

Changing scientific production in design

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1 Date, time and location

Wednesday, Oct. 11th, 11:30-13.00, B2 2.5 room

(https://www.iasdr2023.polimi.it/congress-programme/).

2 Thematic background

Publication is central to the making of science, but at the same time has become the measure by which researchers are evaluated for tenures, promotions, and grants (Fyfe, 2019). Most of the features we associate with the modern scientific journal – including originality of research, self-authorship, refereeing procedures, and standardized rhetoric and structure – were nineteenth-century developments, while big profits, the use of English as the international language of science, and the emergence of professional bodies for managing editors and publishers are largely twentieth-century phenomena (Moxham & Fyfe 2018).

The scientific publication today is going through a moment of profound change. With the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (2003) the open access paradigm has acquired great importance: according to the European Commission (2019), the future of scholarly publishing should offer researchers the possibility of participating in a distributed system of knowledge. New trends therefore emerged (Kim et al., 2018), questioning also the oligopoly of academic publishing (Larivière, Haustein, Mongeon, 2015) and the controversy about the use of impact factors (Curry, 2018; Waltman & Traag, 2021).

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In this context, the scientific publishing landscape is changing (Chiriboga, 2019). For the past 10 years scientific journals have been under continuous discussion (Cope & Phillips, 2014; Bienfield, 2014), also regarding the university press (Pochoda, 2010), the revision of editorial practices (Horbach & Halffman, 2020) and various attempts at profound change (Aalbersberg et al., 2012). Scholarly discourse, which was once restricted to printed texts, is now being produced in a variety of formats, including short videos, information visualisations, and networked writing, up to work that cannot exist in print (McPherson, 2010): new types of journal articles (visual essays, video articles, research articles) o elements (graphic abstract, interactive pdf), dynamic and contributive publication formats (Heller, The & Barting, 2014) and moreover new typologies of publishable research products (e.g. OpenAireExplore research products categories: protocols, software, data set, models...) emerged as well. Many open access publishing platforms and infrastructures have been established and have gained scientific recognition and reliability (Open Research Europe, 2021). Many scholars talk about the need to think of scholarly knowledge as an ecosystem (Altman & Cohen, 2022), proposing a holistic and integrated approach to scholarly communication (Birdsall et al., 2005).

At the same time, many changes are permeating the design field, and in particular the ones related to the digital transformation, asking for deep knowledge dissemination, fostering new discourses and representations on design (i. e. "viscourses", Bonsiepe, 2007, p.36). In the design domain, the reflection is monitoring trends in journal expansion, in the increase and acceleration of publishing, as well as improvements in the quality of publication (Cross, 2009; Atkinson, Valentine & Christer, 2021). Anyway, apart from more efficient editorial management systems, patterns of scientific publishing in design are remarkable stable (Gemser, De Bont, 2016) and the journals format, or the concept of publications, remains attached to the idea of traditional articles (Lupo, Gobbo, Lonardo, 2021). Finally, quality of perception, visual designs and reading experiences of design journals can be improved (Gemser et al. 2012; Barness, Papaelias, 2021).

In addition, scientific publishing represents a geography of power for the expression, diffusion and consolidation of scientific thinking, raising questions about the visibility and inclusion of a wider geographical range, with a specific regard towards the non-homologation of different cultures of scientific thinking and knowledge organisation (Graham et al. 2011). Design is often concerned with the concept of a peripheral vision (Bonsiepe, 2003); or marginality to which design history poses some design models (Fry, 1995) and the issue of decolonizing design, to open the hegemonic design discourse of the North to other voices (Fry, 2017).

In this context, we assume that scientific publication should enable the emergent diversity of knowledge (Boast et al., 2007).

We strongly believe that the design discipline can be a pivotal field for the experimentation and discussion of new scientific publication formats for scientific research (Lupo, 2022;

Radice, 2022). Therefore we call for the awareness and responsibility of the whole design community¹.

This topic is transversal to all the tracks of the IASDR 2023 conference, and linked to many of them: for instance [Changing] Organization and Policies; [Changing] identities.

3 Aim

This panel aims at providing an opportunity to discuss the scientific production and publication in design as a research area, sharing opinions and best practices, and envisioning new directions, methods, policies.

We want to attract and engage the IASDR community, proposing controversial ideas and including experts in the fields with different backgrounds and practices.

3.1 Discussion points

The main questions are: how is scientific production and publication in design renewing and transforming to better respond and serve to the needs of the research community and have a real social, politic and economic impact? How can design publication enable the emergent diversity of knowledge?

The panel aims at addressing the following discussion points:

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¹ In the days this panel program has been drafted, a critical situation is affecting Design Studies, the academic journal of the Design Research Society, formally published in co-operation with Elsevier Science. The recent treatment by Elsevier of the Editor-in-Chief and other Editors of Design Studies, for which "the journal is not growing, financially or editorially" and the pressure for "demanding a seven-fold increase in publications or facing closure", made the Editor-in-Chief together with the entire Editorial Board, resign their positions on the journal, on 10th of July, after various unsuccessful attempts to respond to Elsevier's action (https://www.designresearchsociety.org/articles/the-future-of-design-studies-update)

This situation proves evidence on how the power of big publishers can determine the future of scientific journals: this is obviously beyond the control and the scope of this panel but is the context we move in and we should be aware of The urge for a discussion about alternative and plural publishing models and platforms is evident.

- 3.1.1 Fostering exchanges and collaborations among scientific journals, academic institutions and open publication platforms.
- 3.1.2 Envisioning and supporting innovative (augmented, enriched, interactive, contributive and collectively-authored) forms of publication, as mixed media ecosystems of content, optional and complementary to traditional linear articles, exploring also new development in AI.
- 3.1.3 Questioning about the concept of excellence, strengthening the impact by supporting the discoverability and re-usability of knowledge beyond mere citation, for a "reputation economy" (Fetcher et al., 2017).
- 3.1.4 Reshaping the evaluation and quality assessment of these new publication forms, basing it primarily on qualitative evaluation and responsible use of quantitative indicators and by conferring the same level of academic credibility and accreditation that traditional articles receive.
- 3.1.5 Promoting choral narratives on contemporary design, for instance representing the plurality of editorial platforms, journals, initiatives and publications from different geographies outside the mainstream.

3.2 Invited contributors' speeches

Each invited contributors give a short speech, sharing his/her vision.

- 3.2.1 Eleonora Lupo (moderator): Introduction: Changing scientific production in design.
- 3.2.2 Renato Bernasconi: Emancipatory Ways of Publishing: A Case from Chile
- 3.2.3 Elena Formia: Decolonizing knowledge production: towards new frontiers through diid journal methodology
- 3.2.4 Peter Lloyd: Rethinking Publication Formats for Design Research.
- 3.2.5 Edu Jacques: Open Science and Design Publishing: a Perspective from Latin America Strategic Design Research Journal (on line)
- 3.2.6 Lasse Sherfigg: From technological solution to cultural transformation: Developing a journal of integrated design research at KISD (on line)

4 Structure of the panel

1° round talk: Speeches, with introduction of the moderator (30 min).

2° round talk: Discussion with Q&A by the moderator (30 min).

3° round talk: Q&A by the public (30 min).

References

- Aalbersberg, IJ J, Heeman, F., Koers, H. and Zudilova-Seinstra, E. (2012). Elsevier's Article of the Future: enhancing the user experience and integrating data through application. *Insights*, 25(1): 33–43
- Altman, M., & Cohen, P. N. (2022). The Scholarly Knowledge Ecosystem: Challenges and Opportunities for the Field of Information. *Frontier in Research Metrics and Analytics*, 6, 751553 Atkinson, P., Valentine, L., & Christer, K. (2021). All Change: Reflections on Design Research Journal Publishing, 2014-2021. *The Design Journal*, 24(6), 833-841.
- Barness, J., Papaelias, A. (2021). Readable, Serious, Traditional: Investigating Scholarly Perceptions of the Visual Design and Reading Experiences of Academic Journals. *She Ji: The Journal of Design, Economics, and Innovation* 7(4): 540-564.

- Bienfield, P. (2014). Novel Scholarly Journal Concepts. In S. Barting, S. Friesike (Eds.), *Opening Science. The Evolving Guide on How the Web is Changing Research, Collaboration and Scholarly Publishing* (pp. 155-163). Cham: Springer Nature.
- Birdsall, W. F. et al. (2005). Chapter 7: Towards an Integrated Knowledge Ecosystem: A Research Strategy. In *Towards an Integrated Knowledge Ecosystem: A Canadian Research Strategy, A Report Submitted to the Canadian Association of Research Libraries*. Wayback Machine.
- Boast, R., Bravo, M., & Srinivasan, R. (2007). Return to Babel: Emergent Diversity, Digital Resources, and Local Knowledge. *The Information Society*, *23*(5), 395-403.
- Bonsiepe, G., Father, J. (2003). Peripheral Vision: An Interview with Gui Bonsiepe. Charting a Lifetime of Commitment to Design Empowerment. *Design Issues*, 19 (4) (Autumn 2003): 44-56.
- Bonsiepe, G. (2007). The uneasy relationship between design and design research. In R. Michel (Ed.) Design Research Now: Essays and Selected Projects (pp. 25-39). Berlin-Basel: Birkhauser.
- Chiriboga, L. (2019). The changing landscape of scientific publishing. *Journal of Histotechnology*, 42(3), 95-97.
- Cope, B., & Phillips, A. (2014). The future of academic journals. Elsevier.
- Cross, N. (2019). Editing Design Studies and how to improve the likelihood of your paper being published. *Design Studies*, 63, A1-A9.
- Curry S.(2018). Let's move beyond the rhetoric: it's time to change how we judge research. *Nature* 554: 147.
- European Comission (2019). Future of scholarly publishing and scholarly communication Publications Office of the EU. European Commission, accessed Feabruary 21, 2022, https://op.europa.eu/it/publication-detail/-/publication/464477b3-2559-11e9-8d04-01aa75ed71a1
- Fecher, B., Friesike, S., Hebing, M., & Linek, S. (2017). A reputation economy: how individual reward considerations trump systemic arguments for open access to data. *Palgrave Communications*, 3, 17051.
- Fry, A. (1995). A Geography of Power: Design History and Marginality. In R. Buchanan, & V. Margolin (Eds.), *The Idea of Design: a Design Issues Reader* (pp. 204-218). The MIT Press.
- Fry, T. (2017). Design for/by "The Global South". Design Philosophy Papers, 15(1), 3-37.
- Gandini A. (2016). The Reputation Economy. Understanding Knowledge Work in Digital Society. Palgrave.
- Fyfe, A. (2019). Scientific Publications, c.1500–2000. In S. Eliot, G. Rose (Eds.), *A Companion to the History of the Book* (pp. 691–704). Hoboken: Wiley.
- Fyfe, A. (2020). The production, circulation, consumption and ownership of scientific knowledge: historical perspectives. CREATe Working Paper 2020/4. Zenodo. https://doi.org/10.5281/zenodo.3859493
- Gemser, G., de Bont, C.(2016). Design-Related and Design-Focused Research: A Study of Publication Patterns. *She Ji: The Journal of Design, Economics, and Innovation* 2(1): 46-58
- Gemser, G., de Bont, C., Hekkert Paul, H., & Ken Friedman, K. (2012). Quality Perceptions of Design Journals: The Design Scholars' Perspective. *Design Studies*, 33(1), 4-23.
- Graham, M., Hale, S. A., & Stephens, M. (2011). *Geographies of the World's Knowledge*. Ed. Flick, C. M., Convoco! Foundation Edition and Oxford Internet Institute.
- Heller L., The R., Bartling S. (2014). Dynamic Publication Formats and Collaborative Authoring. In S. Bartling, S. Friesike (Eds.), *Opening Science. The Evolving Guide on How the Web is Changing Research, Collaboration and Scholarly Publishing* (pp. 191-211). Cham: Springer
- Horbach, S. P. J. M., & Halffman, W. (2020). Innovating editorial practices: academic publishers at work. *Research integrity and peer review*, *5*(11), 1-15.
- Kim, S., Chung, E., & Lee, J. Y.(2018). Latest trends in innovative global scholarly journal publication and distribution platform. *Science Editing* 5(2): 100–112.
- Larivière V., Haustein S., Mongeon P. (2015). The Oligopoly of Academic Publishers in the Digital Era. *Plos One* 10 (6).
- Lloyd, P. (2023). Quality and qualities of design studies, design research and design. *Design Studies*, 84, 101161.
- Lupo, E. (2022). Changing scientific production in design. *diid- disegno industriale industrial design*, 78: 10-23.
- Lupo, E., Gobbo, B., & Lonardo, E. (2021). Towards a new design culture of scientific production—Innovating the formats of scientific publication of design. In L. Di Lucchio, L. Imbesi, L., A. Giambattista, & V. Malakuczi (Eds.), *Design Culture(s). Cumulus Conference Proceedings Roma 2021*, *Volume 2* (pp. 1082-1097). Roma: Università La Sapienza.

- McPherson, T. (2010). Scaling Vectors: Thoughts on the Future of Scholarly Communication. *The Journal of Electronic Publishing*, *13*(2). doi: 10.3998/3336451.0013.208
- Pochoda, P. (2010). Editor's Note for Reimagining the University Press. *The Journal of Electronic Publishing*, 13(2).
- Radice, S. (2022). Prode Project: a living article publishing platform. *diid- disegno industriale industrial design*, 78: 62-73.
- Trindade Perry G., Leônidas Soares Pereira, L., (2023). Global diversity in design research: A bibliometric investigation of design journals, *Design Studies*, Volume 88, Sept. 2023, 101217, https://doi.org/10.1016/j.destud.2023.101217
- Waltman L., Traag V.A. (2021). Use of the journal impact factor for assessing individual articles: Statistically flawed or not?. *F1000Research* 9: 366.

About the Authors

Eleonora Lupo: Designer, Ph.D. in Disegno industriale e comunicazione multimediale, she is an Associate Professor in Design at the Politecnico di Milano. Her main research interests are focused on Humanities and Culture Driven Innovation, Design for Cultural Heritage and Product and Processes Design Cultures. She is the scientific coordinator of the research ProDe – Scientific production in design (www.prode.polimi.it).

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