

## Pullinger's and Joseph's Inanimate Alice and Intercultural Engagement

Ana Abril

*Complutense University Madrid*

Follow this and additional works at: <https://docs.lib.purdue.edu/clcweb>



Part of the [American Studies Commons](#), [Comparative Literature Commons](#), [Educational Administration and Supervision Commons](#), [Educational Methods Commons](#), [English Language and Literature Commons](#), [European Languages and Societies Commons](#), [Feminist, Gender, and Sexuality Studies Commons](#), [Other Arts and Humanities Commons](#), [Other Film and Media Studies Commons](#), [Reading and Language Commons](#), [Rhetoric and Composition Commons](#), [Social and Behavioral Sciences Commons](#), [Television Commons](#), and the [Theatre and Performance Studies Commons](#)

Dedicated to the dissemination of scholarly and professional information, [Purdue University Press](#) selects, develops, and distributes quality resources in several key subject areas for which its parent university is famous, including business, technology, health, veterinary medicine, and other selected disciplines in the humanities and sciences.

*CLCWeb: Comparative Literature and Culture*, the peer-reviewed, full-text, and open-access learned journal in the humanities and social sciences, publishes new scholarship following tenets of the discipline of comparative literature and the field of cultural studies designated as "comparative cultural studies." Publications in the journal are indexed in the Annual Bibliography of English Language and Literature (Chadwyck-Healey), the Arts and Humanities Citation Index (Thomson Reuters ISI), the Humanities Index (Wilson), Humanities International Complete (EBSCO), the International Bibliography of the Modern Language Association of America, and Scopus (Elsevier). The journal is affiliated with the Purdue University Press monograph series of Books in Comparative Cultural Studies. Contact: <[clcweb@purdue.edu](mailto:clcweb@purdue.edu)>

---

### Recommended Citation

Abril, Ana. "Pullinger's and Joseph's Inanimate Alice and Intercultural Engagement." *CLCWeb: Comparative Literature and Culture* 16.5 (2014): <<https://doi.org/10.7771/1481-4374.2499>>

This text has been double-blind peer reviewed by 2+1 experts in the field.

The above text, published by Purdue University Press ©Purdue University, has been downloaded 339 times as of 11/07/19.

This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact [epubs@purdue.edu](mailto:epubs@purdue.edu) for additional information.

This is an Open Access journal. This means that it uses a funding model that does not charge readers or their institutions for access. Readers may freely read, download, copy, distribute, print, search, or link to the full texts of articles. This journal is covered under the [CC BY-NC-ND license](#).

*CLCWeb: Comparative Literature and Culture*, the peer-reviewed, full-text, and open-access learned journal in the humanities and social sciences, publishes new scholarship following tenets of the discipline of comparative literature and the field of cultural studies designated as "comparative cultural studies." In addition to the publication of articles, the journal publishes review articles of scholarly books and publishes research material in its *Library Series*. Publications in the journal are indexed in the Annual Bibliography of English Language and Literature (Chadwyck-Healey), the Arts and Humanities Citation Index (Thomson Reuters ISI), the Humanities Index (Wilson), Humanities International Complete (EBSCO), the International Bibliography of the Modern Language Association of America, and Scopus (Elsevier). The journal is affiliated with the Purdue University Press monograph series of Books in Comparative Cultural Studies. Contact: <[clcweb@purdue.edu](mailto:clcweb@purdue.edu)>

---

**Volume 16 Issue 5 (December 2014) Article 18**

**Ana Abril,**

**"Pullinger's and Joseph's *Inanimate Alice* and Intercultural Engagement"**

<<http://docs.lib.purdue.edu/clcweb/vol16/iss5/18>>

---

Contents of ***CLCWeb: Comparative Literature and Culture 16.5 (2014)***  
Special Issue ***New Work on Electronic Literature and Cyberculture***  
**Ed. Maya Zalbidea, Mark C. Marino and Asunción López-Varela**  
<<http://docs.lib.purdue.edu/clcweb/vol16/iss5/>>

---

**Abstract:** In her article "Pullinger's and Joseph's *Inanimate Alice* and Intercultural Engagement" Ana Abril analyzes Kate Pullinger's and Chris Joseph's digital graphic novel and game. *Inanimate Alice* offers a model for online education environments and has been widely acclaimed. However, Abril's analysis suggests possible ways for improving the empathic and educational potential of the novel/game for interpersonal and intercultural benefit. Abril bases her analysis on the theories of human interpersonal communication and then applies these findings to *Inanimate Alice* and suggests improvement so that participants would be able to decide if they want to play from the viewpoint of their own culture or another one according to versions available.

## Ana ABRIL

### Pullinger's and Joseph's *Inanimate Alice* and Intercultural Engagement

*Inanimate Alice* <<http://www.inanimatealice.com>> is a multimodal digital novel/game created by Kate Pullinger and Chris Joseph. The project began in 2005 and consists of five episodes as of 2014 (the artists' intention is to expand it to ten). The series narrates the adventures of the protagonist Alice as she travels all over the world with her parents because of her father's work. *Inanimate Alice* is a multimodal work of digital literature because it combines diverse sense modalities of visual images/text and sound/music, as well as touch through the input of the mouse or touchscreen. The term "multimedia" refers to this combination of "texts" in different perceptual modes and the stimuli that participants receive are more complex and complete thanks to the activation of multiple perceptual channels. Interactive digital novels can be considered "remediation" in the context of Jay David Bolter's and Richard Grusin's explanation of intermediality. In his introduction to *Teaching the Graphic Novel*, Stephen E. Trabachnick posits that the graphic novel is "an extended comic book that treats nonfictional, as well as fictional plots and themes with the depth and subtlety that we have come to expect of traditional novels and extended nonfictional texts" (2; on the graphic novel see also Baetens and Frey; Gil González <<http://dx.doi.org/10.7771/1481-4374.1921>>; Vandermeersche and Soetaert <<http://dx.doi.org/10.7771/1481-4374.1806>>).

Digitalization has enabled cheaper production of images, which were previously costly. This, in turn, has helped the growth of the graphic novel industry both in printed versions (also created by digital means) and online. The first graphic novels were directed at an audience that preferred images over text, particularly readers of comics and Japanese manga, but today graphic novels are addressed to other types of audience as well. For example, *Graphic Medicine* <<http://www.graphicmedicine.org>>—a website that combines medicine with the potential medical advantages of comics in an attempt to find alternative ways to address health problems—shows the importance of visuality in conveying emotional situations wherein images contribute to the production of an empathic response by the reader. The growing importance of new media technologies in pedagogy is also contributing to the development of learning tools (on new media and pedagogy see e.g., Boruszko <<http://dx.doi.org/10.7771/1481-4374.2355>>; Bourgonjon <<http://docs.lib.purdue.edu/clcweb/vol16/iss5/8>>; Bourgonjon and Soetaert <<http://dx.doi.org/10.7771/1481-4374.2245>>; Soetaert, Bourgonjon, Rutten <<http://dx.doi.org/10.7771/1481-4374.1794>>; Tötöszy de Zepetnek and Boruszko <<http://stateofthedisipline.acla.org/entry/paradigm-shift-comparative-humanities-digital-humanities-pedagogy-new-media-technology-and>>).

Multimodal environments are not exclusive to the digital domain as they are also present in print novels in the context of intermediality (on intermediality, see the bibliography by Tötöszy de Zepetnek, <<http://docs.lib.purdue.edu/clcweblibrary/bibliographydigitalhumanities>>). Nevertheless, digital novels can be easily presented in multiple formats including text, image, and sound and can be activated by means of touch such as a mouse or a touch screen. This combination of sensorial modes within one piece of multimodal literature allows for the mapping of tactile action onto other perceptual modes and enables somatosensorial perception so that the participant reaches a higher stage of immersion (see, e.g., Bouchardon and López-Varela <<http://dx.doi.org/10.7771/1481-4374.1793>>). In fact, the success of computer-mediated communication is possibly due to this capacity for engagement. Furthermore, not only do participants choose their pace of semiotic interchange by establishing their own reading rhythms, they also select the paths of their reading sequences by clicking on (or touching) the links (whether images or texts) on the screen. Importantly, the amount of image and sound present in multimodal interactions needs to reach a balance, according to principles of learning in instructional technology established by Richard E. Mayer and Roxana Moreno. The first principle Mayer and Moreno identify is connected to the importance of multimodality in education and is called the Multiple Representation Principle. The second principle is the Contiguity Principle and alludes to the cognitive benefits of presenting words and images at the same time in the process of teaching. The third principle is the Split-Attention Principle and relates to the importance of the auditory mode for explanations as a

substitute for the overuse of the written linguistic mode. The next tenet reminds us that each learner approaches multimodal learning techniques in a different way depending on their previous educational training and this is called the Individual Differences Principle. The final principle is the Coherence Principle and calls for developers of multimodal interactions to clearly summarize the most important information while leaving aside details and also avoiding too-scientific words and images (see also Mayer).

Interactive multimedia has characteristics which are different from print reading experiences. Reader-response theory, especially the work of Wolfgang Iser and Umberto Eco, shows that readers of print engage in interpretation by filling in cognitive gaps part of the semiotic structure of texts. The difference with digital readers is that the fragmented non-sequential structure of the so-called hypertext requires a reader who will choose his/her own path by clicking on the mouse or touching the screen (on reading and new media, see, e.g., Hayles, "Electronic," "How"; Killian; Kress; Miall). Readers of print turn the pages and read following a given sequence. In hypertext, the reader must decide on the reading sequence and sometimes even engage directly with the text (and text here refers to a multimodal artifact that can include still or animated images, film, video, sound, etc. (see, e.g., Walsh). The new "hybrid" individual who uses such sites is no longer one who "interprets" in the sense of Iser or Eco. For instance, he/she may produce new material that can be incorporated online (for instance, a photographic picture captured through his/her webcam). The participant's input thus becomes crucial in interactive digital literature because now "the text is not only a readable text, but also a text to manipulate" (Bouchardon and López-Varela <<http://dx.doi.org/10.7771/1481-4374.1793>>). The next concept in my theoretical preamble for my analysis of *Inanimate Alice* is "transmedia" which is "storytelling across multiple media platforms, usually digital media" (Fleming <<http://getideas.org/thought-leader/considering-transmedia-literature-born-digital/>>) and *Inanimate Alice* fits properly into the classification of multimodal-transmedial e-literacy works wherein generic classification also becomes problematic.

As I note above, *Inanimate Alice* is a graphic novel/game, but it is also a game and a learning tool: it is used for online teaching or in blended learning (B-learning) where a combination of online and face-to-face approaches are employed. Hence, the role of educators as re-shapers of information plays a crucial role in transmitting and adapting information from different cultural contexts (see, e.g., López-Varela, "Intertextuality" 18). For this reason, the capacity to integrate both parties of the educational method—educators and students—enriches the learning process. *Inanimate Alice* encourages participants to make choices on behalf of the protagonist. However, the end of the story is not modified by the participants' decisions and the following example illustrates the idea: in Episode 2 there is a bicycle puzzle to be solved and the user cannot progress until this is achieved. In another instance within the same Episode, the participant is required to dress Alice and cannot continue unless this task is fulfilled. Although the endings of the chapters do not change, the pace at which one finishes these tests makes the user spend more or less time until the end of each episode. Other examples where the participant has to perform certain actions in order to continue can be found in Episode 3 and Episode 4. In the former, the user has to collect all the dolls to finish the story otherwise it restarts (unless he/she chooses the version "Read Only"). In Episode 4 one has to guide Alice through a labyrinth of a derelict building until one finds the way out. In this case, however, it does not matter how many different paths the user tries as there is just one exit pre-established in the game. As a consequence, despite early ideas of hypertext opening and unpredictability, all the different paths Alice undertakes under the guidance of the participant lead to one and only one ending programmed into the game. Additionally, the designer of the game maintains authority to decide what actions need to be performed in order to move on in the story.

The indirect presence of authorship in *Inanimate Alice* via the pre-programmed paths of actions means that participants can "act upon" Alice as if she were a puppet, but have no "absolute choice" to decide what will happen because it is already arranged for them. I understand this in the context of what Maurice Merleau-Ponty posited, namely that "the world [as we know it] is already constituted, but also never completely constituted; in the first case we are acted upon, in the second we are open to an infinite number of possibilities. But this analysis is still abstract, for we exist in both ways at once. There is, therefore, never determinism and never absolute choice, I am never a thing and never bare consciousness. In fact, even our own pieces of initiative, even the situations which we have chosen,

bear us on" (527). What Merleau-Ponty meant can be applied to digital interactivity between the participant and the interactive work of literature in the sense that in the digital realm our freedom to act is limited in scope by the innate boundaries of the digital world. That is, the participant in *Inanimate Alice* is moving within the imaginary world created by its author and his/her ability to perform any action inside this world is determined by the digital context itself. Further, I take into account Jean Baudrillard's notion of simulation when making a closer analysis of the levels or mediation filters which exist between the participant *Inanimate Alice* and its protagonist Alice. Although Baudrillard identified four stages in the order of the sign and in *Inanimate Alice* there are three levels of mediation, we can still draw some parallels between the two. This comparison is possible because of the fact that the digital reality of the novel/game aims to stand as a copy of the imaginary. In *Simulacra and Simulation*, Baudrillard defines this concept as "the generation by models of a real without origin or reality: a hyperreal" (2). Similarly, his idea of a hyperreality can be found in *Inanimate Alice* owing to the various filters which separate participants from the digital reality of the game and thus participants find several levels of mediation between themselves and Alice. The first level of mediation is Alice herself, because all we know about her life and her virtual world is perceived through subjective events mediated by the only character we have access to: Alice herself. However, this first stage works as an indicator that participants will never have access to the outer objective truth by themselves. The second stage of mediation is the physical machine of the novel/game—the hardware of the computer itself—through which participants have access to the protagonist and her world. Finally, the third mediation platform is not a closed entity, but the process consisting of the cognitive mechanisms for receiving, understanding, and manipulating Alice's story. This distance between Alice and the participant decreases the participants' closeness with the heroine's digital world, thus obstructing the emergence of feelings of empathy for Alice. Interpersonal interaction among the characters of the game is another issue: neither Alice's face nor any other human face is shown in the game. The only faces shown are the digital photographs of her friends at school in Episode 3, memorabilia which have "a metonymic deictic function that helps the process of recall" (Bouchardon and López-Varela <<http://dx.doi.org/10.7771/1481-4374.1793>>). Overall, the user lacks information from Alice's life before she is eight, which constitutes another difficulty for participants in identifying with her.

Assuming that the majority of the users of the game are children (*Inanimate Alice* is used as an educational tool in primary and secondary education in the U.S. and Canada, among other countries), the level of empathy users feels for Alice ought to be high. However, her inaccessible face—and face-to-face communication and eye contact is one of the most powerful ways of interpersonal communication (see López-Varela, "Multimodal")—participants also lack information about her life other than her current trips and somber—and sometimes dangerous—situations. The sensation of loneliness and fear is triggered from Episode 1 when her father goes missing and she has to rescue him with the aid of her mother and digital friend, Brad. In Episode 2, Alice starts by saying that she has "lost both ... [her] parents" and immediately she clarifies: "Not 'lost' as in dead, at least I hope not." In this same Episode, another terrible thing happens to her: she goes out in the middle of a snow storm, where she believes that she will "freeze to death and ... [her parents] won't find her." Episode 3 deals with another grave issue: her father refuses to assist her in going to school because of the "kidnapping" of children. Finally, in Episode 4 the tension and danger of Alice's adventures escalates to almost fatally: "the iron stairs [of the derelict building she was climbing] begin to collapse" and she almost falls. The somber tone and tension of some moments within the episodes are at times eased by little games which appear on the screen. This device is recurrent in the novel/game and accounts for the vague boundaries between computer games and electronic literature.

Alice's relationship with her parents also seems too distant—and even sometimes nonexistent—for an eight-year-old girl to comprehend. This contributes to the difficulty and frustration a participant might face in empathizing with Alice. Although suspense might encourage the search for a solution in young adults, younger children might not feel compelled by a story that shows a frightened girl who is often lonely and tense and who spends her life with tutors when her parents are away on mysterious missions. Alice travels around the world with her parents visiting many different countries such as China, Italy, Saudi Arabia, and Russia and yet she never talks to or sees any other children from/in those cultures. Alice is only a voyeur in the sense of Baudrillard, a character who only exists sur-

rounded by the hyperreal world in which she is embedded. She only knows and travels around the hyperreal world of the game because "one never discovers on [the] Internet; one only uncovers," especially in a pre-programmed games (Nunes <[http://project.cyberpunk.ru/idb/cyberspace\\_internet\\_virtuality\\_postmodernity.html](http://project.cyberpunk.ru/idb/cyberspace_internet_virtuality_postmodernity.html)>). The protagonist's numerous trips occur in an artificial spatio-temporal framework whose only correlation with the material world is the time participants spend on the screen.

Alice is the mediating mechanism between all the cultures in the game and the way she is presented does not encourage intercultural dialogue to awaken the participants' empathy (on new media and interculturalism see, e.g., López-Varela and Tötösy de Zepetnek). Alice seldom leaves the house she stays in, isolates herself, and denies participants the chance to see her interact interpersonally or interculturally with other children. Episode 3 shows Alice recalling her school and how "it was full of kids, including boys." In another instance in Episode 3 she shows her inner frustration at not seeing other children: "it's kind of sad to want to go to school, but I've never been to school in my life and it is something I'd like to at least try." Alice is aware of the fact that her family situation is not exactly the same as that of other children her age, asserting with determination that her "home-schooling" situation "makes ... [her family] look like hippies ... which we are not." One wonders if Alice's lack of interaction with other children and her isolation is perhaps used in raising awareness about particular aspects lacking in her life. However, this position would mean that the game is addressed to a target audience who understands how irony works and I believe this is not the case.

Next, I present a brief excursion about the importance of sociocultural context in an individual's education and how digital learning tools such as *Inanimate Alice* can assist the learner develop cognitive, social, and communication skills. Our role in the social group we belong to is given to us the moment we are born and this role is internalized by the individual. Each person has to identify with an established group in order to feel they are part of a larger group, a community. This process is what we know as socialization, "the process by which children acquire the standards, values and knowledge of their society" (Smith, Dockrell, Tomlinson 152). Once individuals perceive that they belong to certain fixed social categories, they recognize themselves as subjects and identify their own positions in society (Smith, Dockrell, Tomlinson 70). For this development to take place, educator guided tasks should entail awareness of the specific needs of the child at each educational and developmental stage. Another important fact to mention about the learning process of the child in relation to his/her interpersonal communicative skills is peer work. Young participants learn as much from each other as they learn from their educators, their parents, and the books they read. We acquire social knowledge in two ways: one is "the product of social transmission ... that takes place in heteronomous relations" facilitated by a misbalance of power and the other "can only occur in autonomous relations between equal partners, where each has the freedom to engage in argument and debate" (Smith, Dockrell, Tomlinson 74). Both processes combine to provide a collaborative vision of the world and to facilitate its discovery with the aid of their peers and under the guidance of an adult. In the case of educational games, this guiding adult is the educator.

Based on above principles of education in the socio-cultural context, one of the problematic issues regarding *Inanimate Alice* is the novel/game's lack to show different perspectives within its virtual world because of its egocentric and author-centered perspective. This mono-perspective in *Inanimate Alice* is built into the narrative through the main character, which makes it difficult to consider other possibilities. Thus I posit that a multi-character perspective would afford a variety of focal points of narration so that participants would not find always the same mediator (i.e., the game's author) between themselves and the story. Allowing participants to filter mediation by means of the creation of self-avatars and interaction with other participants would enhance the gaming experience's diversity. I relate *Inanimate Alice* to Piaget's stages of cognitive development, although we ought to be aware that when he formulated these developmental stages, new media technologies did of course not exist; nevertheless, I submit that Piaget's thought can be applied in our digital age education. Like Alice, children aged within 8-11 years old tend to start approaching their environment through language, as Piaget discusses when introducing the concrete operational stage. To facilitate the child's recently discovered subjectivity and to promote the verbalization of thoughts and emotions as bridges for empathic feelings among peers, *Inanimate Alice* could provide more interpersonal exchanges. Other tasks which address the needs of the child's operational stage can include memory skill tasks such as quiz-

zes about events which happened in the game since at this stage children are able to recall things they have done in the past. Further, Piaget's fourth and last stage of cognitive development extends from the ages of 11 to 15 and is called the formal operational stage. It is characterized primarily by the capacity to think in abstract terms and concepts, build conceptual ideas, and by the rise of symbolic thought. It is generally acknowledged that children in this age range are capable of testing hypotheses and considering logical propositions. Consequently, interactive scenarios embedded in educational digital games should include questions testing with multiple possible solutions so as to increase the participant's capacity for hypothetical reasoning and abstraction. The main difference between Piaget's phases is that in the concrete operational phase the subject needs to perceive the physical objects of his/her speech even if those objects belong to past events, whereas in the formal operational phase the child can think of those physical objects as abstract terms or symbols.

Hence, in *Inanimate Alice* providing participants with topics for discussion to stimulate their critical capacity would assist them to broaden their mental faculties by incorporating more cognitive skills and hypothetical questions. While *Inanimate Alice* already contains some of the activities I suggest, they are only accessible to teachers and incorporating these activities within the episodes of the novel/game would surely have greater effects than introducing them outside of the game's plot. Knowledge about the sciences, humanities, and other subjects included in the standard curriculum may be intermingled among problem solving tasks so that the game would serve multiple objectives. We must also bear in mind that *Inanimate Alice* is used by participants from all over the world whose cognitive representations of the concepts presented may vary depending on their different cultural origins. As such, they will have different mental images of certain words and concepts. For this reason, the novel/game should offer various versions depending on participants' sets of cultural symbols. Trying to make a mono-, linear, and protagonist-centered digital game into a multicultural tool is impossible if diverse lines of narration do not fit with the needs of each culture and lack any alternative paths within the game. As it now stands, every country that the protagonist of *Inanimate Alice* visits represents implicitly and explicitly the values and cultural sets of symbols of the novel/game's authors.

In conclusion, in my analysis of the interactive digital educational novel/game *Inanimate Alice* <<http://www.inanimatealice.com>> from the perspective of semiotics, interpersonal, and intercultural interrelations I come to the result that interactive digital educational tools should mirror cultural aspects of intercultural dialogue and should reflect how individuals enrich one another's knowledge. A digital novel/game that portrays a group of friends from different cultures would be a good venue for interpersonal and intercultural perspectives because it would lead to a variety of new learning experiences for participants. One possibility for achieving such "fidelity" to cultural paradigms would be different versions of the novel/game by different authors whereby each represents his/her own culture. As a result, participants would be able to decide if they want to play from the viewpoint of their own culture or another one according to versions available. Further research needs to be conducted on psychological grounds considering how hypertext structures do not parallel adequately the working of the human mind and its perspectives. Hence I suggest that alternative models should be developed for interactive digital education based on the cognitive capacities of the child during his/her stages of educational development.

Note: "Pullinger's and Joseph's *Inanimate Alice* and Intercultural Engagement" is a translated and revised version of Abril Hernández, Ana. "Narrativas transmediáticas en entornos digitales: la novela hipermedia *Inanimate Alice* y sus aplicaciones docentes," *Cuadernos de Información y Comunicación* 2.2 (2014): 11-30. Copyright release to the author.

### Works Cited

- Baetens, Jan, and Hugo Frey. *The Graphic Novel: An Introduction*. Cambridge: Cambridge UP, 2014.
- Baudrillard, Jean. *Simulacra and Simulation*. Trans. Sheila Faria Glaser. Ann Arbor: Michigan UP, 1981.
- Bolter, Jay David and Richard Grusin. *Remediation: Understanding New Media*. Cambridge: MIT P, 1999.
- Boruszko, Graciela. "New Technologies and Teaching Comparative Literature." *CLCWeb: Comparative Literature and Culture* 15.6 (2013): <<http://dx.doi.org/10.7771/1481-4374.2355>>.
- Bouchardon, Serge, and Asunción López-Varela. "Making Sense of the Digital as Embodied Experience." *CLCWeb: Comparative Literature and Culture* 13.3 (2011): <<http://dx.doi.org/10.7771/1481-4374.1793>>.
- Bourgonjon, Jeroen. "The Meaning and Relevance of Video Game Literacy." *CLCWeb: Comparative Literature and Culture* 16.5 (2014): <<http://docs.lib.purdue.edu/clcweb/vol16/iss5/8>>.

- Bourgonjon, Jeroen, and Ronald Soetaert. "Video Games and Citizenship." *CLCWeb: Comparative Literature and Culture* 15.3 (2013): <<http://dx.doi.org/10.7771/1481-4374.2245>>.
- Eco, Umberto. *The Role of the Reader: Explorations in the Semiotics of Texts*. Bloomington: Indiana UP, 1984.
- Fleming, Laura. "Considering Transmedia: Literature 'Born Digital'." *getideas.org* (2010) <<http://getideas.org/thought-leader/considering-transmedia-literature-born-digital/>>.
- Gil González, Antonio J. "Comics and the Graphic Novel in Spain and Iberian Galicia." *CLCWeb: Comparative Literature and Culture* 13.5 (2011): <<http://dx.doi.org/10.7771/1481-4374.1921>>.
- Hayles, N. Katherine. "Electronic Literature: What Is It?" *eliterature.org* 1 (2007): <<http://eliterature.org/pad/elp.html>>.
- Hayles, N. Katherine. "How We Read: Close, Hyper, Machine." *ADE: Association of Departments of English Bulletin* 150 (2010): 62-79.
- Igboin, Benson O. "The Semiotics of Greeting in Yoruba Culture." *Cultura: International Journal of Philosophy of Culture and Axiology* 9.2 (2012): 123-42.
- Iser, Wolfgang. *Prospecting: From Reader Response to Literary Anthropology*. Baltimore: The Johns Hopkins UP, 1989.
- Killian, Lara. "New Textual Formats: Reading Online is Re-wiring the Human Brain and Changing How We Process Information." *Dalhousie Journal of Interdisciplinary Management* 5 (2009): 1-13.
- Kress, Gunther. *Literacy in the New Media Age*. London: Routledge, 2003.
- López-Varela, Asunción. "Intertextuality and Intermediality as Cross-cultural Communication Tools: A Critical Inquiry." *Cultura: International Journal of Philosophy of Culture and Axiology* 8.2 (2011): <<http://www.semioteca.net/spip.php?article6>>.
- López-Varela, Asunción. "Multimodal Metaphor and Intersubjective Experiences: The Importance of Eye-contact in Davison's Graphic Novel *The Spiral Cage* and in Annie Abrahams' Net-Project *On Collaboration*." *Lavori del Convegno Palazzo degli Artisti Italiani*. Ed. Lello Masucci and Giovanna Di Rosario. Napoli: Oficina di Letterature Electrónica, 2011. 307-24.
- López-Varela Azcárate, Asunción, and Steven Tötösy de Zepetnek. "Towards Intermediality in Contemporary Cultural Practices and Education." *La intermedialidad / Intermediality*. Ed. Freda Chapple. Special Issue *Cultura, Lenguaje y Representación / Culture, Language and Representation* 6 (2008): 65-82.
- Mayer, Richard E. "Multimedia Learning: Are We asking the Right Questions?" *Educational Psychologist* 32.1 (1997): 1-19.
- Mayer, Richard E., and Roxana Moreno. "Nine Ways to Reduce Cognitive Load in Multimedia Learning." *Educational Psychologist* 38.1 (2003): 43-52.
- Merleau-Ponty, Maurice. *Phenomenology of Perception*. Trans. Colin Smith. London: Routledge, 1958.
- Miall, David S. *Literary Reading: Empirical and Theoretical Studies*. Bern: Peter Lang, 2006.
- Nunes, Mark. "Baudrillard in Cyberspace: Internet, Virtuality, and Postmodernity." *project.cyberpunk.ru* (1995): <[http://project.cyberpunk.ru/idb/cyberspace\\_internet\\_virtuality\\_postmodernity.html](http://project.cyberpunk.ru/idb/cyberspace_internet_virtuality_postmodernity.html)>.
- Piaget, Jean. *The Moral Judgement of the Child*. 1932. Trans. Marjorie Gabain. New York: Free P, 1997.
- Pullinger, Kate, and Chris Joseph. *Inanimate Alice* (2005): <<http://www.inanimatealice.com/>>.
- Smith, Leslie, Julie Dockrell, and Peter Tomlinson, eds. *Piaget, Vygotsky and Beyond: Future Issues for Developmental Psychology and Education*. London: Routledge, 1998.
- Soetaert, Ronald, Jeroen Bourgonjon, and Kris Rutten. "Video Games as Equipment for Living." *CLCWeb: Comparative Literature and Culture* 13.3 (2011): <<http://dx.doi.org/10.7771/1481-4374.1794>>.
- Tötösy de Zepetnek, Steven. "Bibliography for Work in Digital Humanities and (Inter)mediality Studies." *Library Series, CLCWeb: Comparative Literature and Culture* (2013-): <<http://docs.lib.purdue.edu/clcweblibrary/bibliographydigitalhumanities>>.
- Tötösy de Zepetnek, Steven, and Graciela Boruszko. "Paradigm Shift in Comparative Humanities: Digital Humanities, Pedagogy with New Media Technology, and Publishing Scholarship Online." *The 2014-2015 Report on the State of the Discipline of Comparative Literature*. Ed. American Comparative Literature Association. *stateofthediscipline.acla.org* (2015): <<http://stateofthediscipline.acla.org/entry/paradigm-shift-comparative-humanities-digital-humanities-pedagogy-new-media-technology-and>>.
- Trabachnick, Stephen E., ed. *Teaching the Graphic Novel*. New York: The Modern Language Association of America, 2009.
- Vandermeersche, Geert, and Ronald Soetaert. "Intermediality as Cultural Literacy and Teaching the Graphic Novel." *CLCWeb: Comparative Literature and Culture* 13.3 (2011): <<http://dx.doi.org/10.7771/1481-4374.1806>>.
- Walsh, Maureen. "Pedagogic Potentials of Multimodal Literacy." *Handbook of Research on New Media Literacy at the K-12 Level: Issues and Challenges*. Ed. Leo Tan Wee Hin Tan and Ramanathan Subramaniam. Hershey: IGI Global, 2009. 32-47.

Author's profile: Ana Abril is working towards her doctorate in intermediality studies at Complutense University Madrid. Her interests in scholarship include semiotic and intermediality analyses of English and US-American literature. Abril's publications include "Narrativas transmediáticas en entornos digitales. La novela hipermedia *Inanimate Alice* y sus aplicaciones docentes," *Cuadernos de Información y Comunicación* (2014) and "The Image beneath the Word: Intermedial Study of the Text and Image in Joseph Conrad's *Heart of Darkness*," *International Journal of Languages and Literatures* (2014). E-mail: <[anaabril@ucm.es](mailto:anaabril@ucm.es)>