



Editorial

Virtual Reality, Critical Perspectives, and the Value of Preliminary Knowledge

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Dear Readers,

We are pleased to present this Special Issue of Preliminary Reports and Negative Results in Life Science and Humanities, titled “Virtual Reality: New Frontiers and Critical Perspectives in Life Sciences and the Humanities.” The five contributions collected here explore virtual reality and algorithmic systems across heterogeneous domains—clinical psychology, cognitive geography, language education, art education, and the history of religions—while sharing a common commitment to preliminary inquiry, methodological transparency, and critical reflection.

In continuity with the editorial philosophy of PRNR, this Special Issue emphasizes that immersive technologies should not be treated as finalized solutions, but as emerging epistemic environments whose theoretical, empirical, and cultural implications are still under construction. As previously stressed in the journal—most notably in the interview with Giacomo Rizzolatti (Massimino, 2025)—early-stage evidence and partial or negative results are often decisive for preventing premature conceptual closure. This principle is particularly relevant in the context of rapidly evolving digital tools.

The contribution addressing cyberchondria and online health research (Hill et al., 2025) exemplifies this concern at the clinical and conceptual level. Rather than consolidating cyberchondria as a stable diagnostic category, the authors interrogate its definitional boundaries and measurement assumptions, echoing earlier PRNR reflections on the need for epistemological clarity in cognitive and psychopathological research (Falzone, 2025). Digital environments are shown to amplify uncertainty as much as they promise access to information.

A second line of inquiry (Scrofani and Vincenti, 2025) is represented by the study on experiencing place through virtual reality, which situates immersive technologies within cognitive geography and territorial studies. Consistent with earlier PRNR case-based analyses of technology-driven projects (Spanò, 2025), this contribution does not equate immersion with substitution. Instead, it documents

how VR can extend spatial perception and meaning-making while remaining constrained by phenomenological and experiential limits.

Educational applications of virtual reality are explored through two distinct but complementary contributions. The first (Labadessa and Paratore, 2025) examines non-immersive VR in foreign language education, adopting an explicitly *ex ante* evaluative framework. By foregrounding accessibility, pedagogical coherence, and technical constraints, the study prioritizes methodological design over outcome-driven claims, in line with PRNR's emphasis on early-stage assessment as groundwork for future validation.

The second educational contribution (Nucita et al., 2025) proposes immersive models for art education through AR and VR, grounded in embodied cognition and neuroaesthetic perspectives. Rather than presenting empirical efficacy data, the authors advance a transferable pedagogical laboratory model, explicitly positioning their work as a conceptual and methodological proposal. This stance resonates with previous PRNR discussions highlighting the value of theoretical scaffolding in interdisciplinary research (Certo, 2025).

Finally, the Special Issue includes a contribution (Monaca and Morgante, 2025) on Retrieval-Augmented Generation systems and virtual reality in the history of religions, which brings immersive technologies into dialogue with the digital humanities. By documenting preliminary implementations and openly addressing epistemological risks, this work reinforces PRNR's longstanding concern with methodological rigor, traceability, and interpretive plurality when computational tools enter humanistic inquiry.

Taken together, these five contributions illustrate a shared conviction: virtual reality is not merely a technological frontier, but a methodological and epistemological challenge. By embracing preliminary results, critical perspectives, and explicit acknowledgment of limits, this Special Issue demonstrates how immersive technologies can be investigated responsibly across the life sciences and the humanities.

We thank the authors, reviewers, and editorial board for their contribution to this Special Issue, and we invite our readers to engage with these works in the spirit in which they are offered—as open, incremental, and methodologically grounded explorations of emerging forms of knowledge and experience.

Warm regards,

The Editorial Team

Preliminary Reports and Negative Results in Life Science and Humanities (PRNR)

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