Howard Gardner's theory of Multiple Intelligences (1999) suggests that there are at least eight different types of intelligence\(^1\). Due to genetic variation and personal experiences, no two people have the same combination of intelligences. These do not only signal the way we interpret and cope with the world around us but the way we react to it. It is no coincidence that Reader Oriented Theories focus on the role of the reader in processing and interpreting text and not solely on textual perception. As readers and students of literature, the act of interpreting is key to understanding; but limited by outdated methodologies of assessment the opportunity to demonstrate what has been learned is practically bound to their linguistic intelligence.

Domenico Chiappe’s hypermedia novel “Tierra de Extracción” (Electronic Literature Collection Vol 2) covers, thanks to media rhetoric, all the intelligences Gardner mentions by encouraging cognitive development so that the reader as he or she explores, can also interact freely with images, drawings, videos, music, audio and text understanding by means of their intelligence as much of the message conveyed. But, what is even more interesting is that by deconstructing the intricacies of its creation students could re-create and produce their own particular results. Proving, in their own way, what they have learned and understand that the skills they already posses, whether they may be linguistic or not, have not only real world applications but literary ones as well.

With the change of medium, from paper to screen, literature has undergone a kind of art and media hybridization that far from being something new and original recovers and allows the coexistence of multiple means of storytelling that extend the concept of reading, understanding and expression. In a literary world of "Multiple Intelligences" and "Digital Natives" Electronic Literature offers not only the possibility of re-interpretation but a new approach in assessment methodologies that allows students from any background to express themselves in what Sir Ken Robinson (2009) would nowadays considered their "natural element"\(^2\). Innovative methodologies are already being put into practice by scholars and teachers of this new literary genre. Laura Borràs\(^3\) and her research group Hermeneia have been enhancing how students understand the complexities of Electronic Literature by means of undergraduate and postgraduate level courses while continuously

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\(^1\) Psychologist and Professor at Harvard University, Howard Gardner developed the “Theory of Multiple Intelligences” in the 80s which revolutionized the educational model by stating that intelligence is an ability like any other. As individuals we all possess one or several which help us understand the world around us. Gardner argues that there is no single intelligence but a diversity of them which mark the potential each individual has. Based on Gardner’s studies each individual has eight intelligences or abilities (some more developed than others) that work together as semi-autonomous entities. Gardner, Intelligence Reframed: Multiple Intelligences for the 21st Century, 1999.

\(^2\) Sir Ken Robinson discusses the natural element hidden in each one of us in his book The Element: How finding your passion changes everything (2009). According to Ken our element is the place where the things we love to do and the things we are good at come together. It is essential that we find and develop our element so as to feel fulfilled as human beings.

\(^3\) Laura Borràs is a philologist and the new Director of the “Institución de las letras Catalanas”; founded the Hermeneia (Hermeneia.net) research group in 1999 which has been studying the interactions between literary studies and new technologies while expanding and sharing their knowledge through their Master in Literature in the Digital Age developed since 2007.
stimulating and promoting the study and research of Elit to a new generation of scholars and critics at a doctoral level. As a result of the Master in Literature in the Digital Age, which I completed, I have been inspired to constantly seek and share new and alternative forms of learning and assessing the literary through Electronic Literature. The purpose of this paper is to express the potential that hypermedia novels such as *Tierra de Extracción* have to strengthen the way we assess our students and how these and other experiences could be documented and shared in a database, like the one presently being developed by Hermeneia, from which students and teachers alike could expand their knowledge and experiment with the possibilities this trans-disciplinary and multi-expressive discipline offers.

**New tools, new assessing possibilities for Electronic Literature**

In Christopher Mott’s essay *Electronic Literature: A Questionable Approach* (2008) the obvious question of how to teach and assess this new storytelling format is raised. Mott states that Cybertext helps promote broader literacy as well as a richer learning experience due to the fact that multimedia appeals to multiple learning styles. Moreover, such learning styles directly relate to what Howard Gardner asserted as Multiple Intelligences which determine what and how students learn. When thinking about the building blocks of Electronic Literature I believe it is practically impossible not to feel the need to experiment and exploit the endless possibilities of not only teaching toward these Multiple Intelligences but essentially assessing our students with them in mind. Quoting James Paul Gee and Katherine Hayles, Mott argues that interactive media allow for a much deeper understanding and defends that the logic of electronic narrative defies the logic of print narrative breaking away from it by making the reader a player a co-author, or co-producer of each work studied in class because each student’s reading experience could be unique.

Jorgen Schäfer, during his presentation at the Electronic Literature Pedagogy Workshop at Blekinge Institute of Technology (2011), suggested that in order to legitimize electronic literature as an important topic we must cross gaps and cross boarders by having students knowledgeable in other disciplines add to what we know about and don’t know about digital literature. He reminds us that there are not many other subjects and international research communities that are as well-suited for crossing the borders and closing the gaps between disciplines, countries, languages and teaching methods as electronic literature. Mott and Schäfer’s affirmations are corroborated in projects like the one developed by Patricia Tomaszek who has also highlighted the payoffs of cooperative teaching and cooperative learning. During her conference presentation at University of Bergen in 2008 it was confirmed that this type of cooperation resulted in a mix of teaching approaches that produced a collective body of knowledge from which future researchers could draw on to analyze digital literature. Tomaszek explained how students from Brown University that were majoring in Chinese, Music Theory, Management, and Digital Aesthetics; Literary Systems; Literature and languages or Computer Science were able to draw insightful connections that ranged from programming knowledge to discussions of theory. Students were not only free to use their preferred communication system, they were also free to organize their group interactions. Therefore, since electronic literature is being analyzed and taught from different epistemological backgrounds and with different methods, I believe it necessarily requires inter or transdisciplinary approaches. Thus, digital literature should constantly motivate us to rethink the methodologies used when evaluating students’ work.
Risks in the way we teach and assess Elit are already being taken at Universities all over the world. The Electronic Literature Organization, ELMCIP and Eastgate Systems Inc present a wide variety of syllabi which promote the reading, studying and assessment of this fairly new discipline. The large number of professionals promoting new methodologies are taking the initiative to incorporate this controversial new genre of literature to their teaching curriculums while also changing traditional assessment methods. When teaching interdisciplinary classes such as Elit, Simanowski (2009) argues that there will be students from different backgrounds who know little of literature but lots about media development and vice versa. Certainly, electronic literature cannot only rely on the traditional methods of literary criticism it needs to arm itself with the tools of social sciences, computer sciences, design studies, arts history, and so on, in order to understand the intricacies of the examined works. This requires a completely different approach to teaching and assessing, an approach that needs to be studied and developed by not only surveying teachers but students alike. But, as Simanowski states “while we have a number of grand theoretical texts about digital literature we as yet have little in the way of resources for discussing the down-to-earth practices of research, teaching, and curriculum necessary for this work to mature” (239).

Though reduced, there are already a number of case studies and surveys developed by scholars like Philippe Bootz 4 who have examined the teaching practices of Elit teachers who engaged with digital literature or creative digital writing. Bootz admits that the literature documenting these practices is relatively poor, stating that educators speak little about their experience, with the exception of some as is the case of Alexandra Saemmer. He goes on to admit that the assessment formats weren't thoroughly analyzed and that his investigation was far from exhaustive admitting it would have also been useful to gather direct feedback from students who had taken those courses. This paper simply suggests another method while defending its possibilities in reference to multiple learning styles enhancing the way our students understand the discipline. Nevertheless, what is essentially more imperative is the documentation of these “experiments” so as to create a database of projects, experiences and innovative ideas to learn from and develop in other classes where Elit is taught.

The multiple intelligences that tie together all levels of Tierra de Extracción

“Though code is sometimes invisible to the user, it can be experienced subtly but still have an impact on the user’s experience”. This affirmation by David Shepard in his essay Finding and Evaluating the Code (2008), as true as it is, should also be valid then with all intermedial and transmedial aspects of Electronic Literature. Understanding the relationship between all levels of creation is key to understanding a work of Elit in its entirety. And here is why Hypermedia Novels like Tierra de Extracción serve as a simple but efficient examples of how all formats of media expression, whether it be sound, video, imagery, text or code work together as a team to tell a story. We could assess our students by imitating the format in which TdE was created. Each student could have a different responsibility related to their field of expertise and by combining all their ideas towards one common goal they could recreate the work or parts of it as an assignment. To do so, it is imponderable that all components emerge from a single point of creation and

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4 Philippe Bootz presents a study based on a survey done by a few teachers engaged in the teaching of Digital Literature:Finding and Evaluating the Code (2008), as true as it is, should also be valid then with all intermedial and transmedial aspects of Electronic Literature. Understanding the relationship between all levels of creation is key to understanding a work of Elit in its entirety. And here is why Hypermedia Novels like Tierra de Extracción serve as a simple but efficient examples of how all formats of media expression, whether it be sound, video, imagery, text or code work together as a team to tell a story. We could assess our students by imitating the format in which TdE was created. Each student could have a different responsibility related to their field of expertise and by combining all their ideas towards one common goal they could recreate the work or parts of it as an assignment. To do so, it is imponderable that all components emerge from a single point of creation and...
when speaking about a single point it does not mean a single mind but a multidisciplinary group of work that guaranties that all components have to come about and grow together. Such is exactly what Chiappe did by combining the *Intrapersonal* and *Naturalistic* intelligences of a group of artists whom worked in collaboration to create a multi-plane narrative with a single artistic direction.

Figure 1. Screen shot, *Tierra de Extracción*.

1. **Hyperphony** (Multiple voices: Creative and Narrative) **Intermediation / Remediation**:

A) Text (Linguistic Intelligence): First plane of contact with story and content.

B) Music / Lyrics / Voiceovers (Musical Intelligence): The mood of each chapter is dictated by the soundtrack and its lyrics expose the subconscious of the characters while female voiceovers act as an omnipresent narrator.

C) Images (Visual Intelligence): Artists linked drawings and photographs to what is said in the text while portraying the cruel reality of *Mene Grande*.

A) As the author clearly states in his essay *El oficio de vender un lenguaje multimedia, con muy poco uso* (2009a) his work is one that could have been printed and sold in codex format back in 1996 but its content and more importantly the message it conveyed hid away in other forms of storytelling that couldn’t be told solely with words. This becomes evident as we encounter an initial image (above) that appeals to multiple learning styles. It reminds us of a painting, one which, as we interact with it, talks to us, sings to us and invites us to read. From the very beginning of the work the reader understands the value of words as the key element of narration. All action and continuity will occur through the interaction with them. Doménico is faithful to the style of traditional novels which explains why his characters and stories require great linguistic skills to remain intricate and interesting. The readers, or in this case, our students with cognitive abilities favoring linguistics will be able to enjoy and understand the novel immersing themselves in each chapter titled by a word which works as the hypertextual element by excellence. The work is essentially navigated throughout the 67 chapters that are written in such way that can be read independently. All have a beginning and an end linked together by their protagonists with a purpose in common...the search for something. The hypertexts that the words uncover allow the existence of several elements and meanings that define an event in innumerable ways. It is not enough then to simply read the words but we must
search into their metaphorical meaning, the shape or image they represent, the words that come out of them, the music that emerges from them, the newspaper articles that relate them to reality, the image linked to them or the interaction they force upon us. All the consequences that result from our interaction with words redirect us to several intelligences that will allow any type of reader to understand the story in a very personal way.

Figure 2. Screen shot, Tierra de Extracción.

B) TdE was also a musical work of art emerging symbiotically with the same inspiration that drove the writing of the novel. The magic that nurtured one thing automatically nurtured the other which even in 1996 demanded to be told as an inseparable unit. Actually, the first act of the novel was intended as a song and all else emerged from there. The author understood the narration was tied to the songs and that to make this sort of meta-text work there was only one format, the multimedia format, one which would unite all components and thus allow all levels of storytelling to come to life. The musical element which is considered by Doménico (2009c) just as important as other narrative elements reflects the mood of the characters. Sounds emerge from our interaction with images and hypertexts, it is the voice in charge of transmitting feelings of emotion or sadness depending on their rhythm. It allows the reader to understand the anemic state of the protagonists of each chapter and their thoughts. We will know that we are in a new chapter by the music we hear, characters will be connected to a specific song serving the “musical” reader as a guide. Students’ musical intelligence will be key to decipher the array of elements otherwise ignored.

Figure 3. Screen shot, Tierra de Extracción

Como ensimismado, Matías inició conversación con un hombre que apareció de pronto sentado a su lado, Pelicano. Ambos hombres miraban, sentados en el mismo banco de concreto, las lejanas llamadas que salían del camino.

Figure 4. Screen shot, Tierra de Extracción
There are 16 soundtracks that will form part of the 44 chapters and are as essential as the images and the text. Sad sounds are predominant so that we can perceive the sadness of its people. At times even the text can be moved to the sound of the music. It represents a synesthetic act that transports us to the time and place helping us understand the surroundings and the situation. The music and the lyrics of TdE were composed by Doménico and produced by Raúl Aleman but each song was given to different musicians (Ojo Fatuo, Jorge Ramírez, Slam Ballet, Culto Oculto and Daniel Armand) together with its corresponding plot. They all read the chapters and worked on musical arrangements that “they” believed necessary. It was a true act of polyphony over polyphony. The building blocks of TdE are audiovisual, multiple and put together by many. Their mission, according to Chiappe (2009b), was to determine which were the sensations felt by the characters, they had complete freedom to impose their point of view. A polyphonic novel in its narration (6 characters) and polyphonic in its creation (20 creators) resulting in a hyper phonic hypermedia novel. The lyrics of the songs establish implicitly what cannot be read in the chapters; what the characters think, what their subconscious screams but does not say, or even what it does not know it thinks. There is a song for each protagonist and the songs are divided into two, three and four parts, each one arranged differently depending on the chapter it appears in. All throughout the musical process the author collaborates with someone else who possesses the means to make possible what he couldn’t have possibly done on his own and the result is a very professional sounding work of Elit.

What is not read in the chapters, what we cannot see in the images or even listen to in the music, will be exteriorized by the voice of a woman. This voice can be heard as we move the cursor over some specific hyperlinks that activate the sound. This voice is feminine, it acts as a third person narrator describing scenarios, protagonists, their thoughts, their situations and everything else as we continue navigating what is on the screen. It speaks from the deepest unconscious of Mene Grande and through its voice we enter, once again, in its terrible and fatal environment. This way the words in the hypermedia novel will come to life. This synesthesic experience creates a multisensorial link between the reader the story and its characters. The author does not choose a feminine voice by accident it metaphorically represents the voice of Mene. Chiappe, as I've mentioned before, presents a work in which all elements live symbiotically linked to each other. Every action has a reaction. Whether it is a simple clic o the extraction of petrol or even helping a woman give birth all lives in harmony in Mene Grande. The voice is feminine because the earth represents a mother from which life comes out. Life which is represented at times by the petrol that allows them to eat or the woman that allows life to continue. It talks to us, it tells us about its horrors, its fatal destiny that turns round and round always ending in disaster.

A moment in time is captured by the images (real if it's a photo or fictitious if it’s a painting) which has nothing to do with what has been narrated before hand but still transmits a parallel sensation. The reader obtains different nuances about what is narrated thanks to the photographs of Humberto Mayol, edgar Galíndez, Archivo Fotográfico Shell-CIC and the Andrés Mata Foundation while also Ramón León’s plastic works together with Manuel Gallardo’s plural and artistic version. These images similarly to the words, will work as hypertexts from which voices, music and even at times hide other words. The iconic function of TdE divides the importance of the theme in its various artistic representations. Contrary to the traditional novel which focuses solely on words, Chiappe develops a hypermedia novel understandable by those with visual intelligences.
who will get other aspects of the story that are impossible for this type of intelligence. The images and drawings will serve as links with the readers subconscious and will act as metaphorical tools. They relate this symbiotic link between the people of Mene, their stories, the industrial development, the oil, nature, the capitalist invasion, their cyclical destiny and otherwise the expressive union of the image and its relationship with the word.

Figure 5. Screen shot, Tierra de Extracción

Figure 6. Screen shot, Tierra de Extracción

The images were also left to the creativity of other photographers and plastic artists similarly to what was done with the musical arrangements (2009c). The novel was given to Ramón León, Manuel Gallardo, Humberto Mayol, Edgar Galíndez and Pedro Ruiz who all had the artistic freedom to express what they understood of TdE and what it made them feel through their art. Some photographers searched amongst their images and related each one with a text or part of a text they considered linked to it. There are some photographs belonging to several countries and situations. Besides, and thanks to a coordinator an array of historical images belonging to Shell-CIC-UCAB and El Universal find their way in TdE, but finding them will require some searching.

Thanks to our visual, musical and linguistic intelligences we can interpret all other storytelling formats extracting our own conclusions. We can relate what we read with what we can see and hear realizing their indisputable connection. As explained, the music expresses the feeling of a chapter whether its violence, love, sadness or happiness, the lyrics go hand in hand with the music and project the most intimate thoughts of the characters, the voiceovers speak from the deepest unconscious of Mene Grande and the photographies and paintings play their own role in adding realism and fiction to the story. In an Elit classroom setting it becomes important for our students to understand this but more so to have the possibility to recreate this when they are assessed. Similarly to what is done by Diagnostic and Forward Looking Assessment methods we, as Elit scholars and teachers, could also identify our students’ skills and knowledge to help them choose a suitable form of assessment in which their skills are key to solving a specific issue. Hence, by having them work together students could also self assess themselves through a Peer to Peer approach so successful for other subject matters.

2. Interactive Fiction / Animation / Hypertext:

With the collaboration of Andreas Meier Mathematical and Kinesthetic intelligences played a key role in the configuring of screens, interactive mechanisms and animation using programing tools like Shockwave and hypertextual links that puzzled it all together.
The screens were all configured one by one but as any worthy artistic piece of Elit it needed an artistic vision and a mise-en-scène that required a different kind of director, in the case of TdE it was a programer called Andreas Meier. His job as a programer and designer brings life to the work and allows all parts to work together but only by means of user interaction. Doménico and Meier decided not to exceed on the decor and come up with a logical interface that would not need instructions. Each chapter represents an individual work of net-art which total 63 chapters all independent from each other but linked at the same time. As Chiappe explains in his article Herramientas para no perderse en el laberinto (2009c) when a work of art is worked on in groups, the authors must coincide in its intention, rhetoric and the way that the arguments are exposed. In the case of programer (Meier) and writer (Chiappe) distance was a key factor and emails had to be shared by the hundreds. As we read some of their exchanges, shared in the article mentioned above, we can have a slight idea of what happens when two very different formats of storytelling come together. Their expertise with incomparable mediums clashes throughout the entire process. It becomes evident that expressing something on screen requires a new approach to storytelling, one that allows the reader to decide what to read and where to go so as to grant a free for all interpretation through interaction.

From the very beginning of the work it becomes clear that user participation is key to reveal the story and understand its message. All our actions will have repercussions throughout the story occasionally having the reader not only participate in the story but becoming the prime mover in some of its chapters. The story telling is now multi-sensory and thus demands an interactive interface that permits the coexistence meta-discourses that appeal to the multiple intelligences required to understand the work in its entirety. A more in depth analysis of how Domenico Chiappe’s hypermedia novel covers, thanks to media rhetoric, all the intelligences Howard Gardner mentions can be read in “Tierra de Extracción”: Multiple Intelligences in the Multimedia Novel a research paper I presented at the international congress “Mapping Elit” in Barcelona in 2011.

In the chapter called Lluvia we will encounter an image which acts as a hypermedia link that once clicked on by the ergodic reader will animate it and metaphorically recreate the extraction of petrol from Mene Grande. Something similar occurs in Monte, a chapter in which our movement up and down with the cursor reenacts a sexual dance-like motion revealing the protagonist’s hidden intentions. In Parto the reader will help a woman give birth linking the moment metaphorically to a number of letters that will splash out like the oil trapped underneath the earth which will form a sentence that was not present before. Moreover, causing the death of a farmer in Odio will set us up as an accomplice to murder. All these actions thought of by Chiappe but made possible only through the use of programming tools like shockwave in the hands of a programmer like Meier, allow us as readers to feel more attached to the story now that we can also be a part of it. Similarly but less accomplice-like, in Mangal we will unpuzzle a cube containing intermedial storytelling formats revealing hidden content not visible otherwise. In the chapter of Anhelos we will be able to unveil a piece of parchment hiding textual content, action that will repeat itself in Vicio chapter in which we must decode symbols that transform into

5 A proposal which emerged throughout my studies at University of Barcelona (Master in Literature in the Digital Age) which linked the multi sensory rhetoric Domenico’s hypermedia novel offered to Gardner’s MI theory. My intention was to prove that since the advent of digital literature, focusing on hypermedia novels, literature can be transmitted and understood in a format suitable for any student by encouraging cognitive development so that the reader as he or she explores can also interact freely with images, pictures, music, voice and text understanding by means of their intelligence as much of the message conveyed unleashing a new world of possibilities for the literary.
words by taking the place of Azuceno Correa, one of the characters, who suffers from an obsession with keys. Furthermore and to conclude with a brief set of examples of the benefits of Mathematical and Kinesthetic intelligences in electronic literature, the reader of TdE can also fragment the text in chapters like Vuelta in which our movement with the cursor flips the text around altering the meaning of what can be read and consequently understood. All clear examples in which, according to Bolter (1991) hypertext redefines the metaphor of the action of the reader who now participates in the creation of text.
The long distance collaboration between Chiappe and Meier is one that could easily take place in a classroom setting. Linguistic, Musical, Mathematical and Kinesthetic intelligences working separately on a project but coming together in intention resulting in a work of Elit put together by allowing students to work on a specific part of a project but keeping the final result in mind. This way, each group of students could be evaluated on their strengths and intelligences participating in the creation of a literary piece of digital work while understanding the elaborative process behind it. Innovative methodologies of assessment like Comprehensive Assessment (which measures the full range of student ability, social, emotional and academic achievement involving multiple learning styles) or Project Based Learning Assessment (involving task in which students must create, do or produce with real world application of knowledge and skills) or even Technology Integration Assessment (combining new and personalized styles of learning by combining technology and new approaches to education) could all be perfectly incorporated to the way we teach and assess our own electronic literature students.

3. **Collaboration** (Interpersonal Intelligence):

In the case of TdE Writers, Programers, Actors, Musicians and Photographers came together to create an electronic literature narrative adventure only possible on the interface of a screen. The groups/individuals were assigned particular tasks with varied results that all had to come together under a single intention. Each participant as an expert in a particular field worked on the specific part of a final project identically to what happens with some forms of assessment practices around the world in which students work together to present and or create a final project for class. As of now, a large part of methodologies used for electronic literature assign one project with the same requirements for the entire class. Students are separated into groups to work together, yes, but all doing the same thing. A methodology like the one proposed by this paper requires collaboration but allows freedom of choice for the students. The processes behind the creation of TdE are taking place in some classrooms but not aimed at recreating an existing work of Elit, a visit to eliterature.org, eastgate.com or elmcip.net will demonstrate that the techniques are being experimented with and seem to be effective, but still require all students to complete a single activity at a time and not one that appeals to their particular intelligence.

Throughout the syllabi presented by ELO we can find that:

2. Nick Montfort an automatic writer and interactive game in 2008 at MIT.
3. Dene Grigar, 3 in class works of Elit using Video/Web/animation at Washington State University.
4. Robert Kendal (2007) at School of the Museum of Fine Arts proposed assessing his students with 1 Short online work that combines text and image, 2 or 3 complex online text and art projects and the building of a website to showcase students individual work.
5. Lori emerson at Georgia Institute of Technology during her Freshman advanced composition / Multimedia writing, writing multimedia poetry in the age of the book course assessed Website creations (Video, Blog and Audio Essay), Collaborative Essays and the creation of virtual environments.

In the case of Eastgate Systems:

1. Janet Murray (1999) at MIT required three projects; 1) To create an interactive interface for moving between simultaneous actions, 2) a multiform story suitable for digital presentation, 3) the creation of a character capable of sustaining a 20 exchange conversation.
2. At Paris 8 Jean Clément & Others had their Hypermedia Department students create a site called Les Étudiants where they posted their creations, communications and memories.

Also found at ELMCIP:

1. Scholars like Lori Emerson had her students develop a final group creative project at University of Colorado.
2. Maria Engberg in 2012 asked their students at Blekinge Institute of Technology to develop a wordless story composed of photos and drawings.

I must also add my personal experience under the direction of Laura Borràs while studying throughout the Masters of Literature in the Digital Age at University of Barcelona. For two years I spent my time acquiring the skills and knowledge necessary to pursue my aspirations in relation to how the literary is taught, understood and assessed. Thanks to professors like Isaías Herrero, Cori Pedrola, Aleix Cort, Joan Elies, Domingo Sánchez Mesa, Perla Sasson-Henry and Laura Borràs’s vision of a hybrid like educational system which is focussed on creating to attain understanding I was able to not only achieve my goals but actually put them into practice. As a result of these multidisciplinary lessons and a very personalized almost “up to you” assessment choice I recreated Videolits\(^6\) and learned to edit photography, audio and video giving me the tools I used later on when creating my very first hypertextual work of Elit after learning programing skills with HTML. All the practices mentioned were key to understanding the new formats of storytelling electronic literature offers and all appealed to one or more intelligence at a time. Several previous students of the master, inspired by similar reasons than mine, put together very convincing works related to how a certain format of assessment, proposed in their papers, could have students understand the intricacies of Elit. Oreto Doménech Masiá’s comparative analysis\(^7\) of Deena Larsen’s I'm simply saying and Tree Woman reaches the

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\(^6\) Cori Pedrola and Aleix Cort present the Videolit which is defined as audiovisual capsules of about 5 minutes based on a literary text or work of art. A Videolit is also a learning methodology which represents an active project of creation perfectly effective in an educational environment. [http://videolit.org/](http://videolit.org/)

\(^7\) A comparative analysis present in Rafael Alemany Ferrer and Francisco Chico Rico’s paper *Ciberliteratura y Comparatismo* (83 - 2012).
conclusion that digital poetry involves the reader more intensely because it involves the senses, furthermore, she argues that poetry expresses through technology a new way of creating, emphasizing on poetic elements and multiplying them in intensity. Movement images, and sound also multiply the connections between signifiers and reinforce the meaning of metaphors, images and symbols. Doménech Masiá’s research project could very well relate to the arguments found in this paper when talking about *Tierra de Extracción* and Multiple Intelligences but moreover it’s the act of comparing two works of Elit from the same author as she did that proves to be an incredibly efficient exercise for students to reach an even greater understanding of the literary thanks to Elit. Furthermore with “I’m simply saying” Deena Larsen: A la recerca d’una traducció de poesia digital a collaborative investigation also developed by previous master students and now members of Hermeneia, Sandra Hurtado Escobar, Berta Rubio Faus and Orote Doménech Masiá Deena Larsen’s poem was translated into Catalan exploring throughout the process the semantical connotations and cultural referents that change from one language to another. Hurtado, Rubio and Doménech came to the realisation that the translation process had lead them to “notice” the high permeability of literary texts, questioning the act of reading as rereading and translation as a recreation. By dissecting all meanings of the poem, necessary for translation and approaching the text in a collaborative manner they proved that real knowledge was built by creating collaboratively and that translating could be an amazingly effective way of assessing our students. Hermeneia, the first research group in Spain devoted to the study of digital Literature since 1999, has granted its devoted students the possibility of being a part of Laura Borràs’s team of scholars and to continue researching new grammars, new readings, to archive its productions and stimulating creation of new pieces of Elit. Nevertheless, as Laura Borràs states, "what was really important was to establish a network of complicity, interests and elective affinities"(2012). Since its humble beginnings Hermeneia has encouraged and continues to encourage new authors to create digital literature by offering awards as the established "Ciutat de Vinaròs" in 2007 whose winners were also selected for the Electronic Literature Organization Vol II. Moreover, it is now dedicated to documenting the works studied by the research group, its undergraduate and postgraduate courses, thus promoting an interchange between areas of creation, innovative teaching and assessment methodologies so as to constantly improve how the literary is taught and understood in the 21st century.

Furthermore, amongst these methodologies, the most faithful to the proposal I present was one that took place at the Erasmus IP organized by Philippe Bootz in Madrid in 2012. Several groups came about formed by students with very different backgrounds, some very aware of what Electronic Literature was and others not so much. Besides, the skills that each possessed separately resulted in a collaborative prototype project of Elit which required from each student the skills they already possessed. During the process of creation what wasn’t known by one was taught by the other becoming a sort peer to peer project based learning methodology that resulted in a digital work that still continues to be developed today. In this case the group had to create their own original work from scratch, methodology which has already been practiced by several institutions as I’ve mentioned above. The difference between this type of project and one which asks students to “deconstruct” and “reconstruct” an existing work of Elit is what Henry Jenkins would call

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A process of translation of Deena Larsen’s “I’m simply saying” documented in Rafael Alemany Ferrer and Francisco Chico Rico’s paper *Ciberliteratura y Comparatismo* (95 - 2012).
appropriation. To understand its intricacies and later originally recompose it by delegating a part of the project to each group of students based on their learning style or intelligence. As per Jenkins, “appropriation enters education when learners are encouraged to dissect, transform, sample, or remix existing cultural materials” (32, 2006a).

Appropriation is what occurs at the yearly workshop hosted by the MIT Comparative Media Studies Program which requires students to work in teams to think through what would be involved in transforming an existing media property (a book, film, television series, or comic book) into a video or computer game and then preparing a “pitch” presentation for their game. Having a pre-existing property, according to Jenkins (2006a), allows students to build on a text they have in common as readers rather than one created by an individual student author and by identifying core properties of the original work students will learn important narrative and formal analysis skills while developing an alternative version of the story in another medium will emphasize the creative expansion of the original content. In the case of TdE appropriation wouldn’t require transforming one type of media into another but it would allow students to build on a preexisting work of Elit, identifying its core properties and consequently delivering a creative expansion of the original content. Assessment methodologies such as Social and Emotional, Teacher Development and Integrated Studies already motivate student projects like these by having them collaborate, communicate and resolve conflicts while strengthening the relationships between students and their teachers as they work together increasing the engagement and retention of the subject by interweaving academic disciplines.

Documenting efficient methodologies:

Presenting ways in which Hypermedia Novels like Tierra de Extracción could enhance literary assessment is only one of the steps to take to really enhance the way we assess our students. The priority should be to document these practices, those that have been used in a classroom setting and share their results. Saemmer made an interesting case on why and how we catalog Elit works the way we do at the ELMCIP conference Remediating the Social (2012). I agree with her on the notion that maybe defining a canon or a list of key words to define styles that change completely in a year or less is important right now, it gives us a sense of direction, hence, I ask myself, isn’t it as important then to spend our time cataloging and sharing methodologies that have been experimented with in Elit classrooms so as to come up with a database of assessment techniques and student projects that inspire our pupils to collaborate, develop their intelligences and share their results? Wouldn’t this sort of documentation offer students and teachers the possibility of learning from each other while promoting the study and dissemination of existing works of electronic literature? There are databases containing volumes of Elit works, databases containing syllabi on how to teach it and many more flooding with research articles and essays but none from which students and teachers can share and learn efficient methods of assessment that could aid them choose a type of approach and maybe even inspire them to innovate on existing ones. We’re heading into a new assessing world, one that not only requires the implementation of new technologies but one that can keep up with real world demands and 21st century students. There are a number of institutions sharing methodologies on websites like Edutopia, NLI (New Learning Institute), Project Zero, Performance Assessment.org, Microsoft’s ITL, ATI (Assessment Training Institute), CCE

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9 Henry Jenkins, Scholar and Provost Professor of Communication, Journalism and Cinematic Arts, considers “appropriation” the ability to meaningfully sample and remix media content. It is a resampling/remediation/remix of sorts done by people in today’s society who build upon the original media. Confronting the Challenges of Participatory Culture: Media Education for the 21st Century.(2006)
Creativity Culture and Education. These institutions promote new methodologies and present those that are already working efficiently in classrooms all over the world. By doing so, teachers and students are reaping the benefits of innovative techniques as well as testing new ones in their classrooms so as to keep up with the times and continue to improve as educational institutions. Isn’t it just as necessary to network websites, works and writers as it is to connect practices and results that we could all share an improve on as Elit becomes more and more present in classrooms? We, at Hermeneia, have realized the need to do so and have started the foundations to create this database taking into consideration not only what scholars and teachers have to offer but what our students can add to the mix.

In addition, this type of community involvement would faithfully represent what Henry Jenkins (2006b) defined as “participatory culture” shifting the focus of literacy from one of individual expression to community involvement of free artistic expression and engagement with strong support in the creation and sharing of one’s creations with other students and teachers passing along what is known by the most experienced to the novices resulting in projects students believe in and feel like their contributions matter. I am a firm believer that when teaching Elit in a classroom it is as necessary to explain why one thing or another happens than it is to learn how it’s done. Every child deserves the chance to express him or herself through words, sounds, and images, even if most will never write, perform, or draw professionally. Giving them the opportunity to try will change the way they think about themselves and the way they look at work created by others. The space in which this community would share their ideas represents the ideal learning environments coined by Gee (2012) as “affinity spaces”. As Gee argues, affinity spaces bridge differences in educational preferences having people participate in various ways according to their skills and interests depending on peer-to-peer learning with each participant constantly acquiring new knowledge or refining their existing skills by tapping into each others’ expertise.

Therefore, as scholars of electronic literature, we need to build a more comprehensive and established methodology of assessments by offering a database of new multi-disciplinary approaches focused on the contemporary requirements of art, media and literature especially to stress the significance of the relationship between new technologies and literature similar to the collaborative efforts promoted by other organizations and Universities: a) Harvard University’s presidential initiative HILT focused on devising statistically valid assessment methods that can drive improvements in teaching and learning based on what works in its own discipline. b) MIT’s TLL (Teaching and Learning Laboratory) where faculty, administration and students design and implement assessment methods. By linking and sharing what has been done and what is being done the lack of mastery in any given subject would be reinforced by alternative perspectives, intelligences and unanticipated hypotheses. Therefore, not only will students provide each other with resources regarding electronic media and literature but they will also serve as an important pedagogical resource for the instructor.

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10 By letting students take media into their own hands, produce something with it and share it with others, we are granting them with a sense of empowerment not very often present in the classroom. This is what Henry Jenkins defines as “Participatory Culture” in *Convergence Culture: Where Old and New Media Collide* (2006).

11 Professor and researcher at Arizona State University, James Paul Gee defines “Affinity Spaces or Affinity Groups” as virtual or physical spaces in which people associate. Working in a similar way than fan community sites do by drawing together ideas, projects and interests in a specific area, in this case Literature and Electronic Literature affiliating people with similar interests. (pp 129-153, chapter 11: *Nurturing Affinity Spaces and Game-Based Learning*)
Conclusion

The study of individual works like TdE in class is imperative for the promotion and understanding of Elit. This paper simply presents a possible assessment practice based on how TdE was created and how its recreation would appeal to our students’ multiple intelligences reinforcing the way they understand the literary through electronic literature hypermedia novels. Nevertheless, it’s the need to share these ideas and add to them that becomes imperative if we intend to enhance the way our students understand literature and express themselves with it. Never has literature been so approachable, so accessible, and so obviously useful to our students’ multiple skills. We need to continue to develop new methods of assessment that involve all intelligences whether our students feel like digital natives or digital immigrants. These methods need to be shared and applied in classrooms so as to come up with the most effective approaches and thus promote and develop Elit in the best way possible.

Let’s continue to ask ourselves how we are assessing our students? Which seem to be the most efficient methods? Which enhance the literary aspects of Elit or which are closely related to the use of media tools? Our goals should be to affiliate students and teachers by creating an online community in which new creative forms of expression and collaboration come together to shape the way electronic literature will be taught assessed and promoted in classrooms all over the world.
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Notes:

1. Psychologist and Professor at Harvard University, Howard Gardner developed the “Theory of Multiple Intelligences” in the 80s which revolutionized the educational model by stating that intelligence is an ability like any other. As individuals we all possess one or several which help us understand the world around us. Gardner argues that there is no single intelligence but a diversity of them which mark the potential each individual has. Based on Gardner’s studies each individual has eight intelligences or abilities (some more developed than others) that work together as semi-autonomous entities. Gardner, *Intelligence Reframed: Multiple Intelligences for the 21st Century*, 1999.

2. Sir Ken Robinson discusses the natural element hidden in each one of us in his book *The Element: How finding your passion changes everything* (2009). According to Ken our element is the place where the things we love to do and the things we are good at come together. It is essential that we find and develop our element so as to feel fulfilled as human beings.

3. Laura Borràs is a philologist and the new Director of the “Institución de las letras Catalanas”; founded the Hermeneia (Hermeneia.net) research group in 1999 which has been studying the interactions between literary studies and new technologies while expanding and sharing their knowledge through their Master in Literature in the Digital Age developed since 2007.

4. Philippe Bootz presents a study based on a survey done by a few teachers engaged in the teaching of Digital Literature: From literary digital creative writing to digital literature teaching in France: a preliminary survey (2011). Throughout his study he examines the teaching practices of 7 people in various educational contexts.

5. A proposal which emerged throughout my studies at University of Barcelona (Master in Literature in the Digital Age) which linked the multi sensory rhetoric Doménico’s hypermedia novel offered to Gardner’s MI theory. My intention was to prove that since the advent of digital literature, focusing on hypermedia novels, literature can be transmitted and understood in a format suitable for any student by encouraging cognitive development so that the reader as he or she explores can also interact freely with images, pictures, music, voice and text understanding by means of their intelligence as much of the message conveyed unleashing a new world of possibilities for the literary.
6. Cori Pedrola and Aleix Cort present the Videolit which is defined as audiovisual capsules of about 5 minutes based on a literary text or work of art. A Videolit is also a learning methodology which represents an active project of creation perfectly effective in an educational environment. http://videolit.org/


8. A process of translation of Deena Larsen’s “I’m simply saying” documented in Rafael Alemany Ferrer and Francisco Chico Rico’s paper Ciberliteratura y Comparatismo (95 - 2012).

9. Henry Jenkins, Scholar and Provost Professor of Communication, Journalism and Cinematic Arts, considers “appropriation” the ability to meaningfully sample and remix media content. It is a resampling/remediation/remix of sorts done by people in today’s society who build upon the original media. Confronting the Challenges of Participatory Culture: Media Education for the 21st Century.(2006)

10. By letting students take media into their own hands, produce something with it and share it with others, we are granting them with a sense of empowerment not very often present in the classroom. This is what Henry Jenkins defines as “Participatory Culture” in Convergence Culture: Where Old and New Media Collide (2006).

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**Websites:**


ELMCIP Anthology. [http://anthology.elmcip.net/materials.html](http://anthology.elmcip.net/materials.html)


Creative Culture and Education. [http://www.creativitycultureeducation.org/](http://www.creativitycultureeducation.org/)


Teaching and Learning Laboratory. [http://tll.mit.edu/](http://tll.mit.edu/)