



IAMCR 2022 Pre-conference (Zoom Online)

Big Data in Communication Research: A Contextual Turn?

Friday 8 July 2022 | 09:00 – 18:00 Beijing time (UTC+8)|

Xi'an Jiaotong – Liverpool University



Xi'an Jiaotong-Liverpool University
西交利物浦大學





Participation and registration

Participation at the event is free of charge, but registration is compulsory. Please use the following link to register by **1 July 2022**.

https://ucph-ku.zoom.us/webinar/register/WN_mZ3UHsrBQbuFjKtOHxPDgg

Language

English will be the event's working language.

Convenors and organisers

- Jun Liu, the Center for Tracking and Society and Department of Communication, University of Copenhagen, Denmark.
- Xianwen Kuang, Department of Media and Communication, Xi'an Jiaotong-Liverpool University, China. IAMCR Beijing 2022 Local Organizing Committee Member and IAMCR member.
- Simon Schweighofer, Department of Media & Communication, Xi'an Jiaotong-Liverpool University, China.

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Program of the IAMCR Pre-Conference: Big Data in Communication Research: A Contextual Turn?

Friday, 8 July 2022 | 09:00 – 18:00 Suzhou/Beijing time | 01:00 – 10:00 UTC

Opening Ceremony 09:00 – 09:15

Moderator

Xianwen Kuang, Xi'an Jiaotong-Liverpool University, China.

Opening remarks

Nico Carpentier, Professor, President of the International Association for Media and Communication Research (IAMCR).

Changfeng Chen, Professor, Executive Dean of the School of Journalism and Communication, Tsinghua University, & Honorary President of the Chinese Association for History of Journalism and Communication.

Beibei Tang, Senior Associate Professor, Dean of the School of Humanities and Social Sciences, Xi'an Jiaotong-Liverpool University (XJTLU).

Xiaoling Zhang, Professor and Head of Department of Media and Communication, Xi'an Jiaotong-Liverpool University, China. Member, Central Organizing Committee & Local Organizing Committee, IAMCR 2022.

Keynote Speech 1 09:15 – 10:15 (45 mins + 15 mins Q&A)

Moderator

Simon Schweighofer, Xi'an Jiaotong-Liverpool University, China.

Speaker

Cuihua (Cindy) Shen, Professor, University of California, Davis, USA; Chair, Computational Methods Division, the International Communication Association.

Tea Break 10:15 – 10:20

Plenary Session 1 10:20 – 12:00 Big data, sentiments and emotions (15 mins for each presentation)

Moderator

Xianwen Kuang, Xi'an Jiaotong-Liverpool University, China.

Papers & Speakers



Paper 1: Could Social Bots' Sentiment Engagement Shape Humans' Sentiment on COVID-19 Vaccine Discussion on Twitter

Menghan Zhang, Ze Chen, and Xue Qi, Soochow University, China & Jun Liu, University of Copenhagen, Denmark.

Paper 2: Agenda Shifting and Sentiment Changing in the Japanese Newspaper during the COVID-19 Pandemic

Haichun Yu, Waseda Institute of Political Economy, & Mikihiro Tanaka, Faculty of Political Science and Economics, Waseda University; Life Sciences Communication, University of Wisconsin-Madison, USA.

Paper 3: Smartphone use during midnight and emotional health among young people
Yan Liu & Hongfa Yi, School of Journalism & Communication, Shanghai University, China.

Paper 4: Research on Netizens Discussions on Russo-Ukrainian War in Twitter: Topic Modeling and Sentiment Analysis

Qiong Dang, the School of Journalism and Communication, Guangxi University, China; the Department of Communication Sciences, Free University of Brussels, Belgium.

Paper 5: Emotional Arousal and Issue Drift: A Study of Computational Communication of Online Verbal Violence in Public Discussion

Xiyu Cao, Department of Journalism and Communication, University of Chinese Academy of Social Sciences, China.

Lunch 12:00 – 13:30

Plenary Session 2 13:30 – 15:00 Social Media, big data and ethnography (15 mins for each presentation)

Moderator

Simon Schweighofer, Xi'an Jiaotong-Liverpool University, China.

Papers & Speakers

Paper 1: Blood, Kin and Code: Capturing Chinese social media data from Copenhagen
Mace Ojala, Qiuyu Jiang and Rachel Douglas-Jones, IT University of Copenhagen, Denmark.



Paper 2: Attribution analysis of "political depression" of social media users in public security emergencies under big data environment

Quanzheng Han, School of Journalism & Communication, Tsinghua University, China.

Paper 3: Contextual turn or big data turn? On the potential for computational methods within ethnography

Brad Limov, School of Journalism and Media & Technology and Information Policy Institute, University of Texas at Austin, USA.

Paper 4: Tracing networks of collaboration: A digital ethnography of travel influencers

Christian Ritter, Department of Media and Communication, Erasmus University Rotterdam, the Netherlands.

Tea Break 15:00 – 15:10

Plenary Session 3 15:10 – 16:40 Norms, Policies, Ethics and Discourse: Contextual Consideration for Communicating Data and AI in China (15 mins for each presentation)

Chair

Joanne Kuai, Karlstad University, Sweden.

Discussant

Jun Liu, University of Copenhagen, Denmark.

Papers & Speakers

Paper 1: Automated Media in China – A Systematic Literature Review on Chinese Automated Media, its Development and Uses in Chinese Media Outlets

Hanna Tuulonen, University of Helsinki, Finland.

Paper 2: Journalistic AI's Chance to Work for Democracy in China's Context

Bibo Lin, University of Oregon, USA.

Paper 3: Exploring the Normative Dimension of AI Innovation in Media in China: A Case Study of Chinese Copyright Law and its impact on Automated Journalism

Joanne Kuai, Karlstad University, Sweden.

Paper 4: Clear up the Confusion: A Tentative Framework for Research on AI Ethics

Junhua Zhu, University of Turku, Finland.



Tea Break 16:40 – 16:50

Keynote Speech 2 16:50 – 17:50 (45 mins + 15 mins Q&A)

Moderator

Jun Liu, University of Copenhagen, Denmark.

Speaker

Christian Baden, Associate Professor, Hebrew University of Jerusalem, Israel.

Closing remarks 17:50 – 18:00

Jun Liu, Xianwen Kuang, & Simon Schweighofer



Abstracts

Keynotes

Keynote 1: Computational communication research: Challenges and opportunities

Cuihua (Cindy) Shen, UC Davis & the Computational Methods Division of ICA

Abstract: Most “digital traces” of human activities are communicative in nature, offering unprecedented opportunities for communication scholars to explore and theorize about the way humans think, behave and interact. Computational communication is an emerging subfield that leverages computational tools to gather, analyze and make sense of digital datasets to understand human communication phenomena. In this talk, I will first discuss the two categories of big data most relevant for communication scholars, content and digital footprints, and their characteristics and research implications. Lastly, I will discuss recent trends and challenges of computational communication, and suggest promising directions to propel the field forward.

Bio: Cuihua (Cindy) Shen is a professor of communication at UC Davis, the co-director of the Computational Communication Research lab. From 2017 to 2022, she was the vice chair and chair of the Computational Methods Division of ICA. She is also the founding associate editor of the journal Computational Communication Research, as well as the associate editor of Journal of Computer-Mediated Communication.

Keynote 2: The Power of Babel: How the neglect of linguistic and cultural diversity undermines the advance of computational communication science

Christian Baden, Hebrew University of Jerusalem

Abstract: Over the past decades, social science text analysis has undergone profound transformation. Besides the expansion of digital textual data and the rapid advance of computational technologies, the field has experienced a far-reaching, accelerating process of internationalization. With the transnationalization of digital communication, also global communication scientific discourse has begun to include diverse scholarly communities and research sites. Despite this internationalization, however, many conceptual foundations, but also most methodological approaches and analytic technologies remain firmly rooted in Western, typically anglophone contexts. Yet, while De-Westernization has gained some salience as a subject in communication theory and research, the same is not true in scientific discourse about communication research methods, and especially computational textual analysis methods. As a consequence, many available strategies and tools remain ill-adapted to the study of textual data in other settings and languages, with far-reaching implications both for the quality of scientific research, and for the development of the field as a whole. Besides numerous threats to measurement validity and the considerable additional efforts required for applying available methodologies to non-WEIRD, especially culturally heterogeneous



and multilingual research settings, especially the comparability of findings and the cumulative creation of scientific knowledge across cultural and linguistic boundaries presents important challenges. In this intervention, I depart from what has been introduced as the “Babel problem” in computational text analysis to argue that the neglect of linguistic and cultural diversity not only limits the utility of computational analyses in many cases, but threatens to undermine the development of theoretically grounded, controllable strategies for computational communication research per se. Identifying key sources of bias, non-commensurability, and unequal opportunities that are hard-coded into contemporary big data analysis, I propose a research agenda toward a more explicit modeling of cultural and linguistic differences, and a more inclusive, de-Westernized computational communication science.

Bio: Christian Baden is Associate Professor at the Department of Communication and Journalism at the Hebrew University of Jerusalem, affiliated with the Center for Interdisciplinary Data Science Research (CIDR), and visiting fellow at the Weizenbaum Institute for the Networked Society, Berlin. His research focuses on dynamic processes of meaning negotiation, contestation and consensus formation in public discourse, with specific attention to the role of framing, cultural resonance, meaning multiplicity, and diversity of presented viewpoints. Integrating computational and manual, quantitative and qualitative approaches, his work has proposed novel strategies for the operational modeling of complex semantic constructs in evolving natural discourse. Specifically, his work aims to illuminate challenges to measurement validity, nuance and accountability that arise from available methodological strategies and computational technologies in social science text analysis. Within the European research infrastructure project OPTED (www.opted.eu), he is presently heading an effort to conceptualize the challenges raised by multilingualism in computational textual analysis.

Panel paper abstracts

Plenary Session 1 Big data, sentiments and emotions

1.1 Could Social Bots' Sentiment Engagement Shape Humans' Sentiment on COVID-19 Vaccine Discussion on Twitter

Zhang Menghan, Chen Ze, Qi Xue, Soochow University, China & Liu Jun, University of Copenhagen, Denmark.

Abstract: During the COVID-19 pandemic, social media has become an emerging platform for the public to find information, share opinions, and seek coping strategies. Vaccination, one of the most effective public health interventions to control the COVID-19 pandemic, has become the focus of public online discussions. Several studies have demonstrated that social bots actively involved in topic discussions on social media express their sentiments and emotions, which affects human users. However, it is unclear whether their sentiments affect human users' sentiments of COVID-19 vaccines. The work identified social bots and built an innovative computational framework, i.e.,



BERT-CNN sentiment analysis framework, to classify tweet sentiments at the three most discussed stages of COVID-19 vaccines on Twitter from December 2020 to August 2021, thus exploring the impacts of social bots on online vaccine sentiments of humans. Then, the Granger causality test was used to analyze whether there was a time-series causality between the sentiments of social bots and humans. The findings revealed that social bots can influence human sentiments about COVID-19 vaccines. Their ability to transmit the sentiments on social media, whether in the spread of positive or negative tweets, will have a corresponding impact on human sentiments.

1.2 Agenda Shifting and Sentiment Changing in the Japanese Newspaper during the COVID-19 Pandemic

Haichun Yu and Mikihiro Tanaka, Waseda University, Japan.

Abstract: This study examines the changing trajectories of Japanese newspaper articles in agenda-setting and the level of sentiment shifting, focusing on fear, worry, and anxiety conveyed in the news coverage of COVID-19 in Japan. Yomiuri Shimbun, the top circulating newspaper in Japan, was selected for this study, and over 180,000 news articles published between January 2020 and January 2022 were collected. This study adopted the automated content analysis approach. First, the topic modeling is utilized to explore the changing main agendas in Yomiuri's reports. Through the model of Latent Semantic Scaling (LSS), it then puts a particular focus on examining the sentiment embedded in news articles in the context of increasing or decreasing numbers of confirmed cases in Japan. It finds out that in Yomiuri's news reporting, the "anti-pandemic" and "economic recovery" appeared as opposing agendas. The finding also reveals that ever since the third wave of COVID-19 infections, the level of fear, worry, and anxiety reflected in Yomiuri's reports has begun to fade. The design of this study also considers the Japanese context, and the function of traditional mass media in shaping public understanding and risk perception of COVID-19 is highlighted.

1.3 Smartphone use during midnight and emotional health among young people

Yan Liu, Hongfa Yi, Shanghai University, China.

Abstract: Background: Though a large number of studies show smartphone use at midnight may lead to sleep depletion¹ and depression², it remains unclear the specific pattern of smartphone use and how these patterns relate to users' emotional health. The paucity of research may partly be due to the difficulty of data acquisition, as previous studies on smartphone use often rely on self-reported data that may not accurately record the complete smartphone use activities. In this study, we integrated log tracking data and survey data to explore the effect of smartphone midnight use. In particular, using O-S-R model³, we examine the relationships between time spent, switching between different smartphone applications and emotional health (Figure 1).

Method: Over one million log data were collected from 372 college students across mainland China. All participants were asked to download an application named "App Usage Tracker" on their smartphone and to keep the app tracker running throughout the data collection. Participants transmitted their tracker data after use for one-week data (Monday to Sunday) and finished one online survey. 360 participants were included in the final data analyses (Table 1).



Results: We found switch frequency during midnight was positively associated with users' negative emotion. Moreover, switching from social media services (SNS) to entertainment during midnight was positively associated with negative emotion; whereas, switching from entertainment to SNS was negatively associated with negative emotion (Table 2).

Discussion: Using computational methods and integrating O-S-R model, this study explore midnight smartphone use among college students. While computational methods provided accurate data for analyses, O-S-R model provided a theoretical framework, which can take contextual elements (e.g., predisposition, smartphone midnight use, and demographics) into consideration when addressing the issue. The findings advance researchers understanding of the relationships among smartphone use and provide practical implications.

1.4 Research on Netizens Discussions on Russo-Ukrainian War in Twitter: Topic Modeling and Sentiment Analysis

Qiong Dang, Guangxi University, China; Free University of Brussels, Belgium.

Abstract: By using texting mining techniques, the study reported in this paper aimed to evaluate the topics, opinions and emotions of Russo-Ukrainian War found on Twitter. An Application Programming Interface (API) streaming method was used to extract the data from Twitter, ranging from 24.02.2022 to 24.03. 2022. A total of over a million tweets were collected using Twitter streaming API. However, after data cleaning, a total of 384,760 tweets were considered for analysis. The objectives of the study are twofold: (1) to identify the topics users tweet about Russo-Ukrainian War; (2) to detect the emotion-based sentiments in the tweets. The study used Latent Dirichlet Allocation (LDA) algorithm for topic modeling and the Louvain algorithm for semantic network clustering. NRC emotion lexicon was used for sentiment analysis. The LDA model discovers six topics: dehumanization of war, US intervention, Putin's military intentions, NATO expansion, establishing a new international order and sanction. While the Louvain algorithm detects three clusters: discussion on the legitimacy of war, president and national media image and people's suffering and emotional community; Sentiment analysis results highlight that the netizens show more negative emotions about Russo-Ukrainian War than the positive ones. The study contributes to existing literature by providing a fresh perspective on various interconnected topics of Russo-Ukrainian War that bring global opinions together to readers an overall understanding of Russo-Ukrainian War.

1.5 Emotional Arousal and Issue Drift: A Study of Computational Communication of Online Verbal Violence in Public Discussion

Xiyu CAO, University of Chinese Academy of Social Sciences, China.

Abstract: Using the concepts of emotional arousal and issue drift, this study discusses the linguistic violence in flaming among Internet users on social media platforms. The study adopts the method of sentiment analysis in deep learning, particularly the BERT, which is an NLP pre-training model, for public discussions against "Tesla" on Weibo. And the article uses the top 20 popular original



posts of “Tesla” topic as research samples and crawls 23419 first-level comments and 15231 second-level comments, involving 19686 participating users. The study finds that the correlation between the sentiment of first-level comments and online verbal violence in second-level comments, the relationship between the views of online verbal violence comments and article topics, and the distribution and contribution values of online violence subdivision topics are analyzed. It is found that the heterogeneity of sentiment affects the likelihood of violence, and online violent comments appear to drift from the original topics, but the damage to publicness lies in the rhetorical wrapping of online violence, and the viewpoints present an “ambiguous” pattern. In addition, this study also discusses the “moral self-perception”, ethics, and social regulations of verbal violence in public sphere.

Plenary Session 2 Social Media, big data and ethnography

2.1 Blood, Kin and Code: Capturing Chinese social media data from Copenhagen

Mace Ojala, Qiuyu Jiang and Rachel Douglas-Jones, IT University of Copenhagen, Denmark.

Abstract: In mixed methods approaches, it has become increasingly common to anticipate or prepare for ethnographic fieldwork using a range of digital methods. This paper is a reflexive account of the process and practices around online data collection, drawing on a research project on the emergent Social Credit System (SCS) in China, in which fieldwork in China was indefinitely postponed due to the COVID-19 pandemic. The research team conducted initial reviews of a range of experimental cities in which SCS features had been introduced. In these reviews, the 2019 introduction of blood donation as a means of gaining social credit arose as a moment of high public discussion of the SCS, its scope and purpose. To research this case more deeply from afar, we decided to explore the possibility of collecting data from Weibo, a platform which is both a host of debates and a means by which other sources are shared. In this paper we reflect on collaboration, coding efforts, and the assemblages of kin relations required to make remote access feasible. We put forward detailed method descriptions of practice alongside critical reflections on decisions, conditionalities and contingencies of conducting social media research from our setting, in 2021. We contribute firstly a critical engagement with the infrastructure, technical and human capacities required to conduct this work from Copenhagen. Secondly, we contribute to critical data studies and communication studies by looking not only at the context of the data collected, nor only at its context of analysis, but at how these two are brought together. As such, we aim to more deeply contextualize the use of computational methods in social anthropology. Overall, we argue for contextualizing and localizing when working with computational methods.

2.2 Attribution analysis of "political depression" of social media users in public security emergencies under big data environment

Quanzheng Han, Tsinghua University, China.

Abstract: After two years of outbreaks, in fact, any mammal exposed to a long-term stressor will produce Pavlovian fear. In particular, the superposition of other public security emergencies during



the pandemic will make users in social media produce a kind of "political depression". Taking the users on the microblog platform during the period from the air crash of China Eastern Airlines on March 21 to the closure of Pudong on March 28 in Shanghai as an example, this study explores the representation of patients with depression through crawler acquisition technology in three aspects: personal information, communication and microblog content, and then extracts the corresponding characteristic variables, establishes the user statistical identification model, and clusters some user comments, Combined with social network analysis and LDA theme model, this paper extracts the key elements of the comment text, obtains the comment attribution dimension, finally analyzes the emotional tendency of each dimension through the emotional analysis software, and finds out the factors affecting the "political negative" emotional tendency of microblog users, so as to provide suggestions for the government to deal with public opinion. The results show that microblog users mainly comment on the two events from seven aspects: event subject, event analysis, event handling, social relations, news media, empathy and personal experience. Among them, event analysis, event handling, event subject and social relations are the main influencing factors of microblog users' emotional tendency of "political depression". Based on this, this paper puts forward corresponding public opinion counseling suggestions. Based on the attribution theory, this paper creatively puts forward the attribution dimension system that affects the emotional tendency of political depression of social media users, but the concentration of public opinion events is limited and no more fine-grained emotional classification analysis is carried out.

2.3 Contextual turn or big data turn? On the potential for computational methods within ethnography
Brad Limov, University of Texas at Austin, USA.

Abstract: This paper explores the productive relationship between big data and context for digital ethnography, and by extension, what ethnographers can contribute to the computational social sciences. Starting from immersion within a social context for an extended period of time, digital ethnographers inductively and iteratively explore the online mediations of places, events, communities, and their stories (Pink et al., 2015). While this "thick description" (Geertz, 1973) of online social phenomena has its benefits in that it can "uncover people's emotions, stories, and models of their world" (Wang, 2016, para. 7), it is of a very different scale than big data and the generalizability of the knowledge it produces can be tenuous. While computational methods aspire to such a generalizable scale, they require operationalization that can strip data of its context. A combination of the two approaches can be powerful. As Tricia Wang explains, "thick data can rescue big data from the context-loss that comes with the processes of making it usable" (Wang, 2016, para. 7).

To this end, I will present the 2020 Austin Film Festival as a case study and examine how its community engaged with its events online. Based on a corpus of tweets (N = 3,597) streamed from Twitter API using the `stream_tweets2()` function of the `rtweet` package (v0.7.0; Kearney, 2019), I first create a time series of the tweets with `ts plot()` before engaging in a number of natural language processing analyses that include structural topic modeling via the `stm` package (v1.3.6; Roberts et al., 2019). These analyses uncover online conversations that augment participant observations.



Though the corpus is small, its size further contributed to my theorization of the Austin Film Festival as a niche “trade media event,” more focused on trade rituals and “consensus-building interactions” (Caldwell, 2008, p.104) among writers than a broader mass audience.

2.4 Tracing networks of collaboration: A digital ethnography of travel influencers

Christian Ritter, Erasmus University Rotterdam, the Netherlands.

Abstract: Drawing on a case study of travel influencers sharing videos on the platform YouTube, this paper explores how digital ethnography can enhance computational research. The researched travel influencers mainly worked as freelancers, aspiring to earn a livelihood from monetising audiovisual content on YouTube. The main purpose of this paper is to assess the methodological opportunities and pitfalls of combining ethnographic research with computational methods in the age of big data. While following the influencers to their travel destinations in Europe and Southeast Asia, I documented their videomaking expertise and collaborations with local tourism professionals. Complementing ethnographic fieldwork with computational methods (Born & Haworth, 2017; Madsen et al., 2018; Ritter, 2021), I retrieved social network data with the software NodeXL. I queried YouTube’s Application Programming Interface for data about the travel destinations that the researched travel influencers portrayed in their YouTube videos. The paper offers a methodological reflection on the data paradox of assessing platform practices. On the one hand, ethnographers can observe how users assign specific meanings to platform practices in particular local contexts (e.g., Douglas-Jones et al., 2021). However, on the other hand, the data infrastructures of digital platform store manifold digital traces of platform practices, making possible network visualizations (Jacomy et al., 2014; Lomborg & Bechmann, 2014). The investigation into travel influencers demonstrates how boundaries between ethnographic data and natively digital data evolve in the research process. Finally, I discuss how ethnographic fieldwork can illuminate the contextual elements of API-based research.

Plenary Session 3 Norms, Policies, Ethics and Discourse: Contextual Consideration for Communicating Data and AI in China

3.1 Automated Media in China – A Systematic Literature Review on Chinese Automated Media, its Development and Uses in Chinese Media Outlets

Hanna Tuulonen, University of Helsinki, Finland.

Abstract: Since 2016 the development of artificial intelligence (AI) in the Chinese media field has been fast. Several Chinese state and commercial media outlets use AI in content production, management and distribution, and the development and use of AI is a part of China’s 13th and 14th five-year plan as the country aims to become the center of global AI innovation by 2030. Yet little is known in the field of social sciences in Western countries about the development and use of AI in Chinese media outlets, how they use it, why they use it and what kind of effects it has on local and



global media. Even in China research in the field of media and AI is rare. According to professor Xiuli Wang from the School of New Media and professor Xiaojun Wan from Wangxuan Institute of Computer Technology at Peking University, most Chinese research on news automation is done in the field of computer science, not social science. This article conducts a systematic literature review on known knowledge and research, compiling how Chinese media uses automation and AI in news production, what kind of systems are used, how data is collected and processed, and what kind of influence it has on media practices and content locally and globally. The aim of the article is to compile information from Western, African, and Asian databases to create a ground zero for future research on this topic. The timeframe of the systematic literature review spans from 1984 to 2022. This time period has been selected because precision journalism was first used in China in 1984. The aim is to then map out the development of data-journalism through 2011-2012 to news automaton in 2022.

3.2 Journalistic AI's Chance to Work for Democracy in China's Context

Bibo Lin, University of Oregon, USA.

Abstract: China usually fails to meet western standards to be counted as a democracy (Strömbäck 2005), and media reportage and scholarly inquiry on the use of AI in China are repetitively stuck in a Cold War-style of “Authoritarianism versus Liberal Democracy” (Zeng, 2020; Gravett, 2020). Under this paradigm, journalism in western countries has been seen as fundamental for facilitating democracy, whereas journalism in China (and many non-western countries) was habitually treated as only playing the “mouthpiece” function for the government, disguising its other roles, such as mediator, educator, storyteller, watchdog, and more, to the society (Hanitzsch & Vos, 2018). This paper calls for thinking beyond the obsolete “Authoritarianism versus Democracy” paradigm, and when discussing the possibilities that Journalistic AI might work for democracy, particularly in non-Western countries, more historical and societal contexts should be addressed. Journalism in China, for instance, cannot be seen as a mere extension of the Chinese government, though the professionalization of journalists indeed is under the government's tight control. However, journalists are still seen as engaging in “democracy”—and opposing totalitarianism—in the way they are encouraged to give voice to the people's interests, even as such journalistic efforts are mostly limited to “non-sensitive” topics. For instance, the “Mass line” mechanism is crucial for journalism in China, via which the government requires journalists to “(come) from the mass, (return) to the mass,” and “work for their benefit” (Wang, 2020, p.122). In this way, Chinese Journalistic AI has the potential to promote “democracy” and revise the dichotomy of Authoritarianism VS. Liberal Democracy by effectively assisting journalists to provide accurate, relevant, and diverse information about the public to the government.

3.3 Exploring the Normative Dimension of AI Innovation in Media in China: A Case Study of Chinese Copyright Law and its impact on Automated Journalism

Joanne Kuai, Karlstad University, Sweden.



Abstract: In January 2020, a Chinese court ruled in favour of copyright protection for an article written by algorithms (China Daily Global, 2020). It found in favour of Chinese tech giant Tencent, who had sued an online platform for unauthorized publishing of content written by its news-writing bot Dreamwriter. The case marked the first time China had granted legal protection for AI-generated works. The case also coincided with the 30th anniversary of the Chinese Copyright Law, which was under discussion for its third revision. Came into force on June 1st, 2021, the amendments included “new types of works” due to “the development of the Internet, AI and big data”. Journalism and other institutions clash over automated news generation, algorithmic distribution and content ownership worldwide. AI policies are the main mechanisms that establish and organize the hierarchies among these institutions. Few studies, however, have explored the normative dimension of AI in policymaking in journalism, especially beyond the West. This case study inspects the copyright law’s impact on AI innovation in newsrooms in the unexamined Chinese context. Using neo-institutional theory, policy network theory, the study investigates the third amendment to Chinese Copyright Law, exemplary court cases regarding automated journalism copyright disputes (such as Tencent v. Yingxun and Film v. Baidu), and other supporting documents. The findings show how China’s copyright legal framework separates authorship and ownership; defines “originality” and “creativity” in human-machine collaboration; and prioritises tech companies while undermining journalism autonomy. We argue that the law’s eager embrace of AI may give tech companies an advantage over news organisations that do not necessarily have a strategy to adopt AI. Moreover, it favours state-owned, resource-rich official media over the private sector.

3.4 Clear up the Confusion: A Tentative Framework for Research on AI Ethics

Junhua Zhu, University of Turku, Finland.

Abstract: While AI scandals are constantly making the headlines, AI ethics has become almost a buzzword that everyone keeps referring to. Ethics, which fundamentally refers to the perception of something being right or good, can also be divided into disciplines like applied ethics, normative ethics, and meta-ethics. Depending on the type of AI and the genre of ethics scholars select as their research subject, debates under the name of AI ethics can range from whether that algorithm is biased to whether one human can get married with a robot. This paper is proposed to offer a tentative framework for categorizing discussions on AI ethics. To this end, this paper will identify the representative ethical issues of all three types of AI and their respective implications in applied ethics, normative ethics, and metaethics. Applied ethics of ANI, as seemingly the most common category, problem-oriented and aims to find out the risks, bugs, and misuses that violate the predetermined norms. Debates in this category are therefore questions of “to be”. One typical example is the privacy-security dilemma. Whether such a tradeoff is legitimate lies at the heart of debates under normative ethics that addresses questions about living in the world of AI and call for political actions to examine the pros and cons of AI technologies, to strike a balance between the conflicting norms, and to find out eventually how AI should be utilized. It is, therefore, governance-oriented and a question of “ought to be”. In addition, meta-ethics of AGI, blending the questions of “to be” and “ought to be”, elevates the discussion to a philosophical level. It is metaphysics-oriented



and probes into the fundamentals of those ethical norms such as whether AI with enough autonomy can and should be considered as a moral agent.