DIGITAL HISTORY: DESIGNING VIRTUAL ENVIRONMENTS
THAT SUPPORT CRITICAL THINKING AND IDEA EXCHANGE, MOTIVATE
AND ENGAGE USERS

by

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Abstract

In my thesis I argue for the use of system designs that: a) open access to a variety of users and allow for collaboration and idea exchange, while at the same time, b) are designed to motivate and engage users. To exemplify my proposed systems design, I created an interactive and open digital history project focused on Romanian culture and identity during Communism, from 1947, when the Communist Party took power by forcing the King to abdicate, until the revolution in 1989, which marked the end of Communism in Romania (Gilberg, 1990, Boia, 2014).

In my project, I present the possibility to recreate Habermas’ notion of public sphere and “the unforced force of the better argument” (Habermas, 1989) and Dewey’s (2004) understanding of democracy as a mode of associated living imbued of the spirit of inquiry within contemporary digital history projects. Second, I outline system designs that motivate and engage users, by satisfying the basic psychological needs outlined in Ryan and Deci’s (2000) self-determination theory: autonomy, competence, and relatedness. Two more concepts are included to complete the proposed digital history project design: presence (Ryan, Rigby, & Przybylski, 2006) and learner hero (Rigby & Przybylski, 2009).
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Chapter 1

Introduction

Over the past half century, digital technology has developed rapidly, and with it, so have digital humanities, the field in which humanistic ideals fuse with the possibilities of digital technology. At the same time, digital history, a branch of the digital humanities, evolved from focusing mainly on quantitative history and visualization, to using technology to simultaneously perform complex processes to further academic research and find new ways to convey history and engage new audiences.

Today, there are many projects using digital technology in the scholarly research of history, but there is little research about the ways in which the specific system designs and technologies have influenced users’ interactions or the effect they have on scholarship. For the purpose of this thesis, I define system design as the process of defining the architecture, components, data and user experience for a system to satisfy specific requirements.

Many definitions of digital history include as a main characteristic of digital history projects, the ability of the users to interact with, manipulate, and revisit the data and offer feedback (Cohen & Rosenzweig, 2006, Cohen, Frisch, Gallagher, Mintz, Sword, Murrell Taylor, Thomas & Turkel, 2008, Seefeldt & Thomas, 2009), yet in practice, many digital history projects offer a read-only experience for the user and neither afford data manipulation, nor offer opportunities for feedback and collaboration. It is thus important to identify and analyze how digital technology is being used and
whether it assists or hinders the needs of both digital historians and the users who interact with them.

In my thesis, I argue for the creation and use of system designs that: a) open access to a variety of users and allow for collaboration and idea exchange, while at the same time, b) are designed to motivate and engage users. I argue that these design principles could be beneficial for users, students and scholars in a variety of ways that I describe in detail. To exemplify my proposed systems design, I created an interactive and open digital history project focused on Romanian culture and identity during Communism, from 1947, when the Communist Party took power by forcing the King to abdicate, until the revolution in 1989, which marked the end of Communism in Romania (Gilberg, 1990, Boia, 2014).

In my project, I present the possibility to recreate Habermas’ notion of the public sphere and “the unforced force of the better argument” (Habermas, 1989) and Dewey’s (2004) understanding of democracy as a mode of associated living imbued of the spirit of inquiry, within contemporary digital history projects. Second, I outline system designs that motivate and engage users, by satisfying the basic psychological needs outlined in Ryan and Deci’s (2000) self-determination theory: autonomy1, competence2, and relatedness3. Two more concepts are included to complete the proposed digital history project design: presence (Ryan, Rigby, & Przybylski, 2006) and learner hero (Rigby & Przybylski, 2009).

1 Autonomy is defined in this paper as the universal urge of an individual to be causal agent of his life.  
2 In this case, competence is defined by a means to control the outcome of an activity and experience mastery.  
3 Relatedness is defined as the universal need to be part of a group, to interact and be connected to others.
Purpose Statement

The purpose of this thesis is to identify and exemplify the characteristics of those digital history projects that represent and convey history, while creating environments that support critical thinking and idea exchange, motivate and engage students, researchers and a variety of users.

Specifically, the goals of this thesis are: a) to explore the system designs currently being used in digital history projects that represent and convey history; b) delineate the specific system design characteristics of digital history projects should encompass to motivate users and encourage engagement and idea exchange; and c) create a model for a digital history project that encompasses the suggested system design characteristics and is built within the presented theoretical framework.

Methodology and Theoretical Framework

The way we use and think of digital technology, as well as our expectations for the purposes it can serve, have changed dramatically in the last fifteen years. While Web 1.0 (before 2004) involved predominantly hierarchically arranged, one-way content produced by a small group of content creators, Web 2.0 represented an important shift in the way content was created and consumed, characterized by a transition from the “read-only” to the “collaborative,” where knowledge is decentralized, accessible and co-constructed among individuals (Greenhow, Robelia, & Hughes, 2009).

The technology available today allows us recreate Dewey’s understanding of democracy as an associated mode of communicative living, where inquiry is concomitantly time an essential privilege and obligation of all members of society
(Dewey, 2004, Hansen, 2006), as well as Habermas’ (1989) theory of “commons” and “the public sphere,” in which any member of the society can identify and freely discuss societal issues.

Even though there are many projects using digital technology in the scholarly research of history today, the vast majority of digital history projects offer their users a read-only experience. Even though offering users new ways to interact with and manipulate data and experience history in new and personal ways are ideas considered core to the discipline (Cohen & Rosenzweig, 2006, Cohen et al., 2008, Seedfeldt & Thomas, 2009), many digital history projects today, do not, in fact, allow the user to interact with or manipulate the data in new ways, nor do they include embedded spaces for users to share and discuss their own ideas, or collaborate with the scholars who create the projects. It is thus important to explore and identify the specific system designs that represent and convey history, while creating environments that motivate and engage users.

An important objective of my approach to digital history and its educational implications is to design environments that would not only motivate and engage users, but also develop intellectual habits of the mind, that will drive them beyond the ability to solve linear problems, following explicit instructions, and help them move into a realm of critical thinking and individual meaning-making (Noddings, 2007). This ability to think critically is conducive to democracy as an associated mode of communicative living, in which inquiry is an essential privilege and obligation of all members of society (Dewey, 2004).
The proposed study addresses issues pertaining to system designs that afford user engagement and participation in concordance with Dewey’s notion of democracy (2004) mentioned above in which critical inquiry, associative living, and communicative experiences have a central place (2004), and his understanding of learning as an intensely social activity that engages the whole individual and the entire society; as well as Habermas’ (1989) theory of the public sphere. Dewey’s notion of democracy as an ethical ideal, a mode of associated living, as well as Habermas’ concept of the “lifeworld,” the indirect context of all that is said in a situation, the set background rules and assumptions that structure how we perceive and communicate with the world, are central to the proposed system designs. This system design takes into account the critique received by both Dewey and Habermas, which suggest that their theorizations did not sufficiently take into account inequities in relationships of power, gender, race or cultural capital (Figure 1).

As a way to exemplify the proposed model and encourage discussion, the system architecture and user experience design framework (Figure 1) was used to create a digital history project focused on how Romanian’s ways of cooking have changed during the communist regime, from 1947 to 1989. The historical question I bring forward to exploration and discussion concerns the ways in which the Communism regime might have removed or installed new elements within Romanian cultural identity.

I compared five editions of the most popular cookbook of the era, the cookbook
of Sanda Marin (Marin, 1943, 1954, 1966, 1968, 2005) and overlaid food consumption trend data with allowed individual yearly consumption per year (the so-called “scientific diet”) (Gilberg, 1990). I collected evidence to build the socio-economic context of living and cooking in communist Romania and a complex narrative of what it might have felt to eat and cook during the last half of the 20th century, in Romania. My goal is to show how the recipes were changed, reduced and censored over the course of the Communist era, as Romania’s severe economical crisis increased, and food became scarce (Gilberg, 1990, Bren & Neuburger, 2012).

The archival material, five editions of the same cookbook, photographs and video footage, were analyzed using the historical method. By using the historical method, a fact from the past is transformed through selection, analysis, and interpretation, into a fact of history by: a) identifying the problems to clarify; b) gathering primary and secondary sources; c) conducting archival research; d) using theoretical frameworks and conceptual tools to build an interpretation (Carr, 1961).

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4 At the time of this study, The Romanian National Library („Bibl. Națională a României”) and the Metropolitan Library of Bucharest („Bibl. Metropolitană”) did not offer access to the original, 1936, version of the Marin Carte de Bucate (Cookbook).
Figure 1 Thesis framework

Preserving the Integrity of History in Digital History Projects

Before I discuss digital history projects system design, I would like to return to a fundamental question that should inform the way we build and cultivate digital history projects: *How do we design in a way that preserves the integrity of the discipline?*

I argue that, in the past, the study of history helped distinguish the educated from the uneducated. Knowing historical facts, such as the date of the disembarkation of Normandy in 1944 or the strategic details of the battle of Waterloo in 1815 distinguished and created access for men to better jobs and better societal circles. Today, the access to information is always in our pocket, a click or voice command away. However, it is not
the information that distinguishes and qualifies individuals today, but a deeper understanding of how these facts are connected and how they might be of importance today. Technology allows historians, limited in the past by the processing power of the primordial computer, i.e., the human mind, to look at data through a “macroscope,” as Graham, Milligan and Weingart (2014) assert. By looking at large amounts of data, historians can thus see large-scale patterns that are only possible to discover through the use of algorithms.

When writing digital history, scholars should be attentive of the ways in which they create meaning. Skinner (1969) talks about two (sometimes conflicting) ways of creating historical meaning: a) by using the historical and political context as a way to elucidate history and b) by focusing on the primary document itself. Skinner argues that historians can expose themselves to interpretation mistakes, when a fact is expected to be in line with a certain way of thinking, within the set context, and thus analysed through that lens. In creating the story line and designing for presence and immersion, we should be mindful about the fact that “there is no one true story about a past, but a multiplicity of complementary, competing, or clashing stories,” (Lee, 2014, p. 129) which the historian has to take in consideration in interpreting evidence. Another aspect digital history projects should display is the concept of historical distance, and how the relative short distance between the reading time and the narrated time (in this case twenty-seven years) might influence interpretations and make certain aspects difficult to see (Phillips, 2014, p. 89). On the other hand, history brings us connectedness. Through history we can reach the lives of humans (including long passed family members) from the past, and see how
they lived, the challenges they faced, the ideals they held. Through the study of history, we can access what is sometimes called the pastness of the past, the ways people in distant ages constructed their lives and how they made their lives meaningful and beautiful (Seixas & Morton, 2013).

Last but not least, history is essential to identity, both on the micro level of family and the macro levels of nations, ethnicities, and humanity in general. History leaves for us many clues about our future, hidden in our past. Graff (1999) challenges the traditional practice of writing history around “past politics and the public life of notable men” (p. 148), which often has lead to creating dichotomies, such as old versus new, narrative versus analysis, history versus theory, transcendent versus everyday, superordinant versus subaltern, around issues that are, in reality, extremely complex.

When designing digital history projects we have to keep in mind both the historical question and the demands of the discipline, but also system design aspects of the projects that will influence the way users engage and interact with the project.

As most of the contemporary digital history projects are built by historians, the first part, which has to do with scholarship and the practice of the discipline, is generally satisfied, yet many digital humanities and history projects today offer a read-only experience, not much different from engaging with history via a book or a magazine. They don’t allow users to contribute their opinions, collaborate or manipulate data, which is important for the advancement of practice and improvement of the projects themselves. In my model, users are offered the opportunity to comment on the ideas presented, to ask their own questions and to interact with data in new ways, but they do not modify the
original content. They rather add to it, creating an external layer of discussion. Unlike digital projects such as Wikipedia, the access to discuss and collaborate is offered as a complement to the project and not as a way to edit the project as it is being read, thus allowing scholars to preserve the integrity of their work, while sharing it with the public and opening it for discussion.

Technology makers release multiple editions of the same software continuously, adapting it to their users’ needs. Digital history projects should be able to evolve the same way. The user interactions with the primary sources are rigid and do not allow users to explore and discover the virtual environments themselves.

**Collecting oral traces of the past, online**

One characteristic of digital history projects is that they can be used to represent and convey history, but also to collect personal narratives and traces of the past. Cohen and Rosenzweig (2006) suggested that using the web to collect oral histories via user upload might be harder than simply publishing history, but it has numerous advantages. Among them: cost. “Collecting history” online is more economical than collecting oral history, both in terms of time and money. “Collecting history” online allows for a variety of perspectives to be shown, argue the authors, who give as an example the digital history project *Moving Here* (“Moving Here, nd”), a project focused on displaying stories of immigration to the UK, created in a collaboration between The British Library, the Victoria and Albert Museum, the Museum of London and several other British museums. Even though it is now closed, the project is still available online through an Internet

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5 “Collecting history” is the authors’ formulation.
Archive. Moving There collected over 500 personal immigration stories and artefacts via an online form.

In order to encourage contributions and build trust, Cohen and Rosenzweig, (2006), advised writing a clear and visible invitation to contribute, an invitation that is clear about copyright, and how and when users’ information can be used. Quoting primary sources like photographs, voice recordings or video can be more challenging than quoting text. A photograph, for example might need to be cited in its entirety. A preferred option, which successfully deals of assigning authorship and outlining use, is creative commons.

**Thesis organization**

The first part of the thesis describes the common traits, themes, preferred system designs and technologies of contemporary digital history projects and analyzes them through the lens of the theories and system designs above mentioned. Because the focus of our study is to explore projects, techniques and technologies that reflect contemporary scholarship in the field of digital history, I sampled my data from two important History Journals in North America, The American Historical Review and Perspectives on History: The News magazine of the American Historical Association, and the Digital Humanities, and from the websites of seven of the most prestigious universities in the world with digital humanities departments: McGill University (CA), Stanford University (USA), Harvard University (USA), Princeton University (USA), The University of Cambridge (UK), University of Oxford (UK), and the University of Melbourne
(Australia). Subsequently, their suitability for motivating and engaging users from a practical and conceptual point of view was be explored.

In an attempt to exemplify and better describe my proposed framework of design, this study also encompasses a digital history project, a microsite that embodies the system design and the theoretical framework I present in my thesis. In this digital history project, I create a historical landscape of how the communist regime influenced the ways in which Romanians cooked and what they ate during the last half century.

**Digital History Project**

The purpose of the digital history project presented here is to show how the recipes in this popular cookbook have changed during the communist era, as Romania’s internal food supply was minimizing and a system of rations was implemented. From 1970 to 1989, faulty agricultural policies combined with President Ceaușescu’s strategy to increase export to repay national debt had produced a severe economic crisis, reducing production and significantly reducing consumption of all kinds of foodstuffs (Gillberg, 1990), yet Marin’s cookbook had been censored and shortened since 1954 (Marin, 1954, 1960, 2005). In 1985, the new “scientific diet” was published in the Communist Party Newspaper “Scînteia” and stated the allowed consumptions rates, per year, per person as:
54.88 kg of meat and fish, 1.10 kg of margarine, 9.6 kg of edible oil, 14.8 kg or sugar, 114.5 kg wheat and flour, 45.3 kg potatoes, 20 kg of fruit and grapes and 114 eggs (Scînteia, 1985, as cited in Gilberg, 1990).

The economical crisis went beyond access to food. The government also provided a rationalized access to electricity and heating (the power was simply cut out), which deeply affected the quality of life (Sillince, 2014). Other areas that were restricted were access to healthcare, caused by lack of electricity and even the most basic equipment (Gilberg, 1990), as well as housing, where families were forced to share their homes with renters (Sillince, 2014).

I visualised the type of recipes included and the main ingredients (meat and fish recipes, crustaceans and seafood-based recipes, vegetable-based recipes and sweet or dessert-like recipes) to draw a picture of the food available in Romania at the time. I compared this data with two other popular cookbooks (Gaster, 1749, Negruzzi & Kogălniceanu, 1842) and I overlaid this data with photographs and stories of the era and document the system of rations and the attitudes towards the general lack of aliments towards the end of the communist regime.

My model includes the system design features I argued as being vital in my thesis: it allows access to a variety of users; it allows users to comment, discuss the project, and upload personal stories. Presence is built though storytelling, photography, voice recordings and personal stories. The data presented is interactive, making it possible for

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6 This would make the daily ration of meat/per person, at 150 grams, 0.3 eggs, and 4 grams of sugar (one teaspoon).
users to explore it in a variety of ways, supporting the concept of learner hero⁷ and fostering an environment for enquiry. The project is designed in such a way that the interaction of the user with the content is non-linear, the menu is not hierarchical, but circular, allowing users to choose what to explore the content, in the order they prefer, while all the sections are connected and hyperlinked. Presence is built through storytelling, archival photographs and video footage. Users are invited to contribute to the project and personal user stories will be collected via the public microsite to be analysed and integrated in a future project.

The digital history project has six main sections, organized as a circle (as to suggest non-linearity), as follows: About this project (with a link to the author’s biographical signature page), Why does Food Matter, where the ways in which cooking and food consumption can be relevant to understanding identity and culture are discussed, The Educationalization of Cooking, in which the concept of educationalization⁸ is described, and evidence of the ways in which the cookbook was used as a tool, not just for cooking, but for reinforcing communist ideology, is presented. A fourth section, Food in Communist Romania, recreates the atmosphere of the socio-cultural context through text, archival photography, propagandist illustration and video depicting empty food shops (alimentara) and commentary from Romanians remembering

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⁷ For Rigby and Przybylski (2009), the key to the motivational pull of video games sits within the concept of the learner hero, where each player is the hero of the story and the play experience is rendered specifically for each player.

⁸ The concept of “educationalization” refers to assigning the social practice of education the task of coping with perceived social problems. The concept is built on the idea that education is the engine of modernity by means of disseminating knowledge, while at the same time playing a role or moral reassurance (Tröhler, 2016)
the never-ending quest for food during communism. A fifth section, *Sanda Marin’s Cookbook* presents the ways in which the book was edited from 1939 to 1969, and finally f) Share *Your own Story*, is a section dedicated to collecting user stories and memories from the depicted era.

Habermas’ notion of “the unforced force of the better argument” (Habermas, 1989), as well as Dewey’s (2004) view of democracy as a mode of associated living imbued of the spirit of inquiry are implicit in the design of this digital history project.

As described above, the data were analyzed using the historical method. By using the historical method, a fact from the past is transformed through selection, analysis, and interpretation, into a fact of history (Carr, 1961). Carr argues, “for the historian, accuracy is a duty, not a virtue (p. 10)” and that “a fact is like a sack, it won’t stand up until you’ve put something in it (p.11).” In a multitude of facts and events, Carr argues that the historian must be selective:

The philosophy of history is concerned neither with the past itself, nor the historian’s thought about the past itself, but rather with the two things in their mutual relations (p. 23).

In conclusion, in my thesis I argue that digital history projects should be accessible to a variety of users, have a strong narrative hook, develop presence and include embedded spaces for user-to-user, user-to-researcher and researcher-peer conversation. To do this, I bring forward three theories: Habermas’ theory of the public sphere, Dewey’s theory of the democracy of education, and Deci and Ryan’s (2000) self-determination theory. As research of system design in digital history projects is insufficient, I support this theory
with empirical data from videogame research on system architecture and design that motivates and keeps users engaged. Lastly, I exemplify the proposed system design in a digital history project.
Chapter 2

Literature Review

In this chapter, I build the context I believe is necessary for a deep understanding of digital history today. I first give an overview of the most important digital technology developments of the last half-century and outline the ways in which they influenced the development of new digital humanities fields and consequentially, digital history.


Thirdly, I discuss the literature related to digital history and its characteristics and challenges. I give an overview of contemporary digital history projects that successfully represent and convey history. In this section of the literature review, I emphasize both the need to keep the integrity of history within digital projects (Skinner, 1969, Lee 2004, Phillips, 2004, Seixas & Morton, 2013), as well as the importance of designing experiences that allow the user to explore, comment and collaborate with the creators of

**Defining Terms: Digital Technology, Digital Humanities and Digital History**

The word *technology* comes from the Greek *tekhnologia* (the systematic treatment) *of tekhnē* (art, craft). The more contemporary Oxford Dictionary defines it as a) “the application of knowledge for practical purposes,” b) the “machinery or devices developed from scientific knowledge,” and also as c) “the branch of knowledge dealing with engineering or applied sciences.” The same source defines the word *digital* as “related to, using or storing data or information in the form of digital signals” through computer technology. Thus, I define digital technology as the sum of applications of digital information for practical purposes (with all that this implies), as well as the branch of scientific knowledge that deals with the creation and use of digital devices.

The humanities teach us to think critically, globally and empathically (Nussbaum, 2010). “We are able perceive and understand the feelings of other because we have first-hand knowledge of these feelings” (Morris, 1975). The humanities are defined as:

A term used in Europe and the USA to distinguish literature, languages, philosophy, history, art, theology, and music from the social sciences and the natural sciences. The term originated in Renaissance times, when *litterae humaniores* (a name still in use at Oxford) signified the more humane ‘letters’ of the revived Latin and Greek authors in contrast to the theological ‘letters of the medieval schoolmen’ (Humanities, 1986, p. 292).

It is through the study of the arts that we can learn about and explore our fellow humans, our past, and ourselves. For the purpose of this M.Ed thesis, digital humanities is defined as the area of research and teaching at the intersection of digital technology and
the disciplines of the humanities. In digital history, a branch of digital humanities, digital technology converges with the discipline of history to further historical practice and research.

**A Half-Century of Advancements in Digital Technology**

The way we use, and just as importantly *think* about, digital technology has changed dramatically, even radically over the course of the last century, alongside advances of the technology itself.

In the late 1940’s, the computer turned from being a specialized scientific instrument into a commercial product. In 1950, building upon his experience during his secret wartime projects in computing and code-breaking, the British mathematician Alan Turing published his famous paper in which he referred to computers as *learning machines* and shockingly asked, “Can computers think?” (Turing, 1950). In 1969, the key ancestor of the Internet, The Advanced Research Projects Agency Network (ARPANET) had data travelling through its modest network consisting of only four institutions: UCLA’s Network Measurement Center, Stanford Research Institute (SRI), University of California-Santa Barbara and University of Utah (“40th Anniversary of the Net,” 2016). In 1975, the launch of the Altair 8800 turned the computer into a personal product (Campbell-Kelly, Aspray, Ensmenger & Yost, 2013). The 1970s and 1980s were marked by the creation of Global networks that later became what we now know as the Internet, while the 1990s were shaped by the invention of the World Wide Web, a more accessible way of retrieving data in the network in the form of interlinked websites. (Kelty, 2008)
The first half of the 2000s saw a shift in the way content was created and consumed, characterized by a transition from the “one publisher, many readers” and the “read-only” to the “many publishers and many readers” and the “collaborative.” Web 1.0 (before 2004) involved predominantly hierarchically arranged content that could be produced by one small group of content creators alone. The communication was one-way, or “read-only,” from the content producer to the consumer of the content; there was no dialogue and no feedback.

In Web 2.0 on the other hand, knowledge was decentralized, accessible and co-constructed (Greenhow, Robelia, & Hughes, 2009). More users became content creators and content was able to be created collaboratively. Web 2.0 is characterized by a continuous dialogue between the creator and the “commentator” of the content. This change brought with it a new wave of thinking and started an era of collaboration and dialogue, which allowed the creators to improve their ideas and learn more about their audience, but also gave the reader the responsibility to think critically and share his or her point of view, creating a continuous communication loop.

In the last decade, innovation in digital technology has created the potential for users to gain from a vast increase in processing power and increasingly sophisticated tools in the form of new software. In addition to this, hardware has become smaller, sleeker and more portable. At the same time, phone and internet cables have disappeared, as wireless connectivity has become the norm. Global social networks and the rapid adoption of the smartphone, a powerful, portable computer, connected to the Internet has become ubiquitous. These changes brought with them still more new forms of
interactivity, and thus more and easier means for content creators and collaborators to record, mix and produce multi-media content, making ourselves sources of history in digital form.

**Digital Humanities: A Continuously Evolving Field**

Over the past half century, the field of digital humanities has also evolved greatly, both from a technological point of view, and in the way the scholarly community has defined the field itself. The terminological change, from “humanities computing” to “digital humanities” in 2004 (Schreibman, Siemens, & Unsworth, 2004), meant recognizing the field of digital humanities as not just a field for digitizing text, but as a new discipline.

In digital humanities, digital technology can introduce new tools that have the potential to enhance research and offer a variety of means to process and visualize data. On the other hand, humanistic thinking influences the very way technology is built and used. In digital humanities, the humanistic ideals fuse with the possibilities of digital technology.

The history of digital humanities is marked by four main periods: a) the beginning of humanities computing, from 1949 to early 1970s, b) the period from 1970s to mid 1980s, when digital history was consolidated, c) the era of the new technological developments between mid 1980s to early 1990s and d.) the era of the Internet, from the early 1990s to the present day (Schreibman, Siemens & Unsworth, 2004).

**The beginnings of digital humanities.** In 1949, the Italian Jesuit priest Roberto Busa, hearing about the invention of a new computing machine, imagined a project in
which he would create an index of terms found in the works for St. Thomas Aquinas, an index that would total 11 million words in medieval Latin. The project was eventually completed in 1992, in a semi-automatic way (Schreibman, Siemens & Unsworth, 2004). Soon, other researchers began using technology to build new indexes and compile dictionaries. Yet at the time the technology available was still limiting: data had to be introduced by hand and then stored on magnetic tape, which was slow to read and could only be accessed serially.

In 1966, the Computers and Humanities journal was founded. The journal published articles on topics such as Computer Programs Designed to Solve Humanistic Problems (1966), The Computer and the Historian: Some Tentative Beginnings (Bullough, 1967) and The Computer and Plato’s "Seventh Letter" (Morton & Winspear, 1967).

Between 1970 and 1980 more and more conferences focused on humanities computing were organized in the UK. In 1986, the Association for Literary and Linguistic Computing in London founded the Literary and Linguistic Computing Journal (Schreibman, Siemens & Unsworth, 2004). Some examples of titles published are Some Thoughts Concerning the Application of Software Tools in Support of Old English Poetic Studies (Hidley, 1986) and Automatic Stylistic Analysis of Lyrical Text (Dierks, 1986).

The programming debate. During the mid 1980s a new debate arose about whether or not students should learn computer programming. Some consider that all students need to learn computer programming, including those in the humanities:
It has been said that education today has too much telling and explaining, not enough showing and doing. Students need algorithmic experience and systems analysis techniques; they need word processing abilities and database concepts. In order that they understand the complexities of actual systems, we need to let them try simulations and hand-on experiences to see how different ‘real world’ variables depend on each other…. They need computers in the humanities (Oakman, 1986).

The creation of the personal computer, and the Apple Macintosh, specifically, allowed for a better experience for users from the humanities because it had an easier to use graphical interface and it incorporated a simple programming tool, which made the computer easier to use than other personal computers at the time. (Schreibman, Siemens & Unsworth, 2004). One of the most important digital humanities projects at the time (O'Brien O'Keeffe, 1997) was Patrick W. Conner’s Beowulf Workstation (Conner, 1991), a computer application which presented the learner with two interlinked windows: one containing the original text and the other that allowed readers to add personal notes, translations, and comments, meant to make the reading and understanding of the ancient text as easy as any contemporary text.

The initial tension between humanities and digital technology. The invention of the personal computer and the boom of digital media put digital technology in the limelight. On one side, digital technology was seen by many as a portent for an optimistic, perfectly controlled and optimized future, but at the same time, many saw digital technology as an agent of dehumanization with the potential to rob us of our relationship to what is natural, human, personal.

Digital technology was seen as something that could ultimately become a threat to the individual because it would eventually rob her/him of her identity: “it angelizes man
(sic) disembodies him. Turns him into software” (McLuhan, Benedetti, DeHart, Zingrone & Marchand, 1996, p. 79). Others considered it to be a threat to society because this lack of identity could make the individual more prone to violence, “for violence is a quest to identity, seeking him to discover, ‘Who am I?’ and ‘What are my limits?’” (McLuhan et al., 1996, p. 98).

For McLuhan (McLuhan et al., 1996, McLuhan, McLuhan, & Szklarek, 1999), digital media was going to be able to completely change our nature by making us dependent on it. Digital media was responsible for creating a new environment deprived of sophisticated social relations, where the individual was passive and where remained little space for individuality. One of the reasons for this lack of individuality was the act of consuming the same media and continuously receiving the same message:

”When you repeat the apartment from hundreds and hundreds of times in a small space, such as these high rises, you really switch in a tribal or cave world.”(McLuhan et al., 1996, p. 54)

For some scholars in the field of humanities, digital technology had the potential to irremediably alter, not only our relationship with the world and each other, but also deeply change our nature: “by the late twentieth century, our time, a mythic time, we are all chimeras, theorized and fabricated hybrids of machine and organism; in short, we are cyborgs” (Haraway, 2004, p.8). The cyborg, seen as the ultimate step in the human becoming digital technology is the symbol of a self without gender, without a need for intimacy, community, natural relationships: a self with no relationship to the past
(Haraway, 2004, p. 9). To some, digital technology was a potential threat to all that it is human.

There has always been a certain tension between the humanities and digital technology, between what is natural and what is simulated. The classical theory of simulacra and simulations introduced by Baudrillard (1983) summed up this tension:

The territory no longer precedes the map, nor survives it. Henceforth, it is the map that precedes the territory, precession of simulacra, it is the map that engenders the territory, and if we were to revive the fable today, it would be the territory whose shreds are slowly rotting across the map (Baudrillard, 1983, p.2).

**Digital humanities today.** As Prescott (2012) argues, if there was ever a time when the tension between the humanist and technology led to a reluctance to use technology in the scholarly research of the humanities, those days are long past. Even though there are many projects using digital technology in the scholarly research of the humanities, one of the criticisms brought to the field is the small-scale focus of the projects and their inability to communicate with and engage the extended humanities community (Juola, 2008, Liu, 2012, Prescott, 2012).

Juola’s (2008) point of view concerning the current state of digital humanities is that the work done in the field has not gone beyond using digital technology as a means of representing data. Moreover, he suggests that researchers in the digital humanities are not aware of the available digital technologies and/or have few incentives to change their practice and learn to use these new technologies: “scholars lack incentive to participate (or even to learn about) the results of humanities computing”(Juola, 2008, p.83).
Another point of view is that current digital humanities projects have little reach outside the groups or research labs where they are developed and that they lack a focus on scaling (Liu, 2012). Prescott (2012) also looks at the impact of digital humanities research on the larger scholarly community and notes that the majority of digital humanities journals have low impact in the extended community of humanities scholars, suggesting that humanities scholars do not read or cite work in the digital humanities. Although he notes that humanities scholars are already using digital techniques in their work, the author argues that the projects created by the digital humanities community do very little to “enhance public engagement with humanities scholarship.” (p.63)

As an example for the kind of project that could have a greater impact on the scholarly community and beyond, Prescott (2012) mentions the Proceedings of the Old Bailey, 1674-1913, a project that digitized 200,000 reports on criminal trials at the central criminal court of London. The result is a fully searchable, open access project, which also represents the largest single body of text about the everyday lives of people in Britain.

In conclusion, what the literature suggests is that even though there is appetite for using digital technology in the field of humanities, digital humanities projects do not seem to reach and engage an audience greater than the institutions in which they were developed. This has to do with the specific technologies being used, the potential of a project to attract interest of a variety of disciplines and also with the access to the data itself.
Digital History: An Overview

In their article, “What is digital history?,” Seefeldt and Thomas (2009) distinguish between *digitizing projects* in digital history and *digital history scholarship* and they point out that even though digitizing is part of the work, the focus of the historian is different of that of the librarian, in that the historian’s approach always has at her core, a historical question. Additionally, the ability of the reader to make interpretative associations is one of the defining elements of the discipline.

**Defining Digital History.** Digital history is the field in which the discipline of history merges with the possibilities of digital technology and where digital technology is used as a means to represent and convey history, to transport, virtually or metaphorically, the reader to the past and bring history into the light of today. Digital history allows us to time travel and it equips us with the tools that enable us to see things we were never able to see before. Digital history is an approach to examine and represent the past in a way that can be implemented through new digital technologies and systems with the goal of creating new ways for people to experience, read and critically follow an argument about a major historical problem. Seefeldt and Thomas (2009) see the act of sharing and connecting with history as something that occurs naturally, no matter the medium:

Even at the early stages of the web’s growth, history was all over the web. Amazingly, people rushed to put their own histories on the web and to create sites dedicated to their favorite subjects. Big organizations, such as the National Park Service and the Library of Congress, put up web sites on major historical places and topics (Seefeldt & Thomas 2009).

Cohen et al (2008) suggest that digital history possesses a set of crucial components: “the capacity of play, manipulation, participation and investigation by the
reader” (p. 454). They see the user as able to test the interpretations of others, mine the materials for items that were overlooked previously and to formulate new views: “The goal of digital history might be to build environments that pull readers in less by force of a linear argument than by the experience of total immersion and the curiosity to build connection.” (p. 454)

Digital history projects are fluid and impermanent (Cohen et al., 2008). It is not they that are fragile or in danger of disappearing, but they are continuously changing, along with technologies, audiences, and new data. Scholars are free to edit, add, annotate as new evidence is brought to light. Cohen et al. (2008) argue that digital history is more than using technology to build history web sites and that mastering technology cannot be the end result of digital historians, but a means to a bigger goal of creating innovative history. “The most important, yet difficult, skill is simply thinking: thinking in bold and creative ways about how this technology can serve the interest of history” (p. 459) On the other hand, the authors suggest, digital historians should have sufficient mastery of technology (specifically programming) so that, by participating in its creation, they can benefit from using software that fits their needs.

Seth Denbo, Director of Scholarly Communications and digital initiatives at the American Historical Association, argued during the digital history panel at the digital history workshop of Annual meeting of the American Historical Association of 2014, that many historians already use digital tools in their practice, even if they don’t consider themselves digital historians. Some of the tools he mentioned were spreadsheets, citation
management tools and digital archives, like Jstor. The digital history panel argued that it is important for historians to use technology purposefully and not just because it’s available. They mentioned three main uses for digital tools: community building (finding like-minded scholars through social media), building blocks (access to data and archives) and problem solving (using technology to get new answers to old questions).

**Digital history projects.** Digital history projects vary from the most simple, like recreating, with modern digital tools, the map of the physician John Snow, who helped eradicate cholera in 1854 London, by overlaying the physical space with data about cholera-caused deaths, to the very inter-disciplinarily complex, like Saint Paul’s Sermon (Mapping the 1854 Cholera Outbreak”, 2014.)

The *Virtual Paul’s Cross Project* (“The Virtual Paul’s Cross Project,” 2016) recreates the delivery of John Donne’s sermon on November 5, 1622 in Paul’s Churchyard. Here, we are transported to the 17th century, where preacher John Donne is giving his Gunpowder day sermon. This digital history project connects us to the primary sources: a painted portrait of the preacher, the text of the sermon itself, as well as the space and historical context of the place. The cathedral is rebuilt with 3D rendering technology so that the reader can walk through the space virtually. A recording of the sermon, which encapsulates the spirit and the tone of the sermons of the era, as well as the acoustics of the space, is available to the user as well.

For the digital history project *Mapping Galileo* from Stanford University (a project that later evolved into *Mapping the Republic of Letters,* the authors create a map
of the letters Galileo sent and received throughout his lifetime. By visualising the nodes of the resulting network, the authors discover new insights: that Galileo created new networks after his first and second trials, and that people who supported him had moved to Rome to be closer to him. When asked why visualization is important, one of the researchers in the project answers: “We visualise so we can see things we didn’t see before.”

Cohen and Rosenzweig (2006) outline some of the characteristics of digital media and its advantages for historians. First, storage capacity: a 120 GB external hard disk can hold a 120,000-volume library. Digitizing primary sources also makes it easier to make them available online, which in turn opens and increases access to these primary sources for variety of users. Second, digital media differs from other media in that it is interactive. It allows for interaction, conversation, feedback and even collecting and writing history. Third, digital media is non-linear and characterized by hypertextuality. This is an important aspect of digital history because it allows historians to convey stories in multiple ways, at the same time, by creating different journeys for each user. I further discuss this aspect in my chapter on creating digital environments that motivate and engage users.

**Designing Digital History Projects.** Digital History projects involve the use of primary sources including text, images or multimedia, but they also include a series of system design elements that are less visible, yet equally important. For the purpose of this thesis, we define system design as the process of defining the architecture, components, data and user experience for a system to satisfy specific requirements. Apart from the
content of a digital history project, components such as navigation (describing the ways in which users can move through the digital history project to access data) and accessibility (designing systems that can be enjoyed by a variety of users) deeply affect how users interact with digital history projects. In terms of accessibility, Cohen and Rosenzweig (2006) write: “Historians, as chroniclers of the past who want to disseminate the truth as far and as wide as possible, should try to make their sites accessible to the greatest number of people, regardless of ability (p. 139).”

Other aspects of digital history projects design that should be taken into consideration are: defining an audience, establishing a strategy for promoting the project, optimizing the content for search engines (SEO), and keeping users informed of project updates via RSS⁹.

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⁹ RSS or Real Simple Syndication allows users to subscribe and track updates on a website via an information feed that can be captured via email or an RSS reader, such as Feedly.
Chapter 3

The Importance of Creating Digital Systems that Encourage and Facilitate Critical Thinking and Idea Exchange

This thesis is organized and conceptualized as a series of concentric circles (Figure 1), the core representing the digital history project itself, where data is interpreted using the historical method. The next layer, encompassing the core, represents the theoretical framework of the digital history project; here I use Carr’s view of a fact from the past being transformed into a fact of history through selection, analysis and interpretation (Carr, 1961), as well as Skinner’s (1969) view of the obligation of the historian to interpret facts and primary documents within the context of those facts and documents. The next two layers refer to the theoretical framework of the project design and the system architecture and user experience design.

In this chapter, I discuss the importance of the outermost layer, the theoretical framework of the project design. This thesis and the digital history project are built on the idea that students, teachers, and all users of digital history projects would benefit from a design that encourages and facilitates critical thinking and promotes exchange of ideas, in a space that is public, democratic and ruled by the “unforced force of the better argument” (Habermas, 1989).

Critical thinking is defined here as “the process by which the thinker improves the quality of his or her thinking by skilfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them” (Paul & Elder, 2004). Critical
thinking is linked to critical inquiry as Dewey (2004) sees it: a tool which individuals within a democratic society use as they work together to solve societal problems. (Bruno-Jofré & Johnston, 2014, p. 4). Through the use of Dewey’s lens of critical inquiry, individuals extract the ideal traits of existing societies and use them to criticize the undesirable features of their own society and find ways to improve them (p.47). In Democracy and Education, Dewey sought to articulate and justify the education he believed individuals needed in order to help society achieve in practice its highest ideals, while constantly challenging these ideals themselves, “so that they would function as sources of hope and imagination rather than closed outlooks (Hansen, 2006, p.4).”

Dewey’s philosophy is part of the pragmatist school of thought, which claims that an idea is true only if it works satisfactorily, and that its meaning can be found in the practical consequences of its application. Having at its core the notion of problem solving, pragmatism rejects unpractical ideas, focusing not on “what it is true,” but rather on “how do we know that it is true” while acknowledging fallibility.10

Critical theorists associated with the Frankfurt School of thought, such as Habermas usually applied their method in relation to a critique of the dominance of capital. They concluded that positivism, where the source of knowledge is information derived from experience interpreted through reason and logic does not lead to a realistic interpretation of social events. These particular critical theorists believe that philosophy and social science should be integrated (Sim, 2001, p. 216).

10 This point was made by Dr. Rosa Bruno-Jofré, in a conversation, in July 2016
For Habermas (1989), an ideal society includes a “public sphere,” a communal space, in which any member of the society can identify and freely discuss societal issues, as opposed to having individuals represented by an organization or a spokesperson, which leads to a distortion of discourse, and in turn, a biased view of society’s problems:

The feedback of group opinions, defined in terms of categories employed in research on governmental and administrative processes or on political consensus (influenced by the display of staged or manipulative publicity) cannot close the gap between public opinion as a fiction of constitutional law and the social-psychological decomposition of its concept (p. 244)

Contemporary societies, in Habermas’ view, have politically dominance that continually manipulates a population’s point of view, in an attempt to match the dispositions of the population with their own objective and political vision (Habermas, 1989). What is known as public opinion has very little to do with the opinions and beliefs of private individuals, i.e., “non-public opinions are at work in great numbers and ‘the’ public opinion is indeed a fiction” (p.244).

In order for this ideal notion of the public sphere to exist, it is important that individuals’ non-public opinions become part of the public discourse.

The Mirage of Active, Critical Learning

In *The School and Society*, Dewey (1943) shares an anecdote about one of his visits to a school supply store, where he was looking for desks and chairs that would be “thoroughly suitable from all points of view: artistic, hygienic and educational, to the needs of children” (p.31). In response to Dewey’s frustration at the lack of finding a suitable desk, a supplier told him: “I am afraid we do not have what you want. You want something at which the children may work; these are all for listening.”
In the past we have dealt with restrictive classroom settings, with desks bolted to the floor and arranged in an orderly fashion facing the blackboard, where children were required to sit quietly, listen, and copy in their notebooks what the instructor has dictated to them, and where children were expected to be able to later reproduce it as literally as possible. These classrooms contributed to the semiotic context in which students could only learn in a passive way. The way to learn was to listen, and, when asked, to be able to repeat what the teacher had said.

We find ourselves at a similar point in digital history today: we unwillingly create similarly restrictive educational contexts by choosing system designs that do not afford inquiry, critical thinking, participation and conversation. While the majority of digital historians agree that one of the defining characteristics of digital history is the way they allow users to participate actively, develop their own questions, and manipulate and interact with the data (Cohen et al., 2008), many digital history projects today are designed for “listening,” rather than for the active work that allows students and other educational actors to develop the capacity for creative, self-development through knowledge-work. As a result, many digital history projects give us only technical inventiveness: new ways of digitizing, visualizing and processing data. Many are designed to be experienced in one direction alone: from the “sender” to the “receiver.”

There is no room for the student to use the technology to reflect upon, or inquire about the data themselves, let alone share their point or view and modify content. In short, there is no room (or far too little room), for critical thinking, participation, feedback and conversation in digital history today. Closed databases and forbidding,
read-only microsites take the place of the restrictive educational environments of earlier eras. Like a printed magazine that offers readers little more than a pre-designed, static experience, where knowledge is presented as an untouchable “product,” the consequence is that many digital history projects today allow for little in the way of feedback, collaboration or conversation. Just as the technology is “closed,” its pedagogical potential is “closed-off” as well.

In the following sections of this chapter, I argue for embedding digital spaces with conceptual tools that would encourage and facilitate critical thinking because I believe that public participation and exchange could enrich both future digital history projects and the experience of the users of these projects. The analysis intends to go beyond the technical and moves toward a model that incorporates Habermas’ and Dewey’s conceptions as educational aims informed by critical inquiry rooted in a democratic image of a decentered and pluriversal society.

Figure 2 From left to right: a classroom of boys 1940s, pupils with abaci in a classroom, about 1930 and students using computers in a contemporary classroom today. Have things really changed?
I argue that, in order for digital history projects to develop further, it would be advisable to consider making them accessible to a variety of users, implementing system designs that encourage critical thinking and participation and including embedded spaces for free exchange of ideas with a self-correcting ethos.

**Designing for participation**

For Habermas (1989), the public sphere is the space of public life where individuals meet to discuss social issues in a free and unrestricted manner. The public sphere mediates between the state and the individual, creating a space of public discussion, debate and self-cultivation, where:

Deliberations are free of any internal coercion that could detract from the equality of the participants. Each has an equal opportunity to be heard, to introduce topics, to make contributions, to suggest and criticize proposals. The taking of yes/no positions is motivated solely by the *unforced force of the better argument* (Habermas, 1996, p.306).

In essence, the existence of the public sphere creates the necessary context for a democratic, decentered, flexible social context. It makes it possible for different social classes, religions, and cultures to maintain their traditions and interests within a shared understanding of a common society.

For Habermas, the bourgeois public sphere emerged in the 18th century and came into being as a result of social changes in Germany, France and Britain. Large numbers of individuals would come together to engage in sharing their ideas and discuss issues of common interest, creating a space in which new ideas and new practices of rational
public debate were possible. However, this utopian state of critical thinking and individual need to share ideas in a constructive manner did not last very long. By the 19th century, the relationship between the state and the citizen became one of client and service provider, and the notion of citizen became diluted in this relationship of dependency on the state. The space became political.

Public debate between private citizens was replaced by the discourse of interest groups that competed for “a greater slice of the public purse” (Habermas, Crossley & Roberts, 2004). Thus, instead of having individuals discuss their own ideas, the public discourse was replaced by specialized politicians in inaccessible conversations that, instead of including the ideas and opinions of individuals, represent the public.

In this new conception, “public opinion” would now be equated with polling surveys or focus groups. Defining public opinion by these means is artificial. First, because the conversation space created by polling surveys and focus groups are temporary and constructed, and owned by the organizers of the poll or surveys (i.e., not a free space in which individuals feel they have the right to share their ideas, whenever these ideas occur). Second, they don’t allow individuals to raise issues that matter to them; the conversation is guided towards a set of pre-defined questions. Third, surveys and focus groups are organized with a clear purpose: they seek votes.

This way of defining the “public opinion” does little to represent individuals because the loudest voices and the most popular opinions are given prominence, not the best arguments (Habermas, Crossley & Roberts, 2004). The individual’s voice is not heard within the “public opinion.” What was once a rich exchange of arguments and
ideas has been exchanged with an opportunity to answer in a passive way, one yes or no question, every four years.

This passivity of the citizens deeply affects our society. With the absence of an equitably accessible platform for individuals to share ideas, critical thinking is destined to become an obsolete habit, a mind tool that is simply, rarely used.

Habermas talks about a normative ideal, which does little to our understanding of the ways in which today’s society could address its problems and recreate this ideal public sphere. Habermas, Crossley and Roberts (2004) suggest that we identify distortions in the public speech: omissions, slips, defenses, and then trace them back in history so that they can be analyzed, understood and corrected.¹¹

This is a tedious, slow process. We could create scaled-down versions of the public sphere to better understand how individuals react to a space in which they can form opinions and share their ideas on topics of individual meaning and importance and, in a limited way, to test Habermas’ ideas of the public sphere.

If we think of digital history projects not only as digital environments, but also as digital societies, we should first aim at creating spaces that are transparent and accessible to a variety of users, from students to researchers, parents and other important stakeholders in the educational system. We should implement system designs that allow and encourage participation, conversation, feedback and idea exchange.

¹¹ Habermas, Crossley & Roberts (2004) talk about “systematical distorted communication”, a concept from psychoanalytic epistemology that could be used in the social context. Instead of analyzing the discourse of the individual, we would need to analyze the public discourse.
Habermas considers individuals’ understanding and participation in the public life to be crucial, because in his vision, this reinforces a healthy democracy, constructed of individuals who think critically. Habermas’ view of an ideal society is in this way very similar to Dewey’s ideas of a healthy democracy. For Dewey, it is imperative for members of a society to be able to discuss issues of individual importance freely, since this dialogue has the potential to ensure continuous interactions among social groups.

For Dewey (2004), there are two elements that guarantee a democratic society: a multitude of points of shared interests, and free, continuous interaction between social groups. There can be no democracy without free access\textsuperscript{12} to knowledge, or without the opportunity to discuss freely and improve what is known, thus establishing a society with a self-correcting ethos.

In an undemocratic society, members are isolated, and left bereft of stimulation from the larger world. Education can serve to entrench this isolation, creating hierarchies of knowledge and power. As Dewey contends:

There must be a large variety of shared undertakings and experiences. Otherwise, the influences that turn some into masters, educate others into slaves. And the experience of each party looses its meaning, when the free-interchange of varying modes of life-experience is arrested. A separation into a privileged and a subject-class prevents social endosmosis. The evils thereby affecting the superior class are less material and less perceptible, but equally real (Dewey, 2004, p. 80).

To make digital history projects today authentically relevant to all groups, we should make sure that all users are considered and valued in the design process. We should ask questions such as: a) \textit{could a non-specialist benefit from engaging with this project?}; b) \textit{will a parent be able to access this resource and have a rich conversation}}

\textsuperscript{12}This idea came up in a conversation with Doctor Rosa Bruno-Jofre, in November 2015.
with his or her child?, c) does this project allow for interdisciplinary insight and feedback?, d) does this project make it possible for its creator to learn from the project’s users?, and e) how can we design for accessibility for a diversity of users, with different needs, that are part of extended groups?

**How Critical Thinking and Participation in Digital History Projects can Help Change Societies**

For many, the possibility to recreate Habermas’ notion of the public sphere and “the unforced force of the better argument” (Habermas, 1989, 1996), as well as and Dewey’s (1943, 2004) understanding of democracy as a mode of associated living imbued of the spirit of inquiry, might seem utopian. Yet contemporary digital humanities projects have the potential to be exemplary environments for fostering the principles of personal and societal enrichment.

Through the study of the humanities we learn how to ask questions, appreciate beauty, think critically, and dream of new ideals. As Nussbaum (2010) argues, the humanities educate individuals who can think critically, imaginatively and globally, which is a necessary condition for preserving and enriching modern democratic societies:

Cultivated capacities for critical thinking and reflection are crucial in keeping democracies alive and wide-awake. The ability to think well about a wide range of cultures, groups, and nations in the context of a grasp of the global economy and of the history of many national and group interactions is crucial in order to enable democracies to deal responsibly with the problems we currently face as members of an interdependent world. And the ability to imagine the experience of another, a capacity almost all humans possess in some form, needs to be greatly enhanced and refined if we have any hope of sustaining decent institutions across the many divisions that any modern society contains (Nussbaum, 2010, p. 10).
Projects in the digital humanities aim to provide new ways for exploring and understanding human experience. Within digital humanities projects, it is possible to design environments that are accessible, inclusive, flexible and inviting to conversation and collaboration. The project I created as part of this thesis is an effort to apply these principles.

In digital history, increasing participation and embedding spaces for sharing ideas within the projects themselves could prompt users to interact with and within these projects, give feedback\textsuperscript{13} and share points of view. Creating virtual spaces in which critical thinking and participation are encouraged has the potential to germinate unforeseen connections and new points of interest among scholars in complementary fields and opening the doors to new conversations based on common interests. Graham, Milligan and Weingart (2014) talk about writing their volume, \textit{The Historian’s Macroscope: Big Digital History}, collaboratively and openly, so that they could continuously improve it: “we shared our materials \textit{before the book was finished} so that if we were wrong, we could improve” (paragraph 5).

Allowing more voices, from different backgrounds, with different points of view and different specializations to contribute to the development of ideas could help to improve the quality of research and its impact. It could also help improve the way we use technology for research and teaching, by identifying the needs and matching it with the best technologies needed for this purpose. In short, it could be used to \textit{humanize}

\textsuperscript{13}Today’s technology affords the collection of a multitude of user engagement data, from visits and clicks to personal trends of interaction with the digital humanities project content, allowing researchers to better understand how users consume their content.
technology (and by extension, its users). Putting scholars and artists in contact with developers and technology makers\textsuperscript{14} has the potential to improve technology itself and drive innovation.

Increasing participation from a multitude of users and societal groups could also help improve the technologies used by historians and history educators. One of the challenges of using technology for research and teaching today is that not all researchers and educators are able to build their own tools to serve their unique purposes. They have to rely on pre-built tools and some of these tools might not best serve their specific purposes. Scholars in the field of digital history need to possess enough knowledge about digital technology to decide which tool is the best for their purpose and which has less positive potential, in a given situation. On the other hand, non-academic technology makers could benefit from humanistic ideas, insight and points of view.

Technology has always found inspiration in art and fiction, allowing its creators to be influenced by artists and humanists and their ideas of what technology should be and could do. When asked about the inspiration for the design of the first mobile phone in the early 1970s, Martin Cooper credited “Star Trek.” “That was not fantasy to us, that was an objective.” (Ten Inventions Inspired by Science Fiction, n.d.).

I have argued here that it is possible to recreate Habermas’ notion of “the unforced force of the better argument” and Dewey’s understanding of democracy as a means of transparent and connected living within contemporary digital history projects,\textsuperscript{14} As Dewey (2004) would say, this variety of opinions and experiences allows a free exchange of points of view and ensures the free flow of ideas across individuals within a healthy democracy.
by enriching current system designs. Through the use of critical inquiry, as defined by Dewey, individuals extract the ideal traits of existing societies and use them to criticize the undesirable features of their own society and find ways to improve them (Bruno-Jofré & Johnston, 2014). Specifically, I have argued that designing for increased participation and embedding spaces for conversation and collaboration could further academic practice, improve user experience, increase interdisciplinarity and drive innovation within digital technology.
Over the past half century, digital technology, and with it, digital history has developed rapidly. Today, there are many projects using digital technology in the scholarly research of history, but there is little research on how systems design and the ways in which specific technologies used influence the ways in which users interact with the virtual environments encompassed within digital history projects. In this thesis, I refer to virtual environments as any technology mediated environment in which users interact with the content of a digital history project.

Virtual environments are complex constructs that have to do, not only with their content itself, but also with the ways in which the content is presented and experienced, the ways in which feedback is given, and the ways in which users position themselves emotionally and socially in the virtual environment. Interaction in virtual environments could be as simple as interacting with the various areas of a website, or as sophisticated as manipulating objects within the environment or with the environment itself.

Virtual environments can be more or less interactive, yet the extent to which users actually engage with them depends on the design of the environment itself: a function of the user’s motivation to explore and engage with the environment.

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15 For the purpose of this paper, I define system designs as the process of defining the architecture, components, data, and user experience for a system to satisfy specific requirements.
In this chapter, I examine user motivation in virtual learning environments with the purpose of outlining the specific characteristics of virtual learning environments that best engage users, while helping them stay motivated to learn. I first explore motivation through the lens of Ryan and Deci’s (2000) self-determination theory and define some of the factors that contribute to motivating individuals. Second, I review the specific characteristics of virtual learning environments, discussing instruction time and space, relationship with technology and some of the challenges of technology-mediated communication. Third, I examine student motivation in virtual learning environments and discuss design strategies and principles that engage and motivate students. Last, I discuss in detail three characteristics of virtual learning environments that engage and motivate students: building presence (or immersion) within the virtual world, designing user experiences in which users have the ability to see themselves as the hero of their experience, and creating virtual learning spaces where instructors and students can customize the interaction in the virtual environment to better fit their needs.

**Defining Motivation through Self-Determination theory**

According to Ryan and Deci (2000), to be motivated is to be moved to perform an action or engage in an activity. Ryan and Deci distinguish between intrinsic and extrinsic motivation: individuals are intrinsically motivated when they engage in an activity only for the pure enjoyment of the activity itself; and are extrinsically motivated when they engage in activities for a separate outcome. Self-determination theory was framed in terms of social and environmental (contextual) factors that may either facilitate or undermine motivation.
Ryan and Deci (2000) believed that the degree of motivation to engage in an activity is thus facilitated or undermined by whether three basic psychological needs are met: a) autonomy, defined in this paper as the universal urge of an individual to be a causal agent in his or her life, b) competence, defined by a means to control the outcome of an activity and experience mastery, and c) relatedness, the universal need to interact and be connected to others. Even though motivation comes from within an individual, it can be influenced by contextual factors. Teachers may not motivate directly a student to learn, but they can create learning environments that motivate students by creating a sense of autonomy, control and competence for students, and creating a feeling of connectedness within the classroom (Daniels, 2010).

**Characteristics of Virtual Learning Environments**

Virtual learning environments are environments, designed with the purpose of delivering and implementing a curriculum, which use digital technology to represent and convey curriculum contents. Thus, not all virtual environments are virtual learning environments, yet all virtual learning environments are virtual environments. My purpose in this thesis is to encourage users to think critically, form their own ideas, and also to connect with the scholars creating the projects, freely discuss the issues that matter to them. It is thus important to look at the relationship between student and teacher in virtual learning environments and distinguish some of the elements that either support or create challenges for students to perform these actions.

Virtual learning environments are also called digital teaching platforms (Dede &
Richards, 2012), computer-based learning environments (Roscoe, Segedy, Sulcer, Jeong, & Biswas, 2013) and inquiry learning environments (Donnelly, Linn & Ludvigsen, 2014). In face-to-face classrooms, the students and teacher(s) are simultaneously present in the same physical space. In virtual learning environments, however, the users are situated across several spaces and moments in time: the virtual environment, which is common and shared (normally through a software and via the Internet) and the physical environments where the users are receiving and performing the mediated instruction: their homes, offices or the library.

One difference between physical and virtual classrooms has to do with the physical space in which learning happens. In a virtual classroom, students might be more prone to external distractions and interruptions, while in the face-to-face classroom, priority is given to instruction and distractions and interruptions are reduced or eliminated though teacher interactions.

The scope of this chapter seeks to address issues within a virtual environment, however, we should be aware of the physical environments involved in digital technology-mediated learning. Virtual learning environments can be synchronous or asynchronous. In synchronous virtual learning environments, users participate in the instruction process at the same time, usually through a video or audio conferencing technology. In asynchronous classrooms, users experience the virtual environment at their own convenience, usually at a different time than other users. Digital history projects fall into this category, as well as Massive Open Online Courses (MOOCs) and other distance learning University programs, such as Desire to Learn (D2L).
In terms of their relationship with the virtual environment, users can be more or
less comfortable with the technology used to create the mediated learning environment\textsuperscript{16}. Participants may consider the online environment intimidating and feel uncomfortable
when observed by a large number of users connected online (Dyke, Harding & Liddon, 2008), they might be reluctant to participate in online threaded conversations (Henderson 2001) or they might prefer face-to-face activities to online interactions (Kemp & Grieve, 2014).

Another characteristic of virtual environments is that the communication is
mediated through the computer, which can create additional noise\textsuperscript{17} (Shannon & Weaver, 1949) in the process of coding and decoding information, making interactions potentially
more prone to misunderstandings. In face-to-face classrooms, students often experience a sense of community, they see themselves as part of the same group, while in virtual
classrooms, users report the loss of connectedness and a sense of community and
belonging to a group (Liu, 2005, Johnson & Brescis, 2006).

User Engagement and Motivation in Technology-mediated Learning Environments

Setting instruction in virtual learning environments can be a catalyst for creating

\textsuperscript{16} It is possible that this variability in sensed and reported comfort could also be noticed in the face-to-face classroom, but I consider this worthy of a separate conversation. Since face-to-face classrooms have been for many generations the norm, I assume, for the purpose of this paper, that it is more likely that students would be more familiar with studying in a face-to-face classroom than a virtual one.

\textsuperscript{17} Shannon and Weaver’s classical model of communication consists of five elements: the source of information, the transmitter, which encodes the message into signals, a channel, to which signals are adapted for transmission, a receiver, which decodes the message from the signal; and a destination, where the message arrives. A sixth element, noise, is the dysfunctional factor and it can be any interference with the message, or any distraction the decoder might experience.
new social situations and needs, and may, consequently, enhance student motivation, getting students excited about the learning experience itself (Wehner, Gump, & Downey, 2011). In a study examining foreign language learning in a virtual environment, where participants could practice Spanish by communicating with native speakers, via avatars, Wehner, Gump, and Downey (2011) argued that the virtual environment makes possible spontaneous language acquisition by “taking language learners who are outside of a country of the language they are learning and putting them inside one” (p. 287). The authors suggest that the novel medium becomes a catalyst for new communication needs, which increases learners’ motivation to acquire the language skills needed to communicate in the new social situation. In digital history, rich virtual environments and new ways of visualising and interacting with the data, as well as new ways of interacting with other interested users, have the potential to have a similar effect, increasing interest and motivating users to engage further with history.

Because of the possibilities afforded by the virtual medium to provide new and interesting learning experiences, virtual worlds may help students increase their learning by increasing their engagement with the content and their motivation to learn (Wyss, Lee, Domina, & MacGillivray, 2014). However, Hung, Chao, Lee and Chen (2013) argue that even though innovative and interesting technology (in their case a robotic teaching assistant) stimulates learners’ motivation at the beginning of the learning activities, systematic instructional strategies must be introduced in the learning process to keep students engaged and motivated and positively influence their learning performance. Creators of digital history projects could include this insight in the design of the projects,
thus building environments that offer support throughout the lifetime of the users’ interactions with the digital history project.

**Design Strategies and Principles that Engage and Motivate Users**

In a literature review of 76 articles from 2008 onward, aiming to map research pertaining to the topic of teaching science to precollege students in virtual learning environments, Donnelly, Linn and Ludvigsen (2014), outline four design principles that afford student inquiry and enable learning: a) allowing students to explore *meaningful and authentic contexts*, b) *using powerful visualizations* to illustrate phenomena that are usually too small, too fast or too vast to allow classroom experimentation, c) *encouraging collaboration* among students, peers and instructor and, d) *developing autonomous, metacognitive learning practices* that involve students in setting their own learning goals and empower them to building their ideas into complex arguments. I believe the same design principles can be applied to the dissemination of history in digital history projects: allowing users to examine primary sources and historical data within the context of these sources and facts, using visualizations to illustrate historical phenomena that would otherwise be more difficult to convey, encouraging a dialogue and collaboration between scholars and users and last, designing virtual environments that support inquiry and critical thinking and help users set their own goals, and form, and discuss, their own opinions.

For the purpose of this thesis, I will further group two of the above mentioned principles, i.e., the ability to explore meaningful and authentic contexts and using
powerful visualizations, under a category I will call *presence*.

Presence is defined as a deep immersion into the virtual world, which happens at the same time as a temporary suppression of disbelief. The user feels like he or she is *present* in the virtual word and not just a user sitting in front of a computer (Natkin, 2006, Ryan, Rigby, & Przybylski, 2006). Presence is “the illusion of *being there,*” the experience of being in one specific environment, while physically situated in another location (Li, Daugherty & Biocca, 2002). Virtual worlds can be made to promote higher levels of presence through story lines, graphic environments and intuitive controls. Ai-Lim Lee, Wong and Fung (2010) argue that presence is a user’s reaction to the given level of immersion in the virtual learning environment, a subjective psychological response to a system.

Today, there is still little research on the ways in which systems design\(^\text{18}\) and the use of specific technologies used influence the way students and instructors interact within virtual environments. To supplement this research, I examined motivation and engagement in game-based learning (Ifenthaler, Eseryel & Ge, 2012), video-game theory (Natkin, 2006) and how presence (Ryan, Rigby, & Przybylski, 2006) and user motivation (Rigby & Przybylski, 2009) are built.

Massively multiplayer online games (MMOG) are a niche of video games that are designed to support a large variety of players simultaneously, in the same setting (i.e.,

\(^{18}\) For the purpose of this paper, I define system designs as the process of defining the architecture, components, data, user experience for a system to satisfy specific requirements.
virtual world). MMOGs connect players within the game and enable them to compete or cooperate, allowing them at the same time to explore and interact with the virtual environments. In this way, virtual classrooms are similar to MMOGs.

According to Natkin (2006), a videogame is not just a linear story, but also encapsulates the experience of the player, the sensation of being an actor within a story in which he or she can enjoy a great freedom of action (p. 29). The reasons for which video games exert such a tremendous motivational pull is that they manage to satisfy needs of autonomy, competence and relatedness for the user (Ryan, Rigby & Przybylski, 2006; Rigby & Przybylski, 2009), as described in Ryan and Deci’s (2000) self-determination theory. Ryan et al. (2006) asserted that players’ motivation and enjoyment are closely related to their feelings of autonomy and competence and that relatedness emerges as an important satisfaction that promotes presence, game enjoyment and future play.

For Rigby and Przybylski (2009), the key to the motivational pull of video games exists within the concept of the learner hero, where each player is the hero of the story and the play experience is rendered specifically for each player, depending on the actions he takes or where he sits within the game storyline. The learner hero has everything he needs to succeed and blazes new trails in search of adventure (thus satisfying needs of autonomy). He or she continuously masters challenges (achieving a feeling of competence) and acts in relationships with others, in general for the betterment of the community (satisfying needs of relatedness). Applying the concept of learner hero to digital history environments could allow users to experience personal agency and master
their own challenges, which in turn could foster deeper engagement with the content.

In designing a video game, one must define and design a universe, a goal for the game and a set of rules (Natkin, 2006). In virtual learning environments, the more similar the universe in which learning happens is to the real world of the student, the more it can motivate students to learn. Israel, Wang & Marino (2016) note that when investigating the benefits of video games in science education, researchers should take in consideration content, game design, learner preferences and accessibility. Game design aspects, such as player immersion and how the video game connects to the everyday reality of the players are deeply connected to the success of the video games in motivating students to learn and achieve (Gonsalves, Rahm, & Carvalho, 2013, Cheng, She & Annetta, 2015).

In game design, an important aspect of development is the accommodation of a variety of player styles. Bartle (1996) classified video game players into four types, depending on whether they are interested in interacting “on” or “with” other players and the virtual environment. They are: a) killers, who are interested in interacting on other players; b) socializers, who are interested in interacting with other players; c) achievers, who look to interact on the environment; and d) explorers, who are interested in interacting with and manipulating the virtual game world. Yee (2005) further refined this list into three types of video game players, depending on their motives for playing: a) players who seek achievement and are interested in mastery, competition, and power gain within the game; b) social players, who are more interested in developing relationships
with other players in the game; and c) immersion players, who are more interested in escaping the real world, role-playing, and being part of the story.

In digital history environments, we can similarly expect users to have different kinds and levels of motivation to interact and engage with digital history projects: some will be more interested in academic achievement, while others might be lured first by the novelty of the projects and what they can discover within the digital setting.

In a study investigating the effect of presence in customer’s perceptions of value towards content shown in a tri-dimensional virtual environment, Li, Daugherty and Biocca (2002) showed that real-life-like interactions with the products (such as engraving a ring, or manipulating and seeing a jacket from multiple perspectives) can engage users into active, user-controlled product experience. The effect of presence in this case, is that customers feel they are receiving information about the products through their own direct experience, as if they were touching the products.

In another recent study, 565 participants were exposed randomly to four different exhibitions that were either two or three-dimensional, in a virtual museum. Katz and Halpern (2015) argued that user presence and cognitive involvement have a strong effect on users’ intentions to visit the real museum and how likely it is that participants would become interested in the cultural content. In the design of the virtual exhibitions in this study, presence was built by designing a three-dimensional environment very similar to a real museum room that users could navigate and in which they could inspect and interact with objects from different angles and from different perceived distances. The authors argued that realistic-looking environments, followed by rich perceptual cues and
multimodal feedback (interaction with and navigation within the space), increase users’ interest and engagement with the presented content. In digital history projects, building realistic-looking environments that convey the historical context of the project, including rich perceptual cues, such as gunshots and screams in a battle, and multimodal interaction with the space, like having the ability to move within the environment or decide the order in which the virtual space is explored, might prove to be equally as important.

Rigby and Przybylski (2009) saw history as a "dynamic subject area, one that by its nature tells a story rooted in the interaction between events, human choices, and consequences” (p. 220), and they suggested that current educational technology fails to capture this dynamism of the discipline, instead working with non-interactive media that fails to convey to learners a sense of agency and relevance. Applying the concept of learner hero to digital history projects could allow users to experience personal agency and master their own challenges, which in turn could foster deeper engagement with the learning material.

One of the criticisms brought to the field of digital humanities today is the small-scale focus of the projects and their inability to communicate with and engage the extended humanities community (Juola, 2008, Liu, 2012, Prescott, 2012). Prescott (2012) notes that, although humanities scholars are already using digital techniques in their work, the projects created by the digital humanities community do very little to “enhance public engagement with humanities scholarship” (p. 63). In digital history, applying a system design that allows for presence and immersion, personal achievement, and social
engagement could enhance users’ motivation to engage with digital history projects and further become interested in the discipline.

In this section, I have examined some of the strategies and design principles that engage and motivate users of virtual environments, such as building presence, encouraging collaboration and creating different ways for users to interact with the environment and others, but also designing experiences in which the user is the hero of the experience, and not a mere spectator of a read-only, pre-defined experience. How do these principles apply to digital history projects today?

The Proceedings of the Old Bailey, (“The Proceedings of the Old Bailey,” 2016), the project that digitized 200,000 reports on criminal trials at the central criminal court of London, could be enhanced by implementing a more pronounced story line and adding to the homepage a link to a story that sets the scene and presents the historical context of the era, explores a multitude of characters present in the digitized documents, and serves to draw the user in. A set of questions or challenges could be made for the user within this story with the goal of implementing the concept of the learner hero. Second, enhancing the already very easy to use and advanced site search by implementing what Ryan (2006) defines as presence and developing the text search into an immersed, intuitive, virtual world data manipulation and search, might increase users’ motivation to further engage with the project. Third, embedding a space for comments and user-to-user interaction could foster a higher sense of relatedness and thus increase the enjoyment of interacting with the digital history project and possibly drive future engagements.

The Virtual Paul’s Cross Project (“The Virtual Paul’s Cross Project”) is a digital
history project, which aims to enable users to experience the delivery John Donne’s sermon for Gunpowder Day, November 5, 1622. The project offers a 3D rendering of the space, a recorded sermon that takes into consideration both the acoustics of the place and the preaching style of the era, as well as detailed profile of the preacher. Yet the project only allows for a read-only experience of the data. The text shown is discontinuous, hiding the story line of the project. This project could increase engagement from a variety of users by implementing the concept of the learner hero and allowing the user to be present in the rendered space: instead of showing a video of the 3D rendered space, users could decide where they want to look and thus emulate moving through the space. Connecting all the pieces of text into a continuous story line could allow for a more fluid interaction with text as the user explores the virtual space, as opposed to the current interaction via tabs and a detailed sub-menu. Lastly, fostering a space for user-to-user interaction within the virtual space by allowing an area for users to leave comments and have real-time conversations could also increase the sense of relatedness that users of the digital project feel.

The *American Yawp* ("The American Yawp") is a collaboratively built, free, online American history textbook. The textbook was produced with the help of 350 historians, in an attempt to create a textbook that was academically rigorous and affordable to all students, whether they came from “community colleges, open-admission universities or elite research institutions” (Locke & Wright, 2015). The textbook is available online. When copyright laws permit, the original sources are linked in a separate section. In a moderated comments section, readers can comment and help
improve the textbook via comments on the text. The authors, who use the same platform to reply to the most relevant comments, moderate the comments and update the textbook accordingly. Each chapter includes a link to the comments section and an invitation to help improve it, as well as a list of contributors to the text. Even though the design of the website is minimalistic, immersion is created with the help of primary sources: large scale images and illustrations or fragments of text. To help increase engagement on the page, alternative ways of exploring the content could be introduced, using keywords or tags. The chapters could include links to similar topics in other sections of the textbook.

In conclusion, digital history projects could be improved by implementing system designs that take into consideration factors that facilitate motivation, such as presence and learner hero and thus satisfying the three basic psychological needs outlined in Ryan and Deci’s (2000) self-determination theory.
Chapter 5

Digital History Project

The main goal of this digital history project was to investigate and discuss how food consumption patterns, cooking and eating habits have changed in Romania during the communist era. The project looks at how one of the most popular Romanian cookbooks Sanda Marin’s *Carte de Bucate*, first published in 1936, has been edited, censored and transformed during the communist regime, as the communist party reinforced the ideology of the communist model, and as the economical crisis increased and basic foodstuffs became increasingly scarce.

Cookbooks, like other instructional books, teach their readers, not only how to cook certain dishes, but also how to behave and think in a specific way. Romanian cookbooks, thus, show not only how to prepare traditional recipes, but also offer a glimpse into what it is to be Romanian.

A process of educationalization through food and cooking occurred, during the communist regime, in that cookbooks, like all books of the era, were adapted to the communist ideology. The cookbook changed from its original version in 1936 to 1969, when it was last edited: recipes were removed completely when they seemed too cosmopolitan and as the ingredients necessary to make them became more difficult to procure; the names of recipes changed, in an effort to make them sound more Romanian (éclair became ecler, charlotte became șarlotă); quantities and ingredients in traditional
recipes were scaled down (such as *cozonaci moldovenesti*\(^{19}\)) recipes that sounded too foreign disappeared completely (Beignets, Chateaubriand, Kugelhupf); and new recipes were introduced, using new ingredients (aterini\(^{20}\) prăjiti) or suggesting new recipe variations for available ingredients (such as potatoes).

The digital project presented in this thesis also aims to become an educational tool, by presenting cultural history in a way that supports critical thinking and encourages idea exchange, while at the same time engaging and motivating users.

One of the reasons for which I chose to explore Romanian identity and history by creating a project focused on food, is that the topic of food makes participation more accessible to a variety of users. Non-academic users rarely contribute to research in highly specialized fields, yet in the field of food studies, scholars can benefit from the knowledge of their students or the society at large (Pilcher, 2016).

From a theoretical point of view, Pilcher (2016) noted that the connection between taste and social distinction became a central focus in sociology, when Pierre Bourdieu observed that taste preferences internalize group values, which in turn express and help maintain social hierarchies (p.863).

In the context of the communist regime, the communist leadership aimed to reshape and reorder the societal structure, and individualism was suppressed in favour of collectivism. At the same time, Ceauşescu’s regime of nepotism and corruption was

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\(^{19}\) The recipe for Moldovan Cakes (*cozonaci moldovenesti*) published in the ’43 edition and presumably in the original edition, asked for 100 egg yolks and 3-4 eggs. This recipe disappears in the ’66 and ’68 editions.

\(^{20}\) Old world silverside is a type of small saltwater fish, that appears in Marin’s cookbook in the 1960s, at the “Editura Technica”, but not in the earlier editions published at the “Cartea Românească”
installed (Hitchins, 2014). The examination of any particular changes to the way of eating and cooking, and by extension changes in taste preferences, can shed light upon cultural changes difficult to observe in other collections of numbers, statistics and facts.

The main historical question, addressed by this digital history project, asks about those parts of the identity of Romanians that may have been suppressed and lost during the communist regime. One of the ways I am examining this question is by looking in detail at how Marin’s cookbook changes during the communist regime. Another is by addressing cooking and taste preferences during communism and comparing them with food preferences one and two hundred years previously. Finally, the digital project is open to both scholars and non-scholars to share and discuss their own opinions and ideas regarding Romanian food and taste and how it might have changed in the last decades in response to external factors.

**Project Methodology and Theoretical Framework**

The data used in this project are: five editions of Sanda Marin’s cookbook published in 1943, 1954, 1966, 1968 and 2005, and two other popular Romanian cookbooks published in 1749, respectively 1841. This data is overlaid with food production and consumption data from The Yearly Statistics Volume of the Socialist Republic of Romania (Anuarul Statistic al Republicii Socialiste Romania), 1985, Romanian newspapers of the era (Scînteia) and other publicly available archival data further mentioned in this chapter. Archival interviews, video footage and photographs are also used to illustrate this digital history project.
The data has been analysed by using the historical method. By using the historical method, a fact from the past is transformed through selection, analysis, and interpretation, into a fact of history by identifying the problems to clarify; gathering primary and secondary sources; conducting archival research; using theoretical frameworks and conceptual tools to build an interpretation (Carr, 1961).

**Project Limitations**

This digital history project has some limitations in terms of time and resources. Digital history projects are usually complex constructs built over a long period of time, usually by teams of researchers and specialists who share their work among creating content, representing data, coding and design. This project is limited to the application of theoretical concepts and design principles described in the previous chapters. In this project, the application of these concepts had to be efficient in order to meet the scope of and the time constraints of the M. Ed. Process, however, the concepts could be applied in expanded ways using more sophisticated data visualization, interactivity and storytelling applications.

Another limitation of this project is using an edition of Marin’s cookbook published in 1943, which has been described (Marin, 2005) as being very similar to the original 1936 edition, because the original is not currently available in Romanian national public library or archives.

Last but not least, as Romano (Potter & Romano, 2012) suggested, investigating contemporary history can be more demanding and challenging that writing history about times and people long gone. The author suggested challenges ranging from the difficulty
of constructing narratives the absence of real moments of closure, to working with, and interpreting in context, new kinds of sources that were not available a few decades ago.

In the following sections of this chapter, I give an overview of the historical and cultural context after World War II and give an overview of some of the most popular Romanian cookbooks in the last three centuries. Second, I give an overview of the data used in this project. Third, I describe the digital history project, which can be accessed online at http://thisfoodie.com/dhp, specifically discussing the ways in which the project was designed to support critical thinking and idea exchange, as well as the ways in which it was designed for being interactive and motivating users to engage with the content presented.

**Food in Communist Romania**

Romania *before*, and Romania *after* communism, are two very different countries (Hitchins, 2014). After World War I, Romania had a King linked to the major houses of Europe and a Queen who was Queen Victoria of England’s own niece, as well as a foreign policy that “skilfully balanced relations with the Allies and the Axis” (King 2007). During President Ceaușescu’s regime, nepotism and corruption, together with despotism and the cult of personality, became a new way of life (Hitchins. 2014). After 1989, the country was still ruled by former communists. Members of the secret services (Securitatea) became powerful businessmen, leaving behind a communist mentality and a legacy of corruption (Hitchins, 2014). “Romania’s misfortune” suggests King (2007), was “a system built not just by a band of miscreants but by an entire country that spent the second half of the twentieth century at war with itself (p.723).
The Romanian Communist Party (RCP) was formed in 1921 and, was at the time, only a minor force with very little prospect of ever reaching mass recruitment, however, after World War II, in the context of the rise of power of the USSR and the defeat of Germany, with soviet troops present in the country, the RCP saw a mass enrolment (Gilberg, 1990). In 1947 the RCP took power over the country by forcing 26-year-old King Michael I of Romania to abdicate, subsequently creating a defamation campaign against the “cowardly” king (Boia, 2014).

In 1965, after the death of Gheorghe Gheorghiu Dej, (Romania’s first communist leader) Nicolae Ceaușescu came to power, instituting national communism, “a hybrid form of Marxism-Leninism that represents a blend of traditional values, elements of Marxist classics and the particular (and peculiar) personal aspects that Ceaușescu brought to the development of the theory” (Gilberg, 1990, p. 49). King (2007) describes the communist regime in Romania as:

“a totalitarian system from its founding to its fall, (…) one based on the continual violation of human rights, on the supremacy of an ideology hostile to an open society, on the monopoly of power exercised by a small group of individuals, and on repression, intimidation, and corruption” (p.627).

The communist model in Romania was imposed by the Soviet Union, and did not take shape from within the society, a reality about which the majority of the population was aware. Romanian communists aimed to fundamentally reorder the societal structure, the lifestyle and spiritual life of the peasant. Individualism was supressed in favour of
collectivism; individual farms were transformed into factories and peasants into factory workers (Hitchins, 2014).

Ceaușescu ruled the country until the revolution of 1989, when, after ordering the army to crush the rebellion using any means necessary (including the killing of numerous demonstrators) he was captured, quickly judged in a sham trial, found guilty of genocide against Romanian and swiftly condemned to death by a group of communists led by Ion Iliescu, who became the next president (Hitchins, 2014).

From 1965 to 1989, Ceaușescu implemented a series of changes in the development strategy of Romania, one of which was to focus on the industrialization and urbanization of the country, to the detriment of agricultural investment (Gilberg, 1990). As a result of this policy, from 1948 to 1984, 27% of the country’s population moved from rural communes to cities and towns (Anuarul Statistic al Republicii Socialiste Romania, 1985), depending on the government to manage the production and the sale of food as opposed to procuring it themselves.

The period from 1960 to 1975 was a period of relative consumer abundance when Romanians reported that they could buy luxury products such as French cognac and American Whisky, black canviar and had access to new electrodomestic products, such as vacuum cleaners and washing machines (Massino, 2012). Yet, by the end of the 1970s, these products became unavailable and basic food items had started to become scarce (Massimo, 2012).

From 1961 to 1974, Romanians’ consumption patterns changed, resulting in a 12% increase in calorie intake, (Shoup, 1981). Petrovici and Ritson (2000) indicate that
the tradition of studying food consumption in Romania was interrupted and even forbidden during the communist regime. During this time, consumption data was “protected” and counterfeited, with data consumption on foodstuffs often overestimated, making the data available from 1944 to 1989 unreliable and sometimes non-existent.

The prolonged underinvestment in agriculture quickly led to a dramatic lowering of production to a level that was inadequate for the population increase or their new consumption patterns. Additionally, in the early 80s, Ceauşescu decided to pay Romania’s foreign debt by exporting gasoline, clothing and foodstuffs. This led to dire consequences for Romanians, since quality produce and meat went to export, resulting in only second and third quality foodstuffs are available to Romanians (Hitchins, 2014, Massino, 2012, Gilberg, 1990).

From the beginning of the 80s, meat, oil and sugar started to be rationed, as basic food products became insufficient for the population consumption. On November 17th, 1985, Ceauşescu published (in the national newspaper, Scînteia) the new „scientific diet”, which aimed at convincing Romanians that they were eating too much and drastically reduced their allowed consumption of basic food products such as meat, what and flour, oil and fruit (Figure 3) (Scanteia, 1985).

The **scientific diet** described the maximum limits of foodstuffs permitted to each citizens, yet, in reality, not all the listed foodstuffs were always available (Massino, 2012). People needed to queue for hours in order to get their rations of sugar and eggs or buy bread, milk and meat, which were increasingly difficult to find (Gilberg, 1990).
The *scientific diet* allowed each individual a maximum daily intake of 150 grams of meat (the equivalent of a piece of meat the size of a palm), three grams of margarine (butter was very difficult to find), (approximately half a teaspoon), five and one half teaspoons of oil, two cups of flour, 1 medium sized potato, a small fruit of a size of a tennis ball, and once every three days, an egg. Soap and detergent were also rationed, allowing individuals to use approximately three grams of soap per day and ten grams of detergent, which approximates to washing one full load every 10 days.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Amount (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat and Fish</td>
<td>54</td>
</tr>
<tr>
<td>Margarine</td>
<td></td>
</tr>
<tr>
<td>Edible oil</td>
<td>9</td>
</tr>
<tr>
<td>Sugar</td>
<td>14</td>
</tr>
<tr>
<td>Wheat and flour</td>
<td>114</td>
</tr>
<tr>
<td>Potatoes</td>
<td>45</td>
</tr>
<tr>
<td>Fruit and grapes</td>
<td>20</td>
</tr>
<tr>
<td>Eggs</td>
<td>114</td>
</tr>
</tbody>
</table>

**Figure 3** The "scientific diet," published in 1985, prescribed the maximum amount of each ingredients an individual was allowed to consume in one year

As industrial labourers were considered to offer the most productive work, they were given priority in terms of housing and distribution of food. On the black market, high status workers had access to a variety of goods through closed stores (magazinele
inchise), while workers in restaurants and factories, who had access to food, would use this situation for personal and bartering purposes. For the rest of Romanians, the most common means of getting food was the queue (Massimo, 2012).

As foodstuffs became more and more scarce, the daily experience of preparing food became a burden for the women of the household, who were in charge of cooking for the whole family (Massimo, 2012). They had to improvise, cooking using seasonings and inferior meat trimings, canned fish and meat, soy salami and produce of inferior quality. The egg ration turned baking into an activity reserved for festivities or special days.

A quote from Masimmo’s (2012) interview with a woman from Brasov, Romania, illustrates how challenging cooking or following a recipe had become:

I’d come home, sit down on the chair in the kitchen, and begin to invent meals... because I couldn’t follow a cookbook... hmmm... I don’t have parsely... I can’t make this because I don’t have cheese... so then I prepared food that you wouldn’t find in any recipe... I would make the first and second course and I only had potatoes... I’d add a vegetable... some eggs with flour... and also make a goulash soup (p. 242)

In his autobiography, Sandru (2013) remembers the foodstuffs that were available to him in his day-to-day life:

Basic food staples were available in communist Romania, some in more abundance than others, for which people had to wait in long lines, come rain, come shine. Vegetables and fruits were available only in season. The variety of food was limited, and most of the daily diet was about the same. I recall my daily diet being bread and milk in the morning; a sandwich with lard, or butter, or marmalade, for lunch and bread with fried potatoes or cabbage, or soups, for dinner. On Sundays, my family had a chicken or other meat in soups or stews. And my mom baked a cake for sweets. Try
this diet for a month. One benefit is that you might lose weight (p. 87).

Many jokes of the era illustrate how unlikely it was to find something like meat, or cheese, in a store during the last decades of the communist regime. Some of these are:

A boy rings the dorbell of his neighbour:
-Mrs, did you make soup today?
-Yes, darling, would you like some?
-No, thank you.
-Then why are you here?
-My mom asks you if you could kindly lend us the soup bone.
(Floroiu, 2014).

An old man stops in the middle of the street, looking confusedly at his empty produce bag: I can’t remember, was I going to the market or am I coming from the market? (Floroiu, 2014.)

When he left from home, Prunariu (n.ed, a Romanian astronaut) left his mom a note: “I’ve gone to Cosmos. I will be back in a week”. When he got back, he found a note from his mother: “I’ve gone for cheese. I don’t know when I’ll be back” (La trecut, n.d.)

By looking at the instituted rations, the consumption pattern changes, the personal interviews and how the most popular cookbook at the time was censored and edited, together with other societal issues happening at the same time, are provided with a glimpse into what it meant to live a normal life during the communist dictatorship.
Some of the most Important Cookbooks in Romania

Calistru (2011) saw eating as one of the most insightful ways of looking into the everyday life of a people. A cookbook was considered a production created to offer lifestyle solutions, which is then crystalized into a form of culture (p.21).

The oldest Romanian cookbook was *Carte întru care să scriu mâncările de pește i raci, stridii, melci, erburi și alte mâncări de sec și de dulce, despre orânduiala lor* is a three hundred year old manuscript written in chirilic letters (Gaster, 1749). The volume was later transcribed to the latin alphabet by Ioana Cantacuzino, in her volume *O lume într-o carte de bucate: manuscris din epoca brâncovenească* (Cantacuzino, 1997).

The cookbook is a collection of 293 culinary recipes, some translated from Italian, French and German and adapted to what was available for the Romanian cook (Calistru 2011).

The cookbook began with sixty-four recipes for fish-based dishes, the most popular being recipes featuring freshwater fish like carp (crap), zander (șalâu) and perch (biban), followed by twenty-two recipes for crustaceans, oysters and escargot. Twenty-one recipes were vegetable-based and were meant for eating during fasting days (zile de post). Seventy-four recipes include meat-based dishes (where the most popular ingredient is beef, which is present in forty-one recipes), followed by poultry (twelve recipes), mutton (nine recipes), pork (eight recipes) and rabbit (four recipes). The rest of the book is dedicated to egg-based recipes, sauces, salads, various types of wine (eleven recipes), liquor (sixteen recipes), and marmalades (Cantacuzino, 1997).
In 1841, writers Costache Negruzzi and Mihail Kogălniceanu published the first edition of another well-known collection of recipes, *200 de rețete cercate de bucăte, prăjituri și alte trebi gospodărești* (Negruzzi & Kogălniceanu, 1942). The cookbook featured 200 recipes, out of which only four were fish-based and nine based on freshwater lobster (rac). Thirty-one recipes were for meat-based dishes, out of which the majority feature beef and mutton and only very few using as a main ingredient pork ham. Eighteen recipes asked for poultry as the main ingredient, while twenty-seven recipes were dedicated to vegetable-based recipes. A big portion of this cookbook, eighty recipes featured pastry recipes, such as pies, cakes and jellies (zalatină). The cookbook also featured six recipes for soup.

In 1936 Sanda Marin (Cecilia Simionescu) published her *Carte de bucate*, a cookbook that was destined to become one of the most popular Romanian cookbooks in the next decades.

Livia Bodea, the coordinator of the latest edition of Marin’s *Carte de Bucate* (Marin, 2005) described Marin’s cookbook as “the most lasting Romanian cookbook” (Sanda Marin, o doamnă cu bun gust, n.d.). Bodea talked about the book’s ubiquity and status as a tool that could fix any problem in the kitchen.

There was a cosmopolitan cultural and societal dimension to this cookbook, suggested Bodea, which led to it being drastically censored in the period between 1944 and 1989: the béchamel sauce became white sauce, Napoleon cake became mottled cake, the quantities used were halved or ingredients replaced (Sanda Marin, o doamnă cu bun gust, n.d.).
Marin’s Cookbook

Marin’s Cookbook changes several times during the communist regime and well into the years after the regime ended. The volume first published in 1936 by the editor Cartea Românească\textsuperscript{21} contained more than 1,400 recipes. Until 1945 it was edited and published in at least thirteen editions\textsuperscript{22}, with a preface written by writer, lawyer and gourmand Alexandru Osvald “Păstorel” Teodoreanu\textsuperscript{23}. From 1950, the book was edited by a new editor, Editura Tehnică, which published four editions in the 1950s and another three in the 1960s, with the last edition being published in 1969\textsuperscript{24}. The 1954 edition, called by Bărnă in the preface of the 2005 volume (Marin, 2005), “the austere edition,” featured only 855 recipes and started with an introduction written by Mircea Petrescu. The 1966 edition opened with an edited version of Petrescu’s preface, signed by Roda Vișinescu. This edition featured 1,324 recipes, some published in the original edition and other new recipes. The 2005 edition featured 1,486 recipes, including the recipes in the original edition, but also some recipes introduced in the volumes published in the 1960s.

The three prefaces, written by Teodoreanu, Petrescu and Vișinescu, are very different: while the first is rich and entertaining, including anecdotes and an almost literary description of the ingredients, the last two are rigid, instructional and represent an educational directive: giving detailed instructions about the quantity of food individuals

\textsuperscript{21} Oana Bârna dated this first edition of Marin’s cookbook in the preface to the 2005 edition (Marin, 2005).
\textsuperscript{22} The author of this thesis has deducted the number of editions by consulting both the 2005 volume, where Bărnă mentioned at least 12 editions before (probably) 1945 and consulting the exemplaries that were listed in Romania’s National and Metropolitan libraries, as well as for sale, second hand, in Romanian online book shops.
\textsuperscript{23} Teodoreanu published his own cookbook Gastronomice, in 1972, in which recipes were described through a mix of stories, poems and legends (Teodoreanu, 1972).
\textsuperscript{24} Both the author’s individual research and Bărnă in the 2005 edition preface suggest the number of editions and the corresponding years of publishing mentioned here.
in different work situations should use and how to avoid diseases are attributed to bad eating habits.

Teodoreanu’s preface included long descriptions, such as:

From the mountains, to the Danube and the sea, Romania presents the most varied land in scenic landscapes and riches, among others gastronomical….All kinds of livestock and poultry, game, fish, fruits, obtained by the mercy of the Creator of this blessed land, where phrases like «butter and honey flowed in the streets” symbolize a mythical state of affairs. Black Sea, with its mackerel (which are from the Danube, but also of saltwater....) with its Pinchuk’s gobies, horse mackerels, red mullets, rays, Old World silversides, mussels and shrimps and its rivers and lakes with freshwater lobsters of all sizes, from the Câldărășani one, big as a stag beetle, to the Brateș, Dorohoi or Brașov ones, big as a lobster, then trouts, hucks, sterlets, carp, sturgeons, perch, northern pike, tench, dwarf catfish; with its giants mountains and wooded valleys, teeming with pelt game and moving with feathered game, with its vineyards and orchards filled with the most wonderful kind of fruit, from the lemon of Balchik to the brambleberries, raspberries, strawberries, and wild strawberries of the Carpathians; its flocks and herds across the whole country, not to count the wheat and corn in eternal abundance, could satisfy a whole continent... (Marin, 1943)

The preface also included an anecdote about a friend who wanted to offer the writer six pheasants, because he was unable cook them, “since his cook was stupid and his wife learned,” and a confession that, as a result of reading the cookbook, the writer was going to ignore his doctor’s advice, go to a restaurant and order “everything I am not allowed to eat, starting with freshwater lobster (strictly forbidden!), to spite to doctor” (Marin, 1943). In 1972 Teodoreanu published his own cookbook Gastronomice, in which recipes are described through a mix of stories, poems and legends, volume in which he mentions and praises Marin’s cookbook (Teodoreanu, 1972).
Petrescu’s introduction (Marin, 1954), was completely different. It focused on the importance of having a balanced diet, which was considered as being of “great social importance” (p.4). Petrescu addressed the woman cook (gospodină) directly and mentioned the importance of cooking economically and described in detail the “rational and balanced” diet. Petrescu compares the human organism to a machine needing fuel:

From an energetic point of view, the human organism can be compared to a thermic machine, because the energy produced by the organism results from the oxidation of the food substances, which can be compared with the fuel necessary for a machine. But, unlike the thermic machine, the human organism can function for a limited time even without food, using its own substances for producing the energy necessary for its normal functioning (p.4-5)

Vișinescu’s introduction (Marin, 1966) was even more didactic, the instruction featuring more than ten pages that described in painstaking detail the nutritive specifics of different foodstuffs, and the ideal amount of food each individual should eat depending on their age and lifestyle. Vișinescu’s introduction uses strict, cumbersome, medical language and could have been easily confused with a chapter from a medical nutrition book:

The quantity of protein necessary for 24 hours, for an adult who performs moderate work is 1-1.5 g for each kilogram of body weight. For example, for a man of 1.70m, 70-105 grams of protein are necessary. Of course, the protein ration varies from an individual to another. Thus, for example, children, teenagers and pregnant women need 1.5-2 g of protein each for kilogram of body weight, the same as those who work in a toxic or contaminated environment (p. 7)
Apart from teaching women how to prepare meals, Marin’s cookbook, being the most popular Romanian cookbook, became an educational tool in the repertoire of communist ideology during the dictatorship.

From 1936 to 1969 the cookbook has gone through many changes. Some recipes were removed completely as the ingredients necessary to make them became more difficult to procure. Concomitantly, recipes that sounded too foreign disappeared completely, such as Beignets, Chateaubriand, Kugellupf and Bouiabesse. The 1954 edition lists four recipes for eggs, while the other editions list over 20, for example. An entire section on flavoured butter published in the 1943 edition disappears from the 1954, 1966 and 2005 editions. The 1943 edition features 70 recipes for fish, while the 1954 edition only lists 30. The 1966 edition features only 67 recipes.

Some of the names of recipes changed, in an effort to make them sound more Romanian and quantities and ingredients in traditional recipes were scaled down. The recipe for Moldovan Cakes (cozonaci moldovenesti) published in the ’43 edition and presumably in the original edition, asked for 100 egg yolks and 3-4 eggs and 5 kilograms of flour. This recipe disappeared in the 1954 and 1966 editions. In the 1954 edition, the recipe was replaced with a new one called Cozonaci economici (economical cakes), which only asked for three eggs for each kilogram of flour and replaced the original 250 grams of butter with only 100 grams of pork fat (untură).
Apart from recipes that were omitted completely, new recipes were introduced, using new ingredients (aterini prăjiți), or suggesting new recipe variations for available ingredients (such as potatoes). Many recipes introduced in the 1954 edition use fewer ingredients and are called “economical,” such as omletă economică (economic omelette), which only asked for four eggs and a little bit of baking yeast, instead of six eggs. Other new recipes are salată de icle imitate (imitation caviar salad) or pateu imitat (imitation pâté), which suggested ways to create “caviar” from semolina and pâté from eggs and onions.

The 2005 volume, described by the editors as the “complete edition”, features some recipes initially published in the 1936 edition, as well as some of the more economical recipes introduced in the 1966 edition. The 1943 edition thus has more than 1,400 recipes listed in its index of recipes, while the 2005 edition lists almost 1,500 recipes. The 1954 edition only lists about 800 recipes, while the 1966 edition lists only 1,324 recipes, edition in which many of the original recipes were removed and new ones, more fit to the economical landscape of the Romanian cook, were introduced.

In the preface of the 2005 edition, Oana Bârnă notes the disappearance of those recipes that could seem “too opulent, too cosmopolitan, or maybe both” (p. 7), and the introduction of new recipes, some very simple, such as mashed beans salad (salată de piure de fasole) or Russian recipes like piroști or vatrușchi. Bârnă notes that in the later editions some of the ingredients and quantities are changed: tuna was later changed to

25 Old world silverside is a type of small saltwater fish, that appears in Marin’s cookbook in the 1960s, at the “Editura Technică” editorial, but not in the earlier editions published at the “Cartea Românească” editorial
26 All the editions mention that the recipes are calculated for six people.
fish in oil, goose liver became poultry liver or any kind of liver, ham is replaced with soy sausage (parizer), and white pepper is replaced with just pepper (p.7).

**Designing the digital project**

The design of this digital project had two considerations: first, to create a space where critical thinking and idea exchange would be supported, and second, to design for interactivity and motivation.

Critical thinking is defined as “the process by which the thinker improves the quality of his or her thinking by skilfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them” (Paul & Elder, 2004).

Critical thinking is linked to critical inquiry as Dewey (2004) sees it: a tool which individuals within a democratic society use as they work together to solve each other’s problems. (Bruno-Jofré & Johnston, 2014, p. 4). Through the use of critical inquiry, as Dewey sees it, individuals extract the ideal traits of existing societies and use them to criticize the undesirable features of their own society and find ways to improve them (p.47 an element of the pragmatist school of thought.

In an effort to recreate Habermas’ public sphere, as discussed above, within this digital history project, the project is publicly accessible and offers users the ability to comment and share their ideas in the same space where the digital history project is hosted, via an embedded, moderated comment system. To create a space which support critical thinking, the data presented is linked to their sources, so that users can access the original sources (when they cannot be presented on the website due to copyright issues). Throughout the project the users are invited to share their own point of view,
interpretations and memories. A section of the project invites users to share personal histories related to food, identity and culture in communist Romania.

A second important consideration for the design of this project was to create a virtual environment that could be interactive and because of its experience design could motivate users to explore it. The whole project is interactive, in the sense that the communication is always two-way because of the comment system embedded in the project. It also allows users to interact with the data presented. For example, the “Educationalization of cooking” page some of the text is only readable when the accordion-like structure is opened. The choice closes another part of the text in an effort to suggest users to make a decision about what they want to read and in which order.

The whole project is built on the concept of learner hero, having some of the secondary sections of the digital project available only as a consequence of exploring the microsite. An “about the author” page is available only when hovering with the mouse over the “About this project” section and some of the recipes mentioned here are hidden throughout the microsite so that the users might unexpectedly discover them.

Users can interact with the data used to create the info-graphics through used to construct the narrative of the project.

Immersion is built through storytelling, photography and video footage of the era, and where photography was not available, with illustrations from the communist era. Last but not least, the project includes an autobiographical signature, describing the author’s point of view, purpose and assumptions.
Another consideration in this project was to implement the concept of learner hero described in the previous chapters, with the purpose of engaging the users and pulling them into an individual experience. For this reason, the project does not use a classical drop-down top menu and instead has a non-linear design, which allows users to choose which sections to explore and the order in which to explore them, while all the sections are connected through various intra-links.

To further invite users the make use of critical inquiry, users are invited to comment and share their ideas via the integrated comment system on every page of the project. Users are also invited to share their own story and respond to questions such as “How do you think the way you cook today was influenced by the communist regime in Romania?” and “Is there a recipe your grandmother or grand-grandmother used to make you or used to talk about that nobody else is talking about? Have you asked them?.”

Description of the project

The digital project itself has six main sections: a) About the Project, b) Why does Food Matter, c) The Educationalization of Cooking, d) Food in Communist Romania, e) Sanda Marin’s Cookbook and f) Share Your own Story.

The “About the Project” section gives an overview of the project goal and research questions.

In the section entitled “Why does Food Matter” I describe how cooking and food consumption could be relevant to understanding identity and culture and I include three interactive visualizations of the types of recipes, organized by ingredient. As the users scroll down through the page to discover new content, the info-graphics, start moving,
populating the space with data. This section also includes a photo of the original 1749 manuscript, as well as a link to an archive where the manuscript can be read its entirety.

The section focused on “The Educationalization of Cooking” describes the concept of educationalization and presents a part of the story through the interactive “accordion” described above.

“Food in Communist Romania” aims to recreate the atmosphere of the socio-cultural context through text, archival photography, propagandist illustration and a video created by the Romanian TV station Realitatea TV, showing archival footage of empty food shops (alimentara) and commentary from Romanians remembering the never-ending quest for food during communism. This video is embedded from the station’s YouTube Channel, which allows users of the digital history project to watch the video on the same platform they are on, while still respecting copyright laws. The interviewees of the program listed the kind of food one could find in the shops: pig legs (informally called sports shoes), chicken wings, claws and necks, rice, semolina and tomato sauce and canned shrimp. The canned shrimp was many times the only food displayed in food-shops, described by one interviewee as “shutters of canned shrimp.” One interviewee remembered that since the shops were mostly empty, the shops seemed to be made only out of glass. The video also includes a short communist propaganda video, where the food shops looked full and an off-voice praised the plenty and rich lifestyle of the Romanians. Clicking on the video leads to user to the YouTube channel where the video, an episode of a larger series, was originally published. This section also offers a
visualization of the “scientific diet” proposed by the Communist Party in 1985, as well as jokes from the era and some of the quotes included in this chapter.

The section called “Share Your own Story” includes an autobiographical signature and invites users to contribute their own stories and ideas, as well as to ask their mothers, grandmothers and grand-grandmothers about food they used to cook when they were younger.

In keeping with the scope of this M.Ed thesis, the project at this time is limited to a few sections, but its foundation and structure, affords the opportunity for it to grow, becoming visible to new readers and enriching the conversation about food in Romania. In the future, a blog section will be created and the project will include a version in Romanian.
Chapter 6

Discussion

In the world of digital humanities, and specifically digital history, there is a need for moving beyond using technology to plot data and show content. There is a need to go beyond offering read-only experiences. I have argued in this thesis that it is important to use digital technology in ways that afford a two-way conversation between the user or the digital history project and the historian.

I believe history, like many other humanistic disciplines, such as philosophy, can benefit greatly from debate, conversation and the sharing of ideas. It is only through dialogue that problems within a structure, be it a digital history project, or an entire society, can be identified (Habermas, 1989) and it is through dialogue and sharing of ideas that solutions can be identified (Dewey, 2004).

Other benefits emerge through the creating of digital history projects and virtual environments that accommodate a two-way communication and invite users to share their opinions. I believe everyone could benefit from knowing, understanding and remembering more history and that, in part, it is the job of the historian not only to write history, but also write it in a way that is accessible to a variety of readers. By creating a habit of having a two-way conversation with readers, historians can identify and address any areas of their speech that are difficult to understand or frequently misunderstood.

As Pilcher (2016) writes, it is uncommon for non-specialist to participate in the creation of the sciences, yet in the case of history in general, and cultural history in
particular, this invitation of non-specialists to participate in the process of writing history can act both as a way to verify the thesis of the historian, and also as a way to build history, by continuously including new, relevant data.

“Everything is repeated, in a circle. History is a master because it teaches us that it doesn't exist. It's the permutations that matter,” says Umberto Eco in his volume, *Foucault’s Pendulum*. Many are aware of and even agree with the formula of “history repeating itself,” yet maybe more conversations should be started on the topic of the fluidity of history; how it transforms through time, as more evidence is discovered and new interpretations are given to the already existing evidence. Allowing for a multitude of voices and perspectives to help bring meaning to historical evidence can only enrich history.

Implementing habits of dialogue and the continuous creation of new points of contact among individuals and groups in a society can help us get closer to the ideal of an intentional democracy, according to Dewey (2004).

In today’s western societies, there is very little that the individual can say or do in respect to the ways in which reality is understood, problems are identified, and policies are implemented. Interest groups have replaced individual expression (Habermas, 1989) and, even though modern democracies are built with the idea of integrating a variety of opinions when making decisions for the whole society, the actual participation of the individual is limited to a vote every four years and. Polls and surveys, and the whole notion of “the public opinion” are constructed pieces of information, designed to tell the story the organizers are interested in hearing. Polls and surveys are an illusion of
individual representation, as a specific group organizes them in accordance to a specific agenda. Another characteristic of this way of integrating “public opinion” is that the focus is afforded to the voice of the loudest (or the voice of the many), not necessarily on the nuances of the voice of the individual.

The result is a passive society, in which individuals are to a great extent told what they think, rather than invited to contribute, build an argument and share original points of view.

**Implications for research and practice**

The tentacles of the negative effects of this passivity are the suppression of critical thought and the general lack of confidence, and thus interest, in contributing individual opinions and to solving societal problems, are ubiquitous. They are present in school, at home, at work, and in the media.

In post-graduate schools, in particular, passivity and a lack of critical thinking skills can prove detrimental, not only for the individuals themselves, and for the societies in which they live, but also for the societies of the future, to which they will contribute as members of the academy and as highly specialized professionals.

These are just some of the reasons why building learning spaces, in this case technology-mediated learning environments, where critical thinking is supported and where idea exchange is understood as not only welcome, but also essential to growth. And if these learning spaces are to be created with this philosophy in mind, then they should be built in a way that pulls users in and motivates them to keep using the space.
The purpose of my thesis was to identify and exemplify the characteristics of those digital history projects that represent and convey history, while creating environments that support critical thinking and idea exchange, motivate and engage students, researchers and a variety of users.

It intended to explore the system designs currently being used in digital history projects that represent and convey history and delineate the specific system design characteristics of digital history projects should encompass to motivate users and encourage engagement and idea exchange. As a way to implement some of my ideas, I created a model for a digital history project that encompasses the suggested system design characteristics and that is built within the selected theoretical framework.

The historical question I brought forward to exploration and discussion in my digital history project concerns the ways in which the Communist regime might have removed or installed new elements within Romanian cultural identity and I have identified and discussed these elements in the digital history project.

**Discussion of data**

Digital history scholars seems to agree when they describe the field as a place where historians and users can interact, where users can see and manipulate the data, where technology is used in ways that allow users to see relationships and phenomena difficult to show before. However, very few of the digital history projects included ways for users to interact with the content or the project creators. Throughout my research process, I have observed a knowledge gap between content creators (historians) and technology developers. In some cases, the content creators are not fully aware of the
technical possibilities and might suggest solutions that are antiquated or only part the way in engaging users with the content presented. In other cases, the technology creators don’t have sufficient theoretical knowledge to deeply understand the needs of content creators.

What I believe is missing, though, is a unified understanding of the user experience they want to build by asking questions such as: Will the users understand how we know what we know? Are we creating sufficient space for the users to challenge us, as project creators? How much time should the users spend on content x to understand context y?

Corroboration that these kinds of questions are often missed from the conversation among creators of digital history projects is the lack of research in this area. In this thesis I used video-game theory and empirical data to find out more about the best ways to build environments that motivate and engage students.

Future study

With respect to the data used in this digital history project, the fact that none of the content in the cookbooks had been digitized, made processing it much slower and cumbersome. It was beyond the scope of this M.Ed. thesis to digitize the content in these valuable cookbooks, yet I believe such a work would be beneficial for comparing and visualizing the differences and similarities between, not only Marin’s edition, but the older cookbooks.

One particular direction for future research could be investigating how the use of fresh herbs and condiments change throughout the centuries in Romanian cuisine. I have found many herbs I had not previously heard of in the older cookbooks presented in this
project and I noticed how certain condiments, specifically dried spices, only start appearing in cookbooks, later in the history of Romania.
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