I cannot help but express my admiration not only for your life time research work and its indisputably innovative character, but also for the daring choices of yours, concerning your studies, in Fine arts, linguistics and computer science. How did you manage to tame computer studies and integrate them so successfully in your previous academic background? How did your life journey to digital humanities start? Has it been a particular spark? Could you share with us the narrative arc of your academic life so far, with the most important moments of it? (of course you are still at the climax and far away from conclusion)

My life journey goes like this: after studying French and German literature in Geneva, with some of the most prominent critics of the time (Jean Rousset, Jean Starobinski) I married and moved to Utah in the United States, where I completed my PhD in literature on French poet Saint-John Perse, the 1960 Nobel prize laureate. At that time I was most interested in poetry because I thought it was the purest manifestation of the essence of literary language. The lack of job opportunities sent me into computer science, which I studied in Colorado and in San Diego, California. After a few years as a programmer I decided the corporate life was not for me and I returned to literature with a new perspective derived from linguistics, philosophy of language and Artificial Intelligence. I remember very clearly what became a "aha" or "Eureka" moment in my intellectual development. I was reading a book by linguist James McCawley called "Everything linguists always wanted to know about logic (but were afraid to ask)" (a pun on the title of a bestselling sex manual of the seventies). The chapter discussed philosopher David Lewis' proposal for assessing the truth value of counterfactuals (if...then statements), and I thought right away, this algorithm would be perfect for deciding whether or not a statement is true of false of a fiction. It also gave me the idea of the "Principle of Minimal Departure." Later I found that Lewis himself had applied his idea to fiction in a paper called "Truth in fiction". This sent me on the track of Possible Worlds theory, and I discovered the work of Thomas Pavel, Lubomír Doležel and Umberto Eco on this topic. My first book, Possible Worlds, Artificial Intelligence and Narrative Theory (1991) was an attempt to apply what I had learned from computer science and from Possible Worlds theory to narrative. I remember attending a conference of the Modern Language Association in New York in 1992, and somebody asked me about Virtual Reality. I had never heard the term! The person explained to me that it was a way to have sex with distant partners, and that he had a student writing a dissertation on the topic. Feeling hopelessly out of touch I decided to learn more. Pretty soon—this was the mid nineties the term was everywhere in the media as the hot new technology that would revolutionize our lives in the mythical year 2000, but the applications were non-existent. Still, I became interested in the idea of VR and in its two basic components, immersion and interactivity. This was the inspiration for my second book, Narrative as Virtual Reality, where I discuss immersion as an important component of the narrative experience, whatever the medium, and interactivity as an ideal that is very successfully implemented in computer games, but is very difficult to reconcile with narrativity.

When I searched you in the net, I bumped into a site of yours. Your site is kept — as you say-deliberately outdated and amateurish in order to remind people how technology has changed or vision of the world and also to offer a glimpse to the possible worlds of your writing projects. Talking of possible worlds, I should pay tribute to your first study: Possible Worlds, Artificial Intelligence, and Narrative Theory, where you explored the relation between fictionality and

narrativity and you concluded that the former is rooted to the latter. In which way do you think this concept could help us "read" the real -world narrative more critically?

The relations between narrative and fiction are rather complex. On one hand, the vast majority of fictional texts tell stories, and the Swiss scholar Lorenzo Menoud goes as far as claiming that narrativity is an essential feature of fiction. There are a few exceptions, for instance Jorge Luis Borges' Ficciones or some texts by Samuel Beckett are certainly fictional, but do not really tell stories, though they do create a world and some characters. So it is safe to assume that fictionality is a feature normally associated with narrative texts, and that non-narrative fictions are only found in experimental literature. The reverse thesis claims that all narratives are fiction, even historical ones, because they involve subjective choice and interpretation of materials, rather than representing some kind of objective, absolute truth, a truth not man-made but inherent to the world. This thesis was made popular in the 1990s by historian Hayden White, who suggested that works of history are plotted in ways comparable to literary works. I have criticized the claim that all narratives are fictional in my 1997 article "Postmodern Theory and the Doctrine of Panfictionality." I regard Panfictionality as dangerous because it loses sight of truth and factuality; it has led to what is known today as "Post-truth," which is the rejection of discourse that does not support your beliefs as fake news. Nowadays there is a growing interest in factual narrative and in the question of truth which is certainly a reaction to the post-truth irrationality; Monika Fludernik and I are currently co-editing a collection of essays on factual narrative in various disciplines. Still, I do not deny that the critique of historical discourse proposed by Hayden White and other postmodernists has been beneficial to scholarship; it has taught us that nonfictional texts can be subjected to the same narratological investigation as literary ones; and it has taught us to be more critical of the notion of representation. The current discourse of fake news and post-truth should have the same effect on our evaluation of factual narratives—by this I mean narratives that take the actual world as referent rather than openly constructing imaginary worlds. We do not have to accept all narratives told about the real world as true; but if reject a factual narrative, this does not mean that it is fiction, it just means that we regard them as false. I think that the principal weakness of the panfictionalist school of thought is its failure to recognize that there is something else than factual and fictional narrative: this something else is lies and errors. Just because a story is not a perfect mirror image of the world (how could it be? it is man-made, while the mirror image is an automatic capture) does not make it a fiction.

You have elaborated the concept of storyworld in order to express the changes that fictional narrative undergoes, on the basis of a manifold proliferation that takes place in our days? What kinds of proliferation create new narratives? In which way does fictional narrative undergo global changes today? Are these changes due to the technological evolution?

I think that the major change that is currently occurring in the relations between storyworlds and narrative texts is that the relation 1 to 1 (one text, one storyworld) is being challenged on two fronts: on one hand, we find many texts referring to the same storyworld, as in transmedia franchises; on the other, there can be one text building different storyworlds, as in novels that explore different branches of the possible, that interleave different stories, or that juxtapose fictional parts with quotations from historical texts. These trends are not absolutely dependent on

digital technology, but still they are greatly facilitated by it: the one text, many worlds by hypertext and games; the one world, many texts by Web sites that gather many different texts (such as fan fiction) as well as videos and visual documents.

You launched the term "avatars of the story" in order to talk about the "various shapes of the invariant nucleus of narrative". Could you give us some examples of the variety of narrative in the digital era?

My position regarding narrativity in the digital age is that the technology has not affected what is a narrative (I regard narrativity as a universal type of mental representation), but rather, has influeneced how stories are told, and how texts relate to stories. For instance, digital technology has greatly facilitated multimodality. Nowadays everybody can create a story combining text, sound and images, both still and animated, while earlier only empowered professionals such as film makers and theater directors could do that. Then there is the huge area of interactive narrative, which ranges from the classical hypertexts of the nineties to the tremendously popular domain of video game, whose success—compared to the relative failure of hypertexts—comes from the fact that players feel immersed in an imaginary world and are given precise goals to pursue. We are also seeing combinations of print and digital narratives in augmented books; but I am not sure whether this phenomenon is going to outlast its novelty; consulting online documents to complement a printed story strikes me as an anti-immersive distraction. Computer games are successful because they support a type of activity that takes place within the storyworld, but both hypertexts and augmented books require actions that break the flow of the story and take the user out of the storyworld.

You have challenged established narratological frames and you have given narratology a crucial medial turn. (Cyberspace Textuality, Narrative as Virtual Reality, Storyworlds across Media: Towards a Media-Conscious Narratology) This huge contribution to the evolution of narratological studies although in the centre of scholarly interest, has hardly affected literature teaching in education, where classics and Genettean narratology still claim the lion's share. Do you think or wish, there will come a day when literature as a discipline could be replaced or at least enriched, by the studying of storytelling in general and of storyworlds in particular?

Absolutely. I have always been an advocate of studying narrative in all its medial manifestations. But the downside of this expansion is that less and less time will be devoted to our literary heritage, and this is rather sad. I don't want the study of popular culture, or of Trump's tweets, to eclipse Homer, Shakespeare, or Proust.

If you were asked to place a marker to represent your theoretical principles on a axis with its two extreme points being the narratological and the ludological aspects of the narrative in new media and then, on another axis defined by the traditionalist and the expansionist approach of narrative, where would you put yourself and why?

Narratology Ludology

Traditionalist x Expansionalist

On the first question, I place myself in the middle, because I believe that computer games can tell stories, and this is the aspect of games that I am interested in. Pure ludologists are more interested in placing videogames within a general taxonomy of games such as the one designed by Roger Caillois, which covers both free play and rule-dominated games aimed at winning. But the gap between ludologists and narratologists has now been bridged, the ludologists recognizing that narrative plays a role in many types of games.

As far as the second axis is concerned, I am clearly an expansionist, since, as I say above, I advocate a narratology that includes many different media. This does not mean that I reject classical narratology (as associated with Genette). Nor does it mean that I propose to apply Genette's categories to all medias. I think that some narratological concepts have transmedia validity (those relating to the semantics of plot, such as character, setting, events, causality), and others are specific to certain media (for instance the concept of narrator, which is needed for language-based narratives but is questionable for visual forms).

According to your critique of the expansionist approach of narrative "digital authors need to relate the new to the familiar and to give a human face to their textual machines; for there are not enough cyborgs in the world to guarantee a readership", you object to the tendency which misuses not to say, usurps the term narrative in order to define narrativeless artifacts. Could you become more specific about it?

What I call cyborgs are people primarily interested in the working of the machine. There are many authors of digital texts who want to drive the user's attention to the operation of the computer, and who want to de-automatize our use of digital technology. I am thinking of a spoof on email by Richard Powers, or of the pseudo games of Jason Nelson, which the user can never win. These works typically focus on the medium by staging its dysfunctionality while exploiting its affordances. They perform something that comes close to the Russian formalist (Shklovsky) notion of estrangement. But the appeal of narrative lies overwhelmingly in its ability to put us in touch with human life experience; in fact the notion of experientiality, and the resulting emphasis on empathy and emotion, have been a prominent feature of recent narratology. I see a radical incompatibility between laying bare the mechanisms of digital technology and the human, emotional dimension of narrative. But there has been growing interest among game theorists and game developers in creating emotional experiences that go beyond the elation or dejection of winning or losing.

I would like to use your spatial metaphor of the North Pole as a place for an initiated elite in interactive narrative and of tropics as the place for mass cultural consumers, in order to ask you, how could interactive narrative reach the desired temperate zone and be addressed to a wider audience? Do you thing that interactive narrative will manage to reach beyond the traditional

audience of computer game lovers or digital natives? Could you give us an example of a satisfactory interactive narrative?

Let me make a confession: as far as I am concerned there is not a single interactive, digital narrative that compares, in terms of immersivity, of intensity of experience, to the non-interactive narratives of literature, film, or TV serial. There are digital texts that give me a sense of moving through space, that seduce me with the beauty of their landscapes (*Dear Esther*; *The Path*); there are digital texts that intrigue me through reflection on their medium, through innovative modes of interaction (Marisha Pessl's augmented novel *Night Film*), or through sophisticated algorithms (*Façade*); there are digital texts that offer parables of digital culture or of modern life (*The Stanley Parable*); but there is really none that fascinates me for the story it tells, and there is none that combines all the types of immersion that I have described: spatial, temporal, emotional and ludic. This is not to say that there cannot be artistic digital texts—narrativity, after all, is only one source of aesthetic pleasure. I think that the future of digital and interactive art is to be more like poetry or art installations than like the novel. But admittedly, by saying this I limit it to the North Pole. If I could really imagine a Temperate Zone form of interactive digital narrative, I would be a creator, not a theorist!

One of my favorite books of yours is Immersion and interactiviy. The dominant belief is that these two concepts collide and are incompatible. Could you explain to us your point and maybe give us some examples of how these two principles can reconcile?

My point is that narrative, because it is a global structure that must present a satisfactory trajectory leading through initial state, crisis and resolution, does not lend itself well to user coproduction, because if users could determine the plot, they would solve all the problems of the hero (if he is likeable), or get rid of him (if he is not), and the story would be over. Hypertext fiction, which offer to the reader a choice of links to follow, never managed to conquer the Temperate Zone, because the author could not control the global direction of the narrative, and the reader ended up being lost in a labyrinth. Games were more successful at combining immersivity and interactivity because they gave the player a role (i.e. an avatar) and a goal, but they usually rely on fixed, pre-determined plots.

In an interview of yours, you say that many of today's literary experiments, especially multisensory ones, rediscover features that have long been used by children's literature. Can you be more specific?

The book, which is the classical support of literature (until it lost its body and became e-book), tends to be taken for granted in standard narratives. But in children literature, it takes many innovative forms: smelly books, pop-up books, books that come together with objects, play books, books that contain little surprises. All these forms are now infiltrating adult narrative and bring about a reflexion on the book as material object. I am thinking of a book like *S* by J.J. Abrams and Doug Dorst, which contains many flat, detachable documents such as postcards and newspaper clips, or of *The Museum of Innocence* by Orhan Pamuk, a novel which comes with a real museum in Istanbul that contains artistic displays of the objects mentioned in the book. And of course, through its combination of pictures and text, children's literature has always been more multi-modal than adult narratives. Graphic novels, a medium that is beginning to receive

recognition as a form of art, derives from comics, which were long despised as "children's literature." Now we recognize not only the intrinsic value of children's and young adult literature, but also its creative use of its material support.

You have "upgraded" computer games to the status of narratives and you have challenged the ideas of the classic narratologists and ludologists as well. Could you present us some of your core arguments, according to which games can be considered as narratives?

The argument claims that the mental construct that defines narrative—that is, the story, or fabula-- can be realized in many different ways. The discipline of narratology arose as the study of diegetic narrative—stories told by an author to a reader through the mediation of a narrator. Media that do not conform to this pattern because they do not involve an act of narration by a narrator were originally not recognized as narrative. Then the concept was extended to mimetic modes that rely on the enactment of plots through performers, as in theater and film. But games were not considered by ludologists to be narratives, because narrative supposedly represents past events, while in games, events are created live (in real time) through the actions of the players. Games, consequently, were more like the direct experience of life than like standard stories. But life is unscripted, while games always rely on pre-scripted code, and often involve pre-scripted plots, so one could say that they are half-way between life and standard stories. My argument is that active user participation is not incompatible with narrativity, because the player's actions create a chain of events that they can later recount as a story. There are indeed many gamers who like to tell the story of their exploits in a game world. Computer games (by this I mean games that represent something, not abstract games like Tetris) provide a mode of realization of narrative that provides an alternative to the diegetic mode of novels and the mimetic mode of film and theater.

Transmedia storytelling is an emerging field in our contemporary culture. Could you explain us the distinction between east coast and west coast transmediality? Which seems more influential and why?

The terms East Coast and West Coast transmedia were proposed by the late Brian Clark, who saw himself as an East Coast producer. "West Coast " stands for the commercial mega-franchises of the Hollywood entertainment industry, such as *Star Wars*, *Lord of the Rings* and *Harry Potter*; East Coast, for anything that is not West Coast. The term should cover creative and non-commercial attempts to use multiple media to present a story, for instance in journalism, augmented books, and art installations. The West Coast model is by far the most influential, because it is grounded in popular culture, which is, by definition, popular. But this should not deter artists from exploring other possibilities.

More and more, recently, ARGs are discussed as an educational means to promote digital literacies and other 21st century skills. What is your opinion?

There was much hype about ARGs in the late 2000s as an educational medium that would also foster social bonding, as players depend on each other's skills to solve problems. Jane McGonigal was the guru of a movement that promoted the "gamification" of learning—for instance, learning through a game to live in a world without oil. One does not hear much about

ARGs anymore—just as one does not hear much about hypertext. In cyberculture, fame is very short-lived. I don't know if there is still an active community of ARG fans or if the phenomenon has died out, unable to compete with social media.

In your latest book, Narrating Space, Spatializing narrative you discuss the notions of place and space from a narratological point of view, creating a bridge between narratology and geography. Would you like to talk about the basic idea of this book?

The basic idea is that narrative can relate to space in two principal ways. It can, of course, represent space, as in descriptions, or involve space in the plot, as in *The Odyssey*, which is about Odysseus being sent by the gods to many different places on his journey home, though he never loses sight of his goal. But narrative can also use space as a medium, by being physically inscribed in space or digitally connected to places. This second possibility, which creates intimate ties between narrative and geography, is realized in locations-specific narratives such as the stories told through signs or through audio aides at historical and heritage sites, the stories implicitly told through museum displays, and the stories behind street names. Computer technology, such as GPS, opens new ways to locate stories in physical space. But before digital technology existed, stories were connected to places through legends that told how some landscape features were created. The bonds between stories and places are as old as narrative itself.

I was really taken by surprise- since you don't cease to amaze me- about your idea of the garden as the most close to perfect multisensory place. Today one would normally think of multisensory experiences as technology-mediated. Would you like to explain it to our readers?

The goal of digital technology is to present an ever better simulation of life and of sensory experience, but life will always surpass its simulation. Technology offers amazing representations, but the garden is real. I think Plato had something to say about this when he contrasted the shadows seen by the prisoners in the cave to the things that project the shadows. Addiction to technology puts us in Plato's cave.