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Reading in Europe—Challenges and lessons learned from the case studies of the READ-IT project

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Abstract

This article reflects on the challenges of combining humanistic and computational research perspectives within the framework of a multicultural and multilingual Digital Humanities project. It analyses the approach of Reading Europe Advanced Data Investigation Tool, a European project funded by JPI-CH, to the framing of its case studies within a wider perspective of interdisciplinary collaboration between humanities, digital humanities, and data science scholars. The analysis of sources ranging chronologically from the 18th century to the present and technologically from manuscript diaries to social media defines a new framework for the history of reading focused on the centrality of the human experience of the reader, and on the evolution of the medium through which reading is conducted. The interdisciplinary collaboration of the project develops a shared laboratory space where practices, languages, and research cultures converge to address both microscope and macroscope questions on the history of reading.

1 Introduction

The importance of books and reading is unquestionable in modern society, but unaddressed questions still remain. Up to now, scholars have studied the circulation of books and the ideas they convey, identified the factors that facilitate or impede the reception of such ideas in different cultural groups, but have not yet succeeded in delineating the impact of reading on the history and society of Europe. Knowledge has significantly increased over the last 40 years regarding what, where, and when people read, with focus shifting from implied or model readers to historical and empirical evidence of reading practices (Iser, 1974; Eco, 1979; Murray, 2018; Fuller and Rehberg Sedo, 2019; Ouvry-Vial, 2019; Price, 2019). Nevertheless, two major questions remain unanswered: why and how do people read? The increasing availability of digitized historical sources and the proliferation of born-digital media are multiplying the sources of possible evidence, though issues are emerging about the ownership and reliability of such large-scale datasets (Rowberry, 2019). New challenges are opening up that can only be addressed through collaboration between the disciplines of the Humanities, Digital Humanities, and Data Science.

Up to now, we have lacked a systematic and integrative approach and the tools to study the experience of reading, the effects on readers and their lives, the outcomes of reading, and what affects the reading experience of the general public within this new research paradigm. Furthermore, there are still gaps between in-depth studies and computational studies, the conceptualizations of reading in different disciplines, and the interrelation between the results of micro-scale disciplinary and macroscopic scale interdisciplinary studies (Hitchcock, 2014).

In this scenario, the questions of why and how people read should be instantiated into a set of operational challenges bridging disciplines, studies of different sources, and studies at different geographical and enquiry scales:

a) What kind of transaction exists between a reader and a text?
b) What role does the environment play in this transaction?

c) Have emotions related to reading changed throughout time and space in Europe?

d) Is it possible to sketch out the portrait of something resembling the 'European reader'?

The Reading Europe Advanced Data Investigation Tool (READ-IT)[1] project addressed these questions through a unique large-scale, user-friendly, open access, semantically enriched investigation tool to identify and share groundbreaking evidence about 18th–21st century Cultural Heritage of reading in Europe. It was a three-year (2018–21) transnational, interdisciplinary R&D project funded by the Joint Programming Initiative for Cultural Heritage. READ-IT consists of a robust consortium of five academic partners from four European countries (Institute of Czech Literature, Academy of Sciences, Prague; The Open University, UK, including the SME IN2; Utrecht University-DH Lab, Netherlands; CNRS-IRISA, Rennes and Le Mans Université-3LAM, France).

Within the work plan of READ-IT, the collection of case studies was the first significant milestone. Use cases collected in READ-IT are challenging the previous approaches adopted in projects such as the UK-Reading Experience Database (UK RED, 1996–2018),[2] the ANR-funded 'Reading in Europe: Contemporary Issues in Historical and Comparative Perspectives' project (2014–17),[3] and the Listening Experience Database project (2012 to present)[4] by going beyond the current state of the art of use cases and by requiring a significantly deeper analysis of sources.

The interdisciplinary collaboration between digital humanists, human and social sciences scholars, and computer scientists investigated innovative ways of gathering new resources through crowdsourcing and web-crawling as well as linking and reusing pre-existing datasets. READ-IT thus aims to ensure the sustainable and reusable aggregation of qualitative data, allowing an in-depth analysis of the Cultural Heritage of reading.

Case studies occupy a central place in the definition of the READ-IT data model and tools, guiding the identification of common issues, dimensions of analysis, and sources for validating and testing both the conceptual framework and the database. Case studies also configure a common research agenda for a multidisciplinary community of researchers on reading, built combining different approaches and sources spanning from social media, students' diaries, and letters, from the 18th century up to today, in Czech, French, German, Italian, and Dutch. Current case studies include: 'Digital Reading Experiences Through Social Media', 'Self-reflection', 'The places where we read', 'Reading in school diaries', 'Multilingual reading and sources', 'Reading and the reception of Romanticism', and 'Reading and censorship' (Vignale *et al.*, 2019).

The set of case studies encompasses a rich 'human archive' in multiple media and languages depicting a transaction between reading subjects and reading materials from the 18th century to the present, including web scraping and social media crowdsourced evidence of reading experiences. In this regard, the case studies define a significant corpus of approaches and questions concerning the phenomenon of reading. Specifically, the significance of the case studies depends on the breadth of periods and locations and most importantly to the different perspectives concerning situations of reading, lasting emotions and memories, immediate responses, or changes in readers' habits.

This article presents and discusses the outcomes of the interdisciplinary collaboration and knowledge creation arising from the READ-IT case studies. It highlights the lesson learned from collecting, discussing, and addressing this variety of sources, research questions, and methods, the development of interoperability and the bridging of people, disciplines, and results.

2 Discussion

The outcome of READ-IT is not a database of reading experiences, but a toolbox that can be adopted in a wide range of studies and that can support interoperability of research data to facilitate collaborations. The information value of the corpora of case studies derives from the opportunity to address a complex system of needs concerning different research questions, sources, and activities through a dialogue between the Information and Communications Technology (ICT) and Digital Humanities (DH) scholars who created the underlying data model and the Humanities and Social Sciences (HSS) researchers who adopted it (Flanders, 2013).

The analysis of the case studies followed three main directions: (a) research questions and focus (i.e. the aspects of reading that are the subject of the research), (b) the type of source of reading experience and the scale of the study (i.e. depth and quantity), (c) research practices and interoperability of data (i.e. expected generated data, competency questions, and issues related to the reuse of data outside the specific case study). The analysis of the case studies produced a set of requirements that were used in the development of a data model (Antonini *et al.*, 2019) and a Reading Experience Ontology (Vignale *et al.*, 2020; Antonini *et al.*, 2021). The resulting model shifted the focus beyond the factual aspects of experience that were addressed in previous projects (who, where, when, and what), to the phenomenological aspects of reading, such as the reader's state of mind (habits, aims, emotions, and achievements) and the articulation of

reading in terms of sessions and key turning points (experiences).

The outcome of the analysis and of iterative engagement with research partners highlighted a number of major issues as a direct result of the integrative approach to the READ-IT case studies:

'The centrality of the human experience' emerging from the corpora of case studies and leading towards the new approach based on a phenomenological analysis of reading. This change of focus directed the modelling efforts in a new direction: from collaborative analysis of sources and contextual factual information of reading towards a phenomenology of the human reading experience. The emphasis on the human aspects of the experience highlighted, for instance, the importance of addressing reading as a diachronic process structured in interconnected phases and dependent on changes affecting reader, medium, and society (Antonini et al., 2019).

'The challenge of legacy data and the human legacy of projects' emerging from the need to incorporate data collected by the UK RED project, highlighting the need to define a strategy based on the restoration or repurposing of legacy data (Antonini et al., 2020).

'The role of the medium' requiring broadening the scope of READ-IT from reading printed books to addressing new media. Firstly, this change opened up a question about which medium qualifies an experience as reading (e.g. is experiencing audiobooks or reading aloud still reading?). Secondly, it developed a reflection on how medium technologies 'mediate' the reader/author relationship, providing a variety of new configurations (e.g. interactive media, collective augmentation of text, and profile-based recommendations). In this frame, the medium as a technology acquires a central role in the modalities and effects of reading and challenges the duality of relation reader/author (e.g. does automatic tagging and interlinking of contents qualify as an authorial contribution?). This strand of research has produced so far a study on social media 'stalking' (Antonini et al., 2019), a framework of technology-driven re-mediation of the author–reader relation (Antonini and Brooker, 2020), and a comprehensive study of the lifecycle and socio-technological ecosystem of webcomics (Antonini et al., 2020).

'Design of tools for multidisciplinarity' requiring the definition of a meta-language of reading (Antonini and Lupi, 2019), a novel approach to an agile ontology development (Antonini et al., 2021), a contribution ecosystem including paper postcards, a digital contribution portal[5] and a chatbot,[6] an ontology design pattern for experiential studies,[7] and an annotation tool for textual sources.

'Integrating the READ-IT data model in existing standards' for cultural heritage and web contents such as CIDOC CRM requiring a re-engineering of the model under the light of the different ontological framework of CIDOC CRM.[8]

3 Conclusions

Reading is an immaterial activity that leaves only indirect traces, which are difficult to retrieve. Nonetheless, the fast-paced transformation of book technologies is configuring reading as the central activity in the new open digital culture (Ouvry-Vial, 2019). READ-IT is advancing research on the history and current practices of reading by developing a framework that allows scholars to address both 'macroscope' and 'microscope' questions (Hitchcock, 2014).

In the realization of this vision, the main challenge is how to extract evidence from historical sources so that it can be interpreted by multidisciplinary researchers both at scale and in detail (Gibbs and Cohen, 2011; Towheed et al., 2015). The work conducted within READ-IT is moving beyond the development of specific case studies to the reconfiguration of the project as a laboratory to rethink, revise, and improve research on reading. The interdisciplinary collaboration powering READ-IT is a source of innovation, outcomes, and opportunities for unveiling new issues in a constant dialogue between the formal, deterministic, repeatable, disambiguated system required by computation and the probabilistic, unresolvable relation with cultural artefacts, objects, and conditions that are the foundation of humanistic methods (Drucker, 2019).

Further research in READ-IT focused on issues emerging from the project, including:

- 'Integrating multilingual DH studies' by connecting the language-agnostic ontology with language-specific NLP resources (Bienvenu et al., 2021).
- 'Furthering the conceptualization of the state of mind of the reader', which is one of the major innovations and central issues of the project (Antonini et al., 2020).
- 'Using the READ-IT model' through the annotation tools, which are being tested through in-depth annotation campaigns in several languages and through research creating multi-lingual and diachronic glossaries of reading concepts (Vignale et al., 2021).
- 'Connecting reading with other aesthetic experiences' by finding a common ground between READ-IT and conceptualizations developed by other projects on experiencing music and art, to be investigated in a follow-on project.[9]
- 'Engaging the general public' through the long-term infrastructure created by the project (contribution portal, postcards, and chatbot), and through events such as European Researchers' Night[10] and the Being Human Festival[11] to reach a variety of user communities.

A final take-away from the READ-IT project is a clear need for cross-disciplinary collaboration to address the challenges of the project, which are neither

strictly within the field of HSS nor ICT. The current scale of Humanities research on reading is based largely on small teams collaborating occasionally with ICT research. In order to develop further, Digital Humanities approaches to the history of reading require systematic, sustained dialogue, resources, and commitment to transform the personal efforts of single individuals into a research community. READ-IT has developed a shared laboratory space where researchers can experience the tangible results produced by an ideal balance of competencies and a shared Digital Humanities agenda.

Funding

Notes

1. http://readit-project.eu
2. https://www.open.ac.uk/Arts/reading/UK/
3. http://eured.univ-lemans.fr
4. https://www.listeningexperience.org/
5. https://read-it.in-two.com/
6. https://t.me/TellMeWhatUReadingbot
7. https://github.com/eureadit/crowdsourcing-ontology
8. Ontology (V1.0) in CIDOC CRM available at https://github.com/eureadit/reading-experience-ontology
9. https://github.com/modellingDH/odp_experience
10. https://ec.europa.eu/research/mariecurieactions/actions/european-researchers-night_en
11. https://beinghumanfestival.org/

References

Antonini, A., Benatti, F., King, E., Vignale, F., and Gravier, G. (2019). *Modelling Changes in Diaries, Correspondence and Authors' Libraries to Support Research on Reading: The READ-IT Approach*, *ODOCH 2019 Open Data and Ontologies for Cultural Heritage*, Rome, Italy. *(CEUR Workshop Proceedings)*, 2375, pp. 73–84.

Antonini, A., Benatti, F., and King, E. (2020). *Restoration and Repurposing of DH Legacy Projects: the UK-RED Case*, *Book of Abstracts of DH2020—Digital Humanities Conference 2020*, Ottawa, Canada. https://dh2020.adho.org/wp-content/uploads/2020/07/138_RestorationandRepurposingofDHLegacyProjects.html (accessed 16 October 2020).

Antonini, A. and Brooker, S. (2020, July). *Mediation as Calibration: A Framework for Evaluating the Author/Reader Relation*, *Proceedings of the 31st ACM Conference on Hypertext and Social Media*, University of Central Florida, US, pp. 17–25.

Antonini, A., Brooker, S., and Benatti, F. (2020, November). *Circuits, Cycles, Configurations: An Interaction Model of Web Comics*, *Interactive Storytelling: 13th International Conference on Interactive Digital Storytelling*, ICIDS 2020. Bournemouth, UK, 3–6 November 2020. doi: 10.1007/978-3-030-62516-0_26.

Antonini, A., Gomez Mejia, G., and Lupi, L. (2019). *All We Do Is "Stalking": Studying New Forms of Reading in Social Networks*, *Proceedings of the 30th ACM Conference on Hypertext and Social Media—HT '19, the 30th ACM Conference*, Hof, Germany: ACM Press, pp. 111–5. doi: 10.1145/3342220.3343646

Antonini, A. and Lupi, L. (2019): *The Role of Philosophical Analysis in the Design*, *Standing on the Shoulders of Giants: Exploring the Intersection of Philosophy and HCI*, CHI 2019, Glasgow, UK.

Antonini, A., Suárez-Figueroa, M. C., Adamou, A., *et al.* (2021). Understanding the phenomenology of reading through modelling. *Semantic Web Journal*, **12**(2). http://www.semantic-web-journal.net/content/understanding-phenomenology-reading-through-modelling-1 (accessed 5 February 2021).

Antonini, A., Vignale, F., Gravier, G., and Ouvry-Vial, B. (2019). *The Model of Reading: Modelling principles, Definitions, Schema, Alignments*. https://hal-univ-lemans.archives-ouvertes.fr/hal-02301611/

Antonini, A., Vignale, F., and Gravier, G. (2020). *READ-IT Deliverable D2—Model of the State of Mind V1.7.* https://oro.open.ac.uk/76044/

Bienvenu, G. L. N., Vignale, F., Gravier, G., and Sébillot, P. (2021). *Utilisation d'approches Automatiques pour la Reconnaissance des Expériences de Lecture*, *Presented at the Humanistica 2021—Colloque de l'Association Francophone des Humanités Numériques*, Rennes, France, p. 81. https://hal-univ-lemans.archives-ouvertes.fr/hal-03230027

Drucker, J. (2019). *Digital Humanities—Complexities of Sustainability*. Keynote address, DH 2019: Complexities, Utrecht, The Netherlands, 12 July 2019.

Eco, U. (1979). *The Role of the Reader: Explorations in the Semiotics of Texts*. Indiana University Press.

Fuller, D. and Rehberg Sedo, D. (2019). Introduction: Read this! Why reading about readers in an age of digital media makes sense. *Participations: Journal of Audience and Reception Studies*, **16**(1): 130–40.

Gibbs, F. W. and Cohen, D. J. (2011). A conversation with data: Prospecting victorian words and ideas, *Victorian Studies*, **54**(1): 69–77.

Flanders, J. (2013). The literary, the humanistic, the digital: Toward a research agenda for digital literary studies. In Price, K. M. and Siemens, R. (eds), *Literary Studies in the Digital Age*. Modern Language Association of America. http://dlsanthology.commons.mla.org/the-literary-the-humanistic-the-digital/ (accessed 20 August 2014).

Hitchcock, T. (2014). *Big Data, Small Data and Meaning*. 9 November. http://historyonics.blogspot.co.uk/2014_11_01_archive.html (accessed 5 February 2016).

Iser, W. (1974). *The Implied Reader: Patterns of Communication in Prose Fiction from Bunyan to Beckett*. John Hopkins University Press.

Kovač, M. and van der Weel, A. (2018). Reading in a post-textual era, *First Monday*, **23**(10). doi:10.5210/fm.v23i10.9416 (accessed 23 November 2018).

Kuzmicova, A. (2014). Literary narrative and mental imagery: a view from embodied cognition. *Style*, **48**(3): 275–93.

Kuzmičová, A. (2016). Does it matter where you read? Situating narrative in physical environment. *Communication Theory*, **26**(3): 290–308. doi:10.1111/comt.12084

Murray, S. (2018). Reading online: updating the state of the discipline. *Book History*, **21**: 370–96. http://dx.doi.org.libezproxy.open.ac.uk/10.1353/bh.2018.0012

Ouvry-Vial, B. (2019). Reading seen as a commons. *Participations: Journal of Audience and Reception Studies*, **16**(1): 141–73.

Price, L. (2019). *What We Talk About When We Talk About Books: The History and Future of Reading*. Hachette UK.

Rowberry, S.P. (2019). The limits of Big Data for analyzing reading. *Participations: Journal of Audience and Reception Studies*, **16**(1): 237–57.

Towheed, S., Benatti, F., and King, E. G. C. (2015). Readers and reading in the first world war. *The Yearbook of English Studies*, **45**: 239–61. doi:10.5699/yearenglstud.45.2015.0239

Vignale, F., Benatti, F., and Antonini, A. (2019). *Reading in Europe—Challenge and Case Studies of READ-IT*, *DH 2019 Abstracts*. Digital Humanities 2019: Complexities, Utrecht. https://dev.clariah.nl/files/dh2019/boa/0197.html (accessed 30 July 2019).

Vignale, F., Antonini, A., and Gravier, G. (2020). *The Reading Experiences Ontology: reusing and extending CIDOC CRM*, *Book of Abstracts of DH2020—Digital Humanities Conference 2020*, Ottawa. https://dh2020.adho.org/wp-content/uploads/2020/07/148_THEREADINGEXPERIENCESONTOLOGYREOREUSINGANDEXTENDINGCIDOCCRM.html

Vignale, F., Bienvenu, G. L .N., Gravier, G., and Sébillot, P. (2021). "*Je pense que ça traite d'expérience de lecture,à voir . . .*": *retour sur une expérience d'annotation collaborative*. Presented at the Humanistica 2021—Colloque annuel de l'association francophone des humanités numériques, Rennes, France, p. 84. https://hal-univ-lemans.archives-ouvertes.fr/hal-03230021