

Teaching Electronic Literature as Digital Humanities: A Proposal

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Abstract

This essay presents an approach to teaching Digital Humanities through two largely unexplored lenses: electronic literature and foreign languages (Spanish in particular). It offers a practical example of a course taught during the Spring of 2016 at UC Berkeley that combines literary analysis with the teaching of basic programming skills, and DH tools and methods. Concretely, this course is an upper division, undergraduate writing intensive class, where students learn how to write and talk about electronic literature—e.g. hypertext novels, kinetic poetry, automatic generators, social media fictions, etc.—, learning specific terminology and theoretical frameworks, as they gain the skills to build their own digital art pieces in a collaborative workshop setting. By taking this course as a practical example, this essay tackles three important pillars in the humanities. Firstly, the overall concept of literature, and more specifically, the literary; secondly, what we understand by literary studies at the university; and thirdly, and more broadly, what constitutes cultural (beyond technical) literacy in the twenty-first century. This essay's final claim is that teaching e-it as DH effectively address all three.

Digital Humanities is not a new field in U.S. universities. Spread across different disciplines, it has also been commonly hosted in English departments. Perhaps due to the long association between computers and composition, most DH practices are founded on the belief that “after numerical input, text is the most traceable type of data for computers to manipulate” [Kirschenbaum 2011]. Going beyond the instrumentality of data analysis, in this essay I want to propose an approach to teaching Digital Humanities in its relation to literary studies through two largely unexplored lenses: electronic literature and foreign languages (Spanish in particular, although this methodology can be applied to other languages). This pedagogical proposal is based on the belief that the range of cultural literacies that are involved in digital reading and writing competencies — plus the added value of learning how to work collaboratively in a community of practice — are better served in a foreign language environment than in a purely English literature department. I present a practical example of a course I have developed and taught during the Spring of 2016 at UC Berkeley that combines literary analysis with the teaching of basic programming skills, and DH tools and methods. Cross-listed between the Spanish and Portuguese Department and the Berkeley Center for New Media, this is an upper division, undergraduate writing intensive class, where students learn how to write and talk about electronic literature — e.g. hypertext novels, kinetic poetry, automatic generators, social media fictions, etc. — learning specific terminology and theoretical frameworks, as they gain the skills to build their own digital art pieces in a collaborative workshop setting. “Electronic Literature: A Critical Making & Writing Course” is a semester long course that incorporates academic research tools and resources, together with practical, hands-on work.

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Electronic Literature as Digital Humanities

Before going into the specifics of this course — in order to delimit the many ways there are to talk about digital prose and poetry — in this essay I follow the definition provided by the Electronic Literature Organization by which *electronic literature* (e-lit) “refers to works with important literary aspects that take advantage of the capabilities and contexts provided by the stand-alone or networked computer” [Electronic Literature Organization n.d.].^[1] Works of fiction such as a hypertextual or an interactive novel, or a multimedia piece of poetry that requires the scrolling, clicking and decision making of the user in order to be read, would be paradigmatic examples of this peculiar type of DH literature.

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These types of electronic works, which are also commonly known as *born-digital* literature, essentially describe literary texts that were conceived in a computer to be performed on a computer, and that would lose a lot of their expressive signification when printed — being thus works of literature (a classic discipline in the humanities) as well as digital media objects. Moreover, since these texts demand the active participation of the reader in “non-trivial” ways, *reading* becomes a full body experience that requires different competencies from those involved in reading traditional print.^[2]

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Likewise, the reading and writing of digital works, mostly distributed online — together with the work of a community of collaborative e-lit producers — has challenged established *literary* concepts such as “author,” “authorship,” “work,” and even the act of reading itself, now fluctuating between distances and depths of reading.^[3] There is an increasing number of publications engaging in the redefinition of these key topics, assuming that we are indeed experiencing a digital turn in literary practice, and we have started to emphasize the use of digital tools to be applied to literary texts, as seen by the affirmation of hosting DH courses in English departments. This is undeniable, but while we have developed and made some progress on the *application* of digital tools to literary texts — inevitably treating the latter as informational and quantifiable data — we seem to have been less interested in determining what sort of *competencies* are necessary, not to read digital texts as data, but to explore the *literary values* of those texts that were born digital in the first place.

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In *Electronic Literature: New Horizons for the Literary*, N. Katherine Hayles began to explore the opportunities that the teaching of born digital literature had for other fields such as computation. Although she was addressing the Computer Science community rather than the DH one directly, she explained that just as networked and programmable digital media were transforming literature, so were literary effects reevaluating computational practice by reveling in the recursive feedback loops involved in the embodied practice, the tacit knowledge and the explicit articulation that happened in both spheres. She acknowledged, nevertheless, that traditional print literature had also created similar recursive loops, but e-lit also performed “the additional function of entwining human ways of knowing with machine cognitions” [Hayles 2008]. By exploring the tension between the high-level meanings of human discourse and the cascading processes linked with executable code in machines we realize how ideas, when performed by digital media, “become more than disembodied concepts, emotions signify as more than irrational fleeting sensations, coded algorithms connect with human intuitions, and machine cognitions promiscuously mingle with conscious and embodied knowledges” [Hayles 2008]. By the same token, computation becomes a powerful way “to reveal to us the implications of our contemporary situation, creating revelations that work within and beneath conscious thought” [Hayles 2008]. Computation ceases to be a technical practice only to become a method of exploring the dynamics of our contemporary digital situation, and our ways of creating art within it. Thus, the lessons that are being taught when engaging with the teaching of born-digital works concern directly the computer science field, but should also interest us as (digital) humanists.

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I will elaborate on my concept of e-lit and born digital works throughout the essay, but it is important to stress at this point that the e-lit course that I am proposing as a means of teaching Digital Humanities, while evidently respecting these definitions and concerns, is built on two further controversial assumptions. On the one hand, the belief that e-lit is a field, not only of creative practice, but also worthy of pedagogical infrastructure within the University, and on the other, the assertion that there is a *community* of individuals interested in its pedagogical development — albeit in many different roles.

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Describing this e-lit community is, however, even more complicated than defining its object and its relation to DH, and for the purposes of this essay I will refer broadly to all those individuals whose (artistic or academic) practice revolves around e-lit in one way or another, but who essentially understand that the intersection of digital technologies and writing has revolutionized our comprehension of three established pillars in the humanities. Firstly, the overall concept of literature, and more specifically, the *literary*; secondly, what we understand by *literary studies* at the university; and thirdly, and more broadly, what constitutes cultural (beyond technical) *literacies* in the twenty-first century. I will begin my argumentation by describing the second and third points before concluding with the importance of treating the digital *literary* under a media specific framework for the benefit of our humanistic inquiries around literature, but essentially, teaching e-lit as DH — *and* in a foreign language environment — effectively addresses all three.

Teaching E-Lit as Digital Humanities at UC Berkeley

Although the Digital Humanities are not new in our universities, and for the past decades professors at Berkeley have carried out important research advancing the field, up until the past couple of years these practices had remained isolated within each professor's individual agenda, not being attached to a comprehensive academic DH curriculum. Thanks to a grant from the Andrew W. Mellon Foundation, with additional support from the Office of the Vice Chancellor for Research, in 2014 *Digital Humanities at Berkeley* was born in partnership between the Office of the Dean of Arts and Humanities and Research IT in the Office of the CIO. DH at Berkeley serves as a locus to streamline DH practices on campus, and in support of "the thoughtful application of digital tools and methodologies to humanistic inquiry by offering project consulting, summer workshops, grants for collaborative research and new courses, and other activities at UC Berkeley" [Digital Humanities at Berkeley n.d.]. Up until now, DH at Berkeley has funded the development of 18 new courses combining digital approaches to disciplines as varied as Political Science and Theater, Dance and Performance Studies.^[4] One of these new courses, "Electronic Literature: A Critical Making and Writing Course," is a Spanish language writing intensive workshop on e-lit that encourages the practice of DH tools and methods (hands-on digital hacking) in hopes of developing new theories of the digital literary, as well as exploring how e-lit can help us reevaluate computational practices.^[5]

Likewise, seeking to implement a coherent methodology of teaching, "Electronic Literature: A Critical Making and Writing Course" is structured according to a hermeneutics particular to Digital Humanities. Similar to what Diane Jackaki and Katie Faull suggested in their presentation at the DH15 conference, "Pedagogical Hermeneutics and Teaching DH in a Liberal Arts Context" [Jackaki and Faull 2015], this e-lit course is built around a DH pedagogy based on practice, discovery, and, most importantly in my case, community. Setting practice at the heart of pedagogical hermeneutics implies, in turn, that this DH course should emphasize experimentation and discovery (of digital tools and computational principles), but also, in the case of e-lit, their emerging poetic relations. To this end, we need to analyze poetic or narrative objects, and at the same time pay close attention to the material and technical conditions that make them possible: How does their underlying code work? Was the poem built on a particular program? Does it require proprietary software to be read? Can a hypertext novel be read by any operating system? etc. Although we all know of the importance of print in literary history, thinking about the materials behind a poem or story is not something we tend to highlight when teaching language or literature. Conversely, material affordances and media constraints come quickly to the fore when working with digital poetry and its flickering, glitchy, or obsolete qualities, for instance — and not only when it stops working.

"Electronic Literature: A Critical Making and Writing Course," thus seeks to explore the previously mentioned issues and methods. It is divided in two correlating modules as indicated by its title: critical writing and critical making. The first module deals mainly with improving students' foreign language writing skills and critical analysis of aspects particular to electronic literature: changes in authorship models (cyborg authorship and posthumanism, for example), questions of originality (unoriginal genius, remix, etc.), challenges in textual ontology (code ontology vs. print ontology), variations in narrative structures (hypertext vs. linear narrative) among many others. Exploring original e-lit works that enact these theoretical concepts helps students materialize their understanding. For instance, by reading the Spanish-language blog-fiction *Más respeto que soy tu madre*, we are able to experience how the supposed blog author, a middle aged Argentinean housewife writing about her hardships during the country's financial crisis, is really nothing but a parodied avatar created by the popular writer Hernán Casciari; while by reading Loss Pequeño Glazier's hypermedia narrative, *Territorio Libre*, we experience the narrator's fragmented travels through Cuba as we sense how the island's digital culture depends on local histories and individual experiences as much as it is shaped (and similarly fragmented) by the availability of material infrastructures, commerce and the State.

Further, by being cross-listed between the Berkeley Center for New Media and the Department of Spanish and Portuguese, the course improves students' reading and writing skills in Spanish through the reading and writing of critical essays both in English and Spanish.^[6] To accompany the experiencing of Casciari's fiction, students are encouraged to read critical works such as Daniel Escandell's essays (in Spanish) on avatars and blogs, for instance, and to complement the experiences on the hypertextual structures of *Territorio libre* students are presented with

Borges's short story *The Garden of Forking Paths* (either in English or Spanish) as well as Espen Aarseth's seminal *Cybertext. Perspectives on Ergodic Literature* (in English). Finally, and to continue with this example, students would be asked to reflect on their readings by writing a short critical commentary on how fragmentation could be used for creative writing by analyzing some exceptional uses of social media platforms (as in Casciari's work) or writing software (as in Pequeño Glazier's custom-made platform) that go beyond their creator's purpose. Students would be encouraged to find a work of e-lit that exploits these characteristics, describe what they see, and evaluate how successful the work is in taking advantage of the technical affordances of the medium. As can be seen, these types of written assignments are aimed at exercising students' presentational and analytical skills, as well as reflecting on the importance of reading in mediating our digital experience.

The writing of e-lit, however, is an interdisciplinary endeavor, and different genres require different skills. Hence the second module of the course incorporates the learning of DH tools and methods related to some important e-lit genres: Kinetic Poetry, Permutators and Generators, Hypertext Narratives, Geo-Location Literature, Augmented Reality Texts, and Social Media Fictions. All students are introduced to each genre's main functionalities, languages, and their poetic and artistic applications and history, but they only specialize in building one particular piece for their final projects. Nevertheless, thanks to weekly workshops, students would have been building prototypes of different e-lit pieces, such as hypertextual narratives built on Twine, kinetic GIF works, remixed poems built around existing generators like Nick Montfort's famous *Taroko Gorge*, and spatial narratives built on mapping and timeline software such as Findery or StoryMaps. Further, by workshopping their own digital pieces, students gain scholarly insights only obtained by participating in this type of practice-based, community exercise of learning competencies. As students engage with these different tools and platforms, they collectively share their work-in-progress in both a shared class website and their own personal blogging spaces, shaping their own e-lit community of practice, as well as intersecting the global net-based network.^[7]

The complete syllabus, list of class exercises, and final projects can be accessed permanently through the bilingual course site [<http://eliterature.digitalhumanities.berkeley.edu/>] but a paradigmatic sample of students' final projects includes: a hypermedia narrative built with the open source tool Twine about the fragmented and violent experience of Mexican students crossing the U.S. border (Zelina Gaytan's *Dos Patrias*); a couple of geospatial narratives built on the ArcGIS StoryMaps platform that recount stories of sexual harassment and assault of women around the world (Alessa Guerrero's *Ch-Chh, oye nena, a dónde vas?*) or about the impact of climate change in different parts of the globe (Michelaina Johnson's *Hasta el último hueso*); an interactive fiction built on the design system Inform7 recreating the restrictive, claustrophobic (and intentionally boring) world of office work to explore the restrictions imposed on literary creativity in Spanish when using a programming language originally based on natural (English) language (Kevin Chen's *Tu oficina*); a custom-made reading program that allows readers to upload texts to test their concentration in our era of constant interference (Carlos Flores's *La era de la distracción*); or a custom-made platform powered by Twilio that allows users to create community-based narratives and poetry using Twitter and SMS messaging, inspired by the games of subconscious creativity made famous by the Surrealists (Tomás Vega's *Sinapsis Colectiva*); among others.

Teaching this type of modular course involves a set of pedagogical challenges, both theoretical and technical. It is not a question of simply theorizing about the changes in authorship or originality, but also exercising technical requirements involved in the construction of those topics. Thus, the course is built around a workshop model, broadly inspired by Miriam Posner's DH experiments with "How Did They Make That?" where the UCLA professor dissects paradigmatic DH projects to help her students get started with their own work [Posner 2013]. This pedagogical proposal is interdisciplinary in nature and is built by the addition of different experiences and skills, underscoring the concept of "community." Incorporating this in the case of e-lit requires the participation of several instructors, specialized in different tools or capacities: a Python specialist, a professor of literary theory, a Twitter bot guru, etc. In its ideal form, the course would invite multiple instructors to the classroom, exposing students to alternative skills, literary proposals, and teaching styles, forging a "teaching community" reflecting the "creative community" behind professional e-lit online.^[8] Hence teaching this type of course is not focused on *knowledges* or *skills*, but on the ability to reach solutions to particular problems, and its content will depend heavily on the actual student composition of the class (modules will vary substantially if the majority of students come from literature degrees or computer science backgrounds, for instance,

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focusing more on structures or concepts accordingly). Taking into consideration the value of previous knowledge and social evaluation, the teaching curriculum should be determined on a case-by-case basis, just as it would in a professional, online, e-lit setting. Correspondingly, a new challenge arises in selecting what type of exercises and practices (rather than what type of tools and skills) should be the most important in the development of reading and writing literacies within a digital community.

E-lit as Digital Literacy

But why talk about *literacies* and *competencies* and not ability, skills, or even knowledge when talking about e-lit as DH pedagogy? After all, literary studies have long revolved around the mastery of a series of *knowledges* about different genres, periods, or authors — not to mention the importance given to the mastery of close reading skills in U.S. colleges. If this structure has worked so well for so long when teaching literature, and e-lit is but a type (or mode) of literature, why call for a different teaching methodology? Why suggest a new competency-based approach to literature, rather than continue to polish up something we know how to do, and to do well?

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Competency-based learning, however, is hardly a new approach to higher education. Since the 1970s, institutions like DePaul University's School for New Learning or State University of New York's Empire State College have been exploring the applications of this model of learning. In a recent article in the *Chronicle of Higher Education*, Dan Berrett highlighted how the practice has been around for 40 years.^[9] Reaching today almost 600 institutions, Berrett even calls it “Higher Education’s next Big Thing” [Berret 2015], while stressing that the approach has been mostly implemented in “applied” degrees such as nursing, public health disciplines, and the like.

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As Joaquín Díaz-Corralejo and Alain Brouté suggest, nevertheless, I believe that favoring the teaching of competencies can be implemented beyond traditional “applied” degrees. This should not be read as a statement contributing to the eviscerating of the humanities in the face of the corporatization of the University, but as an opportunity to bring together the liberal and the technical aspects of the current dilemma. Perhaps it would be better to talk about teaching digital literacy, or literacies in a conceptual way, rather than competencies, that can be hosted within the scope of Digital Humanities courses.^[10] Lankshear and Knobel distinguish “conceptual” definitions from “standardized operational” definitions of “digital literacy.” Standardized operational definitions are quite similar to the regurgitation of facts and of knowledge we see in the worst cases of pure content-based teaching, presenting uncontextualized tasks, performances and demonstrations of skills. Although knowledge of the tasks and skills involved in dealing with digital works will be necessary in order to be digitally literate in a conceptual way, this type of operational literacy leaves little room for student’s creativity. By contrast, conceptual definitions of digital literacy present views “couched as a general idea or ideal” [Lankshear and Knobel 2008], enabling people to understand information however presented, letting them match the medium they use to the information they are presented with, and the audience they are presenting it to.

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The competencies involved in this approach, based on students’ self-paced progress and demonstrable measures of previously acquired learning — this is, stressing the capacity to *learn how* to apply a set of related knowledge and skills in order to *perform* a given task — point towards an epistemological change. Its adoption in humanities courses focuses on the student’s internal construction of meaning, and on her or his desire and ability to behave as an autonomous and different agent [Díaz-Corralejo and Brouté 2013]. In other words, teaching competencies would categorize “to learn” as an intransitive verb, rather than teaching to learn *about* something concrete — e.g.: learning to play the piano as opposed to learning to recognize (or repeat) a tune. By this I am proposing to teach “reading literature” as “building,” “designing,” “touching” and/or “listening,” for instance, rather than reading literature as something that depends on our eyes and minds solely — an approach enacted by the combination of the writing and making modules in the discussed e-lit course. It could even be argued that this would follow a similar methodological turn to that experienced in foreign language teaching, by stressing a communicative approach to language learning and producing, rather than following drills and repetitions of memorized explicit grammatical constructions, and readymade dialogues and situations.

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Teaching digital writing and reading literacies through a competency-based paradigm is further related with concepts of creativity and thought processing, as well as engaging with the larger socioeconomic context, other discipline related knowledge, and the student’s overall behavioral pattern and job organizational skills [Díaz-Corralejo and Brouté 2013].

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Finally, a pedagogical framework based on competencies and not content-knowledge assumes the acquisition of “expert knowledge”: complex, transversal, and, what I am mostly interested in for the particular case of e-lit as a digital humanities practice, transferable to other fields — beyond Hayles’ defense of computation, to any discipline where this type of digital literacy may be needed.

Perhaps in line with this belief, and in an effort to professionalize education before students leave the university or pursue advanced graduate degrees, many programs have been set to redefine the undergraduate student as “apprentice researcher.” More likely than not, students are assigned a project to improve certain knowledge or skills of their own, while working on a faculty led project. In these cases, however, we do not expect students to master the skills they are applying, but we hope they improve them while learning to work collaboratively in a larger project. This is an approach mostly internalized when teaching digital *tools* in most of our DH courses, but teaching transferable, applied knowledge has not usually been set at the forefront of literary studies curricula. As it happened with earlier types of DH projects and apprentice structures, our engagement with electronic literature requires a change of perspective, one that can benefit from the type of applied skills and *literacies* we’ve become familiar with thanks to DH practice, and that can, inversely, help us firm up the value of humanistic knowledge when teaching (and living) in a digital realm.

I am using *digital literacies* as a shorthand for “the myriad social practices and conceptions of engaging in meaning making mediated by texts that are produced, received, distributed, exchanged, etc., via digital codification” [Lankshear and Knobel 2008], which can be as varied as the behavior of different bloggers, writing an academic paper online, or emailing a relative. We see how the practice of linguistic competencies in digital environments has been absorbed by most of our daily activities, and even though we have been told that reading has decreased in the past few years, and that “current patterns in reading show that reading print-base literature has dropped in popularity and will continue to do so despite the modest rise in sales of books” [Grigar 2008], the truth is that we read more than ever. Not only have we transferred many communicative activities to the realm of our digital screens via text messages or emails, but reading digitally has also been absorbed by popular entertainment forms such as video games — not to mention more specialized practices like machinima, digital animation, fanfiction writing, and the like. As these become more and more complex, users are required to decipher new patterns of narrativity that belong particularly to experiencing and advancing in a digital story, which are very close to some current examples of e-lit. Participating in these activities provides opportunities for gaining situated meaning rather than the merely verbal (or literal) sorts that are, precisely “the kinds of meanings that underpin deep understanding and competence, whether in work practices or academic disciplines. They mark the difference between merely being able to parrot back content (...), attaining sound theoretical understandings and being able to apply these in concrete practical settings (displaying competence)” [Lankshear and Knobel 2008].

Along these lines, back in 2008 Dene Grigar commented on the increasing popularity of video games as key forms of popular twenty-first century culture, explaining how despite their narrative complexity video games are not perceived as e-lit by many, and “according to some, [have] not achieved literary quality on par with books.” But, she insists “they do have the potential to do so,” and “when they do, e-lit may very well overtake print-based literature in popularity” [Grigar 2008]. Without having reached this utopian (although surely dystopian to some) future where video games hold the same status as books, it is unquestionably true that our relationship with storytelling and narrativity are changing thanks to our interaction with digital forms of fiction. This, in turn, is not only affecting our relationship with literature, but also demanding a reconceptualization of how we read, write, and create stories, and, consequently, how we teach and learn to write, read, critique, and build stories.

E-Lit as a Foreign Language

So, what would be the ideal space to develop these essential digital literacies? *Where* and under what departments could we teach how to write, read, critique and build electronic literature within the University? Although I have acknowledged the presence of literature DH courses in English departments, perhaps due to the link between computing and composition that Kirschenbaum suggested, when talking more precisely about e-lit, we are dealing with a type of literature that moves easily between media, but also between languages, between linguistic traditions, and thus a comparative framework may present itself as a more suitable approach. Jessica Pressman has proposed this

very successfully, when she explains that electronic literature *is* Comparative Literature. “It is born digital; it operates across multiple machine and human languages, and requires translation of these languages before it even reaches the human reader” [Pressman 2014]. It is procedural and computational and is processed across multiple platforms, protocols, and technologies, in accordance with the constraints and technical specificities of hardware, software, and network configurations. E-lit combines text, image, sound, movement, interactivity, and design, challenging traditional disciplinary boundaries as well as genre categories [Pressman 2014]. For these and other reasons, electronic literature requires its reader to read and think comparatively, and thus e-lit should naturally be read under a comparative literature lens.

Defending this comparative literature perspective to the teaching of born-digital literature, Rebecca Walkowitz further compares it to what she calls “born-translated” novels. These are works that have been written for multiple world audiences in mind, sometimes published in several languages at the same time, or in a language (usually English) other than the native tongue of the writer in an exercise of “preemptive translation.” She explains how this practice — the division of writing and speaking languages in translation — was the expectation for late medieval and early modern European writers who often circulated their work in Latin in order to reach wider audiences and build communities of knowledge up until the late eighteenth century, when the era of national languages and literary traditions would be inaugurated [Walkowitz 2015]. Although Walkowitz admits that we are still part of that era where “the expectation that the language of writing will match the language of speech remains dominant” [Walkowitz 2015, 12], e-lit may take us back to a time before national languages and literary traditions. The language, on this occasion, is not necessarily a natural one, but a combination of those regional plus the addition of computation and the non-linguistic signifiers, such as kinetic, aural and interactivity knowledges, that come about e-lit production. More than talking about a given language, or the comparison between two, we need to be thinking about the combination and coexistence of *several languages*.

Expanding on Pressman’s and Walkowitz’s observations, I have also proposed somewhere else that e-lit could be read as a Foreign Language Literature. Precisely, due to the interdisciplinary nature of the e-lit field and the multilayered qualities of the digital objects under study — and despite Pressman’s, Walkowitz’s and Kirschenbaum’s claims — these courses give rise to suspicion in both the English and Comparative Literature Departments, as well as the Media Studies departments; e-lit not being literary enough for the first two, but paying too much attention to poetics over media for the latter. E-lit is something intrinsically hybrid, going beyond English or technical praxis, and this hybridity is better served by being taught through competence-based models of literacy than as a content-based literature course. My earlier claim of teaching e-lit as DH literacy is what allows me to also claim that e-lit belongs in Foreign Language Departments. After all, we are facing a type of literature that *necessarily* combines different (semiotic) languages (sound, movement, text), but also programming and formal languages (JavaScript, Perl, Python, etc.) and natural languages that can be expressed in different tongues (Spanish, Portuguese, Norwegian, etc.), that can or cannot be framed by any single one of these languages’ literary traditions. Couldn’t we think of this combination as a foreign language in itself? The ultimate *global* language? If e-lit is seen as a foreign language, its teaching would easily fall under foreign language departments’ responsibilities.

Furthermore, since what I’m proposing is the teaching of applied competencies to the learning of these languages in a community setting, foreign language labs are already a familiar setting where we have been, or should have been, implementing similar teaching methodologies for many years — at least since the pedagogical turn to communicative language teaching in the 1980s. These are usually dynamic spaces habilitated with computers and video and audio devices where students of different languages, coming from diverse classes and levels of proficiency can go to learn individually and complete projects, meet as groups, or join faculty in group activities without the rigidity of a fixed desk environment. Language labs usually offer resources that complement formal teaching, allowing students to pursue their individual interests like watching films or listening to music of a given language that would not usually be part of the language instruction curriculum. However, most of the language instruction at the university level is still confined to the classroom, considering lab activities as *additional* practice, not being really incorporated to the course grading or assignment structure.

If electronic literature can be approached as a way to teach digital humanities and vice versa, why not think of the

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language lab in the same tradition of the DH laboratory where technological tools are built and applied? As Amy Earhart has stressed “[d]igital humanities labs are experimental models attempting to fill the various needs of the digital humanities community including the desire to expand the field, support a broad range of projects, and provide training for students and faculty” [Earhart 2015]. Moreover, the DH lab presents itself as a neutral space — resisting divisional arrangements regarding colleges or departments, for example — being able to foster collaborative work that uses the laboratory as “more than a space, but a symbol of our hopes” [Earhart 2015]. Perhaps we could rethink the foreign language lab as a place to nurture the same type of research and pedagogical resources (and hopes) for the e-lit community.^[11]

E-lit as a Global Community

However, as it happens with most literature, the majority of e-lit that is taught and produced in the world happens *outside* the lab and the classroom. In *Electronic Literature Communities*, Scott Rettberg and Patricia Tomaszek explain that e-lit’s dependence on the global network has made the development of electronic literature more international in nature than any previous literary traditions [Rettberg and Tomaszek 2015]. And, despite the fact that “the French, Spanish, German, Dutch, Brazilian, Scandinavian, English, American, and Canadian electronic literature communities, for example, don’t necessarily speak the same languages, we are all becoming increasingly aware of each other’s work. The field of electronic literature is a network of networks, and we are only beginning to learn how to work together” [Rettberg 2009]. This landscape seems to assume that there is something inherently global about e-lit that would make us wonder if we can, or if we even should, talk about e-lit *in different languages*. Because the e-lit community is intertwined with the global network it has been posed as essentially international, belonging even to an earlier era of “preemptive translation,” and “yet it is still the case that many communities are emerging from and are responsive to national and language based literary traditions” [Rettberg and Tomaszek 2015]. Under this lens, and in my particular case, I wonder what Spanish (Hispanic?) e-lit would look like, for example? What elements (beyond language) would be decisive in its conceptualization? And *where* would we locate it if talking about geopolitical frontiers in the Web has long become pointless? In other words, how to think about it under my previous consideration of e-lit as some sort of ultimate global language?

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In the case of born-translated novels, Walkowitz explains how this type of literature, written for multiple audiences, has developed strategies for multilingualism “design for the foreign, confluent, and semi fluent readers who will encounter them” [Walkowitz 2015]. The reader of born-translated fiction would no longer be a master of many languages, but is “expected to understand less because understanding all the languages in the globe would be impossible, and to understand differently because new units of the book become meaningful” [Walkowitz 2015]. This is what Walkowitz understands as “recognizing incomprehensibility”; learning how incomprehension operates within, and not simply between communities. “In an age of global migration, it is impossible to know all the languages or even to comprehend all versions of the same language” [Walkowitz 2015, 216] — which is not a claim to romanticize either the technologies of circulation, since they do not promise total comprehension either, but it highlights the incoherencies of the global multiplicity.

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Similarly, some productive approaches to thinking electronic literature in relation to the global have abandoned the idea of languages and geographies all together by proposing a new definition of literary writing in relation to world literature: “Only a redistribution of concepts, a way of thinking about the conditions of literary writing, will take us to a place, a collaborative workplace, where works by many different authors can reach a selective audience more diverse than any faction could be” [Tabbi 2010]. Rather than attempting to produce a cross section of world literature in digital media, Tabbi’s approach is to advance a notion of *the literary* different from the print-based model that is so thoroughly embedded in the very idea of a world literature. Other equally embedded ideas, he says, “like the ‘grand thought’ of freedom (Brandes, Auerbach), and the yearning toward universality, also need to be investigated in the conception of cyber visionaries no less than in longtime scenarios of world literature” [Tabbi 2010].

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Reinforcing my earlier claims, what is universal for Tabbi is no longer a single world vision that necessarily transcends its national, racial, gendered, or cultural origins. What is universal instead is the ability, by observing the constraints on the current world system as it configures itself in our actual digital writing spaces, to enter into meaningful conversations

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with other creators in written (as well as non-written) forms. In this sense, world literature, the digital networks that support it, and the social networks that sustain it can be regarded as an alternative formation to globalization. What is “literary” in this heterogeneous sample of world literature can be recognized in this capacity to disturb the smooth operation of global communications as Tabbi insists, using textual instruments whose operations are largely conceptual. Indeed, one important accomplishment of e-lit may have been to locate narrativity not as a literary universal but as one of many qualities best realized in the particular medium of print [Tabbi 2010]. In this sense, digital media would not be a threat to the life of books or literature, but would help us in a revaluation and relocation of the literary in multiple media. At the same time, the question of setting the digital literary as something experienceable *beyond* language, supports the importance and utmost pertinence of thinking about e-lit as something written, in practical terms, in *another language* — one made of many, a born-collective language — as I am proposing here.

Working Collectively as Digital Literacy

The performative and flexible nature of an electronic literature framework, moving through multiple spaces and languages as Tabbi reminds us, is what defines the digital literary as something that goes beyond the human language of choice (engaging frontally with digital literacy). I believe this framework makes a strong case in support of the teaching of e-lit in foreign language departments. This is a linguistic question, of course, but also an administrative one, where highlighting the bureaucratic constraints over the matter becomes very important. While e-lit has a foothold in academia, Rettberg points out how most of the academic positions in the field are held by critics or theorists while authors of electronic literature have been less likely to find employment. Likewise, students have been allowed to write dissertations on e-lit, but very few places (if any) would permit them to present their writing as a work of electronic literature [Rettberg 2009].

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When it comes to the expression of the e-lit community *outside* academia, by publishing their code (and complete works) openly on the Web, many digital artists and writers are manifesting that in order to make the field flourish, “[w]e don’t need to build a market for electronic literature, but rather a culture that will support and sustain its development” [Rettberg 2009]. Rettberg goes back to the idea of establishing a gift economy system where materials, resources, and even collected works and anthologies are shared, and where members of the community participate in conferences and publications (perhaps scholarly based, but not necessarily). Although many people “are inclined to believe that if something comes for free,” he explains “then it must be ‘valueless[.]’ [t]he history of the twentieth century avant-garde is, however, replete with examples of artistic and literary movements, notably the Dada and Fluxus, which managed to have a great deal of lasting influence in spite of the fact that they worked outside of the conventional cultural economy of their day” [Rettberg 2009]. Following this logic, Rettberg concludes that the best way to produce readers of e-lit would be to produce more digital writers.

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Teaching digital literacies as (global) e-lit and vice versa — understanding e-lit as a DH discipline — implies questioning institutional aspects related to how we traditionally work in humanities departments. It implies questioning not only the content of our curricula, but also how we teach and study said curricula, something already underscored by much DH scholarship and activism.^[12] When looking at e-lit as DH implementation, I believe that the most revolutionary change (and the most natural and intrinsic change coming from our experiences of working in digital environments) has to do with experiencing a *community* as a *working practice*, and including the learning of *working collaboratively* as an essential *digital* (cultural) *literacy*. The implementation of a community as a framework for creating and exploring literature in a collective, collaborative manner rejects the classic idea of the literary creator or critic who writes following an individual experiencing of the world that he or she can translate to the benefit of the rest of humanity — an outdated romantic conceptualization of work, sitting at the core of most modern conceptions of literature, yet still prevalent behind the structuring of most of our universities.

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Conveniently, from an epistemological point of view, implementing a community-oriented framework to the pedagogical experience grants germane importance to the practice of learning competencies (versus content-knowledge or capacity). Teaching competencies in a community setting favors collective learning, valuing prior knowledge (gained outside the learning community or in a different one), while it considers the complexity of these activities within their social evaluation and their context in a shared manner. Returning to Díaz-Corrales and Brouté, applying competency-

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based pedagogy to the teaching of literature would imply taking on the collective perspective of socio cultural research paradigms, similar to those coming from action theories, situational cognition and problem solving frameworks [Díaz-Corralejó and Brouté 2013]. This perspective would not be the typical practice of literary scholars or academics, but, as I would like to suggest, it is the best approach when dealing with the concepts at hand, because building a community of readers and writers has been intrinsic to the field of electronic literature from its very beginnings.

In “Electronic literature: a Critical Writing and Making Course” we replicated this experience by encouraging students to work in projects where their different skills could be shared. Students coming from computer science backgrounds were paired with rhetoric or literature students in order to build together a joint narrative or poem that intertwined high linguistic, language, and literary values with good programming design. Students with different levels of mastery over the Spanish language also helped those with weaker language skills, since this class incorporated different language levels, something not very common in our traditional divisions of language instruction. Students benefited from each other’s and the group’s set of knowledges, expanding their worldview thanks to their different disciplinary gaze or language skills. They also shared their work with the world by posting everything in a open bilingual website, rather than uploading their assignments privately through Berkeley’s online blackboard platform, and shared their work through social media with their friends and relatives, expanding the classroom content beyond our classroom walls.

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As Scott Rettberg has expressed, e-lit has always been a field deeply rooted in the idea of community, mostly built on the Web as a communal space, and structured around the paradigms of the gift economy. In “Communitizing Electronic Literature” he explains how, when the World Wide Web was being adopted at a popular level, “the community of electronic writers writ large made a consequential choice” [Rettberg 2009] to publish online rather than in CD-Rom or floppies” because the multitudinous Web offered writers the opportunity to reach a wider audience, more global in a geographical sense, and across different languages. Publishing online, nevertheless, implies a demonetization of the product, while it assumes *another* type of value based on sharing, and on the establishment of a community of producers and consumers not rooted in the exchange of currencies.

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Thinking about the material conditions for teaching becomes evident when trying to build a pedagogical structure for community learning because, although the Web exists and is there for us to access, *we* as professors in humanities departments, make our teaching experience happen mostly in a classroom, within university walls. In order to implement these ideas of community networks under other very material institutional constraints it becomes essential that *we, professors*, and not only *we, DHers* or *we, e-lit peeps* reflect seriously on the role of the university and our different home departments in the establishment and adaptation of (e-lit) community practices. Within DH practice, the work done by the Scholar’s Lab at the University of Virginia may be a good example to think through our duties as instructors and students, and our responsibility and place with the larger Institution, but I haven’t seen the same institutional background for projects relating to born digital literature. Moreover, when thinking about e-lit, we should underscore the relation with new realities of reading, writing and working *by digital means* that affect us all beyond language departments. Where do we stand, as a broader teaching community, in relation to the aforementioned concepts of the global literary, new literacy competencies, and the humanities academic curriculum?

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Beyond the classroom — Literary versus Literacy: What’s at Stake?

As I hope to have proven, rethinking our notion of *literacy* through the practice of electronic literature involves expanding what we understand by digital literacy. Following Dene Grigar, who builds on Cynthia Selfe’s *Technology and Literacy in the Twenty-First Century*, I propose that technical literacy today should not be seen simply as “a complex set of socially and culturally situated values, practices, and skills involved in operating linguistically within the context of electronic environments, including reading, writing, and communicating” [Selfe 1999][Grigar 2008]. Instead, it should be extended to incorporate the mastery of visual, sonic, kinetic, and kinesthetic modalities, allowing us to situate contemporary knowledges within “a more adequate, richer, better account of the world” [Selfe 1999][Grigar 2008]; a world that reflects upon the multilingual nature of its global multiplicity. Such an approach would mean “that art forms that include a literary component could be used to promote literacy” [Grigar 2008].

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Teaching e-lit, accordingly, should help us in the learning of technical literacy, as Grigar suggests. And this is an

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important statement given that, regardless of the disciplinary focus, there seems to be generalized consensus on the importance of developing *some sort* of technical literacy as part of the contemporary undergraduate curriculum. Going a step further, I propose that, when dealing with e-lit, tinkering with the technical aspects that are involved in the creation of digital works (a hands-on approach that I've reiterated to be essential in order to fully comprehend the poetics and narrativity of digital artworks) can teach us valuable lessons about what it means for *any* work to have literary value — or, better yet, to *be literary* — in our twenty-first century digital circumstance. In other words, by understanding that e-lit is a type of literature that incorporates a *literary aspect* that emerges from a work's exploitation of its digitality, and that this aspect, correspondingly, can help us gain important insights about the overall comprehension of the ontology of the literary (beyond technical literacy and competencies), it is not difficult to see why redefining this *literary aspect*—or *literary elements*—of today's digital objects should become paramount.

The *literary* however, is a slippery term that evaporates the minute one tries to analyze it. In “The Idiocy of the Literary (and what does it have to do with digital humanities?)” Sandy Baldwin has acutely noticed: “[I]terary criticism says nothing about the category of the literary. It describes literary works and makes distinctions between them because they are literary. A novel or poem may be good or bad, but it is a subject of criticism because it is literary” [Baldwin 2013]. Baldwin carries on explaining how literary scholars know about the extent and complexity of critical classifications and theories applied to literature, and acknowledges that knowing these is what makes us good literary critics, “but it does not equip us to consider the literary” [Baldwin 2013]. The self-evidence of literature, as he puts it, “the given-ness that there are works of literature — makes literary criticism the worst way to consider the literary” [Baldwin 2013].

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Baldwin's controversial statement is a very productive way to start thinking the relationship between reading and writing competencies (to their pedagogical extent) in the digital realm. His approach also helps us think through the *literary question* beyond electronic literature, or, going even further, to use e-lit to rethink and evaluate the digital humanities as the larger field from which I am proposing we study it. Questioning the problem of the literary (together with those other more obvious terms that have been consistently challenged over the past few decades such as “author” or our notion of “reader” or even “work”) may help us advance humanistic and literary theories from the lens of the digital, whether the literature itself is digital or not.

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In the same essay about the relationship between digital humanities and electronic literature, Baldwin proposes that one of the essential aspects — *the essential aspect* — of digital humanities is precisely the question of the literary, “literally of the letter on the screen” [Baldwin 2013]. By this, Baldwin underlines a chiasm that separates matter and conceptuality or, appearance and abstraction. “In this chiasm, the digital letter is both literal and figurative. It is, in short, literary. Not only this, but the letter is poetic. It produces the system that will enable digital humanities” [Baldwin 2013]. In Baldwin's essay, the resulting conditions for (Uni)code, “for storage, for processing, and so on, are produced poetically from the literary, that is, from the letter as the given-ness of a category, as an announcement that extends itself and exhausts itself in doing so” [Baldwin 2013]. He bases his analysis on the practice of TEI encoding to elaborate how digital humanities as a field of enquiry has been systematized around a set of categories for objects and discourses that work around literature without the literary. According to this, the literary would come to mean “a domain of excess and difference that is institutionalized as creativity or innovation” [Baldwin 2013]. At the very least, Baldwin believes DH to be “uncomfortable with this sense of the literary” [Baldwin 2013].

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Like Baldwin I believe that most of the current DH practices handle and present the literary domain, but do not participate in it. Tools for analysis, terminological databases, mapping and visualizations, etc., assume the productivity of poetics of the literary, but are not literary. In Baldwin's words, digital humanities “follows the trajectory of the literary but is not literary itself. It insists that it is methodological. Such insistence lets digital humanities operate on and make a project out of the literary” [Baldwin 2013]. When it comes to literature and DH, then, we face a literature *emptied* of the literary in contemporary research projects about literature. Literature could be *the object* of digital humanities, but the not the literary itself.

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How can we think the concept of the (digital) literary? In order to imagine a “meta-digital humanities of the literary” Baldwin proposes to rethink both the digital *and* the humanities at large. Agreeing with him, and while recognizing the valuable insights gained by turning literature into narratable data (as would happen with Unicode), I suggest we also

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start working on *experiencing the literary* in itself. Evidently, what I am suggesting implies rethinking our ways of experimenting with digital tools, language, and literature *in a literary way*. And this brings me back to the question of how to teach digital humanities *through* electronic literature.

Learning how to look at a digital object while questioning how it is made in the way I have been suggesting with this pedagogical proposal of teaching e-lit as DH literacy, becomes essential because the application of technical literacies to the creation of digital prose and poetry is the best way to experience the very slippery concept of the (digital) literary. By developing critical and maker competencies in this manner, the literary stops being something abstract, and become something almost concrete that can be performed and built.

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Investing in the establishment of a Digital Humanities curriculum where e-lit sits at the center is essential for the coherent evolution of literary studies in the twenty-first century, from a research perspective to a curricular development need. Moreover, and considering the global nature of the digital writing field, this type of literary studies should push for an international and multilingual nature that reflects the true linguistic diversity of our campuses — highlighting Spanish in the case of my own Californian institution, but not exclusively. I'm not talking about an absorption of Spanish e-lit into the study of a new global digital language, but about the leveling of Spanish as a foreign language with the global digital language that is electronic literature — that may not be as foreign to us nowadays after all. Finally, opening a space for writers, readers, students and teachers to learn together the necessary competencies to explore the literary in its new digital circumstance can illuminate important aspects of DH as a field of inquiry and teaching. Rather than take the digital to make a project of the literary, what I am stressing is that *the digital* and *the literary* are to be experienced throughout, one coming out of the other and vice versa. I believe this could broaden our current DH practices and scholarship, and, most importantly, help us firm up the value and nature of the Humanities in the university today.

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Notes

[1] Within a broad range of works, the ELO distinguishes hypertext fiction and poetry, on and off the Web, kinetic poetry presented in Flash and using other platforms, computer art installations with literary aspects, conversational characters, also known as chatterbots, interactive fiction, novels that take the form of emails, SMS messages, or blogs, poems and stories that are generated by computers, collaborative writing projects, and literary performances online that develop new ways of writing [Electronic Literature Organization n.d.].

[2] In his influential book, *Cybertext: Perspectives on Ergodic Literature*, Espen J. Aarseth describes ergodic literature as that which requires a nontrivial effort from the reader to traverse the text. "If ergodic literature is to make sense as a concept, there must also be nonergodic literature, where the effort to traverse the text is trivial, with no extranoematic responsibilities placed on the reader except (for example) eye movement and the periodic or arbitrary turning of pages" [Aarseth 1997]. Although Aarseth applies this concept to both born-digital and certain experimental codex works such as Julio Cortázar's *Hopscotch*, the term has been adopted by e-lit criticism to describe cyber interaction with the narrative.

[3] While literary studies have put close reading at the center of most analytical work, Franco Moretti has put emphasis on the importance of "distant reading," this is, understanding literature by turning it into data that can be aggregated and analyzed in massive amounts. This DH practice is intended to look at the great scope of literature, rather than closely looking at an established — evidently more limited — canon of works [Moretti 2013].

[4] Since Fall 2015, DH at Berkeley has founded 18 courses: Fall 2015: 3 courses, in Political Science, Art History, and Music; Spring 2016: 3 courses, in the School of Information, Spanish, and Music; Fall 2016: 3 courses, in Art History, Theater Dance & Performance Studies, and Rhetoric/New Media; Spring 2017: 9 courses, in the Graduate School of Education, Art History (2 courses), Near Eastern Studies (2 courses), History (2 courses), Ethnic Studies, and English.

[5] I'd like to thank the Berkeley DH Council, as well as Dean Anthony Cascardi and DH Executive Director and Academic Coordinator Claudia Von Vacano for their support with this project.

[6] This undergraduate DH course is the first to be taught at the Berkeley Center for New Media in Spanish. I am grateful to Greg Niemeyer, then director of the BCNM, and to my own department of Spanish and Portuguese, for the opportunity to teach a class in Spanish inside *and* outside of the Spanish and Portuguese Department, since I believe this is a step forward in expanding the role of Spanish on campus, while coherently contributing to the multilingual makeup of our Californian university.

[7] As course evaluations showed, students' satisfaction with the course received 7/7, exceeding departmental averages, highlighting the sense of community and group agency created by the course. One student commented "I found myself doing so much more research about e-lit outside of the classroom and aside from homeworks (*sic*) because I wanted to learn more. After class I'm still thinking about the material and talking about it with my friends"; other: "I appreciated working in groups and as a class to present to the campus. I feel that as a class (even though there aren't many of us), we are making important advancements and help spread the word and understanding about e-lit. After having taken this course, I feel like a mini-unofficial-ambassador of e-lit."

[8] In practical terms, during the Spring 2016, this course has been taught by a Spanish literature professor, a specially trained graduate student, a member from Berkeley's research IT, and has received the visit of four different e-lit scholars and/or artists from Mexico, Portugal, Puerto Rico and the United States.

[9] Berrett underscores three "Key Eras of Growth for Competency-Based Learning": The 1970s, when "Institutions like Alverno College, DePaul University's School for New Learning, Regents College (now Excelsior College), the State University of New York's Empire State College, and Thomas Edison State College are the first adopters. They seek to make higher education available to a growing population of adult students by using demonstrable outcomes and measures of previously acquired learning to assess what students know. The approach allows students to make progress at their own pace instead of following the traditional academic calendar"; The late 1990s, when "the governors of 11 states agree, in 1997, to create a virtual college to help students acquire training for in-demand jobs like information technology, teaching, and nursing. Western Governors University reaches 71 students in 1999, its first year in operation. By 2015, it enrolls more than 62,000 students. Its scale is enabled by online tools, a competency-based method, and the separation of faculty roles into those who assess learning and those who provide academic coaching"; And today, when "Southern New Hampshire University, in 2013, becomes the first institution approved to award federal financial aid based on students' demonstrated progress instead of the credit hour. That same year, the University of Wisconsin begins offering its own competency-based program, signaling mainstream acceptance of the idea. A year later, the Competency-Based Education Network forms. The coalition of 17 institutions and two state systems seeks to share information on this method of learning, guide its development, and stake out principles for high-quality programs. Now nearly 600 institutions are now seriously exploring competency-based education" [Berret 2015].

[10] Due to the sheer diversity of specific accounts of "digital literacy" that are out there, and their consequent implications for digital literacy policies, Colin Lankshear and Michele Knobel consider it better to talk about *litteracies*, in its plural form, to incorporate similar terms such as computer literacy, information literacy, technological literacy, media literacy, communication literacy and the like [Lankshear and Knobel 2008].

[11] In her article "The Digital Humanities as a Laboratory," Amy Earhart notices how academic institutions are experimenting with different structures to leverage DH work. She highlights the formation of DH Labs like the Stanford Literary Lab (Stanford), Scholar's Lab (University of Virginia), Digital Scholarship Lab (U of Richmond), Humanities and CriticalCode Studies Lab (USC), Electronic Textual Cultures Lab (U Victoria), The Humanities Laboratories (Duke U), and The CulturePlex Laboratory (Western U), among others.

[12] The scholarship is wide on the topic. For overarching perspectives please view *Debates in the Digital Humanities*, Matthew K. Gold Ed (2012), *The American Literature Scholar in the Digital Age* by Amy Earhart and Andrew Jewell (2011), *Defining Digital Humanities: A Reader*, Melissa Terras, Julianne Nyhan and Edward Vanhoutte Eds., or the very recent *Between Humanities and the Digital* (2015) edited by Patrik Svensson and David Theo Goldberg. Also consider the work done by the Scholars' Lab at the University of Virginia, and the many panels and ongoing conversations being held at organizations such as HASTAC and ADHO, and even special interest groups like Global Outlook::Digital Humanities.

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