

Is our actual world interactive?

Some philosophical reflections about video gaming and real life

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0. Introduction

This paper is my first attempt to merge my Master thesis and my current research on interactivity. In my thesis I have discussed the problem of indeterminism within semiotic theory, while during the past year I've studied interactive texts. I want to show you that the two issues are not so distant as they may appear. Video games give me a great opportunity to study the figure of the author, that is also the subject of my Phd project.

1. Interpretation and indeterminacy

Understanding is an activity that requires a large amount of cognitive elaboration. Any text – let it be a novel, a painting, a movie or a video game – invites its interpreter to cooperate for the production of a meaning. Semiotics studies how texts determine their interpretations. Words and images do not have meaning on their own, but neither is interpretation a casual or anarchical practice. Sense is an effect produced by a cognitive agent that questions an expression.

One of the most important concepts in Semiotics is that of indeterminacy or *openness*¹. Let us consider a minimal text as the sentence “Little Red Hat went into the woods”. It could seem to be an autonomous meaningful unit: there is someone who’s called Little Red Hat, and there is a wood. But, is Little Red Hat male or female? Is she a human, an animal, a robot? And does she really have a red hat? We read in the text information that is not written, and we couldn’t do otherwise. Words are negative restrictions telling which properties we cannot avoid to attribute, but only suggesting which properties actually to attribute.

A textual possible world is then different from a logical possible world because we readers fill the first up with a great number of auxiliary details; and we rest on our knowledge of the world in order to guess the content that is left unsaid. Anyway, there are many items that we do not know how to infer properly. For example, did Little Red Hat go into the woods because she thought it would have been better to take a riskier path than to arrive late; or she simply didn’t care about her mother's prescription? This detail is very important: in the one case, we are reading a tale about managing two

values in conflict; in the other case, we are reading a tale about the importance of social rules. And many other particulars would be equally relevant.

Openness is produced by a question that the interpreter makes to the text (“What will happen next?” “Who did that act?”) to which the text doesn’t answer yet. And there are also works – open works – that will never reveal some fundamental traits of the story. Of course, every text gives rise to an indefinite number of undetermined points, but not every question is permissible. The kid should not ask if Little Red Hat is a Zombie, even if an analytic philosopher might inquire into this. On the other hand there are questions that the text wants to induce in the reader, explicitly or, far more often, indirectly. These questions build a thick content out of a mean expression.

If we want to draw a model of a text’s content, called a *story*, we cannot use a single line tracing the following of events. We must consider many disjunctions, whenever the reader imagines or should imagine more than one possible future in the story. Above these disjunctions is played the game between the author and the reader. Starting from textual indications, the reader guesses the upcoming, and later the author will judge if he was right or wrong. Watching a man with a gun lets me reader split the future of the story at least in two branches, but it will be the author who will choose one of the two. In a novel or in a movie it is always the author that who *closes* an open item, who undertakes a branch in the modal model. So there are:

- details that are immediately declared by the author, building a linear spine for the story;
- items that will never be clarified, leaving many alternatives open at the same time, and therefore producing a global sense effect (open stories);
- points that are left open for a while, and are closed later by the author.

I have recently proposed to consider a fourth case, in which some elements are left open by the author, and will be closed later by the reader. This is what I’ve called *interactive story*².

Just one last brief thing before we move on to the games. The author and the reader are physical entities. But reading a text, the reader attributes to an abstract instance the fact of having chose something. If I’d say “At the end of Romeo and Juliet they both die”, there has been a closure, in fact it’s evident that they could have not. Did Romeo, as a fictive character, take this choice? Is it fundamental to know that the historical person we call Shakespeare took that choice?

Semiotics presupposes an author in the text to which to attribute the responsibility for all the decisions about the story. It is the image of the author the reader builds up by looking only at the text, without any reference to the real world, and it is called Model Author. And at the same time there is an image of the reader in the text. I have already said that not all the questions a reader can make to a text are proper. Well, the proper ones are what is called Model Reader. With this terminology it becomes

easier to see that in a novel, or in a movie, the Model Author and the Model Reader are at any time under the author's control. The author first makes plausible that Romeo and Juliet may marry or may not, and then after he decides that they will not.

2. Interactive stories in videogames

Instead the reader or player of texts with interactive stories takes some effectual decisions. Good examples are hypertexts in which the reader can choose between some possible developments for the fictional events. Video games are very interactive texts, and therefore it may seem that they should necessarily vehicle interactive stories. Unfortunately this would be too much a rushed conclusion. In fact nowadays only a few video games give to the player the power to modify the story told.

The most of them presents some open points and allows the player to pick one alternative among some; but only one of these alternatives is correct – there is only one 'solid' possible future, and the task of the game is to find it out. The story told by this kind of games is very similar to a traditional book's one, where the reader must guess an ending, but there is just one correct ending chosen by the author. The player has no power whatsoever: he has to *repeat* without mistakes an already written story. Metaphorically, it is like a gun that has only one target to hit or to miss.

Far more interesting, from a semiotic standpoint, are those games where the player has many targets to shoot at, and they are all correct. The player has the power to make a true choice if there are real alternatives. This is what doesn't happen with traditional books, where it is impossible for the reader to let his voice be heard.

Of course, there cannot be a totally undetermined story, or there would be no story. And so a game without mandatory checkpoints would be no fun at all. Constraints build the text, but I want to focus on texts with indeterminacies that can be closed by playing or reading, games in which the player has an influence on the Model Author. Of this last kind are open-ended games, where the actions of the player's avatar respect some rules, and can often be said right or wrong, but in some moments of the story they have a certain degree of freedom. This freedom has a substantial effect on the following events and it represents the will of the player. It is very different to watch an assassination and to do the assassination; when it comes to video games in which the player *must* kill the target to win I'd say we are somewhere mid way, but undoubtedly closer to the 'watch' end than to the 'do' end.

Modelling these games' stories requires a non-linear diagram, with junctions arising whenever the player takes control of the Model Author, not simply guessing but shaping the textual future. The author of an interactive story must create at least two mutually exclusive fictional worlds, and must

allow the player to undertake both. In games with a non-interactive story exists a 'fate', an 'immutable destiny', or – better – a 'pre-determined choice'. The player is coerced to do something, at the price of his avatar's death and of consequent failure to reach the goals of the game.

Of course one may object: “What if the player actually wants to do that he has to do?”. This is a well known *quaestio infinita*: if my entire life obeys the will of God, or the laws of physics, but I feel like I'm taking true decisions evaluating real alternatives, am I free or not? In the small field of narrative, we can distinguish interactive and non-interactive stories; and we can try to analyse the conditions to be satisfied for having authentic, deep interaction.

I'd like go one step further, distinguishing kinds or degrees of interactive stories, even if this is what I am working on right now. In the Encarta encyclopaedia no one can let Napoleon win at Waterloo; in Wikipedia anyone can. Wikipedia is in this sense interactive or deeply interactive. But it is not a pool where users may vote among multiple alternatives that the administrator permits; in Wikipedia any user writes whatever he wants. Of course this leads to some problems of confidence and authority, but we are now concerned with distributed authoriality. There can be games as such? I'm talking about games in which the player may not only choose one option among some chosen by the author, but can take any conceivable alternative future of the story.

At the end of many thrillers there is a room, in which the detective and some other character are having a cup of tea. The reader knows that one of those characters will be found guilty by the detective in a short time. If I want to make an hypertext out of this novel, I could let the reader choose who will be convicted. I'd write many endings, offering him the possibility to read the one he prefers, and so to close an item of the story left open by me. Of course, the options to chose from are only the characters drinking tea in that room. It would be very different if the reader of my hypertext could also add or replace any character he likes. This actually happens in some Internet sites where many users act as a *collective author*, or for example in 'Sim City' when we do not use pre-designed buildings, but we draw our own ones.

An interactive story of the first kind may be implemented also on the rom cartridge of a video game console, because the endings are already there, and the player simply accesses the data in a way that produces a personal story. Instead, an interactive story of the second kind requires the reader to physically write on a device. This more powerful reader or player would become far closer to an author, and I would say that he acquires a complete control of the Model Author, while he had before only a limited access to it, having to choose one among some well defined alternatives.

There is one last rank to climb in this scale. I am supposing that this 'Power Reader' can only intervene on the future of the story. But if he could re-write what is already written he would grasps the entire

instance of authoriality, becoming a fully featured author. And this means he could modify also the Model Reader of a text, the whole story's sense possibilities. The point is that in video games this happens too: whenever a hacker re-writes part of the source code of a game he becomes a co-author under every respect (but legal ones). And the open source projects permit the user to work as if were their creator.

3. Has our life an interactive story?

Philosophers who discuss determinism and free will have found two necessary conditions for having authentic freedom: the existence of real alternatives in the world and the possibility to take control of those alternatives. Now I'm going to show you very briefly that there is an analogy between this and what I've told you until now.

The debate on free will is a particularly intricate one, with a number of different positions. In Semiotics, Charles Sanders Peirce and Umberto Eco especially dealt with it³. While Peirce was a monist and is considered today the champion of indeterminism in nature, Eco is basically a dualist, and has traced a threshold between non semiotic phenomena – under restraint of deterministic chains of causes and effects – and semiotic phenomena that behave in a different way. Between a sign and the result of its interpretation there is a space for indeterminism, called “C-space”, produced by the very nature of languages and cultural representations⁴.

Even if Eco has proposed this semiotic threshold as an ontological discontinuity, in some writings he seems to approach the issue more on an epistemological ground. And it is this approach that I adopt. We humans part deterministic and indeterministic phenomena on the basis of our knowledge of them: the better we know a system, the better we are able to predict its future behaviour and so we are more reluctant to attribute freedom to it. It is the interpreter's lack of knowledge what produces freedom in what he observes, even if this freedom were nothing but an illusion⁵. Eco suggested to differentiate metaphysical possibility and structural possibility, and as semioticians to focus on the second one. Playing a card game, or chess, or blackjack permits by the means of their own rules to evaluate many possible moves, independently from any metaphysical argument. And we are imbued with linguistic games that structure our life.

The large majority of philosophers would advice to be careful not messing up determinism and predictability: things must be determined or undetermined regardless of someone observing and understanding them. Switching this problem to an epistemological (and semiotic) level implies to overturn of this argument: the world is always a world for an interpreter, who has a critical role in

building it. Asking about freedom in an interpreter's world is asking about hypotheses and predictions; while questioning freedom in a world without any interpreter thinking it is at least a problem that goes beyond any possible Semiotic field.

So the world any subject lives in is like a text to cooperate with; first of all, what we perceive is open to many possible outcomes – our future is not as our past⁶. Our habits of interpretation allow us to know roughly what another person can or can't do, but there is always a space for choice in other's actions. Rarely we can make a linear plot of a behaviour so to exclude every possible outcome but one. If I were in front of a person with a gun, I could not know if that will fire or not; I would have to interpret an open detail, exactly – but for personal drawbacks – as when I read a novel's story. If reality is like a language, than there may be languages that surrogate reality at best. Pier Paolo Pasolini said that cinema is the language of reality, and Gilles Deleuze agreed writing that cinema is the only language able to represent time and movement⁷. But I would like to argue that cinema, as well as novels, can only realize non-interactive stories. Time and movement are fundamental traits of our experience, but freedom of action is equally such, and video games with interactive stories are a language better approximating life.

I believe it could be possible to model elementary social interactions by describing them as interactive stories. The background of stereotypes provided by culture lets any social actor see some options in every situation⁸, and often this actor can actively choose one of these options, accessing a sort of 'Model Author'. I am still wondering which degree of authoriality a subject can reach. Often we take some easy paths, following already traced routes; sometimes we try new approaches to problems, overcoming the limitations given us by culture; but probably there is a threshold over which we cannot go. If we had within our power the 'Model Reader' of our life, we would be gods. And until the birth of the Matrix this is very unlikely.

In conclusion, a space of indeterminacy pre-exists its eventual determination, that is as saying that to be readers is a necessary condition to be authors or players. But it's not possible to reduce the actor or player of a practice (like video gaming) to the reader of a text. If the world is a text, then it is a text where we are more than observers. In a novel the reader, the author and the characters are distinct entities; in real world practices the subject is at the same time interpreter of what he sees, character in the story he's in and author of his decisions. Because of this, our life has an interactive story.

- 1 Eco U. 1962, *Opera aperta*, Milano: Bompiani (Eng. tr. 1976, rev. 1989, *The open work*, Cambridge: Harvard UP); 1979, *Lector in fabula*, Milano: Bompiani (Eng. part. tr. in 1979, *The role of the reader*, Bloomington: Indiana UP).
- 2 Compagno D. 2006, “Donnie Darko: tra apertura e ipertestualità”, in *Ocula 7*; 2006, “L'autorialità nei testi interattivi”, paper presented at the XXXIV Congress of the Italian Association for Semiotic Studies, publication pending in *E/C*.
- 3 Peirce C.S. 1892, “The doctrine of necessity examined”, in *The Monist 2* (C.P. 6.35-6.65); Eco U. 1975, *A theory of Semiotics*, Bloomington: Indiana UP; 1986, “On Semiotics and Immunology”, in Sercarz E.E. et alter (eds.), *The semiotics of cellular communication in the immune system*, Berlin: Springer-Verlag.
- 4 Eco U. 1986, *cit.*
- 5 For a similar argument: Dennet D.C. 2003, *Freedom evolves*, New York: Viking books.
- 6 Popper K.R. 1982, *The open universe*, vol. II of *Postscript to The logic of scientific discovery*, London: Hutchinson.
- 7 Pasolini P.P. 1972, *Empirismo eretico*, Milano: Garzanti (Eng. tr. 1988, *Heretical empiricism*, Bloomington: Indiana UP); Deleuze G. 1985, *Cinéma 2*, Paris: Minuit (Eng. tr. 1989, *Cinema 2*, London: Athlon).
- 8 Eco U. 1997, *Kant e l'oromitorinco*, Milano: Bompiani (Eng. tr. 1999, *Kant and the platypus*, New York: Harcourt Brace); Violi P. 1997, *Significato ed esperienza*, Milano: Bompiani (Eng. tr. 2001, *Meaning and experience*, Bloomington: Indiana).