

Book Review

Olivier Le Deuff, *Digital Humanities. History and Development*, London: ISTE, Hoboken: Wiley, 2018, 165 p. ISBN 978-1-78630-016-4

The contribution proposed for analysis, published in 2018 by ISTE and Wiley, is included in ISTE's Intellectual Technologies Set coordinated by Jean-Max Noyer and Maryse Carmes. Rather than presenting an exhaustive history of digital humanities, the author, lecturer in Information and Communication Sciences at Bordeaux Montaigne University, manufactures a sketch that traces the origins of digital humanities to the birth of modern science. The paradigm postulated by the author breaks away from the vision of congruence between computer technologies and digital humanities and suggests that, alternatively to the generation of digital humanities by the computing tools, digital humanities precede computer technologies. The thesis proposed by Olivier Le Deuff, however valiant, is also audacious, as the precedents he sets to prove the existence of digital humanities prior to the Digital Revolution may seem strained. As the author himself states, more than a presentation of the history and development of digital humanities, the book ought to be treated as an archeology of knowledge and methodologies, a presentation of the antecedents of the current directions in digital humanities.

The book is devised as a diptych; on the one hand, tracing the genealogies of the digital humanities and, on the other hand, deliberating on the evolution of several fields of the digital humanities. Each part of the book comprises five chapters and the perspective proposed is chronological, but also thematic. The first part distinguishes and evaluates five nodal points, precisely five genealogies that determined the evolution of digital humanities, while the second part analyses current directions in digital humanities and their precedents. The perspective constructed by the author in the first five chapters is similar to a stair, which leads from the origins of digital humanities, at the dawn of modern science, to the current directions that mark this field of science, each chapter representing a tread.

The first step regards the emergence and the evolution of the Republic of Letters into the Republic of Sciences. The Republic of Letters is not to be perceived as a circuit of letters and communications between savants, but as a "learning circle",

a concept theorized by the author in the *Introduction*, which represents the milieu of the scientists, intellectual and social alike. The growth of knowledge, concurrent with its differentiation, leads, in turn, to the need of rationalization, one of the rationales of digital humanities. Thus, the information must be operationalized and one of the instruments that enables us to operationalize it is the index, instrument that determined, according to Olivier Le Deuff, the formation of the digital humanities. Prior to considering the index's role in the evolution of digital humanities, the work proposed for analysis regards digital humanities as a science of writing, emphasizing the need for interdisciplinarity. Returning to the problematic of the index, the infobesity, term used frequently by the author, is considered the main factor which shaped the need to handle large amounts of information. The author links the index with computer technologies, highlighting its role as a precursor of the electronic means. Were we to summarize the author's theory this far, we would be able to notice a network, the "learning circle" of the Republic of Letters, and an instrument, the index, both perceived as being part of incipient digital humanities. However, the index was not sufficient to handle the information overload, because it treated only a book or an author, not all the printed works. As a result, other instruments were called upon, instruments such as notebooks and library catalogues. Not only the network and the instruments used by the scientists were symptomatic of a new field of knowledge, the digital humanities, but also the adjustments of the scientists' habitat or workstation, as Olivier Le Deuff regards it. The transformations suffered by the scientist's habitat were generated by the same condition that generated the instruments above-named, infobesity, precisely the need to access multiple documents. The author suggests that the transformations marking the researchers' workstation, ultimately, lead to the development of the Web.

The thesis postulated by the author in the first five chapters of his work implies that the formation of the Republic of Letters caused an information overload, which, in turn, determined the inception of digital humanities. However, we believe that the theory above-mentioned is strained, because, rather than digital humanities, it handles something that, indulgently, may be referred to as pre-digital humanities. We consider that it is difficult to discuss about digital humanities prior to the 20th century, as the technical means were analogue. Although the evolutions mentioned by the author represent solid precedents to digital humanities, we appreciate that they are a far cry from what digital humanities constitute.

As the Nietzsche quote used as a motto for the sixth chapter suggests, the last five chapters treat several methods used by the digital humanities and their evolution, from their pre-digital traces to contemporaneity. Alternatively to the perspective of the first half of the book, which places each field of the pre-digital humanities, for instance, the indices, in a diachronic evolution of the entire phenomenon, the second half of the work proposed for analysis deliberates on each field separately, autonomously of the formation of the digital humanities as a scientific phenomenon.

Similarly to the approach of the previous chapters, the author traces the origins of each method and field regaled to the dawn of modern science. For instance, the quantitative methods currently used by the digital humanities originate in statistics,

perceived, in a Foucauldian manner, as a pillar of the modern state, as a means used by the emerging modern governments to control their individuals. However, the current quantitative trends used by digital humanities are determined by the broadening of statistics and quantification at the turn of the 19th century, reflected in Émile Durkheim's works and, later, in the directions of the Annales School. In the *Conclusion*, the author pleads for an alliance between quantitative and qualitative methods, because digital humanities consist in documentation and production as well. Another field of digital humanities illustrated by Olivier Le Deuff in a diachronic approach is that of automatic processing. The author traces the origins of automatic processing to Jean-Claude Gardin, rather than Robert Busa, and he also identifies a distinct period of pre-digital humanities, that of the *Humanities Computing* age. A nodal point between the *Humanities Computing* and the digital humanities, as the author states it, is the success of the Web. Therefore, the transition from pre-digital humanities to digital humanities was assured by the advent of the Web. Metadata is also a source of the digital humanities, the book detecting its origins in the days of Mesopotamia, its formalization in the creation of catalogs and, its current use with the markup languages. Scientometrics' antecedents, as a field of digital humanities, are discovered in bibliometrics. The perspective postulated by Olivier Le Deuff is not that of simple quantifications of articles, but that of a field which perceives science as a system whose evolution can be analyzed and even predicted. Finally, the author analyzes the use of maps in digital humanities and he highlights the fact that maps illustrate more than territories, but different aspects of the reality and of the Internet infrastructures as well. A methodological issue that we must raise is that of the criteria used by the author to select and order the above-mentioned fields and methodologies of the digital humanities. We believe it would have been appropriate for the author to name the criteria based on which he selected and ordered the contents of the last five chapters.

According to Oxford's Lexico, digital humanities represent an academic field concerned with the application of computational tools and methods to traditional humanities, disciplines such as literature, history, and philosophy. The book proposed for review suggests a broader perspective, one which traces the origins of digital humanities beyond computational tools and follows the phenomenon in the long term. The theory envisaged by Olivier Le Deuff is tributary to an evolutive perspective, rather than presenting the inception of digital humanities as a result of an intellectual revolution. However, even if the rediscovery of scientists such as Emanuel Goldberg and Paul Otlet, which places the advent of digital humanities prior to the contributions of Vannevar Bush and Robert Busa, may seem legitimate, tracing the origins of digital humanities to the birth of modern science is strained, because, rather than the origins of digital humanities, it reveals the origins of humanities. Nevertheless, Olivier Le Deuff's work is valuable because, as he suggests, it sketches an archaeology of knowledge, a tableau of the distant sources that precede digital humanities. A compelling division is introduced by the author in the chapter regarding automatic processing, as he introduces the notion of *Humanities Computing*, to define an age that precedes that of the digital humanities. The criterion that divides *Humanities Computing* and digital

humanities is that of the succes of the Web. Consequently, the development of the digital humanities was determined by the emerge of the Web, prior to the Web existing a pre-digital humanities aeon, with a distinct final age, the age of *Humanities Computing*.

Following Alan Liu's approach, Olivier Le Deuff succeeds in sketching a synthesis of the history of digital humanities in the *longue durée*, dismissing a revolutionary logic, although his reasoning concerning the distant origins of digital humanities may be questionable. One of the author's conclusions is that digital humanities tend to transform into a broader topic, encompassing mankind and changing its characteristics to a digital humanity. For instance, in the field of science the researchers who embrace digital humanities are compared by Alan Liu to dragonflies that abandon their chrysalis stage. Hopefully, the evolution in store for this academic field, will not be as short lived as the lifespan of a dragonfly.

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