanne Kuai, Department for Geography, Media and Communication, Karlstad University*

AI and algorithms in news media have been adopted in the whole news value chain. However, many questions remain in our interrogation of the crucial role that AI and algorithms play in the information ecosystem, our everyday life and our society in general. With AI's expected transformative power to our society and its revolutionizing power over journalism, how the technology is being used in Chinese newsrooms is worth further scrutiny as China promotes its global alternative to liberal democracy.

One of the most important ways in which AI has the potential to override the values of journalism is the notion of autonomy when algorithms bypass journalists in the creation, curation and distribution of news. This study intends to study how algorithms work in China's biggest news aggregator platform Jinri Toutiao, led by Beijing-based tech firm ByteDance, by diverse methods including document analysis, expert interview, walkthrough method and algorithm audit, in a bid to understand how the introduction of algorithms in the news value chain impacts journalism autonomy. Understanding how the algorithms in news distribution work pave the way for further inquiries into who it works for and for what purposes. That is to say, understanding how AI works pave the way to address the issue of how we align the goals of AI with our goals and, ultimately, what our goals are. In so doing, the study also aims to advance our knowledge of how China uses technologies to control the information ecosystem and increase our understanding of the shifting dynamics between news organizations, tech platforms and the government in an authoritarian regime and a repressive media system.

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#### **Metrics as a signifier and catalyst of journalism values**

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Digital metrics are seen as increasingly useful to guide and evaluate editorial decisions in online newsrooms (Lamot & Paulussen, 2020). Initially, much debate concerned audience clicks as commercialisation and driver of sensationalist news (Fürst, 2020), but with time, metrified targets and evaluations have become "the new normal" in journalistic production (Christin & Petre, 2020). By empirically looking at the case of the Swedish news industry, the purpose of this study is to analyse how metrics are used as a managerial strategy to rationalise journalism labour, and ultimately, its implication for journalism's norms and practices. The material contains of interviews on two levels: strategic management (individual) and journalists (focus groups) plus textual sources of trade press articles, internal documents, published interviews, etc. According to neo-institutional theory, the organisational field's stability is an important feature to become acknowledged as a societal institution (Meyer & Rowan, 1977; Vos, 2019). The questions is how this technological change have impacted the internal norms, beliefs, values, practices, and identities of journalists, i.e. the meso-level linking the daily activities within news organisations with the macro-level of journalism as an institution (Ryfe, 2006).

Metrics are in this study conceptualised as a signifier and a catalyst of journalism values in relation to changed economic and managerial conditions: A signifier in terms of making managerial evaluation and strategies visible, a catalyst in terms of metrics' capacity to stir conflicts and tension, and thereby uncover values and ideology. This study contributes to research on the cultural and material innovation in newsrooms summed up as *measurable journalism*, and more specifically, to the organisational understanding of this diffusion in a digitally mature country with a strong press tradition like Sweden.

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## **Practices of Artificial Incompleteness: Limitations for the Materialization of Trustworthy AI**

*Tessa Oomen, Erasmus School of History, Culture and Communication, Erasmus University Rotterdam*

The black box and opaque nature of AI systems can be harmful to society; thus, the European Union has shifted its focus towards the development of desirable AI, now Trustworthy AI. This requires a change in AI development practices to ensure that this trustworthiness materializes in AI systems. As members of an EU-funded project, we conducted a multi-sited ethnography-based study to explore AI developer experiences Trustworthy AI development. Analysis of observations of consortium meetings, interviews, document analysis, and researcher notes followed the principles of thematic analysis.

The results showed two key outcomes. First, Trustworthiness materializes in/through non-technical practices associated with AI development. Developers pay attention to how trustworthiness stems from non-technical practices, such as publishing, open (recursive) communication with audiences, and collaboration with reputable partners. Legal frameworks were not found to stimulate the development of Trustworthy AI. Second, trustworthiness can never fully materialize in AI systems. Trustworthy AI development is faced with issues of Translation that limit the materialization of trustworthiness, through three themes emerging from the data, namely Transformation, Visualization, and Revelation.

In conclusion, Trustworthy AI faces significant challenges to become a reality. However, this should not mean it is a futile endeavor. In reflecting on the incompleteness of translations and what practices are involved, both research and practice can improve and strengthen future work on desirable AI.

Keywords: artificial intelligence, Trustworthy AI, trustworthiness, materiality, communication, communicative constitution of organization

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## **An industry is born: Investigating livestreaming cultural production in China**

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Livestreaming, as an innovative technological force, is continuously shaping today's digital media landscape. Livestreaming refers to 'broadcast video streaming services provided by web-based platforms and mobile applications that feature synchronous and cross-modal (video, text, and image) interactivity' (Cunningham et al. 2019:722) and has been taken up by many social media platforms incorporated into their media systems (such as Instagram Live, YouTube Live, etc.). In the West, Twitch, as the most successful livestreaming platform, fosters an industry mainly based on the broadcasting and viewing of video-gaming content. However, livestreaming cultivates a more complex industry structure in China.

The livestreaming industry plays an important part in China's wanghong<sup>1</sup> economy, which is constituted by various actors including social media and e-commerce platforms, wanghong content creators and their agent companies, Multi-Channel-Networks (MCN) institutions, as well as brands and online retail (Han 2020). It introduces diverse modes of cultural production and monetization (Cunningham et al. 2019) and disrupts the existing media governance framework in China. An important question emerged: How does China's livestreaming industry evolve into its current form? Hence, this PhD project aims to unravel the relation between individual subjectivity and creativity, institutional forces, technological and socio-political conditions that commonly shape the cultural production of livestreaming in China.

Using the production of culture perspectives (Peterson & Anand, 2004) as a theoretical framework, this research investigates the entangled dynamics of different actors in China's livestreaming industry. It first offers a historical overview of the emergent industry, and situates its development in the local social, political, and economic context (technology, law and regulation; market),

highlighting the interactions between the state and platforms. Then it uses Douyin as a case study to reveal how platforms affect content production and cultural practices (industry structure) through their policies, interfaces, and affordances. Lastly, it turns its focus to the inner working routines of MCN institutions (organisation structure) and individual livestreamers (occupational career) to offer "complex, ambivalent, and contested" (Hesmondhalgh, 2019: 98) details of cultural production in the industry.