The interactive potential of post-modern film narrative. Frequency, Order and Simultaneity.

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ABSTRACT

A considerable number of contemporary films are now using narrative models that allow several adaptations on digital and interactive operating systems. This trend is seen in films such as Memento by Christopher Nolan (2000), Irréversible by Gaspar Noé (2002) and Smoking / No Smoking by Alain Resnais (1993), concerning the chronological organization of their narrative parts - here it is a question of order. Or in films such as *Elephant* by Gus Van Sant (2003), Groundhog Day by Harold Ramis, 1993 and Rashômon by Akira Kurosawa (1950), for the diegetic repetition - a question of frequency. Or even, in films such as Magnolia by Paul Thomas Anderson (1999) and Short Cuts by Robert Altman, 1993 which use the idea of expansion or compression of the narrative - a question of simultaneity. To change the accessibility of the cinematographic experience and to constantly re-evaluate the way in which the narrative tool is used, is from now on considered the interactive potential of the contemporary film narrative.

INTRODUCTION

Allow the viewer to be involved in the fiction and decider on the cuts, links or the viewing order of the film narrative - this is what the future of cinema could look like. The narrative models invented by the cinema (very often adapted from the literature models of the 19th Century) give the viewer one of the most important roles: that of cracking the code of the diegetic content. The viewer has to decipher the pathways of space and time, make the links between the scenes and the dialogues, recognise characters, associate ideas etc., in order to fully get to grips with the film narrative which is presented to them, without however being able to actively act on the diegesis. However, films which are distinguished by their narrative structure and which call for viewer participation definitely exist,

either by breaking down the stories into individually narrative blocks, or by a diegetic layout which is spread out, reversed, or uncoordinated with the narrative, or even by repetition or temporal a-synchronism of the characters' actions. These are films with multiple structures according to Dan Hassler-Forest (2005), or data based films according to Lev Manovich (2001) and Jim Bizzochi (2005), mosaic films according to Suzanne Duchiron (2007) or even modular films according to Allan Cameron (2008). In the sections hereafter we will try to show why certain narrative techniques, used in contemporary cinema, suggest that the film narrative could be adapted into a potentially interactive narrative tool. Three concepts, taken from literary theories, will help us assess our position: Frequency as a repetition tool, Order as a chronological organizer and Simultaneity as a method of expansion and compression of the narrative. As for the question of Frequency, we will see with films such as Rashômon by Akira Karosawa (1950), Groundhog Day by Harold Ramis (1993) and Elephant by Gus Van Sant (2003) how each film is organized with regards to its narrative, and why they call upon interactive adaptation with a digital operating system. In the section on Order, looking at films such as Memento by Christopher Nolan (2000), Irréversible by Gaspar Noé (2002) and Smoking/No Smoking by Alain Resnais (1993) we have decided to ascertain how the organisation of narrative sequences can play a decisive role in the construction of a meaning and seem to challenge the viewer to create his/her own layout. With regards to the diegetic simultaneity, our analysis will focus on the following films: Short Cuts by Robert Altman (1993) and Magnolia by Paul Thomas Anderson (1999), in order to establish why this type of narrative tool has such a high level of adaptability for interaction without involving transformation of the narrative. Considering the potential of the film narrative involves studying films in which the author has used

various digital techniques and technology, which allow the viewer to intervene at any stage of the narrative (in the narrative space, the time of the action, the choice of characters, etc.). It also involves contemplating films for which the presentation could be dynamically controlled by a digital system, which monitors the viewer and uses his/her behaviour as a source of interaction. Finally, it involves assessing films created around a language, a digital code, which could be interpreted and executed by a computer. But, long before the film narrative became voluntarily interactive, cinema had already introduced the question of ductility in temporal handling and the resulting concept of the appearance of continuity. The challenge of editing the different temporal moments of cinematographic narration was defined as a primary necessity for the construction of signifiers. In cinema, what is seen does not necessarily correspond to the chronological order of the recordings and shots. Consequently, the presentation order of various sequences of images is often modified to focus on a particular aspect of the narrative or to adjust the different temporal moments of the film¹. Using diegetic reorganisation, interruption of the narrative and repetition of different moments, past or future (analepsis and prolepsis - Genette, 1972) and jumps in time of the narrative action (ellipses), cinema connects the viewer to the story, and asks that they intervene (intellectually) in order to understand the narrated events.

1 | Narrative frequency as a repetition tool

We therefore come to the question of frequency²: is there regularity or not between the number of times an event happens in the fiction and the number of times it is narrated? If the event happens and is narrated once, we would consider that the frequency is null. On the other hand, if the event happens once and is narrated several times, we consider that there is an absence of regularity and the frequency can then be identified. In these cases, the same story postulates several narratives, allowing the same event to be compared to various narrative moments and to allow the viewer (reader) to go back to an event and try to understand it better. The repetitive connection of *diegetic* events is made in the suc-

The repetitive structure of the same event should enable more freedom of interpretation, giving the public a selection of possible options. The repetition being as described above means the viewer is given more power. In the following section, we will analyse the connections between film frequency and the possible challenges of such a narrative tool, these ideas will be found in films such as *Rashômon* by Akira Kurosawa (1950), *Groundhog Day* by Harold Ramis (1993) and *Elephant* by Gus Van Sant (2003).

1.1 | The repetitive variations of Rashômon

Imagine a film narrative where the story of a murder is told in four different distinct versions. This film exists: it is *Rashômon* by Akira Kurosawa (1950). The same event, a violent murder, is filmed from four different points of view: 1) the Crook's narrative (the real killer), 2) the Woman's narrative, 3) the Late Husband's narrative, 4) then that of a Lumberjack who, let's say was in the area. This would correspond to the following formula: 4 narratives (R) for 1 story (H) - according to Genette's theory: nRécit pour 1 Histoire (see figure 1).

In *Rashômon*, Kurosawa plays on the variation and discontinuity of the narrative. In a repetitive and alternated skilled editing, Kurosawa leaves viewers in suspense, waiting for the final judgement. Kurosawa's option towards a reduction of the narrative and direct involvement of the viewer, commits his film to inevitable interaction (even if the succession of different narratives follows an order which is already configured by the scenario³ beforehand).

This play on different perspectives of the same event induces the viewer to take part in the narrative, to remain at the side of one of the characters and to believe in the truth of one of the narrated versions. In forcing the viewer to remain mentally active, Kurosawa's cinema questions the interactive potential – cognitive interactivity (Zimmerman, 2004:158)⁴.

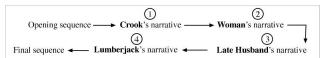
cession of these parts according to an order and an organization anticipated by the scenario and cinematographic direction. If it is proved that the repetition is made in succession, why not let the viewer choose the *diegetic* variants?

¹ Of course, the aesthetic of the film-shot (single-shot film) of the Lumière brothers (e.g. *The arrival of a Train at La Ciotat Station* and *The Waterer Watered* - 1895) came to a dead end when it involved narrating several stories at once. The single-shot was therefore insufficient. It will only be Edwin Stanton Porter who introduces temporal non-linearity, the multiplicity and dramatic discontinuity of the narrative, e.g. *The Life of an American Fireman* - 1903).

² To go back to Gérard Genette's concept, see *Figures III*, p. 145 and contd.

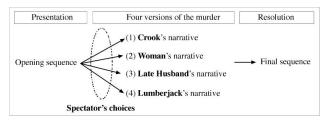
³ Rashômon is adapted by A. Kurosawa and S. Hashimoto from two short stories by the writer Ryunosuke Akutagawa, Rashômon and In the Thicket.

⁴ Cognitive or interpretative interactivity, the first degree (of four) according to Eric Zimmerman is that which requires an intellectual commitment from the viewer.



01 | Linear succession of Rashômon's narratives.

The fixed and sometimes predictable structure triggers another, much more flexible and arbitrary. Thus, the same film will be divided into different parts and organized according to the choice of the viewers (see figure 2). Let us therefore imagine the narrative presented in the following way: a preview of the opening sequence, the story is interrupted with the following question: "Would you like to see what happens next according to the viewpoint: 1) of the Crook, 2) of the Woman, 3) of the Late Husband, 4) of the Lumberjack. Choose one of these options". Thanks to current digital technology, it would be easy to adapt *Rashômon* to a functional operating system (2nd degree of Zimmerman)⁵ which actively involves the viewer.



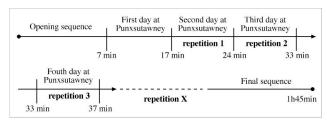
02 | *Hypothesis of a multiple-choice structure for the film* Rashômon.

Of course, this organisation of the film narrative will alter the original order put forward by Kurosawa and Hashimoto, but it will not really change the final outcome of the film (actually, the narrative of the Woman could easily be inserted after that of the Lumberjack, or that of the Lumberjack before that of the Crook). The sequence of the events put forward by Kurosawa keeps the same logic, but this new interactive possibility invites the viewer to engage in a *performative* act and to choose the succession of the different parts, whilst actually being involved in the narrative.

1.2 | The limited frequency of Groundhog Day.

Groundhog Day by Harold Ramis (1993) induces the same logic. The story focuses on the repetition of a day in the life of a journalist, Bill Murray playing the role of Phil Connors. The duration of the film narrative is approximately one hour and forty-five minutes, but it only actually corresponds, and from a diegesis point of view, to the same day which repeats itself for a whole year. Thus, there is an absence of regularity between the number of times the event happens in the fiction and the number of times the story is told (Genette, nR-1H). Moving forward by means of ellipses, the story play on the repetitive events of the actors, who, from one scene to the next are confronted by very limited narrative déjà-vu. After an opening sequence introducing the characters, the narrative blocks, which make up one day, are repeated throughout the narrative. From six o'clock in the morning to six o'clock the next morning, the days go by as a repetition of an unusual experience, each day is the same as the previous one.

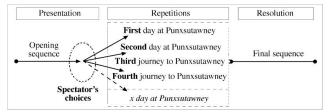
The first day at Punxsutawney rolls out between the 7th and the 17th minute, the second day and the first *diegetic* repetition between the 17th and 24th minute, the third day and the second repetition between the 24th and 33rd minute, and so on (see figure 3) up to the final sequence where the main character, after reliving the same situations over and over, changes his/her personality and overcomes the challenge of the repetition of the 2nd February



03 | The repetitive linear structure of Groundhog Day by Harold Ramis.

This frequency diagram suggests a break-up of the narrative, where an effective breaking down of the narrative would allow the viewer to participate. A multiple-choice structure where the public could choose between various versions of the repetitive narrative (see figure 4). After the opening sequence, the viewer can, by using an interactive multiple-choice tool, decide upon the order of succession of the various repeated days.

⁵ Functional or practical interactivity corresponds to the second degree in Zimmerman's hierarchy; it is a mental and physical combination of different performative acts from the viewer with the narrative (Zimmerman, 2004:158).



04 | Hypothetical diagram for an interactive tool for Groundhog Day.

The interactive potential of *Groundhog Day* appears obvious, even though we resort to a breakdown of recursive sequences. In this narrative cycle, the viewer becomes conscious of a repetitive structure and creates a narrative shortcut before arriving at the final sequence. Without a doubt, our proposition distorts the original narrative, since it allows what previously seemed to be organised, to be jumbled. Nevertheless, since it involves a choice, the optional access to episodes will enable the reader to be involved in various narrative moments of a story which in principle seemed to be too linear, but which in fact was ignoring this characteristic.

1.3 | How many different routes are there for Elephant?

In accordance with Genette's frequentative conditions, we will also find diegetic repetition capability with Gus Van Sant. In Elephant (2003) Van Sant narrates the few hours preceding the "Columbine" drama, limiting himself by filming exactly what happened without looking at the reasons why that massacre really happened. The repetitive narrative configuration used in the filming of *Elephant*, enables Van Sant to deal with the same story from several different distinct viewpoints (nR - 1H). The sections in the high-school corridors are filmed with unrelenting tracking shots, following the characters that are wandering about in their daily routine. The viewer gets to know the locations through the insistence of one camera which does not stop going back to previously visited locations. Even before arriving at the end of a corridor we already know what will happen. For Raymond Bellour, the shots for *Elephant* are like repeated lines, where "the cuts here correspond to elements of a network, of which the elements which suddenly appear or the connections, in a whole different meaning other than the ordinary, capture in proportion due to the fact that they use the actions from the scenarios of a film devoid of intrigue, where these actions switch order depending on the various points of view" (Bellour, 2004:11). Thus, and for Bellour, it is definitely a question of varying points of view and repetitions, even if they

are differentiated by another diegetic moment. The viewer is experiencing déjà-vu and at the same time, discovers small differences in the looks between characters, in the rate of movements, in this second opportunity that Van Sant gives the viewer to see the same scene again but from another perspective. Therefore, we can imagine many possibilities that do not exist, many shots, angles, distances, sound-bites, movements which could have been, and imagine an identical but different film. The multiplicity of the movements of *Elephant*, all the tracking shots, the connections made with movement, repetitions, are all used to define the possible routes, throughout a static mapping duration. With *Elephant*, the viewer finds themselves in moments of failure, where the narrative is subjected to diegetic suspension effects. A scene remains in suspense, waiting to be rerun, which will only happen later on. This constant return of the narrative, in the form of differentiated repetition, points to a more convincing need for interaction: it would be easy to formulate the viewers' choice for a different viewpoint at each repetition. According to Van Sant, this possibility takes us into the era of breaking down cinema, due to the layout of other types of images, notably video graphics images, linked to games, computer graphics and interactive images⁶. Using this method of dealing with the narrative, Van Sant analogises with the narration models used in video games, whereby the player has the choice between several viewpoints (the narrative according to John, the narrative according to Elias and the narrative according to Michelle).

Therefore, can we consider that there is an objective connection between the narrative structure of *Elephant*, and that of an interactive narrative? The multiplicity and repetition of shots, the different viewpoints, the repetition of storylines and the possible choices (subjective) are available to viewers. In using this narrative metaphor, Van Sant encourages the viewer to take a stand on the revisited image, in order to better judge what appears. They question the current film narrative procedure, by offering us a narrative that touches on the conditions of interactivity. As a result, one of the bonus options on the DVD allows the film to be seen in two surprising ways (see figure 5): either by choosing the characters, or by choosing their storyline in the narrative.

The *Elephant* shots send us back to FPS (First Person Shooter)-type video games, where the viewer takes the place of the gunman, using an objective vision on the shoulder of their avatar.





05 | Storyline or character: two ways of revisiting Elephant. (Images from DVD-Mk2 Collector's Edition).

In a way, these options allow the editing of the film to be simplified. On the one hand, we see the storyline of each character being created (*John, Elias, Nathan, Michelle, The girls, Eric and Alex* and *Benny*), and one click on one of the names will show you the corresponding scene. On the other hand, the choice is directly made on a visual representation of the characters. With many options such as the storyline pathways, many segments such as the predictable (or unpredictable) pathways, *Elephant* is there to be seen again and again with the certitude of already knowing the outcome.

2 | Order and diegetic synchronisation.

Does the layout of different film elements (shots, sequences, scenes, acts, etc.) condition the perception we have of a narrative? The answer seems obvious: find out who is responsible for the violent murder at the beginning or at the end of the film will make all the difference. It is about being the detective for one minute and the fugitive for the next hour. In fact, it is defining the presentation order of the narrative and how this is linked to the causes and outcomes of the story. The following question thus arises: if the order of segments which make up the narrative corresponds to the order of the story told, then there a is bi-uniform correspondence between the segments of the narrative (N) and the segments of the story (S), since the narrative follows the story or vice versa. This layout is not more valid than another which highlights the asymmetry between the story and the narrative, however, it is suitable for the deletion of the "traces of narrative activity", such as the indication by Jean-François Lyotard in his analysis of the libidinal economy of a narrative tool (Petite économie libidinale d'un dispositif narratif)⁷ (Lyotard, 1994:151). Therefore, the two structures are When the segments of the story (S) are revealed in a narrative (N) in an order which is distinct from that of their logical concatenation, another narrative time-space occurs which, due to the fact that it was not previously planned, gives the viewer a kind of narrative revelation. What happens in the narrative strictly mimics what has happened in the story. This is why, and in this case, the succession of facts (S) no longer follows the exclusively temporal organization of the narrative (N). Making this narrative game available to the viewer gives them endless possibilities which did not exist beforehand, it is telling the viewer the following: take control, you can decide what the connections are between the sections and the relations between the segments of the narrative. This is what we will ascertain in films such as Memento by Christopher Nolan (2000), Irréversible by Gaspar Noé (2002) and Smoking, No Smoking by Alain Resnais (1993), in the analysis hereafter.

2.1 | Move forward by going backwards in Memento.

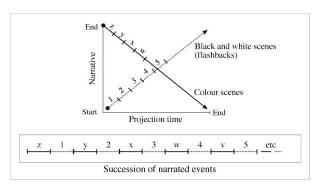
Nowadays, cinema gets hold of more diverse narrative techniques to divert the more and more vigilant viewer. Sometimes a narrative is presented in an order which is so dramatically altered that in a final analysis the intended effect is blurred to the detriment of the requirements of narrative realism. To assimilate it is to understand that a second or third preview is needed so that what happens in the story truly emerges. This is seen in *Memento* by Christopher Nolan (2000), in which the viewer is exposed to a memory game, in a backwards narrative where the hero, Leonard Shelby (Guy Pearce)

diachronic in the same way: the symmetry between the order of the story and that of the narrative takes the following options away from the viewer: playing with the segments, separating them from the next or previous one and creating a new meaning.

⁷ Lyotard, Jean-François, *Des dispositifs pulsionnels*, Paris, Galilée, 1994, p. 151.

suffers from anterograde⁸ amnesia. Nolan's trick is to put the viewer in the character's shoes and give him/her the impression they have lost their memory (this might be why one needs to see the film twice in order to understand it properly). The viewer is just as confused as the character and progressively learns, at the same time as the character. So that this process works well, Nolan divides the story into several parts and inserts them side by side in the opposite direction, so that the end of a scene corresponds to the beginning of the previous one.

To complicate everything further, scenes filmed in black and white (flashbacks) are inserted, which unlike the colour scenes, follow a chronological order of the narrated events (see figure 6). The colour narrative follows the story in reverse chronological order whereas the black and white narrative respects the original order. The succession of events in the diegesis therefore has the following structure: z-1-y-2-x-3-w-4-v-5, etc.

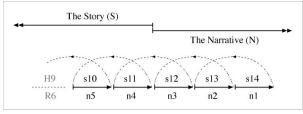


06 | Succession of events in Memento by Christopher Nolan.

The narrative tool of Memento highlights the connection between the temporality of the story and the order of succession of the narrative. One is going backwards; the other is getting further away as the time passes. The two moments are antagonistic and only cross over in the case of an anticipated *diegetic* accident. This type of structure shows a double narrative movement: on the one hand it highlights the segmentation of the story and reveals the *diegetic* combinations of the narrative; on the other hand it encourages unplanned virtual choices. The separation of the connection between what is shown onscreen and what happens in the story (time of the signifier and time of the signified) brings to light the layout of the narrative segments vis-à-vis the narration. The classic deployment of going backwards, used in *Memento*, offers a series of narrative segments laid out in reverse chronological order: in brief, the story is reversing whereas the narrative is progressing forward. It is up to the viewers to play with this original film layout and the narrative which is constantly moving back and forth.

2.2 | The reversibility of Irréversible

Playing with the reversibility of time is what encouraged Gaspar Noé to reproduce the narrative tool of *Memento* in his second feature film, correctly entitled *Irréversible* (2002). Again, this film is shown in reverse chronological order, each scene being explained by what has just happened, but seen just after. Divided into sixteen chapters which roll out as a series of sixteen sequence shots, *Irréversible* is shown in reverse chronological order: the segments of the story lead us into an unknown past (see figure 7). Here we see the same layout: the story is going backwards whereas the narrative is progressing forwards



07 | The story is going backwards, the narrative is moving forwards in Irréversible by Gaspar Noé.

From end to end, Irréversible plays with the time, the lives and the destiny of the characters and the viewers. The film begins with the terrifying outcome of a tragic story and progressively connects the events which lead to this tragedy. Noé justifies his use of a backwards narrative structure with the fact that he wants to constantly re-evaluate what has been seen, based on what we learn later. It is backwards that we witness, feeling both horrified and powerless. the story of Alex (Monica Belluci), Marcus (Vincent Cassel) and Pierre (Albert Dupontel): a short timespace of the broken life of one woman and two men which is revealed by a chain of dramatic circumstantial events. The irreversibility of the events, the ineluctability of destiny: Irréversible takes us on a ride of emotions, from the damned of the hell of the Rectum to the short-lived happiness of the couple at the end of the film (that is in fact the beginning of the story).

Both *Memento* and *Irréversible* play on the paradigm

⁸ Anterograde amnesia concerns facts put out of someone's mind that precede an accident or a disease.

of obvious disorder and backwards organisation of the narrative. We could also look at *5X2* by François Ozon (2005) or *Vantage Point* by Pete Travis (2008) since they also function in the same way: the first tells a story in reverse chronological order of a young couple; the second is the story about a terrorist attack on the President of the United States, told backwards. Unfortunately, the time and space do not allow it, but we understand that we will remain within the same type of analyses: the segments of the narrative are shown in the opposite order to the chronological segments of the story.

2.3 Smoking, No Smoking in which order, please?

"The 15th December... The two new films by Alain Resnais are released at the same time:

- Well, you can see that the two films have come out at the same time; there isn't a number one and number two. We can go and see whichever one we want... If we want to see No Smoking first, let's go!
- Do you want to see No Smoking first?
- No! I am just saying that it's possible; we have the choice that's all.
- Ok...Smoking, No Smoking, I am going to go and see Smoking. I want to see them in the right order! - But that's the thing, there isn't an order... Why do you insist on putting them in order?
- The film is called Smoking, No Smoking, so I am going to see Smoking first, then No Smoking... It seems logical to me don't you agree? On the 15th December, which one are you going to go and see first?"

This extract from the trailer for Smoking, No Smoking (1993) indicated in advance what viewers could expect when they enter the cinema: choose which order they will watch the two films. Which one should be seen first? This is the question a lot of people will be asking. But only by watching the films will this riddle be answered, if there is actually an answer9. "In my opinion, there is no order in which to see the films", declared Alain Resnais, during an interview with Danièle Heymann in 2004. All the same, his two-part literary work puts the viewer to a kind of test, as published in the French newspaper Le Monde at the time of the film premiere: "You should go and see Smoking first, or even No Smoking. In any case, both, or you are missing out on a doubly indubitable pleasure", as you can see a conclusive answer is never actually given. Thus, the French newspaper Le

Quotidien used the same strategy: "You will either like it or love it".

In fact, making the viewer choose even before they enter the cinema gives Resnais' multiple-film a very innovative and specific character. The fact of choosing can be considered depending on two very distinct configurations: on the one hand there is an actual choice, due to the formality of the presentation of the two narratives; the viewer must make a choice before buying their ticket. On the other hand, there is a potential choice, where viewers feel obliged to see one of the versions first.

But Smoking, No Smoking is in fact one single story, which, for layout and narrative configuration reasons is seen as two separate films. To be seen in any order, Smoking, No Smoking is split into a multitude of sketches, each one covering an idea, an action, a desire, before retracing its steps and branching off into another direction. Each pathway allows the characters to satisfy a desire, which the previous sequence did not allow them to do. The narrative strategy used by Resnais enables exploration of all the potential outcomes; each part of the story could evolve in different ways. She smokes or she doesn't smoke; a friend or a gardener comes to visit her; a funeral or a christening, etc. Even if there are numerous and varied narrative variations, the roll-out of the film still must follow a very strict program and follow an order which was fixed beforehand by the director. It is not about a tree structure that the viewer can follow at random and as they please, but rather a choice of pathway intentionally defined by the author of the film. Evidently, this tree structure allows for a direct adaptation on a digital operating system. You just need to split the sections up according to the director's chaptering and then let the viewer choose the presentation of sequences. Potentially interactive, Smoking, No Smoking could also be presented on a split screen. In this case, the viewers would choose between two versions of the same story and not on the organisation of the sequences. Involving time and space reflection, the two films are created with a very strong interdependence, "when we have seen the first, we want to see the second right away", exclaimed the French newspaper Libération. Therefore, why not watch both simultaneously and allow Alain Resnais' multiple film to reach a third degree of interactivity according to Eric Zimmerman's scale - the explicit interactivity¹⁰.

⁹ In certain countries, such as Portugal, the two films were not released at the same time; this took away all the magic of a simultaneous premiere and completely went against Resnais' original idea.

¹⁰ This is a type of participative interactivity, where the viewer takes his/her place in narrative dramatic art: they can choose, reorganise events, carry out simulations, etc.

3 | Apparent simultaneity

Simultaneity can be described as distinct events which refer to the same moment in time. Largely, it is what happens at the same time. For example, in spoken language, simultaneous translation is done at the same time as the speaker gives his/her speech in another language.

In the film narrative, narrative simultaneity can appear in different ways. 1) Either it is seen in the same shot, showing the actions of various characters: Establishing shot - Julien is finishing his dessert while Josephine tells him about her day at work and washes the dishes at the same time. 2) Or it is done through several sequential scenes where the movement of the camera and the switching from shot-to-shot shows us that while character X is doing something, character Y is doing something else. Panoramic - While Julien is looking under the car bonnet, the camera sweeps over the front of the house to Josephine who is talking to her neighbours. 3) Or even, simultaneity can be seen in scenes which are distinct and separate in the projection time, when for example the events refer to a specific moment in the narrated story. We can recognize this type of diegetic simultaneity by visual or sound narrative tricks. For example, at the beginning of each scene an alarm, a clock or a watch shows us the same time for different actions which are going to happen, or when all characters carry out the same action (e.g. wake up, go swimming, brush their teeth, etc.). Or even when a visual indication (the sun is setting in every scene) shows us that the events are happening at the same time. *Diegetic* simultaneity appears here as an expansion method of the film narrative. This is the way that cinema tells viewers that what is happening in two distinct geographic locations is happening at the same time.

3.1 | The parallel links of Short Cuts.

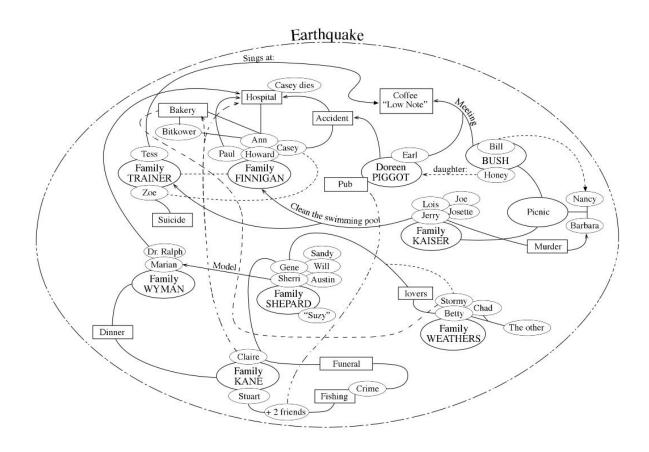
Inspired by nine short stories and a poem by Raymond Carver, Short Cuts by Robert Altman (1993) is a journey across Los Angeles in the 1990's. It is a sketch film, a rather intimate representation where the various destinies of 22 characters are inter-twined. Crossed portraits, emotions grouped together, multiple pleasures or a single drama; there is something for everyone, or several "Fabula" (Bordwell, 1985) at each glance. A broken-down structure of the narrative tool encourages a reorganisation of the narrative through the viewer's constant intellectual movement (Zimmerman's 1st degree). In his trial with Short Cuts, David Balcom brings together Altman's

narrative and Ted Nelson's hypertext concept¹¹. In a rather theoretical interpretation of the hypertext, Balcom insists that *Short Cuts* is also a text which is richly bound together and poly vocal, and which requires an intellectual commitment from the viewer in order to make a connection between each character and their corresponding stories. According to Balcom, "Short Cuts contains a lot of hypertext elements. (...) Whereas the viewer of Short Cuts does not click with his/her mouse and does not change the presentation order of the stories (as is done for example in Afternoon, a Story by Michael Joyce), the viewer is always choosing connections in order to follow and play as they so wish [for each story]" (Balcom, 1996).

In Short Cuts, the stories have an apparent simultaneity: everything happens at the same time, but can only be narrated in the succession order of the narrative. For example, at the beginning of the film, while Stormy Weathers, in the helicopter, is spreading the fruit-fly repellent, Earl Piggot is driving clients around in his limousine, the Finnigan family are watching Howard Finnigan's news on fruit flies on the television, the Wyman and Kane families are at a concert where Zoe Trainer is playing the cello, Jerry Kaiser is protecting his car from the spraying, Tess Trainer is singing in a nightclub and the Shepard family are arguing because of Suzy, the family dog (see figure 8). All these scenes happen at the same time and there are several elements which can prove this: it is night time, same hour in all the scenes and in several shots we can see the same news program on television.

From now on, the viewer's role is no longer to follow the events as they are narrated, but rather to piece together a huge jigsaw, the narrative pieces of which would have been voluntarily scattered. Short Cuts is a film which is overrun with links, a network of signifiers which highlight a certain participation effect induced by a breaking down of the film narrative. It allows a network of possible connections to be "spatialised", a virtual plan of relationships and correspondences, a broken-down narrative structure, with guides so as not to get lost. It is up to the viewer to play around on this minefield and to create his/her own connections, end-to-end narrated stories, and try to find an order which seems correct to him/her.

¹¹ For Theodor Nelson, hypertext is non-sequential writing — a text that is linked together and gives the viewer choices. As is widely understood, hypertext is a series of pieces of text connected by links which offer the viewer different pathways. It is best viewed on an interactive screen (Nelson, 1981).



08 | The connections of Short Cuts and the spatial organization of the narrative.

For three hours, the multiple stories are inter-twined, the characters cross paths and the actions are interdependent. While *Gene Shepard* is trying to get rid of his dog (Suzy), *Doreen Piggot* bumps into *Casey Finnigan* in the street, *Zoe Trainer* is playing basketball with her friends and *Ann Finnigan*, *Claire Kane* and *Stormy Weathers* run into each other in Mr. Bitkower's bakery. Imagine a tool which would let you watch all these actions at the same time and on the same screen: that is the challenge Robert Altman faces with an interactive tool for his film, and Mike Figgis deal with on *Timecode* (2000).

3.2 | At the same time as Magnolia

In the same way as Short Cuts, Magnolia by Paul Thomas Anderson (1999) takes us on a three-hour journey through a day in the life of a dozen characters. These characters all have a direct or indirect connection between them, so strong that their destinies cross over, meet or are avoided over the course of an inevitable destiny. For example, in the prologue, the man responsible for the murder is hanged, the argument between the parents causes the death of their son, then thanks to the (much talked-about) "raining frogs", the officer regains his confidence and catches his robber, and the robber is forgiven by the

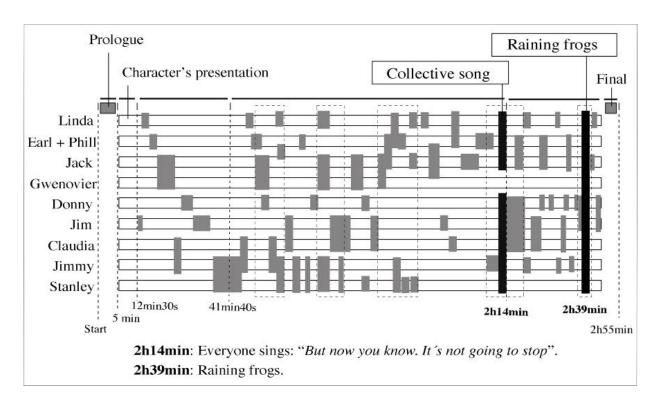
police officer, etc. This is a film which operates with intersections, connections and disaffection, a kind of netting made from interrelated elastics which are connected together, in such a way that a movement on one side influences another on a different side, this one then influences another and so on.

Each story, seemingly independent, is represented on a narrative frame with a parallel structure. I.e. at certain specific cuts, there is a jump in time in the diegesis to show what else has happened during the part we have just seen. We therefore note that the different stories in Magnolia respect the same timespace but do not share the same physical-space. For example, while Jimmy is hosting "What do children know?" on the television. Claudia meets Jim at her house, Earl is dying in his bed, Franck is being interviewed and Donny is looking for love in a bar. These different parts of the narrative are supposed to happen simultaneously but due to the narrative temporal constrain of the cinema, they can only be shown in a succession and an order previously chosen by the director (or editor). The vigilant viewer should make an extra effort to connect each part and piece the big jigsaw back together.

The earthquake trick used by Altman in *Short Cuts* (see figure 8) then later on by Figgis in *Timecode*, in

2000, helped the *diegetic* reunification. For *Magnolia*, Anderson understands that he needs a similar tool if he wants to win back his public, and undertakes two completely unexpected situations: on the one hand he has the courage to make all characters sing the same song (at the same time, 02:14:00), who at this very moment are scattered around the city. On the other hand, he reunites all the characters in a grand finale of "raining frogs" which ends up influencing everyone's destiny (02:39:30) (see figure 9).

acters who end up crossing paths and influencing a future which was already defined; alternative narratives where sometimes the only link between the parallel stories is simultaneity. For Suzanne Duchiron, this trend is reflecting on a disrupted society and one which is governed by a world of collision, shock and confrontation (Duchiron, 2007). The layout of extremely complex, inter-twined, broken-down and interdependent scenarios is unique to a narrative deconstruction, which is nothing but a mirror maze of our society.



09 | Distribution of parallel stories in Magnolia.

In Magnolia (as in Short Cuts for that matter) the trend is in the fragmentation of the narrative and the separation of the characters and their stories. The chronology of the narrative, deconstructed to the detriment of the characters' actions, no longer respects the temporal succession. Magnolia, this multi-narrative film brings the fragmentation back to life, as well as all the broken "mosaic" parts which must be joined back together in order to create a valid and satisfying meaning. The simultaneity is only visible, and the parallel stories are only grouped together, in certain cases and as the viewer sees fit. As examples, we could have used Crash by Paul Haggis (2004) or Babel (2006), or even Amores Perros (2000) by Alejandro Iñarritu, since they all highlight separated narration, stories about parallel worlds or seemingly independent and far-away char-

CONCLUSION

Lev Manovich has already considered it: the arrival of the era of visual effects and digitalisation opens the door to a new era in cinema (Manovich, 2001)¹². But, the increasing use of special effects and digitalisation in contemporary cinema, and especially Hollywood cinema, instead of making it more liberated, makes the film narrative a slave of its own history. In fact, all the visual effects show is a bad portrayal of the separation from the Aristotelian narrative model, always lead by the characters, their dialogue and actions. We should look at things from another angle and try to differentiate the Story from the Narrative. Since digital cinema has this capacity

¹² Manovich analyses, under the semiotic theory, what he calls the fundamental forms of new media, i.e. *the database and the algorithm* and compares them with cinema.

to work in a richer and more flexible world of visual and sound effects than film, it has the potential to work with a narrative free from storytelling, scene and dialogue. We can imagine very quickly that this condition of contemporary cinema has more potential for a so-called interactive film narrative than at any other time in cinema history. Of course the success of this is not definite and the connection with interactivity is not as simple as all that. To tell a story is to bring it into a determined time-frame, this is a connection which is very time-sensitive. To invoke moments of interaction for the viewer means suspending the narrative, cutting the narrative succession, it is about giving the choice, and especially, interrupting the magic of the image and losing the illusion of the moment.

Therefore, we are at a standstill. For Peter Lunenfeld this could even be a failure, a kind of hyper hybrid which would never have succeeded. It is as if someone asked us to "imagine a cinema screen which surrounds you, a panoramic scene where you can choose which action to watch, zoom in on certain events and see the scenes differently to another viewer" (Lunenfeld, 2002:378). Although, it is precisely the word imagine that Lunenfeld uses to consider that interactive cinema can only fully exist under almost mythological conditions. For Lunenfeld, one of the main myths of interactive cinema involves believing that new technology will finally free it from its narrative state: "This is the idea that new technology will not only generate new stories but also new ways of telling these stories" (Lunenfeld, 2002:385). In fact, what we have seen up to now is that the impact of new technology on cinema has not really supported the narrative, but has rather condemned it. The discussion has therefore shifted. New technology gets rid of the narrative rather than giving it more value. To consider that a simple passage of a film narrative on a non-linear digital network would help create a new type of narrative, so-called interactive, is to under-estimate the whole history of cinema and a whole learning process of the cinema viewer. So how should we consider cinema in order to find an interactivity potential, which would not implicate its own narrative?

For Glorianna Davenport and according to a fictional approach, it is about "celebrating the electronic narrative as a process where the author, a representation system in a network and a public actively collaborate in the co-construction of a given meaning" (Davenport, 1999:446-456). For Davenport, the interest is not only in the construction of a new meaning, but also in the necessary conditions to get there, i.e. in the production elements (author, public and digital technology). The author must work in advance on his narrative in order to consider the

multiple options; the digital network must allow a third party to make choices; and the public must be an active partner in the construction and presentation of the story. In fact, the interactive film narrative must make the viewer believe they have a certain amount of control over what happens on-screen. Make them believe that if they move the screen the screen will move, that if they choose to go to the right, the image will move to the right, that if they decide upon a character, their viewpoint on the narrative will depend on the viewpoint of the chosen character, etc.

At the end of the day, and concerning the film narrative, the cinematographic experience calls for another outlook. On the one hand, the layout of the narrative must be reconsidered so that the variations can be played with (put in order or disorder), on the other hand, the *diegetic* time must be restructured and narrative repetition must be considered (frequency). Finally, the stories must be linked together and the objective coincidences of the narrative must be accepted (simultaneity). All that with the risk of being left a prisoner to a cinema that no more authorize renovation and lets itself wander along the pathways which will one day lead it to its disappearance, and this is no-one's wish.

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References.

BALCOM, David (1996), Short Cuts, Narrative Film and Hypertext. Internet document: http://www.mindspring.com/~dbalcom/short_cuts.html (consulted on the 18th of July 2008).

BELLOUR, Raymond (2004), "Le parti pris du réel", *Trafic*, no. 49, Spring.

BOISSIER, Jean-Louis (2004), *La Relation comme Forme. L'interactivité en Art*, Geneva, MAMCO.

BORDWELL, David (1985), *Narration in the Fiction Film*, Madison, The University of Wisconsin Press.

BIZZOCCHI, Jim, *Run, Lola, Run - Film as Narrative Database*, Internet document: http:// web.mit.edu/commforum/mit4/papers/bizzocchi.pdf (consulted on the 15th of July 2008).

CAMERON, Allan (2008), Modular Narratives in Contemporary Cinema, Palgrave Macmillan Ed.

DAVENPORT Glorianne; MURTAUGH M. (1999), "Automatist storyteller systems and the shifting sands of story", *IBM Systems Journal*, vol. 36, no. 3. Accessible at: http://mf.media.mit.edu/pubs/detail.php?id=1311 (consulted on the 15th of July 2008).

DUCHIRON, Suzanne (2007), "Les films mosaïques, la plurinaration symptôme d'un monde en déconstruction", Stardust Memories, nº 18, April.

GENETTE Gérard (1972), *Figures III*, "Poétique", Paris, Seuil Editions.

HASSLER-FOREST, Dan, Multiple Narrative Structures in Contemporary Cinema, Master's thesis, University of Amsterdam, April 1999. Internet document: http://www.euronet.nl/users/mcbeijer/dan/mns/index.html (consulted on the 18th of July 2008).

LUNENFELD, Peter (2002), "The Myths of Interactive Cinema", in Ryan Marie-Laure (ed.), *Narrative Across Media*, University of Nebraska Press.

LYOTARD, Jean-François (1994), *Des dispositifs pulsionels*, "Debates", Paris, Galilée Editions.

MANOVICH, Lev (2001), *The Language of New Media*, The MIT Press.

NELSON, Theodor H. (1981), *Literary Machines*. Swarthmore, Pennsylvania: self- published.

ZIMMERMAN, Eric (2004), "Narrative, Interactivity, Play, and Games. Four Naughty Concepts in Need of Discipline", *First Person*, Noah Wardrip-Fruin and Pat Arrigan (ed.), Cambridge, London, MIT Press.

Referenced Films.

5x2, François Ozon, 2004.

Amores Perros, Alejandro González Iñárritu, 2000.

Babel, Alejandro González Iñárritu, 2006.

Elephant, Gus Van Sant, 2003.

Groundhog Day, Harold Ramis, 1993.

Irréversible, Gaspar Noé, 2002.

Magnolia, Paul Thomas Anderson, 1999.

Memento, Christopher Nolan, 2000.

Rashômon, Akira Kurosawa, 1950.

Short Cuts, Robert Altman, 1993.

Smoking / No Smoking, Alain Resnais, 1993.

Vantage Point, Pete Travis, 2008.