

Bridging the gap: making academic journals accessible for the neurodiverse

Casna, M.; Delaney, S.; Hall, R.; Mommen, A.; Tsigoni, F.

Citation

Casna, M., Delaney, S., Hall, R., Mommen, A., & Tsigoni, F. (2024). Bridging the gap: making academic journals accessible for the neurodiverse. *Inter-Section*, 5(1), 2-3. Retrieved from https://hdl.handle.net/1887/4170405

Version: Publisher's Version

License: <u>Creative Commons CC BY 4.0 license</u>
Downloaded from: <u>https://hdl.handle.net/1887/4170405</u>

Note: To cite this publication please use the final published version (if applicable).



\$ INTER-SEGION Junior Archaeological Research Journal



INTER-SECTION DECEMBER 2024 ISSUE V

EDITORIAL STATEMENT: **BRIDGING THE GAP**

MAKING ACADEMIC JOURNALS ACCESSIBLE FOR THE NEURODIVERSE

MAIA CASNA, SARAH DELANEY, RACHAEL HALL, ANOUK MOMMEN, AND FOTEINI TSIGONI

In the past decade, the scientific community has increasingly prioritized diversity and inclusion, recognizing that these values are essential when looking towards innovation and equity in research (Forrester, 2020; Sarju, 2021). Several archaeology journals have responded by emphasizing diversity in editorial boards, promoting inclusive and ethical research practices, as well as highlighting systemic issues with the underrepresentation of specific demographics among their authors (e.g., Bardolph, 2014; Turner, 2022). Although significant progress remains to be made in achieving equality in the field of archaeology and science over the next few decades, these ongoing efforts indicate a promising trend towards a more inclusive and diverse approach to these disciplines.

In this framework, Thorp (2024) recently emphasized the importance of recognizing neurodiversity among scholars and advocated for enhanced efforts to facilitate the inclusion of neurodivergent scientists in the scientific community. A strong example of the inclusion of neurodiversity in archaeology is the Chartered Institute for Archaeologists (CIfA), which actively promotes diversity and inclusion within the profession, further contributing to this positive trend. While neurodiversity is now being addressed in higher education settings thanks to various governmental programs and university initiatives (especially after the online teaching programs adopted during the COVID-19 pandemic), this progress still struggles to translate into scientific outputs (Brinn et al., 2024; Geurts et al., 2020; Levitt, 2022). Creating opportunities for disabled and neurodiverse individuals to feel included within the structured environment of academia is both essential and valuable (e.g., Henning et al., 2022). Such inclusion fosters greater flexibility in how research questions are formulated and methodologies are approached, enriching the diversity of perspectives and enhancing the overall quality of scholarly practice (Bernard et al., 2023).

Scientific publications are the bedrock of research and academic discourse, serving as the primary medium through which new data is disseminated, debated, and built upon. Therefore, ensuring that scientific literature is accessible

to neurodivergent scholars is crucial not only for equity but also for maintaining scientific integrity and fostering progress, as it was argued that excluding a significant portion of the academic community from contributing to and benefiting from new knowledge hinders innovation and advancement (Ruzycki & Ahmed, 2022). Additionally, neurodivergent scholars deserve equal opportunity to be involved in the academic research community as those who may face fewer obstacles. Yet, journal layouts are not always accessible to diverse readers, and the scientific publishing industry appears to struggle to accommodate diverse readerships.

To partially bridge this gap—and to experiment with new approaches—this issue of Inter-Section has been designed and formatted to be accessible to a wider audience of readers. Through months of research and discussion that brought together staff members, neurodivergent graphic designers and students, as well as external collaborators, we were able to improve upon current ways of presenting to better visualize archaeology. By listening to and accommodating the diverse cognitive profiles of the individuals involved in our discussion group, we thoroughly reviewed and planned how to enhance Inter-Section's usability, engagement, and reading satisfaction.

As the font can be one of the key issues neurodivergent people may face when trying to read text, we investigated possibilities that offered an improvement. Atkinson Hyperlegible, the main font we selected for this issue, was engineered by the Braille Institute to enhance readability for people with visual impairments and dyslexia, addressing (albeit not in all cases) common challenges such as letter confusion and visual stress. Further, we gave thoughtful consideration to text and column spacing in order to prevent cognitive overload, which is particularly beneficial for readers with ADHD and other attention-related difficulties. A well-organized layout, with ample white space, guides the reader's eye naturally, reducing strain and enhancing comprehension. Color choices were equally important to us. By selecting more subdued color schemes, we aimed to create a reading environment that minimizes sensory overload. This is particularly important for individuals on the autism spectrum, who may be sensitive to bright colors or busy color schemes. A calm and consistent color palette can make the reading experience more pleasant and less distracting, allowing readers to focus on the content rather than being overwhelmed by the presentation.

While we think this issue represents a significant advancement from previous layouts adopted by Inter-Section, it is crucial that we continue to explore and implement design innovations that foster inclusivity. The use of accessible fonts, thoughtful spacing, and sensory-friendly color palettes are just the beginning: moving forward, enhancing digital accessibility will be a key focus. We aim to develop more flexible reading options, such as adjustable font sizes, text-to-speech features, and interactive content tailored to individual needs. These advancements will further ensure that our publications remain accessible to all readers.

In addition to technological advancements, involving neurodivergent individuals and those with disabilities in the design and review process is crucial, as their insights are invaluable in creating truly inclusive publications. By collaborating with those who directly experience the challenges of accessibility, we can better understand everybody's needs and preferences, leading to more effective solutions.

In conclusion, making scientific publications accessible is essential for encouraging a diverse, inclusive, and innovative research community. Our work on this issue of Inter-Section represents an important initial step towards making the journal more visually welcoming and accessible for neurodivergent readers. In the years to come, we are committed to continuing this path by exploring further enhancements and leveraging technology to provide even more flexible and adaptive reading options. Our goal is to ensure that Inter-Section not only meets the current needs of its diverse readership but also evolves to accommodate the ever-changing requirements of a dynamic and inclusive scientific community.

D IBLIOGRAPHY

D Bardolph, D. N. (2014). A Critical Evaluation of Recent Gendered Publishing Trends in American Archaeology. *American Antiquity*, 79(3), 522–540. https://doi.org/10.7183/0002-7316.79.3.522

Bernard, L., Fox, S., Kulason, K., Phanphackdy, A., Kahle, X., Martinez, L., Praslova, L., & Smith, N. A. (2023). Not your "typical" research: Inclusion ethics in neurodiversity scholarship. *Industrial and Organizational Psychology*, 16(1), 50–54. doi:10.1017/iop.2022.100

Brinn, S., Cameron, C., Fielding, D., Frankston, C., Fromme, A., Huang, P., Nazzaro, M., Orphan, S., Sigurdsson, S., Tay,

R., Yang, M., & Zhou, Q. (2024). A framework for improving the accessibility of research papers on arXiv.org. https://doi.org/10.48550/arXiv.2212.07286

Forrester, N. (2020). Diversity in science: next steps for research group leaders. *Nature*, 585(7826), S65–S67. https://doi.org/10.1038/D41586-020-02681-Y

Geurts, M. L. J. P., Al Kenany, S., & Snoei, M. (2020). *Autisme in het inclusief onderwijs*. [Unpublished thesis, Utrecht Univeristy]. https://studenttheses.uu.nl/handle/20.500.12932/39379

Henning, C., Summerfeldt, L. J., & Parker, J. D. A. (2022). ADHD and Academic Success in University Students: The Important Role of Impaired Attention. *Journal of attention disorders*, 26(6), 893–901. https://doi.org/10.1177/10870547211036758

Levitt, J. M. (2022). How we can make academia more disability inclusive. *Nature Human Behaviour*, 6(10), 1324–1326. https://doi.org/10.1038/s41562-022-01447-y

Ruzycki, S. M., & Ahmed, S. B. (2022). Equity, diversity and inclusion are foundational research skills. *Nature Human Behaviour*, 6(7), 910–912. https://doi.org/10.1038/s41562-022-01406-7

Sarju, J. P. (2021). Nothing About Us Without Us – Towards Genuine Inclusion of Disabled Scientists and Science Students Post Pandemic. *Chemistry – A European Journal*, 27(41), 10489–10494. https://doi.org/10.1002/CHEM.202100268

Thorp, H. H. (2024). Science needs neurodiversity. Science, 384(6694), 365. https://doi.org/10.1126/SCIENCE. ADQ0060

Turner, T. R. (2022). Welcome to the AJBA. *American Journal of Biological Anthropology*, 177(1), 3. https://doi.org/10.1002/AJPA.24456