

ALEXANDER DUNKEL

PUBLICATIONS

PEER REVIEWED (first-authored)

-
- 2024 **Dunkel, A., Burghardt, D., & Gugulica, M. (Accepted).** *Generative text-to-image diffusion for automated map production based on geosocial media data.* Kartographische Nachrichten. Springer.
[10.21203/rs.3.rs-3503977/v1](https://doi.org/10.21203/rs.3.rs-3503977/v1)
- 2023 **Dunkel, A., Hartmann, M. C., Hauthal, E., Burghardt, D., & Purves, R. S. (2023).** *From sunrise to sunset: Exploring landscape preference through global reactions to ephemeral events captured in georeferenced social media.* PLOS ONE, 18(2), e0280423. DOI: [10.1371/journal.pone.0280423](https://doi.org/10.1371/journal.pone.0280423)
- 2020 **Dunkel, A., Löchner, M., & Burghardt, D. (2020).** *Privacy-aware visualization of volunteered geographic information (VGI) to analyze spatial activity: a benchmark implementation.* ISPRS International Journal of Geo-Information, 9(10). DOI: [10.3390/ijgi9100607](https://doi.org/10.3390/ijgi9100607)
- 2019 **Dunkel, A., Andrienko, G., Andrienko, N., Burghardt, D., Hauthal, E., & Purves, R. (2019).** *A conceptual framework for studying collective reactions to events in location-based social media.* International Journal of Geographical Information Science, 33(4), 780–804. DOI: [10.1080/13658816.2018.1546390](https://doi.org/10.1080/13658816.2018.1546390)
- 2015 **Dunkel, A. (2015).** *Visualizing the perceived environment using crowdsourced photo geodata.* Special Issue: Critical Approaches to Landscape Visualization, Landscape and Urban Planning, 142, 173–186. DOI: [10.1016/j.landurbplan.2015.02.022](https://doi.org/10.1016/j.landurbplan.2015.02.022)

ARTICLES & CONFERENCE PAPERS (co-authored)

-
- 2023 **Weckmüller, D., & Dunkel, A. (2023).** *An application-oriented implementation of hexagonal on-the-fly binning metrics for city-scale georeferenced social media data.* The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, XLVIII-4/W7-2023, 253–260. DOI: [10.5194/isprs-archives-XLVIII-4-W7-2023-253-2023](https://doi.org/10.5194/isprs-archives-XLVIII-4-W7-2023-253-2023)
- 2022 **Weckmüller, D., & Dunkel, A. (2022).** *Developing a privacy-aware map-based cross-platform social media dashboard for municipal decision-making.* The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, XLVIII-4/W1-2022, 545–552. DOI: [10.5194/isprs-ar-chives-XLVIII-4-W1-2022-545-2022](https://doi.org/10.5194/isprs-ar-chives-XLVIII-4-W1-2022-545-2022)
- 2021 **Hauthal, E., Dunkel, A., & Burghardt, D. (2021).** *The Representation of Spatial Context by Emojis with-in Location based Social Media.* Abstracts of the ICA, 3, 1–1. DOI: [10.5194/ica-abs-3-102-2021](https://doi.org/10.5194/ica-abs-3-102-2021)
- 2021 **Hauthal, E., Dunkel, A., & Burghardt, D. (2021).** *Emojis as Contextual Indicators in Location-Based Social Media Posts.* ISPRS International Journal of Geo-Information, 10(6), 407. DOI: [10.3390/ijgi10060407](https://doi.org/10.3390/ijgi10060407)

ARTICLES & CONFERENCE PAPERS (co-authored)

- 2020 Löchner, M., Fathi, R., Schmid, D., Dunkel, A., Burghardt, D., Fiedrich, F., & Koch, S. (2020). *Case Study on Privacy-Aware Social Media Data Processing in Disaster Management*. ISPRS International Journal of Geo-Information, 9(12), 709. DOI: [10.3390/ijgi9120709](https://doi.org/10.3390/ijgi9120709)
- 2020 Gröbe, M., Dunkel, A., & Burghardt, D. (2020). *A new web map for the MeinGrün app*. Abstracts of the ICA, 2, 1–2. DOI: [10.5194/ica-abs-2-8-2020](https://doi.org/10.5194/ica-abs-2-8-2020)
- 2019 Löchner, M., Dunkel, A., & Burghardt, D. (2019). *Protecting privacy using HyperLogLog to process data from Location Based Social Networks*. In LESSON 2019—1st International Workshop on Legal and Ethical Issues in Crowdsourced Geographic Information. [URL](#)
- 2019 Andrienko, N., Andrienko, G., Chen, S., Burghardt, D., Dunkel, A., & Purves, R. (2019). *Geovisual analysis of VGI for understanding people's behaviour in relation to multifaceted context*. Abstracts of the ICA, 1, 1–2. DOI: [10.5194/ica-abs-1-10-2019](https://doi.org/10.5194/ica-abs-1-10-2019)
- 2019 Hauthal, E., Burghardt, D., & Dunkel, A. (2019). *Analyzing and Visualizing Emotional Reactions Expressed by Emojis in Location-Based Social Media*. ISPRS International Journal of Geo-Information, 8(3), 113. DOI: [10.3390/ijgi8030113](https://doi.org/10.3390/ijgi8030113)
- 2018 Löchner, M., Dunkel, A., & Burghardt, D. (2018). *A privacy-aware model to process data from location-based social media*. VGI Geovisual Analytics Workshop, colocated with BDVA 2018. Konstanz, Germany, 19. Oct. 2018. URN: <urn:nbn:de:bsz:352-2-1tc0wl382uqkr0>

BOOK CHAPTERS & ARTICLES

- 2023 “Event inventories: Estimating the temporality of landscape scenic resources from user-contributed geodata.”, Conference Proceedings, ASLA Visual Stewardship Conference 2023, Argonne National Laboratory, Lemont, US [\[link\]](#)
- 2023 Burghardt, D., Dunkel, A., Hauthal, E., Shirato, G., Andrienko, N., Andrienko, G., Hartmann, M., & Purves, R. (in press). *Extraction and Visually Driven Analysis of VGI for Understanding People's Behavior in Relation to Multi-Faceted Context*. Book Chapter, Springer, 241-270.
- 2021 Dunkel, A., Leukefeld, T. (2021). *Tag-Maps: landschaftliche Wahrnehmung in sozialen Netzwerken am Beispiel der Planungsregion Leipzig-Westachsen*. Kurzbroschüre: stadtlandnavi.de
- 2021 Hecht, R., Brzoska, P., Burghardt, D., Cakir, S., & Dunkel, A., ... (2021). *Informationen und Navigation zu urbanen Grünflächen in Städten Abschlussbericht und Handbuch zum mFUND-Projekt: MeinGrün*. November. IÖR, 2021, S.126. [URL](#)
- 2020 Dunkel, A. (2020). *Tag Maps in der Landschaftsplanung*. In: Handbuch Methoden Visueller Kommunikation in der Räumlichen Planung, Springer, 127-166, DOI: [10.1007/978-3-658-29862-3_8](https://doi.org/10.1007/978-3-658-29862-3_8)
- 2016 Schmidt, C., Dunkel, A. (2016). *Den Landschaftswandel gestalten! Entwicklung und Gestaltung der Kulturlandschaften Baden-Württembergs am Beispiel der Region Ostwürttemberg*. LUBW Landesanstalt für Umwelt, Messungen und Naturschutz Baden-Württemberg
- 2016 Dunkel, A. (2016). *Assessing the perceived environment through crowdsourced spatial photo content for application to the fields of landscape and urban planning*. Dissertation. DOI: nbn-resolving.org/urn:nbn:de:bsz:14-qucosa-207927
- 2015 Schmidt, C., Dunkel, A., Hanke, R., Lachor, M., Seidler, K., Böttner, S., Gruhl, E. (2015). *Kulturlandschaftsprojekt Mittelsachsen*. Sachsen, Dresden, 651 p.
- 2014 Schmidt, C., Dunkel, A., Hofmann, M., Schneeberger, E. (2014). *Den Landschaftswandel gestalten! Potentiale der Landschafts- und Raumplanung zur modellhaften Entwicklung und Gestaltung von Kulturlandschaften vor dem Hintergrund aktueller Transformationsprozesse*, Band 2: Regionalplanung und Landschaftsrahmenplanung, Bonn, Bundesamt für Naturschutz (BfN)
- 2014 Schmidt, C., Dunkel, A., Hofmann, M., Schneeberger, E. (2014). *Den Landschaftswandel gestalten! Potentiale der Landschafts- und Raumplanung zur modellhaften Entwicklung und Gestaltung von Kulturlandschaften vor dem Hintergrund aktueller Transformationsprozesse*, Band 1: Bundesweite Übersichten, Bonn, Bundesamt für Naturschutz (BfN)
- 2014 Schmidt, C., Dunkel, A., Lein, M., Seiche, K. (2014). *Strategische Umweltprüfung für den Flächennutzungsplan 2015 der Stadt Dresden*, 97 p.

BOOK CHAPTERS & ARTICLES

- 2013 **Schmidt, C., Dunkel, A., Hofmann, M., Lein, M. (2013).** *Strategische Umweltprüfung für den Landesentwicklungsplan 2013 Sachsen (LEP)*, 90 p., Sachsen.
- 2010 **Dunkel, A. (2010).** *Die Kulturlandschaft der Stadt Bad Schandau und ihrer Umgebung - ein Entwicklungskonzept*. Diploma Thesis, Landscape & Environmental Planning, TU-Dresden.

INVITED LECTURES, PRESENTATIONS, SYMPOSIA

- 2023 “**Estimating the temporality of landscape scenic resources from user-contributed geodata.**”, presentation (in-person), ASLA Visual Stewardship Conference 2023, Argonne National Laboratory, Lemont, US [\[link\]](#)
- 2023 “**Visuelle Analyse von Geosocial Media Daten mit Jupyter Lab**”, CartoHack #16, Deutsche Gesellschaft für Kartographie e.V. [\[link\]](#)
- 2022 **VGI and Smart Cities Workshop & Poster (EVA-VGI) at Smart Country Convention (SCCON)**, Berlin [\[link\]](#)
- 2022 “**Nutzung von Social Media für die partizipative, grüne Stadtentwicklung**” (Online), Stadt Chemnitz; with B. Hoffmann (Amt für Informationsverarbeitung); C. Beschow, S. Böhme (Stadtplanungsamt); F. Etterer (Grünflächenamt) [\[link\]](#)
- 2021 “**Decoding the perceived City**”, Trial (test) lecture as part of the interview process for tenure track at UVA, Virginia, for a joint appointment at the School of Engineering and Applied Science, the School of Data Science and the School of Architecture. [\[link\]](#)
- 2020 “**HyperLogLog for Real Time LBSM Visual Analytics. A solution to the count distinct problem and privacy?**”, presentation (Online), EvaVGI II & Remote Sensing Image Analysis, TU Berlin [\[link\]](#)
- 2019 “**Visualizing the perceived City from crowdsourced Social Media data**”, Seminar “Decoding the City”, Faculty of Architecture, TU Dresden [\[link\]](#)
- 2019 “**Social Media Visualizations and Monitoring**”, presentation, Berchtesgaden National Park, workshop on park issues from mass invasion through the global spread of information on Social Media [\[link\]](#)
- 2019 “**theplink-docker: A spatial interface to support city planning and local community discourse**”, Community Workshop, Waynesboro, VA [\[link\]](#)
- 2019 DFG-Outreach “**Research in Germany**”, AGU Fall Meeting, San Francisco
- 2018 “**Visualizing peoples’ perceptual responses to space through crowdsourced spatial photo content**”, presentation and workshop, Data Dialogue 9, School of Architecture, University of Virginia
- 2018 “**Taking into account the public’s view in landscape and urban planning: Big Data Potentials and Challenges**”, Workshop on visual communication methods in Regional Planning, Kassel, Germany
- 2017 “**Identifying Perceived Characteristics and the Collective Attribution of Values and Meaning from Social Media**”, presentation, Nexus Conference (Dresden)
- 2017 “**Visualizing VGI for application to the fields of landscape and urban planning**”, VGIscience Summer School (TU Dresden)
- 2015 „**On Empathy and Data _crowdsourced mental maps**“ presentation, with Dr. M. El Khafif (DATAlab)
- 2012 „**Open Source Cartography_ Mapping Patterns of Crowd Sourced Data**“, Guest Lecture, Panel Discussion and Exhibition, Department of Architecture URBANlab, California College of the Arts (CCA), San Francisco, USA
- 2011 „**Network-Landscapes: New control options for Landscape Architecture and Environmental Planning through the use of internet-based, international, locative media data streams**“, Guest Lecture, Fall 2011 Colloquium, Department of Landscape Architecture & Environmental Planning, UC Berkeley