



**a.a. 2024-2025**

**Seminario Interclasse**

# ***“Tra potere della tecnologia e sfide sociali. Cosa fa il design?”***

***Prof. Paolo Ciuccarelli***

**Direttore del Center for Design – Northeastern University (Boston)**

Macerata, 4-5 marzo 2025

## **Abstract**

Il design è ovunque, ma cosa significa davvero progettare? Questo seminario propone un'esplorazione approfondita del design non solo come disciplina, ma anche come processo, attitudine e strumento critico per interpretare e trasformare la realtà. Attraverso un equilibrio tra riflessione teorica, esercizi pratici e analisi di casi studio, indagheremo il ruolo del design nell'era dei dati e dell'intelligenza artificiale, tra potenzialità trasformative e sfide sociali.

Partendo da una riflessione aperta sul significato del design, ne analizzeremo le molteplici dimensioni attraverso parole, immagini e definizioni, confrontandole con le sue manifestazioni concrete nella società. Il design sarà discusso nella sua natura molteplice, toccando temi come il design per l'emergenza e per la salute e il rapporto con la tecnologia, in un continuo dialogo tra osservazione critica e progettazione attiva.

La seconda giornata sarà dedicata al rapporto tra design e dati: come interpretarli, dar loro forma e renderli accessibili a pubblici eterogenei. Attraverso esercitazioni progettuali, rifletteremo sulla natura dei dati e sulle implicazioni delle loro rappresentazioni. Il seminario si concluderà con una lectio dal titolo Human by Design,



che approfondirà la dimensione interpretativa e umana delle tecnologie, con particolare attenzione ai temi della complessità e dell'incertezza. Esploreremo approcci e strategie progettuali per superare l'astrazione dei dati e costruire nuove forme di conoscenza, il più possibile inclusive.

Questo seminario invita a ripensare il design non solo come risposta ai problemi, ma come strumento di riflessione critica, di lettura del presente e di immaginazione di futuri possibili.

## References

### Day 01

#### Primary Sources

- Bruggeman, R., Ciliotta Chehade, E., & Ciuccarelli, P. (2023). Expanding user need finding through abductive reasoning. *Proceedings of the Design Society*, 3, 1745-1754. <https://doi.org/10.1017/pds.2023.174>
- Kim, M., Mages, M. A., Maffei, S., Ciuccarelli, P., & Villari, B. (2022). Empowering patientship. 11th Inclusive Design Conference. Helen Hamlyn Centre for Design.
- Colombo, S., & Ciuccarelli, P. (2020). Design for Emergency: An open platform to design and implement user-centered solutions in the COVID-19 pandemic. *Strategic Design Research Journal*, 13(3), 711–724. <https://doi.org/10.4013/sdrj.2020.133.12>
- Manzini, E. (2015). *Design when everybody designs: An introduction to design for social innovation*. MIT Press.
- Cross, N. (2006). *Designerly ways of knowing*. Springer.
- Maldonado, T. (2002). Defoe and the "Projecting Age". *Design Issues*, 18(1), 78-85. <https://doi.org/10.1162/07479360252756229>
- Pine, B. J., & Gilmore, J. H. (2000). *L'economia dell'esperienza: Oltre il servizio*. Etas.
- Dubberly, H. (n.d.). How do you design? Dubberly Design Office. Retrieved from <http://www.dubberly.com/articles/how-do-you-design.html>
- Simon, H. A. (1996). *The sciences of the artificial* (3rd ed.). MIT Press.



## **Secondary Sources (Further Readings)**

- Bruggeman, R., Ciliotta Chehade, E., Marion, T. J., & Ciuccarelli, P. (2024). Towards a computational model of abstraction in design reasoning. *Proceedings of the Annual Meeting of the Cognitive Science Society*, 46. Retrieved from <https://escholarship.org/uc/item/17197716>
- Ciliotta Chehade, E., et al. (2024). Mapping patient-centered design practices and actors within stakeholder networks to reimagine healthcare. In Gray, C., Ciliotta Chehade, E., Hekkert, P., Forlano, L., Ciuccarelli, P., & Lloyd, P. (Eds.), *DRS2024: Boston, 23–28 June*. Boston, USA. <https://doi.org/10.21606/drs.2024.629>
- Colombo, S., Ciliotta, E., Marengo, L., Liu, H., Molino, P., & Ciuccarelli, P. (2023). Design for Emergency: How digital technologies enabled an open design platform to respond to COVID-19. *Interacting With Computers*, 35(5), 650-665. <https://doi.org/10.1093/iwc/iwad047>
- Han, Y., Bruggeman, R., Peper, J., Ciliotta Chehade, E., Marion, T., & Ciuccarelli, P. (2023). Extracting latent needs from online reviews through deep learning-based language model. *Proceedings of the Design Society*, 3, 1855-1864. <https://doi.org/10.1017/pds.2023.185>
- Maffei, S., Bianchini, M., Villari, B., Ciliotta Chehade, E., Seitz, U., & Mages, M. A. (2023). Exploring patient-centeredness ecosystems: A collaborative approach to expand the service design horizon. *SERVDES 2023: Entanglements and Flows Service Encounters and Meanings*, 620-638.
- Monteiro, M. (2019). *Ruined by design: How designers destroyed the world, and what we can do to fix it*. Independently published.
- Escobar, A. (2018). *Designs for the pluriverse: Radical interdependence, autonomy, and the making of worlds*. Duke University Press.
- Goodman, E., Kuniavsky, M., & Moed, A. (2012). *Observing the user experience: A practitioner's guide to user research* (2nd ed.). Elsevier Science.
- Papanek, V. (1971). *Design for the real world: Human ecology and social change*. Pantheon Books.

---

## **Day 02**

### **Primary Sources**

- Lupi, G., & Posavec, S. (2018). *Observe, collect, draw! A visual journal*. Princeton Architectural Press.



- Lupi, G. (2017). Data humanism: The revolutionary future of data visualization. Retrieved from <https://www.printmag.com/article/data-humanism-future-of-data-visualization/>
- Lupi, G., & Posavec, S. (2016). Dear data. Princeton Architectural Press.
- Kitchin, R. (2014). The data revolution: Big data, open data, data infrastructures and their consequences. SAGE Publications.
- Bateman, S., Mandryk, R. L., Gutwin, C., Genest, A., McDine, D., & Brooks, C. (2010). Useful junk? The effects of visual embellishment on comprehension and memorability of charts. Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2010), 2573–2582. <https://doi.org/10.1145/1753326.1753716>
- Heer, J., & Segel, E. (2010). Narrative visualization: Telling stories with data. IEEE Transactions on Visualization and Computer Graphics, 16(6), 1139–1148. <https://doi.org/10.1109/TVCG.2010.179>
- Tufte, E. R. (1983–2006). The visual display of quantitative information (1983), Envisioning information (1990), Visual explanations (1997), Beautiful evidence (2006). Graphics Press.
- Bertin, J. (1983). Semiology of graphics: Diagrams, networks, maps (W. J. Berg, Trans.). University of Wisconsin Press. (Original work published 1967)
- Brinton, W. C. (1919). Graphic methods for presenting facts. The Engineering Magazine Company. (Available online: <https://archive.org/details/graphicmethods00brin>)

### **Secondary Sources (Further Readings)**

- Lenzi, S., & Ciuccarelli, P. (2024). Intentionality and design in the data sonification of social issues. Big Data & Society, 7(2). <https://doi.org/10.1177/2053951720944603>
- Ciuccarelli, P., & Kahn, P. (2021). From scientific visualization to public engagement: Learning from a public archive of COVID-19 related visualizations. In AA. VV. Malofiej 28: Premios Internacionales de Infografía (pp. 6-12). Society for News Design; EUNSA.
- Mauri, M., Colombo, G., Angeles, B., Ciuccarelli, P., & Others. (2019). Teaching the critical role of designers in the data society: The DensityDesign approach. Fifth International Conference for Design Education Researchers, 183–195. METU Department of Industrial Design.
- Gelman, A., & Unwin, A. (2011). Infovis and statistical graphics: Different goals, different looks. Journal of Computational and Graphical Statistics, 20(3), 529–538. <https://doi.org/10.1198/jcgs.2011.09220>



## Tools

- Service Design Tools: <https://servicedesigntools.org/>
- Financial Times Visual Vocabulary: <https://github.com/ft-interactive/chart-doctor/tree/master/visual-vocabulary>
- RAWGraphs: <https://rawgraphs.io/>