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TO SCREENSHOT OR NOT TO SCREENSHOT? TENSIONS IN REPRESENTING VISUAL SOCIAL MEDIA PLATFORM POSTS

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Introduction

The rise to prominence of visual social media platforms (VSMPs) including TikTok, Instagram, and YouTube has led to increasing amounts of research attention directed to these platforms. As research engages multimodal platforms, representing their content (including text, audio, image, and video components) increasingly becomes both important and complex. The AoIR Internet Research Ethics (IRE) 3.0 guidelines stipulate that “we need to elaborate an ethics addressing the distinctive issues clustering around the production, sharing, and thereby research on visual images” (Franzke et al., 2020). In this paper, we begin making such an elaboration, describing considerations necessary when representing screenshots. We provide an overview of four current approaches to representing VSMP posts and annotate their tensions.

Prior Examinations of Screenshots

The act of screenshotting is non-neutral, and produces its own media artifact. One notable discussion of this artifact format is (Frosh, 2018), which provides an in-depth historical and media form analysis of the screenshot. This details how the screenshot’s design both invisibilizes its existence as its own media object, and makes it function as an evidentiary artifact (see also (Jaynes, 2020)). Other researchers have discussed how

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screenshots can be used to hold structural powers accountable (Jenkins & Cramer, 2022).

Prior research has discussed screenshots' privacy implications, and how researchers can learn from fan archives' practices (Drouin, 2021) and online remix cultures (Fiesler & Bruckman, 2014). (Shore & Prena, 2023)'s recent study of users' screenshotting behaviors reveals how non-researchers conceptualize screenshots' privacy risks. Further, we find (Cagle, 2021)'s discussion of researching nonconsensually-captured images informative. Cagle argues that both looking at and sharing these images can be ethically fraught, and urges for obtaining informed consent from those represented along with 'ethical ekphrasis' as text-only or text-in-addition description of images (Cagle, 2021).

It is important to note issues of representation in research images have significant histories. One example is the "Lena" image of a Playboy Magazine model, used in early computer vision research without the model's consent (Mulvin, 2021a, 2021b).

Current Practices of VSMP Screenshot Inclusion

To ground our discussion of tensions in screenshotting VSMPs, we synthesize common practices in existing research. Representations of these media tend to come in four primary forms: 1) text-only descriptions, 2) unaltered screenshots, 3) partially-altered screenshots, and 4) drawings. Text-only descriptions do not represent posts visually, but through verbal descriptions, such as (Vázquez-Herrero et al., 2022) and (Kennedy, 2020). Unaltered screenshots are not subsequently edited before being included in research outputs, such as (Maddox, 2023), and (Bhandari & Bimo, 2022).

Partially-altered screenshots have visual elements blurred or altered, such as obscuring creators' faces (e.g. (Lundy, 2023)) or blurring account usernames (e.g. (Khoury et al., 2023)). These alterations can include blocking less personally-identifiable information, such as (Vizcaíno-Verdú & Abidin, 2023)'s replacing "like" counts alongside blurring creators' faces. Our final example of screenshot practices is when researchers draw, rather than screenshot, posts. Examples include (Abidin, 2018), (Stephenson et al., 2024), and the conference presentation of (Biggs et al., 2023).

Alongside image formats of VSMP screenshots, we also see diversity in what screenshots are taken. While most previously-referenced papers include a single screenshot per video, some of the four-screenshot composites in (Vizcaíno-Verdú & Abidin, 2023) may be of subsequent frames within one video. This reveals important methodological questions — what frame do you choose to screenshot moving images? How do researchers convey cuts between different video parts, or choose a "typical" frame for a particular camera setup within a video? How do static portrayals reduce nuance and encode researchers' biases by freezing complex subjects at selected moments in time? Compositing multiple screenshots to account for temporality, or using artistic techniques such as blur lines, could help address these challenges.

Ethical Tensions Regarding VSMP Screenshots in Research

As the IRE guidelines (franzke et al., 2020) argue, representing multimodal data is particularly ethically fraught. Below, we outline three value questions researchers should

reflect upon when including VSMP screenshots (or not): what is *(in)visible*, what is *consensual*, and what is *legal*, when representing VSMP posts? Similar to (Schafer et al., 2023), we do not prescribe guidelines or resolutions, but instead describe critical considerations.

First, researchers should address the tension between the values of attribution and anonymity. Posts by VSMP creators represent significant creative labor. On one hand, invisibilizing this labor through anonymization can harm creators by not crediting them. On the other hand, visibility can elicit further scrutiny or harassment (Alcoff, 1991). Researchers have demonstrated creators often navigate calibrated visibility using complex folk theories (DeVito, 2022), and this navigation has been discussed in prior AoIR research (Stegeman et al., 2022). Adding unintended visibility could cause harm by undermining creators' efforts to be seen only in specific contexts (Dym et al., 2019). Visibility is also problematized for those studying harmful media on VSMPs, from media captured nonconsensually (Cagle, 2021), to misinformation or otherwise objectionable content, when researchers might want to avoid giving this content the "oxygen of amplification" (Phillips, 2018).

Another tension for researchers to navigate is around degrees of *informed consent*, particularly since VSMPs are known to have long, convoluted end-user license agreements (EULAs) that most users do not read before joining (Fiesler & Proferes, 2018). Since most users do not know the rights they sign away as they join VSMPs, researchers have additional responsibility to take care in representing user-generated content in their work. Researchers could consider procedures of dynamic consent (Tseng et al., 2024), and contact users whose content they are interested in highlighting, to discuss consent to use and represent such content in their papers. However, there are temporal challenges associated with dynamic consent (Halperin & McElroy, 2023) and mechanisms needed to accommodate changes in consent preferences over time, particularly when dealing with sensitive subject matters (Halperin et al., 2023). After an article's publication, researchers no longer have easy ways to remove screenshots. While consent may be difficult to adapt or dangerous to acquire for some cases, such as in (Fuchs & Meikle, 2018), considering these processes and contextual degrees of risk when representing VSMP posts is warranted.

Our third tension exists within navigating legal frameworks surrounding VSMP posts and their usage. Since posts constitute intellectual property, including screenshots could implicate researchers under copyright law. For instance, some fair use guidelines for researchers caution screenshots may be used "only for the purpose of critique" but not to "illustrate a point," and that redrawing a figure does not equate to permissible use (Association for Computing Machinery, n.d.). Additionally, platform terms of service regarding researcher data access and republication are important considerations for representing VSMP posts. However, not including screenshots, since drawings or textual descriptions may not fulfill screenshots' evidentiary role, may present its own legal challenges, such as creators alleging they were inaccurately or even defamatorily represented. Omitting screenshots may also weaken researchers' arguments, since their ability to demonstrate evidence via VSMP post representations would be diminished.

Conclusions and Future Work

In this paper, we described existing methods researchers use to represent VSMP posts, and some attendant ethical tensions in using screenshots. Beyond the tensions and overview we produced, this reveals important future research directions. These include interviewing researchers about their existing practices, exploring alternative representation methods, or studying users' reactions to the VSMP post usage in research, similar to (Fiesler & Proferes, 2018).

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References

- Abidin, C. (2018). *Internet Celebrity: Understanding Fame Online* (Illustrated edition). Emerald Publishing.
- Alcoff, L. (1991). The Problem of Speaking for Others. *Cultural Critique*, 20, 5–32. <https://doi.org/10.2307/1354221>
- Association for Computing Machinery. (n.d.). *Guidance For Authors On Fair Use*. Retrieved February 26, 2024, from <https://www.acm.org/publications/authors/guidance-for-authors-on-fair-use>
- Bhandari, A., & Bimo, S. (2022). Why's Everyone on TikTok Now? The Algorithmized Self and the Future of Self-Making on Social Media. *Social Media + Society*, 8(1), 20563051221086241. <https://doi.org/10.1177/20563051221086241>
- Biggs, H., Marcotte, A., & Bardzell, S. (2023). TikTok as a Stage: Performing Rural #farmqueer Utopias on TikTok. *Proceedings of the 2023 ACM Designing Interactive Systems Conference*, 946–956. <https://doi.org/10.1145/3563657.3596038>
- Cagle, L. E. (2021). The ethics of researching unethical images: A story of trying to do good research without doing bad things. *Computers and Composition*, 61, 102651. <https://doi.org/10.1016/j.compcom.2021.102651>
- DeVito, M. A. (2022). How Transfeminine TikTok Creators Navigate the Algorithmic Trap of Visibility Via Folk Theorization. *Proceedings of the ACM on Human-Computer Interaction*, 6(CSCW2), 1–31. <https://doi.org/10.1145/3555105>
- Drouin, R. A. (2021). (Don't) just screenshot it: Ethics of archiving fan misbehaviours. *Journal of Fandom Studies*, 9(1), 19–32. https://doi.org/10.1386/jfs_00030_1

- Dym, B., Brubaker, J. R., Fiesler, C., & Semaan, B. (2019). "Coming Out Okay": Community Narratives for LGBTQ Identity Recovery Work. *Proceedings of the ACM on Human-Computer Interaction*, 3(CSCW), 154:1-154:28. <https://doi.org/10.1145/3359256>
- Fiesler, C., & Bruckman, A. S. (2014). Remixers' understandings of fair use online. *Proceedings of the 17th ACM Conference on Computer Supported Cooperative Work & Social Computing*, 1023–1032. <https://doi.org/10.1145/2531602.2531695>
- Fiesler, C., & Proferes, N. (2018). "Participant" Perceptions of Twitter Research Ethics. *Social Media + Society*, 4(1), 2056305118763366. <https://doi.org/10.1177/2056305118763366>
- franzke, aline shakti, Bechmann, A., Zimmer, M., Ess, C., & the Association of Internet Researchers. (2020). *Internet Research: Ethical Guidelines 3.0*. <https://aoir.org/reports/ethics3.pdf>
- Frosh, P. (2018). Screenshot: The "Photographic" Witnessing of Digital Worlds. In *The Poetics of Digital Media* (pp. 158–223). Polity.
- Fuchs, C., & Meikle, G. (2018). "Dear Mr. Neo-Nazi, Can You Please Give Me Your Informed Consent So That I Can Quote Your Fascist Tweet?": Questions of Social Media Research Ethics in Online Ideology Critique. In *Routledge Companion to Media and Activism*. Routledge. <https://westminsterresearch.westminster.ac.uk/download/3771d54accbad32ff3aad192b97046846bf53526a21984caf3c25b140ef88c26/160940/Routledge%20Companion%20to%20Media%20and%20Activism.pdf>
- Halperin, B. A., Hsieh, G., McElroy, E., Pierce, J., & Rosner, D. K. (2023). Probing a Community-Based Conversational Storytelling Agent to Document Digital Stories of Housing Insecurity. *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*, 1–18. <https://doi.org/10.1145/3544548.3581109>
- Halperin, B. A., & McElroy, E. (2023). Temporal Tensions in Digital Story Mapping for Housing Justice: Rethinking Time and Technology in Community-Based Design. *Proceedings of the 2023 ACM Designing Interactive Systems Conference*, 2469–2488. <https://doi.org/10.1145/3563657.3596088>
- Jaynes, V. (2020). The social life of screenshots: The power of visibility in teen friendship groups. *New Media & Society*, 22(8), 1378–1393. <https://doi.org/10.1177/1461444819878806>
- Jenkins, B. M., & Cramer, E. M. (2022). Capturing Injustice: The Screenshot as a Tool for Sousveillance. *Howard Journal of Communications*, 33(4), 412–433. <https://doi.org/10.1080/10646175.2022.2032884>
- Kennedy, M. (2020). 'If the rise of the TikTok dance and e-girl aesthetic has taught us anything, it's that teenage girls rule the internet right now': TikTok celebrity, girls and the Coronavirus crisis. *European Journal of Cultural Studies*, 23(6),

1069–1076. <https://doi.org/10.1177/1367549420945341>

- Khoury, C., Owen-Smith, A., Joh, U., Duan, Y., & Hemsley, J. (2023). Multi-Modal Crisis Discourse and Collective Sensemaking on TikTok. *Proceedings of the Association for Information Science and Technology*, 60(1), 203–212. <https://doi.org/10.1002/pra2.781>
- Lundy, M. (2023). TikTok and COVID-19 Vaccine Misinformation: New Avenues for Misinformation Spread, Popular Infodemic Topics, and Dangerous Logical Fallacies. *International Journal of Communication*, 17(0), Article 0.
- Maddox, J. (2023). Micro-celebrities of information: Mapping calibrated expertise and knowledge influencers among social media veterinarians. *Information, Communication & Society*, 26(14), 2726–2752. <https://doi.org/10.1080/1369118X.2022.2109980>
- Mulvin, D. (2021a). Proxy Justice (or The Lena Image, Part 2). In *Proxies: The Cultural Work of Standing In* (pp. 113–144). The MIT Press. <https://direct.mit.edu/books/oa-monograph/5154/chapter/3403261/Proxy-Justice-or-The-Lena-Image-Part-2>
- Mulvin, D. (2021b). The Visual Culture of Image Engineers (or The Lena Image, Part 1). In *Proxies: The Cultural Work of Standing In* (pp. 73–112). The MIT Press. <https://direct.mit.edu/books/oa-monograph/5154/chapter/3403261/Proxy-Justice-or-The-Lena-Image-Part-2>
- Phillips, W. (2018). *The Oxygen of Amplification*. Data & Society. https://datasociety.net/wp-content/uploads/2018/05/1_PART_1_Oxygen_of_Amplification_DS.pdf
- Schafer, J. S., Starbird, K., & Rosner, D. K. (2023). Participatory Design and Power in Misinformation, Disinformation, and Online Hate Research. *Proceedings of the 2023 ACM Designing Interactive Systems Conference*, 1724–1739. <https://doi.org/10.1145/3563657.3596119>
- Shore, A., & Prena, K. (2023). Platform rules as privacy tools: The influence of screenshot accountability and trust on privacy management. *New Media & Society*, 14614448231188929. <https://doi.org/10.1177/14614448231188929>
- Stegeman, H. M., Poell, T., Duffy, B. E., Jokubauskaitė, E., Cotter, K., Velthuis, O., & Meisner, C. (2022). PLATFORMS AND THE PRECARIETY OF CREATOR (IN)VISIBILITY. *AoIR Selected Papers of Internet Research*. <https://doi.org/10.5210/spir.v2022i0.12968>
- Stephenson, S., Page, C. N., Wei, M., Kapadia, A., & Roesner, F. (2024, May 11). Sharenting on TikTok: Exploring Parental Sharing Behaviors and the Discourse Around Children’s Online Privacy. *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems*. CHI '24, Honolulu, HI, USA.

Tseng, E., Bellini, R., Lee, Y.-Y., Ramjit, A., Ristenpart, T., & Dell, N. (2024). Data Stewardship in Clinical Computer Security: Balancing Benefit and Burden in Participatory Systems. *Proceedings of the ACM on Human-Computer Interaction*, 8(CSCW1), 29. <https://doi.org/10.1145/3637316>

Vázquez-Herrero, J., Negreira-Rey, M.-C., & López-García, X. (2022). Let's dance the news! How the news media are adapting to the logic of TikTok. *Journalism*, 23(8), 1717–1735. <https://doi.org/10.1177/1464884920969092>

Vizcaíno-Verdú, A., & Abidin, C. (2023). TeachTok: Teachers of TikTok, micro-celebrification, and fun learning communities. *Teaching and Teacher Education*, 123, 103978. <https://doi.org/10.1016/j.tate.2022.103978>