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SHORT ARTICLE

Multimodal approaches to the reconstruction of street protest events using publicly available information: methodological issues

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ABSTRACT

Multimodal reconstruction of street protest events combines news media and social movement organization (SMO) texts with audio-visual (A/V) sources and is an opportunity to conduct and enhance analyses of protest. However, there are fundamental issues that the nascent literature on this topic has not adequately considered. These issues include the various forms of bias from the sources of A/V materials and the ethical issues of both incorporating public surveillance technologies and archiving the data. We discuss biases from media, SMOs, and researchers, and the ethical issues of creating a sophisticated research panopticon to holistically collect and monitor protests past and present, and in archiving such potentially intrusive data.

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Street protest; protest event analysis; multimodal; bias; ethics

To study past street protest events, social scientists can reconstruct them through a variety of data. To reconstruct a street protest event, information on the event's time, place, actors, demands, actions, and interactions is required. This can be attempted with protest event surveys, in-depth interviews with protesters, and participant observation, among other methods. However, if one wants to reconstruct many past street protests, text from media or movement protesters' websites are major data sources (Dollbaum, 2021; Murdie & Bhasin, 2011). In the last two decades, innovations such as the internet, smartphones, and related technologies have proven ideal for public surveillance of street protests, and, concomitantly, news media organizations, social scientists, and governments have eagerly used these them to capture audio and visual information for analysis (Rigney & Smits, 2023; Wilson & Serisier, 2010). Modern social movements increasingly prioritize such aural and visual representations; they use the internet for transnational communication and visual tools as a means to mobilize, establish a shared language, express a collective identity, and construct memorable brands to entice the public (Doerr & Teune, 2008).

Sociologists and political scientists, among others, have begun to combine text with publicly available audio-visual sources (A/V) for the multimodal reconstruction and analysis of street protest events (Day et al., 2019; Steinert-Threlkeld, 2019; Way, 2020; Ngwenya et al., 2022; see also Erickson, 2011). In this approach, protests are forms of multimodal communication via text, audio, and visual materialities (Santiago de Roock, 2020; Kress & Bezemer, 2023).

The nascent methodological literature in sociology and political science on how scholars can add A/V to text in a multimodal approach to reconstruct street protest events has various shortcomings. Most such articles on protesters' and movements' use of A/V tend to be descriptive with thematic

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analysis (e.g. Brown et al., 2017; Liinason, 2023). Some are broadly supportive of the general uses of A/V (Mattoni & Teune, 2014). There are a few helpful guides, but they focus narrowly, e.g. how to interpret protest banners and photos (Philipps, 2012), and how to use videos to observe situational dynamics during protest events (Nassauer & Legewie, 2019). Few consider the multiple bias problems that multimodality presents. Fewer still raise ethical issues in collecting and archiving A/V and text data together (Richardson, 2020).

We raise these practical and ethical issues in the use of publicly available information, via a multimodal approach, for the reconstruction of street protest events. Multimodality has a cost in terms of bias and ethical dilemmas in archiving A/V sources (Richardson, 2020). Thus, we also discuss the bias of media, organizers, and researchers, and the ethics of collecting and archiving multimodal – combined text and A/V – materials. We raise the issue that there are ethical problems in archiving reconstructed protests from multimodal data with regard to the European Union's 'right to be forgotten', especially within democratically backsliding nations.

Multimodal analysis of street protests

In multimodal approaches, scholars combine diverse types of data sources to gain a more comprehensive and nuanced understanding of the event of interest. These data may be publicly available, and such data can originate from mainstream or alternative news articles, as well as statements from social movement organizations (SMOs).

In addition to text, media outlets and protest participants often provide pictures of some kind, and photographs of people, banners, and placards are a visual snapshot of protest moments. The 'visual' aspects directly depict what protesters created and carried to the protest (Philipps, 2012). They provide a glimpse into the materiality of the events, including objects, as well as bodies and a setting of the assembly. Photos and videos also capture the dynamics of events, e.g. the movement of crowds; interactions between protestors, authorities, and the physical environment; the progression of the protest; and any sequences that might not be evident in still images.

The audio track, as well as other sound recordings from the protests, give researchers access to another aspect of materiality. 'Audio' captures the sounds of events, e.g. speeches, vuvuzelas, and chants, in what can be called a rhythmic code of communication. Delving into the sonic realm of protests involves an examination of the role of protest songs, the widespread distribution of protest sounds through online and social platforms, the creation of new musical adaptations inspired by these sounds, and even the development of entire soundtracks and playlists (Angkasa, 2023; Stanisz, 2018). The digital collection of these non-textual aspects allows researchers to trace the overall material aesthetics of protest (Brown et al., 2017).

The strength of a multimodal approach lies in its capacity to furnish a more precise and comprehensive understanding of events, thereby potentially reducing biases or constraints that arise from a reliance on singular data sources. The multimodal approach can be a form of triangulation and verification, e.g. whether the A/V materials are what the media or SMO text described in terms of place and main participants. In the process of fact-checking, A/V could also add new knowledge about the protest.

The bias of media, organizers, and researchers

Biases in both data collection and analysis in protest reconstruction impact qualitative and quantitative research in many disciplines, e.g. sociology, political science, ethnography, and geography. For sociologists and political scientists, especially in Protest Event Analysis (PEA), newspaper media is a primary source for protest reconstruction and analyses; as such, media bias has long been a prominent concern. Sources of potential error encompass selectivity bias, description bias, and systemic bias (Earl et al., 2004). Selectivity bias questions whether certain protests are more likely to receive media coverage than others

and is influenced by factors such as the perceived newsworthiness of events, presence of violence, counter-demonstrators, protest size, symbolic actions, and temporal proximity to larger events (Hellmeier et al., 2018; Wouters, 2013). Description bias concerns the frequency and accuracy of information provided by the media, including instances where insufficient detail is provided (Earl et al., 2004). Systemic bias concerns whether the media exhibits biases related to time, geography, and other factors in their selection and description of events. Scholars have observed differences in protest coverage between local and national press outlets, as well as between liberal/leftist and conservative media (Rucht & Neidhardt, 1998).

Although SMOs and other protest organizers also supply text and A/V materials for social media, mainstream, and alternative press, scholars rarely discuss their biases. One form is selection bias, where SMOs may emphasize certain protest aspects, such as large turnouts or peaceful conduct, while potentially overlooking conflicting incidents or divergent perspectives. Engaged in framing strategies, SMOs, akin to the media, may use emotionally charged language and imagery to elicit specific resonant responses, such as solidarity or outrage (Benford & Snow, 2000). Narrative bias emerges through selective sourcing and a focus on testimonials that align with the organization's narrative, which may under-represent alternative voices in the crowd with differing imaginations regarding the protest's causes, demands, and aesthetics (Ślosarski, 2021). Response bias may appear in disseminated documents, as SMOs may emphasize feedback from ardent supporters that would overshadow critical or diverse viewpoints. Through collaboration with or creation of alternative media, SMOs may portray protests positively to counteract the stigmatizing 'protest paradigm' (Xu, 2022).

We, the researchers, also have our biases (Nassauer & Legewie, 2019, Theodossopoulos, 2014). Our status as scientific observers places us in a privileged position where we can view the protests from afar, and select and monitor what we want. We may fail to see our own preconceptions and established patterns of thinking and thus allow ourselves to be seduced by 'attractive' data and overlook what is 'boring' or 'obvious' (Miles & Huberman, 1984).

Bias in media reporting, by the protest organizers, and in the researchers' own perspectives, present a significant challenge to accurately reconstruct past street protest events. Relying solely on either text or A/V content will not solve the bias problem. Whereas A/V materials offer unique perspectives that augment our understanding of protest events, there are inherent limits: some are intentionally employed to evoke emotional responses, and the capability to falsely manipulate high-resolution sound and images via Artificial Intelligence (AI) and other technological means is a daunting challenge. Researchers should acknowledge that A/V representations are the result of iterative modifications, embedded conventions, and technological advancements, and thus recognize them as arenas in which power dynamics make some phenomena more visible and others less (Zuev & Bratchford, 2020). It is important to recognize biases and make them explicit, even if we cannot, at present, eliminate them.

Ethics, archiving, and the right to be forgotten

As in the case of textual data, collecting, analyzing, and archiving protest images, videos, and audio raise important ethical questions in their preservation (Richardson, 2020). A key issue is the protestors' 'right to be forgotten' and the potential harm to researchers, journalists, and other interested actors that make protest data public, especially for those fearing state reprisals. The potential for harm can come from authoritarian or liberal democratic governments. Even when researchers use A/V as secondary data and combine, catalog, and merge them with other data, and thus make these data publicly available in their new form, there are ethical issues in data preservation and dissemination. Various entities process identical or similar data (about the same protest event) for diverse purposes, which complicates the effective exercise of the 'right to be forgotten' by

individual protesters. And yet, a paramount concern is to respect protester anonymity, privacy, and informed consent (Traianou & Hammersley, 2021).

In legal terms,[1] the 'right to be forgotten' is designed to protect those who request that personal data which reveals political opinions, philosophical beliefs, or organizational affiliations (Article 9 of the GDPR) be erased from a specific dataset (Article 17 of the GDPR). However, this right can conflict with freedom of expression and access to information (Article 10 of ECHR). Such tension could be reviewed by the court in specific cases with particular regard to the right to privacy (Article 8 of ECHR). Some may argue that data from protest events may expose violence or misconduct by protesters, law enforcement, or others, providing evidence for prosecutors. In cases involving data with clear scientific importance, arguments for public interest, academic research, and knowledge advancement may carry more legal weight than an individual's right to be forgotten (recitals 156–157 GDPR).

If social scientists wish to accurately reconstruct protest events, there must be a data collection plan that is feasible with regard to time, personnel, and funding; and, of course, it must be ethical. In essence, a truly holistic process of protest event reconstruction could be tantamount to a 'research Panopticon' that would challenge ethical norms of anonymity, privacy, and informed consent of protesters. The ethical objections stem from the legal issues raised above and from the moral idea behind the 'right to be forgotten': protest participants did not have the opportunity to consent to the use of their captured materiality, even when it was the media or SMOs that captured it (see also Traianou & Hammersley, 2021).

Preserving the right to privacy and anonymity when using A/V, particularly during the creation and archiving of datasets, is important (Richards, 2012). Tools exist to obscure faces and make individual identification from video difficult, but rogue actors may eventually be able to defeat these protections (Aronson et al., 2018); at the same time, there are advancements in the collection of multimodal data (O'Halloran et al., 2021) and the classification of protest images using sophisticated computational techniques (Steinert-Threlkeld et al., 2022) that also push against ethical boundaries.

To drive this point home, consider a dystopian yet logical vision of the future: If we heed the lessons of the last decade, social scientists can no longer assume that democracy will endure. The government, which paid for that data through grants to academic researchers, may not be a democracy (e.g. Russia), or may be backsliding (e.g. Hungary), or at threat of backsliding (e.g. the United States). Social scientists working in democratic countries risk building a protest event dataset for a future authoritarian government.

Yet, these data help us to understand the very democracy that is under threat. Our obligation as scientists is to report, raise questions, and address the ethical issues and implications of multimodal protest research that uses publicly available data.

Note

1. We discuss the European Union's data protection framework, grounded in the Regulation 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (GDPR) [2016] OJ L 119/1, and European Convention for the Protection of Human Rights and Fundamental Freedoms (ECHR), Rome (Italy), 4 November 1950, in force 3 September 1953, available at: https://www.echr.coe.int/documents/d/echr/Convention_ENG.

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References

Angkasa, W. (2023). Synchronous chanting in Indonesian social movement repertoires: A tool for emoting and for manipulating emoters. *Human Arenas*. https://doi.org/10.1007/s42087-023-00360-8

Aronson, J. D., Cole, M., Hauptmann, A., Miller, D., & Samuels, B. (2018). Reconstructing human rights violations using large eyewitness video collections: The case of Euromaidan protester deaths. *Journal of Human Rights Practice*, *10*(1), 159–178. https://doi.org/10.1093/jhuman/huy005

Benford, R. D., & Snow, D. A. (2000). Framing processes and social movements: An overview and assessment. *Annual Review of Sociology*, *26*(1), 611–639. https://doi.org/10.1146/annurev.soc.26.1.611

Brown, D. A., Evangelinidis, E., & Martinović, M. (2017). Visual dimensions of protest: Three examples from the Balkans. *Knowledge Cultures*, *5*(5), 69–95.

Day, S., Seedat, M., Cornell, J., & Suffla, S. (2019). A multimodal reading of public protests. *Environment & Planning C Politics & Space*, *37*(6), 1005–1023. https://doi.org/10.1177/2399654418818550

Doerr, N., & Teune, S. (2008). *Visual codes in movement: When the protest imagery hits the establishment*. Retrieved February 23, 2024, from https://protestkuriosa.files.wordpress.com/2008/05/doerr-teune.pdf

Dollbaum, J. (2021). Protest event analysis under conditions of limited press freedom: Comparing data sources. *Media and Communication*, *9*(4), 104–115. https://doi.org/10.17645/mac.v9i4.4217

Earl, J., Martin, A., McCarthy, J. D., & Soule, S. A. (2004). The use of newspaper data in the study of collective action. *Annual Review of Sociology*, *30*(1), 65–80. https://doi.org/10.1146/annurev.soc.30.012703.110603

Erickson, F. (2011). Uses of video in social research: A brief history. *International Journal of Social Research Methodology*, *14*(3), 179–189. https://doi.org/10.1080/13645579.2011.563615

Hellmeier, S., Weidmann, N. B., & Rød, E. G. (2018). In the spotlight: Analyzing sequential attention effects in protest reporting. *Political Communication*, *35*(4), 587–611. https://doi.org/10.1080/10584609.2018.1452811

Kress, G., & Bezemer, J. (2023). Multimodal discourse analysis. In M. Handford & J. P. Geep (Eds.), *The Routledge handbook of discourse analysis* (2nd ed., pp. 139–155). Routledge.

Liinason, M. (2023). The performance of protest: Las tesis and the new feminist radicality at the conjunction of digital spaces and the streets. *Feminist Media Studies*, *24*(3), 430–447. https://doi.org/10.1080/14680777.2023.2200472

Mattoni, A., & Teune, S. (2014). Visions of protest: A media-historic perspective on images in social movements. *Sociology Compass*, *8*(6), 876–887. https://doi.org/10.1111/soc4.12173

Miles, M. B., & Huberman, A. M. (1984). *Qualitative data analysis: A sourcebook of new methods*. Sage.

Murdie, A., & Bhasin, T. (2011). Aiding and abetting: Human rights INGOs and domestic protest. *The Journal of Conflict Resolution*, *55*(2), 163–191.

Nassauer, A., & Legewie, N. M. (2019). Analyzing 21st century video data on situational dynamics—issues and challenges in video data analysis. *Social Sciences*, *8*(3), 100. https://doi.org/10.3390/socsci8030100

Ngwenya, N., Malherbe, N., & Seedat, M. (2022). Multimodality, cultural production, and the protest event: Considerations of space, politics, and affect in South Africa. *Multimodality & Society*, *2*(2), 114–130. https://doi.org/10.1177/26349795221099903

O'Halloran, K. L., Pal, G., & Jin, M. (2021). Multimodal approach to analyzing big social and news media data. *Discourse, Context & Media*, *40*, 100467. https://doi.org/10.1016/j.dcm.2021.100467

Philipps, A. (2012). Visual protest material as empirical data. *Visual Communication*, *11*(1), 3–21. https://doi.org/10.1177/1470357211424675

Richards, N. M. (2012). The dangers of surveillance. *Harvard Law Review*, *126*, 1934. https://doi.org/10.1017/9781316459607.001

Richardson, A. V. (2020). The coming archival crisis: How ephemeral video disappears protest journalism and threatens newsreels of tomorrow. *Digital Journalism*, *8*(10), 1338–1346. https://doi.org/10.1080/21670811.2020.1841568

Rigney, A., & Smits, T. (Eds.). (2023). *The visual memory of protest*. Amsterdam University Press.

Rucht, D., & Neidhardt, F. (1998). Methodological issues in collecting protest event data: Units of analysis, sources and sampling, coding problems. In D. Rucht, R. Koopmans, & F. Neidhardt (Eds.), *Acts of dissent: New developments in the study of protest* (pp. 65–89). Edition Sigma.

Santiago de Roock, R. (2020). Digital selves, material bodies, and participant research tools: Towards material semiotic video ethnography. *International Journal of Social Research Methodology*, *23*(2), 199–213.

Ślosarski, B. (2021). A strategic toolbox of symbolic objects: Material artifacts, visuality, and strategic action in European street-protest arenas. In B. Abrams & P. Gardner (Eds.), *Symbolic objects in contentious politics* (pp. 39–53). University of Michigan Press.

Stanisz, A. (2018). Antropologia dźwięku wobec protestów społecznych i politycznych. *Zeszyty Naukowe Uniwersytetu Jagiellońskiego Prace Etnograficzne*, *46*(1), 89–115. https://doi.org/10.4467/22999558.PE.18.005.8686

Steinert-Threlkeld, Z. C. (2019). The future of event data is images. *Sociological Methodology*, *49*(1), 68–75. https://doi.org/10.1177/0081175019860238

Steinert-Threlkeld, Z. C., Chan, A. M., & Joo, J. (2022). How state and protester violence affect protest dynamics. *The Journal of Politics*, *84*(2), 798–813. https://doi.org/10.1086/715600

Theodossopoulos, D. (2014). On de-pathologizing resistance. *History and Anthropology*, *25*(4), 415–430. https://doi.org/10.1080/02757206.2014.933101

Traianou, A., & Hammersley, M. (2021). Is there a right not to be researched? Is there a right to do research? Some questions about informed consent and the principle of autonomy. *International Journal of Social Research Methodology*, *24*(4), 443–452. https://doi.org/10.1080/13645579.2020.1801276

Way, L. (2020). *Analysing politics and protest in digital popular culture: A multimodal introduction*. SAGE Publications Ltd.

Wilson, D., & Serisier, T. (2010). Video activism and the ambiguities of counter-surveillance. *Surveillance & Society*, *8*(2), 166–180. https://doi.org/10.24908/ss.v8i2.3484

Wouters, R. (2013). From the street to the screen: Characteristics of protest events as determinants of television news coverage. *Mobilization: An International Quarterly*, *18*(1), 83–105. https://doi.org/10.17813/maiq.18.1.y6067731j4844067

Xu, M. (2022). How mainstream and alternative media shape online mobilization: A comparative study of news coverages in post-colonial Macau. *Journalism and Media*, *3*(3), 453–470. https://doi.org/10.3390/journalmedia3030032

Zuev, D., & Bratchford, G. (2020). *Visual sociology: Practices and politics in contested spaces*. Palgrave Pivot.