

## **Adolfo Bioy Casares' THE INVENTION OF MOREL in the Web Age**

“The odyssey of marvels he unfolds seems have no possible explanation ...  
and he uses a single fantastic but not supernatural postulate to decipher it.”  
Jorge Luis Borges, preface to *The Invention of Morel*, 1940.

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Signs of the imaginary world created by the Argentine writer Bioy Casares, in his classic novel “The Invention of Morel” abound in the Web age. Published originally in 1940, the book by Casares, friend and collaborator of Borges, brings a love story between the narrator, a fugitive stranded on a desert island, and Faustine, a beautiful woman with gypsy lineaments. The fugitive observes a number of people who are talking and acting just as in ordinary life, which in the end turns out to be the result of some sort of projections by an optical, electro-mechanical apparatus, invented by a scientist named Morel. The three dimensional projections contain many sensorial modalities. “I am speaking of images extracted from mirrors, with the sounds, tactile sensations, flavors, odors, temperatures, all synchronized perfectly, observed Morel referring to his invention. In the Web age, several futuristic questions related to time, space, memory and immortality need new interpretations, due to the advancement of science and technology. More than the mere understanding of new technologies, the way of understanding the characteristics of the new age is through observation of human nature, to feel the impact of the silent review of key concepts to humans, such as time, space and memory.

What would happen if we were living in an era where everything could be easily copied? First, think of the digital objects, such as music, movies, books and newspapers, then this ability could be extended to physical objects and then to living beings. The cost to reproduce and distribute digital information is minimal leading to an unrestrained dissemination. The phenomenon of copies is spread over the Web and shows up in many other areas, including cloning animals and human embryos.

What would happen if we were living in an age where all information that one perceives could be easily stored and later retrieved? An unlimited memory, capable of storing not only the memory of each individual, but also the collective memory. A memory that records everything, all the books ever written, all the pictures already taken, all the films already produced and all the music already composed. Moreover, what if each person could easily store and catalog everything that is heard, seen or spoken? The Web already provides virtually limitless storage capacity. More than one trillion Web addresses have been already indexed by search engines can be retrieved in a number of ways.

What would happen if we were living in a time where there were no more limitations of distance? Perhaps we can be inspired by the Aleph of Borges, a small spot of light where

everything going on in the world could be seen simultaneously from every angle. A vision of the world that makes it small by the symbiosis of computing and communications. A first step toward a virtual world, as the infinite Aleph, was already taken by the globe-imaging software Google Earth. Using the Internet-based tool, users can fly around the world and zoom in on both natural features and whole universes of information added by other users. The four corners of the world, their inhabitants, their cultural and regional differences, are being inexorably intertwined by computers and networks in a modern version of the Aleph.

What would happen if humans could live forever? A scientific project published in the literature proposed what was called "Digital Immortality." The central point is the real possibility of storing all the information that a person has seen, read, heard or talked about during her lifetime. This would pave the way to a partial immortality, where a person would be reduced to a mass of information and immortalized through the storage of digital information. Thus, the "information side" of a person is eternal and can even be copied indefinitely. The next phase would be the two-way digital immortality. It would allow the information side to evolve with time. Such information would be represented by an avatar, that would live in the network and interact with future generations indefinitely.

We happen to already live in an age where these signs are becoming increasingly real. Indiscriminate copies of everything, books, software, personal diaries, songs, videos and movies flood the Web and become accessible to anyone, from North to South, West to East. Religions, political movements and popular organizations spread their ideas around the world in the blink of an eye. In seconds, video and pictures of wars, social conflicts, the daily trivia, torrid romances, vanities and crimes circulate on the Web, revealing virtues and vices of the globalized humankind. In the Web, people watch hundreds of millions of videos a day on YouTube and upload hundreds of thousands of videos daily, competing with traditional TVs. Some blogs rival in number of readers with the most influential newspapers of the world. Web virtual worlds are being created by artificial environments that visually imitate complex physical spaces, where people can interact with each other and with virtual objects. People are usually represented online by animated characters or avatars. The massively multiplayer online role-playing game *World of Warcraft* is being played by more than 11.5 million subscribers worldwide and *Second Life* total residents are more than 16.5 million. The impact of virtual world technology is beginning to be felt by society. Despite all these signs, yet this new world looks like a distant futuristic scenario. This is perhaps due to a slow perception of society on how technological advances are restructuring the reality. An intricate reality whose signs defy our ability to decipher it and call for new visions of the world. Literary works and their narrative devices create a rich arena for speculating ideas necessary for the understanding of new realities. The fascination with virtual reality and computer games was shown in *Matrix*, where robots rule the planet and keep humans plugged into a virtual world. The work of Bioy Casares predates Wachowski brothers' story by half a century.

Nothing more human than a love story to explore the intricacies of an era where technology gradually replaces tasks that were the privilege of man and nature. The novel describes the romance of two lovers that coexist spatially in two different temporal dimensions. Bioy's novel theme has become ever more relevant to a society bound to images and videos, that are becoming a dominant form of content in the Web. The search for eternal love weaves an unexpected story, intertwined by ingredients essentially humans, such as jealousy, uncertainty, fear, hope and solitude, having a virtual world as scenery. A story told with fine irony, marked with metaphysical questions about life, death and eternity. "I saw her: the bright scarf, her hands clasped on one knee, her glance, enlarging my little world. My breath became uncontrollable. The rocks, the sea, everything seemed tremulous", described the narrator when looking at Faustine. A story that pushes the reader to speculate the boundaries between fantasy and reality. The plot architected by Bioy Casares relies upon a virtual world, on which all the characters, but the narrator, are images, copies of human beings and objects of nature. "These walls – like Faustine, Morel, the fish of the aquarium, one of the suns, one of the moons, the book by Belidor - are projections of the machines." The quest for immortality and eternal love led Morel to create a virtual reality, with ideas that float today as real possibilities, backed by scientific and technological developments. "With my machine a person or animal or a thing is like the station that broadcasts the concert you hear on the radio. If you turn the dial for the olfactory waves, you will smell the jasmine perfume on Madeleine's throat, without seeing her." And the project of Morel has evolved along this line. "But if you turn all the dials at once, Madeleine will be reproduced completely, and she will appear exactly as she is; you must not forget I am speaking of images extracted from mirrors,... an observer will not realize they are images." As the technology evolves, computing and networking shall be able to provide enough computational power to create virtual worlds realistic enough to be mistaken for the real thing, like *Matrix*-style simulated realities. In the story, the narrator becomes confused with the copies and makes the following comment: "I do not know which flies are real and which ones are artificial". In order to support the integration of physical systems and processes with networked computing, novel visions will be required to understand the new environments. The cyber-physical systems are bound to create pervasive systems that will profoundly shift the way humans interact with things, such as robots truly interacting with people.

To keep the lovers together, Morel architected his plan: "We shall live in this photograph forever. Imagine a stage on which our life during these seven days is acted out, completed in every detail. We are the actors. All our actions have been recorded". In realizing that the interaction with his lover was in a virtual world, the narrator, the only human being alive on the island, commented: "To be on an island inhabited by artificial ghosts was the most unbearable of nightmares, to be in love with one of those images was worse than being in love with a ghost (perhaps we always want the person we love to have the existence of ghost)." In his plot, Bioy overlooked the still obscure side of man's relationship with machines and images.

Machinery and images perpetuate the characters, but not the love. The narrator observes that Morel's plan is hopeless: "The images are not alive". Love aspires more than cold

virtual images generated by the technology. The warmth of human interactions is not part of virtual reality. In the world of images seen by the narrator, there is no interactivity, it is only a one-way relationship. And the narrator dreams of richer forms of interaction: "...I can imagine the touch moment when I arrive at Faustine's house, her interest in what I shall tell her, the bond that will be established between us". The quest for eternity with his love makes the narrator desperately try to enter the virtual world: "...because I know that, since I have entered that world, Faustine's image cannot be eliminated without mine disappearing too. ... I arranged the records, the machine will project the new week eternally." In his novel, Bioy Casares brings to light subtle questions associated with the concepts of copy and image, that are fundamental to the digital world. As the narrator walked through the hall and saw a ghostcopy of the book by Belidor, he thought: "...I took out the book. I compared the two: they are not copies of the same book, but the same copy twice". Bioy develops further the idea of different kinds of copies, ranging from pure images to intelligent copies with programs. "And someday there will be a more complete machine. One's thoughts or feelings during life – or while the machine is recording – will be like an alphabet with which the image will continue to comprehend all experience (as we can form all the worlds in our language with the letters of the alphabet)" The narrator still have a warning: "But even the image will not be alive; objects that are essentially new will not exist for it". The narrator also realizes the participation in the virtual world is not enough for him: "I can still see my image moving about with Faustine. I have almost forgotten that it was added later; anyone would surely believe we were in love and completely dependent of each other". Sentiments and human relationships are strongly marked by memory and time, with their finitude and uncertainty. The eternity of perfect copies of humans is still something mysterious, not yet grasped by us. Bioy Casares anticipated details and dilemmas of a new era governed by technology, where machines and humans essay a symbiotic approach. The consequences of this approach are still uncertain. A mystery for which the author left some clues. At the end, the narrator in love, now an image too, makes a last request: "To the person who reads this diary and then invents a machine that can assemble disjoined presences, I make this request: Find Faustine and me, let me enter the heaven of her consciousness."

Endnotes:

- 1) The Invention of Morel, Adolfo Bioy Casares, New York Review Books, New York, 2003, translated by Ruth L. C. Simms
- 2) The Aleph, Collected Fictions, Jorge Luis Borges, Penguin Books, 1999, New York, translated by Andrew Hurley.
- 3) Digital immortality, Bell, G. and Gray, Commun. of ACM 44, 3 (Mar. 2001), 28-31
- 4) The Scientific Research Potential of Virtual Worlds, William Sims Bainbridge, Science 27 July 2007: Vol. 317. no. 5837.

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