

A Place to Think in the New Information Age

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TO CITE

Hollan, J. D. (2024). A Place to Think in the New Information Age . In *Proceedings of the Paris Institute for Advanced Study* (Vol. 21). <https://doi.org/10.5281/zenodo.13588564>

PUBLICATION DATE

16/08/2024

ABSTRACT

This short note summarizes a National Science Foundation proposal completed during a research residency at the Paris Institute for Advanced Study. The goal is to communicate to a wider audience the need for a human-centered information space as a place to think in the new information age. A human-centered information space is both an idea, and a computational environment. It is the idea of a spatial cognitive workspace—a desktop for intellectual activity—reified as a computational environment that actively supports information-based work.

Acknowledgements

This brief note is a summary of a proposal submitted to the National Science Foundation. I first acknowledge this support and my co-PIs: Haijun Xia and Philip Guo at UC San Diego, Arvind Satyanayaran at MIT, and Maneesh Agrawala at Stanford. I also would like to acknowledge the members of the project advisory panel: Saadi Lahlou (LSE and Paris-IEA), Wendy Mackay (Inria), Tom Malone (MIT), Gary Olson (UCI), Roy Pea (Stanford), Justin Solomon (MIT), and Jaime Teevan (Microsoft). In addition, the proposal is strengthened by the involvement of the Human-Computer Interaction Consortium (hcic.org), the Paris Institute for Advanced Study (paris-iea.fr), organizations with extensive experience with both interdisciplinary research and interactions across multiple institutions, the French eNSEMBLE network, and Microsoft Future of Work network. Michel Beaudouin-Lafon (Universit'e Paris-Saclay) will serve as the representative from the eNSEMBLE network and Abigale Sellen from the Microsoft Future of Work network.

This paper was written during a 1-month residence at the Paris Institute for Advanced Study under the "Paris IAS Ideas" program.

Barbara Tversky in her delightful and informative book, *Mind in Motion* (Tversky, 2019), tells us that when thought overruns the mind we put it in the world. We jot thoughts on pieces of paper, whiteboards, and post-it notes. We type them into laptops and phones, highlight them in books and articles by underlining or making margin notations, and surprisingly often send them in emails to ourselves. Even if captured, we face the problem of finding them when needed. Physical media can only be in one place and often that is not where we are. If we store them in the cloud we need network access and they are often still difficult to locate. Is it in Dropbox or Google Drive, on the computer in the office or the one at home, and what was the file's name and where in the filesystem hierarchy was it placed?

Of course today we have powerful search facilities but we still confront creating a query and even if it is successful it too often returns more than we want and much that is unrelated. Unfortunately, it will not bring back the context of previous use

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