Gardiner and Musto begin the discussion by introducing ideas that often appear in digital humanities, specifically on issues related to its definition; the next three chapters of the book include tools, elements, and the environment, as part of digital humanities. Next, the authors discuss topics such as managing the lifecycle of digital humanities objects, answering broader questions about digital rights management, publication, and open access, and in the final chapter the authors review the evolving landscape of digital humanities. The book closes with an epilogue entitled The Half Life of Wisdom, in which there are philosophical questions about the existential threats to humanistic studies as a whole.

This is an excellent, thoughtful, and thought-provoking text for both curious and open-minded students or scholars who are newly engaged in research and studies on digital humanities. In the first few chapters, Gardiner and Musto have successfully put provoking and critical questions and ideas related to different perceptions and debates among humanists related to digital humanities, as are discussed by Berry (2012) and Carter (2013). The last few chapters, however, are not as mind-opening as the previous ones; they offer helpful but mundane information, apparently aimed to suit the title of the book itself, i.e. a primer for students and scholars.

As the title suggests, this book serves its purpose as a resource for undergraduate and postgraduate students working in the field of the digital humanities, especially those who are attracted to the digital history. Overall, the well-structured book discusses how technological developments have presented scholars and students with new grounds to explore, among others, the history aspects of digital humanities, methodology, and pedagogy. It tries to respond to such questions as whether the Digital Humanities (DH) is a field of study or a methodology, if it is a social science, a humanistic, or a technological discipline, or whether it is the study of the interaction between computing and humanities.

In their concise and attention-grabbing introductory chapter of the book, the authors describe their specific interests and best efforts to elaborate the definitions of digital humanities.
from various perspectives, while providing clear backgrounds to those who are new to the field.

Hitherto, the field of Digital Humanities, according to the authors, has been seen by many as “a method that exploits the tools and power of computing to continue the conventional work of the humanities (p. 3)”. It is pointed out in the book that computer scientists, for instance, deem the digital humanities as “… the study of how electronic form affects the discipline in which it is used and what these disciplines have to contribute to our knowledge of computing” (p.3). In this chapter too, Gardiner and Musto suggest that the DH by many scholars be deemed a methodology, while Humanities Computing is a field of study or a discipline. The authors’ sees DH as “harnessing computing power to facilitate, improve, expand, and perhaps even change the way humanists work (p. 4). Following such challenging and interesting discussions on the different definitions of DH, the authors themselves do not give a clear-cut definition of their own on DH; instead, they explicitly state that the answer to the definition lies in the chapters that follow the introductory chapter.

Chapter two (2) of the book elaborates, among other, major differences between the humanities, social sciences, and physical sciences that derive from the manner in which “they organize the basic material of their study, how they manipulate, arrange, and represent their evidence (p. 15). In both, according to the book, data is normally arranged and analyzed in broad classes. Similarities and deviation can be evaluated through sophisticated mathematical, statistical, metric and any other quantitative means. This evidence can easily be converted into digital data (p. 15). In Humanities, the authors claim, the raw material of study is different, individual, and often unique. Here a human life, a work of art, or a collection of individual objects are not reduced to statistics or patterns of data and their deviations (p. 15).

This chapter also highlights an essential problem emerging along with the rapid development of the technological advancement. Ease to accesses, enormous amount of information, old and new, as well as widely available tools for data collection and analysis, call for more far-reaching, accurate, and extensive research. Yet, Digital Humanities, according to Gardiner and Musto, offers what might be “a closer approximation to at least the complete historical, literary, or visual record, if not to the underlying realities that those records reflect (p. 19)”. The authors also address the problem of classification and documentation of digital data, which is virtually unlimited and more complex than those of Humanities research with conventional data. The authors suggest that a more rigid design and preparation than those in the paper world that scholars are familiar with are required.

Another issue the authors present in this book is that the digital age has not changed the analytical function of the scholar; it has, in fact, created tools that can help speed the analysis by making the many time-consuming processes more efficient. When mentioning data interpretation, the authors mention that one of the criticisms often raised against digital humanities projects is that, while they preserve much material in digital form - gathering and manipulating it – “they do not venture into analysis or interpretation. The research and presentation are certainly accomplished, but many scholars claim that without the interpretation, this is not humanistic studies (p. 29).

The elements of Digital Humanities are discussed in two chapters in this book. Chapter three (3) discusses texts and documents in various forms, seen in a broader sense of any forms of text, including a cultural object that speaks both to readers and to other texts. To this, the authors mention “… literary theories of intertextuality are now merging with the notions of active intercommunication among computer created objects in an era of the emerging semantic web.” (p. 35). Furthermore, Gardiner and Musto mention the fact that the established theories of textual communities, both in oral and written communication, have appropriately transform into the new digital multimedia environment. These materials can be integrated into digital research that has transcended the existing traditional boundaries.
The object, artifact, images, sound, space, performances and rituals, constructs and models, virtual reality, and games are elements of Digital Humanities addressed in chapter four (4), giving lights to those who are committed to their plan to conduct research using this type of texts. However, the authors admit that this has added complications to scholars and students’ ability in understanding and interpreting their capability regarding the conventional grammar and rhetorical performances that have previously assisted their predecessors in Humanities research. According to the author, in the digital work along with its interpretations, to enter into humanistic discourse, researchers are expected to present their theses and supporting documents – text, data, object and others – to be studied and considered by the community working in any given field.

One of the foremost challenges of the digital humanities is, according to the authors, as well as Classen (2013), to maintain the open characteristics of the web and its resources, while at the same time offering some degree of expert guidance in its use and in the materials accessed. Historically, one of the essential roles of the humanities, as Gardiner and Musto point out, has always been to provide guidance to, and interpretation of, the world created by humanity. This remains a core mission in the digital humanities.

The topics on digital tools and environment are discussed in chapter five (5) and six (6). Despite the rapid and fundamental changes in digital tools that develop along with the digital advances, according to the authors, the new digital tools still keep on the same functions of the traditional humanities. Digital tools are commonly deemed “software applications for the analysis, manipulation, and presentation of data (p. 69).”

Similar to the previous chapters that discuss the organizations and aspects of DH, in chapter five, Gardiner and Musto discuss digital tools first by presenting the history aspect of the development of the tools. In the later parts, the authors elaborate the types of tools and provide an overview of various categories of digital tools and how they are used. The authors also mention that “most projects or research agendas in the digital humanities do not employ single tools; even the simplest projects can require text and image processing, storage, analysis, and presentation, deploying multiple tools either simultaneously or in a succession.” (p. 70). Due to the multitude kinds of tools used in DH, the authors explicate those examples of specific tools in the Appendix of the book, making it easier for readers of this book to find the specific information needed, especially with the existing glossary and index the authors provided at the last pages of the book preceding elaborate and extensive list of references.

To conclude, chapter five (5) has shown the authors’ hard work in finding the right kind of digital tools for humanists, which cover a wide array of applications. These are mostly tools that enable the scholars and students to create databases and digital archives, categorized under the heading text-based tools, data-based tools, image and sound-based tools, and outcome-based tools.

In chapter six (6), the authors mention the fact that a computer in the digital age is seen not as a mere passive tablet or manuscript upon which people write and keep records; it is now deemed a work environment. Thus, the computer and its associated applications are both a tool and an environment, as it is mentioned in the book that “with 3D image in virtual realities the tools have also become the environment and vice versa” (p. 82). Furthermore, this chapter highlights that this continuously growing environment for creating, publishing, and working with digital knowledge and skill brings in everything from personal equipment to institutes and software to cyberspace.

Following the introduction to this chapter, the authors discuss in detail digital environment in terms of the institutional environment (as the majority of the DH are conducted in an institutional environment) and campus-based centers. Here the authors present a list of campuses that provides an overview of some model centers that offer significant supports to humanists working in digital research. Most
of the description of these environments, however, has been drawn from the centers own websites. Other issues presented in this chapter on digital environment are collaborative centers, the funding environment, and the global environment. This chapter is deemed beneficial for readers, especially those who are concerned with the issue of sustainability as the priorities for digital projects related to humanities and humanities studies.

Publication is the main topic of chapter seven (7). This includes pre-release, release, and beyond. By and large, the authors begin with some history aspects of publication, i.e. by explaining the meaning of publication and its forms, which have changed significantly after approximately five centuries. Unsurprisingly, the first sub-topic discussed by the authors is archive, as a large amount of new and valuable research is initiated with archives. Then, Gardiner and Musto explain that in digital form “there are now archives that is nearly complete digital size versions of the slowly accumulated documents placed in a depositary for record keeping…” (p. 99). Libraries, for example, have set the trend of creating the infrastructure to accommodate and access information and data, available from the past up to the present. Subsequently, the documents are usually appended to print monographs, digital archive project and, generally, collaborations. New means of sharing knowledge and creating connection between scholars and the public are also provided, the authors claim.

Reference works is the next topic discussed in this chapter. The authors mention that, since the distant past, dictionaries and encyclopedias are part of the western tradition. In this chapter, many other digital reference works produced outside academia are elaborated as digital reference which, according to the authors, can reach a wide range of audience. It is in the digital environment that “the reference work is researched, assembled, and written, and is subsequently published digitally (p. 104).

Another form of reference application discussed in this chapter is online bibliography, and there are bibliographies for every subject. The most interesting topic discussed in this chapter is virtual reality (VR). According to the author VR projects clearly indicate that humanistic publishing is “more of a dynamic process than the creation of a series of testing objects” (p. 115).

Chapter eight (8) and nine (9) both discuss the meta issues of digital humanities, covering education, collaboration, publication, stratification, discoverability, relationship of readers to author, preservation, sustainability in the digital environment, hiring, tenure and promotion (HTP), gender, global and other divides. One of the most intriguing is the discussion on Digital Humanities theory. Gardiner and Musto discuss Digital theory in such a way as to determine what role it might play in the digital humanities. For the most part, digital theory focuses on “the direct impact of computer technology upon traditional humanistic studies and can thus be characterized broadly as humanities computing” (p. 142). Meta-issues, part 2, are elaborated in chapter nine (9), comprising discussions on, among others, Copyright and other rights, digital rights management, as well as Open Access.

Unlike the previous nine chapters that discuss the impact of the digital on humanities, chapter ten (10) focuses more on the humanists on the world of computing. This chapter titled “Evolving Landscape for the Digital Humanities” is begun with the authors’ mentioning new ideas and insights in relation to the human impact on landscapes. Yet, Gardiner and Musto do not provide detailed answers to their own critical questions, leaving readers with some gaps which, otherwise, may have satisfied readers’ thirst for deeper and wider discussions. In one of the sub-topics of the chapter, the Humanities in Academia, the authors present a rather worrying condition called “crisis in scholarly communication” that covers four elements: the audience for print monographs, its role in professional assessment and advancement, the future of university presses, and the role of library in developing collection, accesses, and preservation of scholarship.
Furthermore, the authors highlight the importance of “Bermuda triangle of scholarly communication”, i.e., the dynamics of publishers, libraries, and scholars, deemed uncertain, shifting, and perilous. It is said that up-to-date attempts are still made to break out the triangle (p. 171). In the next sub-topic of chapter 10, Gardiner and Musto make a mention of learned societies, independent associations of scholars, that are deemed to be most capable of breaking out the Bermuda triangle of scholarly communication.

An epilogue The Half Life of Wisdom, poses philosophic questions about the existential threats to humanistic studies as a whole. To close the chapter, Gardiner and Musto discuss organizations of scholarly resources online outside of the academy. This part is interesting as the authors give a mention of Wikipedia and Google as the best examples of large-scale content projects outside academia that have reached tremendously massive successes in not only providing information but also in making it better as scholars and public can both edit and make corrections hence higher accuracy.

To conclude, this book is very appropriate as a basis for learning Digital Humanities because most of the contents of the book discuss digital history from its earliest stage to the present and some thoughts and outlook about its future. This book was written and published in 2015, but most of the issues discussed in it are still relevant with the current scientific development of Digital Humanities. However, given the exponential growth of the digital world and the rapidly changing societies as the result of keeping up with its advancement, an update to this book is essential.

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