

Is interactivity in interactive documentaries exploited at its full potential?

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Abstract

This paper investigates the most employed choices of interaction in interactive documentaries and how they are critical factors in shaping the experience of the user that could potentially create a new perception of reality. Linear documentary theory is analyzed, in order to set a definition of its non-linear counterpart. A categorization of the iDocs is then outlined and the most used choices of interaction are discussed, based on narrative and game theory and the media employed that would shape the experience. Three case studies, representing three different modes of interaction, are analyzed, showing how different choices of interaction can lead to different negotiation of the reality, potentially changing the user's perception of it.

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Introduction:

“Today we are witnessing the emergence of a new medium—the metamedium of the digital computer” says Manovich (2001:6) in the introduction of his book “The language of the new media”. The digital medium affords interactivity, but not only a cognitive interactivity, like for example a book or a play, also a physical one: in this new scenario, the user is entitled to make a choice, she is *pushed* to do it. In terms of narrative, the shift was huge: passing from the authorial responsibility of storytelling, of course subjective but still fixed to the author point of view, to an open and unpredictable user-prompted one with the potential of many *subjective* stories, as many as the people of the world.

Videogames have been dealing with non-linear narratives from the very first beginning, almost 40 years now, and the results, in terms of ways to interact with the story, are astonishing: from a italian plumber jumping on turtles to real interactive movies, able not only to entertain but also to move. Both games and movies though deals with fantasy characters, temporary representation of viewer/player with whom they share goals, emotions, conflict, joy and sorrow. It is the realm of the fiction where the viewer knows that those people represented are not real people and that the whole story is nothing else that the product of the imagination of the author: that restless plumber is not even a real person! It's virtual, it's fake. It's not real. The repercussion on their life is therefore quite limited.

Documentaries, on the other hand, refuse this fictional approach in behalf of a more factual one about what is being narrated. They deal with reality, and so do their interactive counterparts: the interactive documentary. They can take different forms and shape, depending on the media that mediate them: what is key is the aim to represent reality.

Giving the opportunity to interact with something that deals with reality has huge potentials: the viewer/player has the opportunity to interact with something that is not fictional anymore, but that could potentially have repercussion on her reality, shaping it and sometime changing it. Choices taken in an interactive documentary don't only affect the narrative flow but, as a narrative about reality, have the opportunity to actually impact on the way the viewer/player perceive reality. The problem is that most of the iDoc created so far uses a type of interactivity which is the same one used in games or online-surfing. Many iDocs are just linear-documentary shaped by the internet affordances, they are still interactive, but they miss their real opportunity: using interactivity in a way that could potentially affect the reality of the players/viewers and so, affect the way they perceive it. Instead of creating multiple, subjective and personalized narrative, like in games or stories, the interactive documentaries could actually create, as narrative about reality, multiple, subjective and personalized realities, that would potentially affect the way we live. Despite this huge potential, this opportunity is not taken at its full. This paper will investigate how different choices of interaction could

lead to a different negotiation of reality, that, in some cases, could affect, in a meaningful way the viewer/player's perception of it.

Through a review of masterpieces of linear and non-linear narratives theory, the first chapter is dedicated to a definition of interactive documentary, contextualizing it from the beginning of the genre, in order to understand what are the main concepts that inspired it and possible future developments. The second chapter is dedicated to highlight the forms of interactive documentary that has been already theorized: the modes of interaction (Gaudenzi, 2009:online) can be considered the political and artistic statement of purpose of the iDoc, that would inevitably shape the choices of interaction that the viewer/player will be able to perform. That will lead to the third chapter, which is about the most important variables, the form of interactivity, the gamification of the experience and the media used, that would shape the choices of interaction in iDocs, highlighting the main consequences they have on the experience. The analysis of three cases studies then will close the paper, three different interactive documentaries that differ for choices of interaction and actual repercussion of the viewer/player's life.

This paper will only take in account documentaries created to be enjoyed through a computer or a mobile device. Many documentaries have been created on DVD or Video Game Console (the DVD *Lagos Wide and Close* and *Medal of Honor: rising sun*, the latter a videogame for Sony Playstation that recreates also with documentary purposes the battle of Pearl Harbour of 1941), but the close nature of those systems prevent a type of participative interactivity that will be further analysed. In this scenario, the viewer/player is also a user and a reader. From now, it will be referred as VURP (viewer, user, reader and player).

1. Interactive documentary: a definition.

In order to understand what an interactive documentary is, we must turn back a little bit and understand what a linear documentary is in the first place. The theorist Bill Nichols starts his book 'Introduction to documentary' with the phrase 'every film is a documentary' (Nichols, 2001:1), stating that every film can be divided in two main categories: documentary of self-fulfilment and documentary of social representation. We would call the first one "fiction" and the second "non-fiction".

The term "non-fiction" suggests a disagreement towards the concept of fictionality as an imaginative creation, embracing the notion of truth, reality and factual: inventing reality versus recording reality. Recording reality though can be tricky since 'the creation of an image through a camera lens always involves some degree of subjective choice through selection, framing and personalization' (Sturken and Cartwright, 2001:16), the myth of photographic truth: media can never make an unmediated copy of reality.

By recording reality, we might mean that 'that which occurred in front of the camera remains identical to the actual event we could have witnessed in the historical world' (Nichols, 1991:25), an agreement between the author and the viewer of no (or at least less) control over what is happening. Documentaries do not reproduce reality, rather they represent it. For Stella Bruzzi, the author while filming the world is automatically influencing it, losing every purpose of objectivity. The reality that the filmmaker is representing is 'a negotiation between reality on one hand and image, interpretation and bias on the other' (Bruzzi, 2000:4).

According to Nichols and Bruzzi, reality is not the only keyword in order to understand what a documentary is: subjectivity seems to have an important role as well. What seemed to be a film genre dedicated to the reality, to the facts, leaves plenty of room to the concept of interpretation and negotiation of what is real.

The main thing that interactive documentary (iDocs) and linear documentary (Docs) have in common is the ambition of representing reality, to deal with the world trying to exert less control possible, but the main difference between them can be immense: who is negotiating the reality represented? The author? Or the viewer? It seems that three main actors are called into question.

In iDocs, the viewer is expected not only to interact with the reality represented cognitively, but also physically and this factor can actually affect the narrative coherence of the narration. Not only that: in some cases, the viewer is expected to create his own version of reality, bringing him outside the passive act of viewing towards an active role of creating. From this point of view, claiming that iDocs is a natural evolution of Docs can be misleading: now, she is not only a viewer, but also a user, a reader and a player, depending of the media

that mediate, and negotiate itself, the reality that is being conveyed.

This focuses the attention on another important factor in terms of negotiation of reality: the media. Each medium has its own affordances and peculiarity that would inevitably transform the object represented. Marie Laure Ryan, arguing on the Murray's statement 'Narrative beauty is independent of medium' (Murray, 1997:273), asserts that, given the abstract cognitive structure of narrative, it can be called to mind by different media 'but each medium has different expressive resources, and will therefore produce different concrete manifestation of this abstract structure' (Ryan, 2001, online). McLuhan even states that the medium itself is the message 'because it is the medium that shapes and controls the scale and form of human association and action' (McLuhan, 2004:130): oral tradition has its own affordances and possibility to interact, so has the printed word and so has the digital medium.

Of course, the digital medium seems to be one of the most appropriate for interactive narrative: as Murray (2004:2) explains, its procedural ('it can embody rules and execute them'), participatory ('it allows us to manipulate its objects'), encyclopedic ('it can contain more information in more forms than in any previous medium') and spatial ('it can create a world that we can navigate and even inhabit as well as observe') characteristics, and the possibility to include still images, moving images, text, audio, video and three-dimensional navigable space, puts it on the interactive throne.

The spread and technological progress of mobile devices can add a layer of mobility and unpredictability to the experience because of the development and proliferation of geolocation technologies and the possibility to connect to the virtual world through Wi-Fi and 3G mobile connection. The reality is about to be negotiated again, with other variables: in the case of a mobile device, smaller screen but huge chances of mobility and connectivity. Of course, the choice of the media that an iDoc would use is up to the author that, as in the linear documentary, has a huge role in terms of shaping and negotiating the reality of the what is being represented.

The author can be considered the designer of the interactive experience. The non-linear narrative counterpart is in charge with the editing and filming, making her the only responsible of the delivery of the message which would be then cognitively interpreted by the user. In iDocs this dividing line ("who is creating reality?") seems to have blurred. But of course, her role in the negotiation of reality is still essential, it is just been put in perspective with the admission of the VURP in the reality-making process.

A definition of iDocs starts taking shape, after having framed the possible variables of negotiation of reality. It seems that iDocs can be described as a negotiation of reality on one hand where the author, media and VURP are the negotiator.

Analyzing some of the most relevant iDocs done so far and the academic documentation about this

topic, a categorization can be drawn in order to highlight the main characteristics that differentiate them, the diversified histories that brought them together and future potential evolutions.

2. Mode of Interaction.

Sandra Gaudenzi categorizes iDocs in four *Modes of Interaction* (Gaudenzi, 2009: online), based on Bill Nichols' six *Modes of Representation* (Nichols, 2001:99). He states that this different modes arises from a sense of dissatisfaction among filmmakers with the previous mode and also from technological advancement of the media involved: in the 60s, the observational mode arose from the availability of magnetic tape recorders and mobile 16mm cameras, that would allow the filmmaker to mediate the story in a different way and so, create a different artifact. From this point of view, same thing happened with the iDocs: the technological advancement of mobile phones and PDAs with a built-in Global Positioning System allowed the creation of a new artifact, and a new experience.

Still, the modes of interaction chosen by the author is also a reflection of her intention, an artistic and political declaration: depending on the level of control the author might want to exert on the VURP or the level of immersion, she is going to choose an appropriate mode of interaction. This is a very important decision in terms of authorial responsibility that would affect the in a very meaningful way the iDoc.

2.1 *conversational mode*

The interaction that constitutes the conversational mode is based on Lippmann's idea of a conversation (Brand, 1988: 46). He thinks that an conversation must be interruptible (interruptibility), an unanswerable request must lead to a smooth transition (gracefull degradation), sentences must be decided on the fly (limited look-ahead), sentences need to feel unpredictable (no-default) and the conversation needs to feel potentially endless (impression of infinite database). He was the director of the Movie Aspen Project, a virtual travel space where the user can drive through a virtual representation of the city of Aspen on a screen. The idea behind the project was the possibility for the user to interact with the software that would smoothly adapt to her inputs. Even though the procedural ability of the computer were quite limited at the time, it was a way to describe reality (the city of Aspen) simulating it. The role of the Author is to create a space the could facilitate the conversation between the VURP and the space in the best way possible.

An example of this mode of interaction is *America's Army*. It is a docu-game created by the US Gov-

ernment in an attempt to document reality, otherwise closed to a civilian, of a battle: ex-soldiers were asked to help recreating sounds and situations that could simulate the reality as closer as possible. Despite the game logic of it, *America's Army* could be considered an iDoc since the will of the author was to recreate a reality, the battle, simulating it, exploiting the procedural characteristics of the digital media.



Fig.1: America's Army

2.2 hitchhiking mode (Hypertext)

This mode, also known as hypertext, is probably the most used in iDocs. The idea behind it is very old, certainly older than the computer (iChing was created 3000 years ago) and it is based on the idea of creating a non-linear narrative rearranging *lexias* (or block of text) through a branching structure the user could navigate, not create. These lexias are fixed. Its closed nature makes it the perfect mode for the author who wants to control the flow of information, make the user explore the possibilities but still be in charge of the narrative. Infact, the VURP could only jump from link to link, like surfing the web. That is also another reason that made this mode so popular: it exploits internet affordances. The control over the narrative and internet conventions made it the most employed mode in iDocs, but the interaction is quite limited.



Fig. 2: In *Forgotten Flags*, the VURP is able to browse through different lexias by clicking on them (right)

One example of this mode is *Forgotten Flags*: this iDocs is about the fear of association with right-wing nationalism of Germans during the soccer world cup of 2006. Through different video-lexias, the VURP is able to explore the reason that made overcome this fear in the people interviewed. Again, the database is closed to any participation, the only thing that she is able to do is explore.

2.3 participative mode

Unlike the conversational and the hitchhiking, the participative mode is characterized by being open to the VURP contribution. It is not a closed system designed by the author anymore, now the VURP has the chance to add her lexia in order to create the narrative and, with that, her version of reality. The spread of cameraphones and wi-fi connection made this process natural and quick, millions of potential filmmaker out there, ready not only to be influenced by the system, like with the conversational and hypertext, but to influence the reality that is narrated. The VURP becomes part and parcel of the narration, switching her attitude towards reality from “what do you have for me, author?” to “what can I give you, author?”. The database is not fixed anymore, neither has to give the idea of being infinite, but it is growing, lexia after lexia, created by the user that can interact with it.

Iranian Stories is a website created to give the chance to people involved in the Iranian protest to have a place to speak. The VURP has the chance not only to browse the interface and discover other people’s point of view but also upload their version of reality. Although the database is open to the VURP contribute, the author is still, in this particular example, in control of the editing part, through an editorial process of evaluation of the lexia, giving less control to the VURP.

2.4 experiential mode

With the arise of Mobile Phones and PDAs with built-in GPS, a displacement of the attention from a private and solitary dimension of the interaction in favour of a public and located one took place. Thank to the locative media, the VURP now is able to explore the space, leaving the virtual and immersing in the physical world, *experiencing* it, creating a kind of interaction which is unpredictable, based on different variables: not those designed by the author anymore, but the ones that exist in reality. The negotiation of reality is now mediated by a different medium that afford an interaction that doesn’t respond only to the virtual logics anymore, but also the physical logic, making the VURP *experience* the space she is occupying, adding a new layer of perception, the *reality* layer, to the experience, changing it drastically.



Fig. 3: Core Sample

An example of this mode is *Core Sample*, a GPS-based interactive sound walk that mixes the past and the present history of Spectacle Island, in the Boston Harbour. In the piece, the VURP is able to experience the reality on two different levels, the real one, a recently created landfill park, and the virtual one, made of sounds and interviews reflecting the past life of the location made of grease extraction plans, casinos, hotels and people living there. Thanks to the GPS devices used in the piece, based on the location captured, the VURP would find himself in two different realities, the physical and virtual, that would merge into a hybrid one.

3. Choices of interaction.

The aim of this chapter is to delineate the variables that could shape the choices of interaction in different interactive documentaries. Of course, every choice, and the possibility for the VURP to make one, is designed by the author, depending on the level of control she wants to give on the narrative flow. The viewer of non-linear documentary has the chance to intervene on the narrative flow and she does it through choices, inside or outside the designed interface, that would constitute the type of experience that she will be able to live that could resolve into a different perception of reality.

3.1 exploratory and ontological interactivity

Mary Laure Ryan (2001: online), adapting Aarseth's user function in *Cybertext* (1997:64), defines 4 strategic forms of interactivity on the basis of 2 binary pairs: internal / external and exploratory / ontological. In the internal mode, the user, in a first-person perspective, or through an avatar, projects herself as a member of the fictional world while in the external mode she situates herself outside the virtual world. In

the exploratory mode, the user is able to navigate the database, deciding the path to take but she has no real impact on the virtual world. The ontological form happens when the users 'have the power to change the world' (Ryan, 2005: online).

Applied to iDocs, these two antithetical modes represent the possibility, for the VURP, to either explore a closed database without having the chance of inserting her contribution, her version of reality, or add her definition of reality, intervening in an active role. The main difference in terms of interaction is between a passive and an active *role* of the VURP, between rearranging lexias scripted by the author and creating lexias scripted by herself, *creating* reality in an authorial way.

The external and internal can be seen as an option, decided by the author, to increase the level of immersion of the VURP. Immersion is, with agency and transformation, one of the 3 key aesthetic categories for the analysis of interactive story experiences proposed by Murray. Immersion is the "sensation of being surrounded by a completely other reality' (Murray, 1997:98), the Coleridge's notion of 'willing suspension of disbelief'. In a Docu-Game like *America's Army* the feeling of immersion is very high, this makes the VURP suspend her disbelief, accepting the internal logic of the experience, which is, in this case, shooting people up. An internal mode, seen as the personification of the VURP in the iDocs, can be seen as a way to feel immersed in another reality instead of staying out of it.

Rayn proposes that this two pairs of variables can be tied together forming four combinations, internal-exploratory, external-exploratory, internal-ontological and external-ontological. In terms of iDocs, it is probably not necessary to divide between internal and external when it comes to ontological since the contribute of the VURP concerns always herself: she is always the protagonist of the reality she is describing, so in a way, the interactivity is always internal.

The main difference in terms of choices of interaction is related to the exploratory and ontological. The difference in terms of user agency, defined by Murray as the 'satisfying power to take meaningful action' (Murray, 1997:126) is critical: in an ontological environment, the VURP is required to add her reality, in the system, putting her in a different role, that could, potentially, change her own perception of reality. Mateas states that the player (but in our case we would call him VURP) will experience agency, the most fundamental of Murray's 3 category from his point of view, 'when there is a balance between the material and formal constraints' (Mateas, 2004:25) with the material constraints being what the VURP is able to do and the formal constraints being what the VURP would like to do: when there is a balance between what a VURP would do and could do, there is agency. In an hypertext, the VURP can browse through different choices, could click and navigate through a timeline, a picture and choose a path to take, but the agency that she could experience in a participative iDoc, adding a brick to the narrative wall, is much higher.

The passive *role* of interaction determined by clicking, browsing, choosing the lexia she would like to watch, or read, compared to an *active* interaction made of creating, writing, recording and taking pictures has huge poten-

tiality in terms of negotiation of reality, that most of the time is not used. Many interactive documentaries are linear documentaries shaped by the affordances of the internet: clicking, browsing and rearranging has become, because of the universal spread of the web, easier and more natural than using a remote control.

A part from those, there are other options that could create a different engagement, creating other type of choices: the gamification of the experience and the choice of the media, that would shape once again the interaction between the user and the iDoc.

3.2 Gamification of the experience

Because of the procedural characteristics enunciated by Murray (2004: 2), the ability to embody rules and execute them, the digital media is the perfect environment for Video Games. The possibility to interact with the artifact is an aspect that is so important that completely changed the rules in iDocs: from viewer (cognitively interaction) to VURP (cognitively and physical interaction). Some iDocs authors, closer to game designers than linear filmmakers, borrowed game logic elements in shaping the interactivity that could effectively change the experience.

Zimmerman (2004: 160) illustrates games as:

'a voluntary interactive activity in which one or more players follow rules that constraints their behaviour, enacting an artificial conflict that ends in a quantifiable outcome'

Analyzing the keywords introduced by his definition of games (conflict, outcome and rules), it is possible to highlight their employment in iDocs and how they can shape the experience, in some cases, in a very significant way.

Collapsus is an interactive experience that mixes interactivity, animation, fiction and documentary. 'It looks into the near future and shows you how the imminent energy transition affects a group of ten young people, who appear to be caught up in an energy conspiracy' (Submarinechannel, 2010: online). It is a fictional story that tries to recreate the reality that the player would experience in an impending world's energy crisis. The online press release states that 'the audience for documentary is dying. The average age of a television documentary viewer is 55 and up' (ibid.): in order to attract a younger audience, the authors opted for game elements that would work as decision points between lexias, enacting a conflict between the VURP and the system, for a quantifiable outcome, which is going on with the story. In this i-documentary, the VURP is asked to decrypt a message in order to discover the clue that would lead to the continuation of the story. In game theory, the concept of conflict and outcome are well known: the game of chess, for example can be seen as a conflict between two players that ends with a quantifiable outcome, either win or lose. Videogames moved the same logic but versus the system, even if it is still possible to compete against other players, like

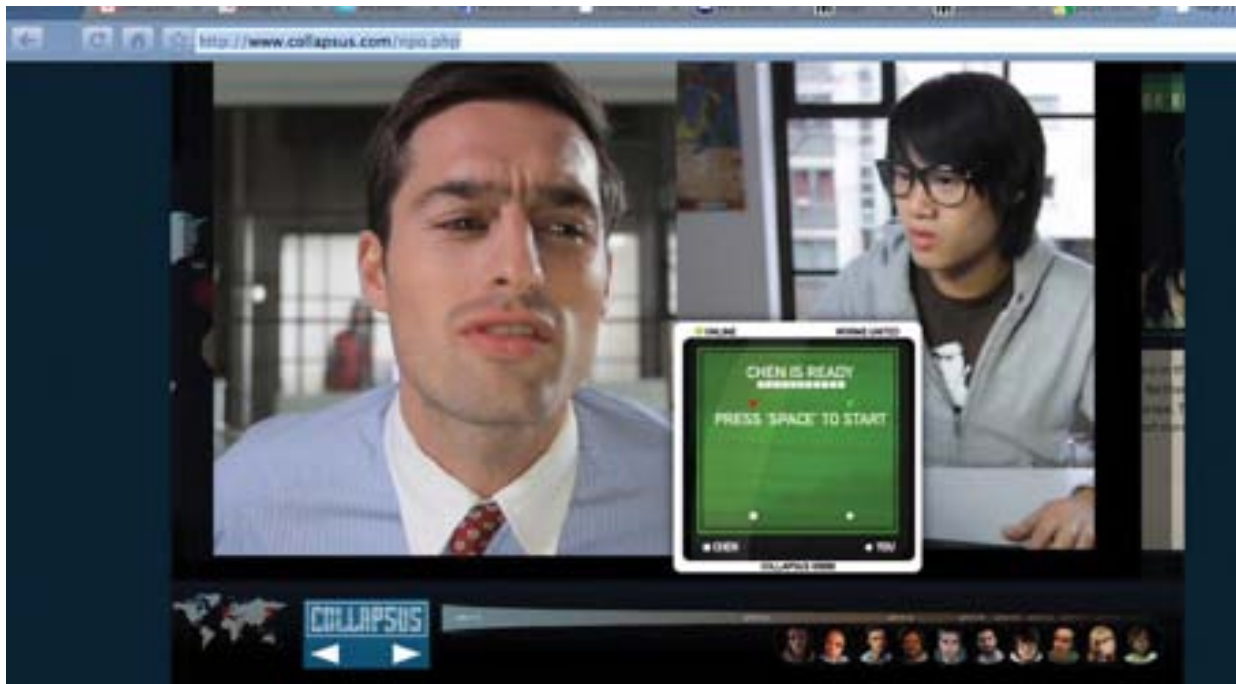


Fig. 4: Collapsus

in multiplayer games. In the case of *Collapsus*, the conflict is a puzzle because 'it has a right answer' (Kim: online). In order to go on with the story, the designer decided to create a conflict between the user and the system, which has one right answer, that need to be overcome. This can be a critical step because the flow of the narration depends on the ability of the VURP to overcome that step, even that might not happen resulting with the impossibility to go on with the story, not to mention the possibility to exasperate the VURP not interested in problem-solving.

Another tool at the author's disposal in terms of gamification of the experience is the setting of rules that could constrain the behaviour of the VURP. Zimmermann and Salen divide the rules of a game in 3 categories: operational which are those rules that are 'synonymous with the written-out rules that accompany board games and other non-digital games' (Salen and Zimmerman, 2004: 130), constitutive which are 'the underlying formal structures that exist "below the surface" of the rules presented to players.' and the implicit rules which are the unwritten rules of the game that 'concern etiquette, good sportsmanship, and other implied rules of proper game behavior'. The constitutive rules are those that the author has the chance to manipulate in order to constrain the behaviour of the VURP and with it, change the experience and the interaction: they become the formal structure of the game, determining its uniqueness.

That's what happens in *Rider Spoke*, a locative game set in many cities of the world, which focuses on the relationship of the player with the city. During this piece, she is asked to ride the bike in the centre of the city, at sunset, with a GPS device attached to the bike that would track her location and to answer to questions that a prerecorded voice would ask through the device. The behaviour - constraining rules that the authors came out with, biking at night in the city at sunset, are designed in order to shape the experience the player would have. This would have repercussion on the way she interacts with the system, on the choices she takes.

3.3 *The Locative media*

If the iDocs are a negotiation of the reality on one hand where the author, VURP and the media are the negotiator, the choice of which media to use is a huge variable in that process. If the computer, because of its interactive affordances, is still the most used media for iDocs, a new trend has been coming out in the last years.

The spread of Mobile Phones and PDAs with built-in GPS moved the interaction outside the private and solitary condition of the computer in favour of a public and situated one. These devices share with the computer the properties enunciated by Murray (procedural, participatory, encyclopedic and spatial) and the possibility to be connected to the web, with the benefit of being easier to be carried around. This has the consequence of taking the virtual world into the physical world.

In this new situation, the interaction, that once was relegated into the computer screen and was strictly virtual, is now subjected to a new layer of perception, the physical world, that drives the VURP to confront herself with a new set of variables. The interaction situated in the real world creates a 'hybrid space' (De Sousa and Silva, 2006:262), a space where virtual and digital coexists.

In this space, the choices are not only motivated by the digital narrative flow (clicking on this link, playing this video) but depends also on a set of variables that are related to the physical world (*Is it raining? Is it going to be raining soon? Is this neighborhood safe? Is it safe to go there at night? Is it far? Is it going to be crowded? Do I want to be in a crowded place?*). From this point of view, compared to a hypertext where the only action the VURP is able to take is choosing the path, so click on links, the degree of agency the VURP experience increases prominently, giving her a new layer of complexity on every decision she might take. In a location-aware environment, the VURP doesn't only interact with the system but she *experiences* the interaction. Ending the experience can also not be that easy as it is in an digital environment: shutting off the physical world is not as easy as shutting off the virtual counterpart and with that the experience.

In a project like *34 North 118 West*, the participants are asked to walk the street of Los Angeles with a Tablet PC with built-in GPS. The focus of this project is *narrative archaeology*, as the people walk through the area, the GPS reading triggers audio fragments in the headphones, adding a layer of perception to the story: the reality they are walking is enhanced by the virtual world. The aim of the project is to show two temporal (and experiential) layers about two different Los Angeles (the one in the past, prosperous industrial area, the actual one, abandoned and decadent), through the activation of sonic ghosts perceived by the wandering user through the headphones.

In a digital hypertext the narrative is unraveled to the user as she clicks on different node paths: the answer is just one click away. In a location aware system, such as *34 North 118 West*, the user is dragged out of the purely

mental state of the computer and embodied in the real city which has the effect to, not only make her experience a whole new layer of perception, but also to influence the choice of interaction based on different variables: now the VURP is the cursor of the mouse, the interface is the physical space she is walking and the interaction is embodied in the physical world, so clicking on the new lexia can be not that easy and devoid of effect on herself like before.

Of course, the level of control of the author is still quite high in a context-aware hypertext: the lexias are fixed, the database is closed as the nodes are physically located but still permanent. What is opened and meaningful in this scenario though is the experience of the interaction, that moved from a click-away choice with no actual repercussion to a uncontrollable and unpredictable embodied interaction with potential effect on the VURP. The choice of the media can be a key decision of the author in terms of allowing the VURP to feel and experience the choices that she does.

4. Case Studies

In this section, three interactive documentaries will be analyzed, representing three of the different modes of interaction already discussed, in order to have a broad spectrum of the choice of interaction available.

These iDocs distinguish themselves not only on the type of the media and the form of interactivity but also, and more importantly, on the impact they might have on the reality they are dealing with. For this purpose, *America's Army* will be analyzed, as an example of iDoc that, through a high level of gamification of the experience have a little impact on the VURP's reality, *Prison Valley* as a very interesting example of iDoc that mixes exploratory and ontological elements of interaction that allow the VURP to confront herself with the reality it is dealing and, potentially changing it, and *Rider Spoke* as an example of successful iDoc that deals with the reality of the VURP, her relationship with the city, that, thanks to the choices that it employs, could potentially have an effect of the reality of the VURP and so on her life.

4.1 *America's Army*

America's Army is an online multiplayer FPS created by the U.S. Army in 2002 with two main intentions: to inform and educate the civilians about a reality, the experience of the army, normally precluded to them and to recruit people, through an immersive and appealing simulation of the battlefield. It can be considered a conversational iDoc where the VURP is allowed to navigate the virtual space. Calling it a simulation of a battlefiled is reductive: *America's Army* is the recreation of the Army experience. After having installed the videogame on the computer, the player is asked to perform a compulsory basic training before she enters

the game realm, 'which for an inexperienced player can take more than 30 minutes' (Neiborg, 2005: online), accompanied by a short explanation of the training and the history of its real life counterpart. The developers had direct access to the sites they were going to recreate, as well as weapons and equipment after which a great deal of the virtual material were modeled. Even weapon handling is recreated after official Army procedures: the player would learn how to reload a M16A2 rifle by an ingame animation that simulates the reload. Very interesting is the case of medical training: in order to become a "combat life saver", the player is asked to attend virtual lectures where she would be trained in basic medical procedures, like how to open the airways on a casualty during a battle. After that, the player is asked to perform a test.

The auditory effects used in the game are developed in order to further immerse the player in the virtual world: sounds generated by real weapons were recorded on site and voices of non-player character were impersonated by real US Army personnel, like the drill sergeant in the basic training.

The degree of agency of the player is high, the formal constraints and the material constraints are quite straightforward and balanced: the actions that the player is able to take perfectly balance the formal constraints of the game which are:

- You should kill everybody in the other squad.
- Everything that is not in your squad will try to kill you.

The VURP is able to experience the simulation following Lippmann's idea of conversation, reacting to the system and user's generated inputs creating potential endless possibilities.

The level of immersion is also very high: the "suspension of disbelief" of the player is total, thanks to an immersive virtual world, the player is able to completely immerse in a different world, accepting the implicit rules that it carries, thanks to the procedural characteristics of the media that could recreate a rich audiovisual experience.

Of course, the interaction is structured as a game. The battlefield is the quintessential idea of an enacted and voluntary conflict and the quantifiable outcome is of course winning. Again, the system of rules are as well a recreation of the one that take place during a battle: she has to kill everything that is not part of her squad and if she gets killed, her game stops and the only thing she would be able to do is chatting with other dead gamers. One thing might happen that can have an effect on the player's (virtual) life, which is the possibility of being banned. In the game, there is only one strict rule: never kill one of your squad. The implicit rule stated by Zimmermann and Salen becomes a constitutive one, bonding and behaviour constraining. If that happens, the player can be banned from the server.

The media gives the possibility to the VURP to experience the game in a private one-to-one relationship with the computer, letting her keep the consequence of her action completely in the virtual world. There is no blurred line between the virtual and the physical world in *America's Army*: everything is happening in the virtual world.

In 2006, Joseph DeLappe started an ongoing "online gaming intervention" called "*dead-in-iraq*". The

project is about typing in the chat-box available in *America's Army* the name, age, service branch and date of death of each service person who has died to date in Iraq and, through screenshots, collecting players' response to the intervention (Hammond, Pain & Smith ,2007:online).

Following the Brechtian approach of Epic Theatre, which implies that 'spectators [who] get immersed in the stories lose their critical distance from what is happening on the stage or on screen' (Frasca, 2004:87), DeLappe was able to *extract* the player from the state of disbelief she was floating in and drag her into the real world, made of real people dying in the same situation the game is trying to simulate. The virtual actions of the players starts having real world consequences as shown in the comments (fig.5): in that moment, *America's Army* wasn't a game anymore, nor even a simulation. It was something different, where a different reality was portrayed: a reality that involves all of them as human being, their reality.



Fig. 5: dead-in-iraq

I think they are dates of deaths of soldiers. are those real people??

i dunno ..was thinkin of joinin the army..

i am sriry

Fig.6: Some of the players' responses to DeLappe's 'dead-in-iraq'.

DeLappe experiment on *America's Army* is very interesting because it shows how reality, an inconvenient one for the U.S. Army, can have an impact on the VURP, even in an *playful* environment of a game where everything is simulated and virtual. The far-away reality portrayed in the docu-game gives in to the much closer and scarier reality dragged in by DeLappe: the embodiment of those virtual dying characters that share with the VURP the real world.

4.2 *Prison Valley*

Prison Valley is an interactive documentary about America and prisons. Shot in a little town in the state of Colorado, US, the iDoc starts from the story of Cañon City (36.000 living people and 13 prisons) and its inhabitants to the relationship between the United States and the private penitentiary system and how the 'private prisons are an extension of the capitalist dream' as stated by Frank Smith, one of the characters of the iDoc. The Voice-of-God narrator guides the VURP into a reality made of young inmates, officials working in huge prisons, journalists and activists, relatives of convicts, shopkeeper and citizens all connected by a common aspect: the relationship between them and the prison system.

The iDoc starts with a 3 minutes introductory video that takes the VURP to her first destination, the Riviera Motel, where she virtually lives in during the iDoc, and introduces her to the first character, one of the many, the manager of the hotel that would narrate the VURP her story and her reality. The motel room is designed as a simulation of a real motel room and will work as a dashboard: in it, the VURP could collect all the material that she finds during the visits, have access to Forum where she can meet other "guests" (or VURPs) and further explore the topic through extra materials provided by the authors. Even though it is a simulation of the motel room, the interaction is very far from the idea of conversation theorized by Lippmann: in fact the VURP is not able to jump the bed or set the thermostats, but only to choose between a number of options decided by the author.

From this point of view, *Prison Valley* is an hypertext, an iDoc following the hitchhiking mode. The control of the author on the story is very high, rarely the VURP is in control of the situation: from the point of view of the narration, the author doesn't allow most any hijacks from the designed path. The lexias are organized to be experienced almost in a linear way, in order to control the flow of information. The physical interaction is quite limited when it comes to absorb the videos, the only thing the VURP is able to do is delve into a part of the story, if interested, or "hit the road" back. Every time one lexia finishes, the VURP ends up in her motel room, where she is able to check the clues (documents, pictures and videos with which she could further explore the topic) that she collected during the visit, but the lexia that she would be able to choose in order to get on with the story would be the one designed by the author. Here, the author is not only in charge of the shooting, but also of most of the editing part, leaving the VURP with a low degree of agency: what she is able to do is overall quite limited. Clicking and browsing seems to be the only way to interact with the iDoc, the overall feeling of "what do you have for me, author?" is the prominent and the negotiation of the reality of the VURP, because of the high level of control of the author, is mainly cognitive. No wonder the author were able to make a linear documentary out of it: from this point of view, *Prison Valley* looks like a linear-documentary shaped on the affordances of internet.

But that's when *Prison Valley* gets interesting: the exploratory form of interaction is not the only one



Fig.7: Prison Valley

in the iDoc. Through the dashboard, the VURP is able to access chat rooms and forums created on the website that would allow them to, not only get in contact with other VURPs (the number of people watching the iDoc is always shown in real time in the interface), but also to get in contact with the characters of the iDoc, allowing her to express her opinion about what's being said and so negotiate the reality in an ontological way. By giving the chance to contribute with the VURP's version of reality, *Prison Valley* can be considered also a participative iDoc, where the database grows with the contribution of the interactors, even though it happens *outside* the narrative path. Infact, the VURP is not adding lexias that would then be inserted in the narration and that could possibly alter it (which for example happen in *Iranian Stories*), but it happens on the level of the discussion of the topic. The interaction though can be very meaningful because the author, in this case we could call the *mediators*, organized chat session with the character of the story, giving the possibility to the VURP to negotiate the reality potentially in a very significant way, crashing completely the fourth wall that divides the character and the audience: to further explore the topic, the mediators also organized a chat session with the french Secretary of State (Pasman, 2011:online).

Prison Valley is a cross-media documentary: an iPhone app was also launched in conjunction with the non-linear documentary, a one hour long linear documentary was aired by Arte' almost one month after the launch of the web version, then an exhibition in an Art gallery in Paris and a book was published. The iPhone app, although the already mentioned affordances of the locative media, contains the introductory video of the doc, the possibility to browse some of the pictures of the iDoc and allow the user to "join the conversation" through the forum. The non-linear documentary though was created to be enjoyed in front of the computer, that would allow the VURP to also interact with the participative aspect of the iDoc.

From a point of view of the story, *Prison Valley* is an hypertext, and a very strict one. The chance to intervene on the narration is very limited and the role of the VURP in the negotiation of the reality is more cognitive than physical. The organization of the lexias in a chronological way and the impossibility to rearrange them makes it an iDoc with a very low form of exploratory interactivity.

On the other hand, the authors were able to use in a very compelling way the 2.0 features of internet and create a tool with which the VURP can add her version of reality, as what happens in a participative interactive documentary, even if her intervention is not on the level of the story, but somewhere else (and judging from the number of contribution on the forums, the confrontation of the VURPs' reality didn't happened that much).

If the artifact has to be considered as the main thing, *Prison Valley* is an hypertext but on the other hand, if the whole experience has to be considered, then it can be called a participative, but an atypical one, where the participation is not on the lexias, but on what the lexia inspired in the VURP.

4.3 *Rider Spoke*

Rider Spoke is a locative project created by Blast Theory that combines theatre, game play and technology that took place in many city of the world. The participant is asked to ride a bike, at dusk, with a WI-Fi enabled mobile device attached to it. This device, through a prerecorded voice invites her to choose a convenient place where she could record, through the built-in microphone, the answer to a question that the system would ask her. Once she found this *hiding place*, at her complete will, the voice ask her a question that would then be inserted as a "pin" in the virtual map the device shows. If during the ride the participant crosses somebody else's hiding place, the device alerts her to stop, shows her the question that was asked and gives her the possibility to listen to the stranger's answer.

The questions, prompted by a very soft voice are quite broad and general at the beginning but become more and more personal as the game goes on, moving from the participant relationship with the city ("Choose a building to make your own. When you find a building tell me what it is like and what you'd do there.") through more private questions about her fears, emotions and secrets ("Find a clear view of the sky and tell me what keeps you awake at night"), to a potential introspective statement of self-awareness represented by the question "Will you make me a promise?". After having answered all the question and having ridden through the city, the participant can return to the initial point, enriched by the experiential and the emotional repercussion that *Rider Spoke* created.

Rider Spoke can be considered an experiential documentary because the negotiation of reality that the VURP does during the game happens through the experience of the physical space she is riding and



Fig.8: Rider Spoke

through the voices of former participants that left their reality sprinkled in the city. *Rider Spoke* is about them and their relation with the city but ends up being about them only, as citizen of the city and people with different desires, fears and hope.

There are two form on interaction in this project, two different ways through which the VURP can experience it and they are both exploratory and ontological. The system ask the VURP not only to answer to the questions it prompts, but also it alerts her when it found the participant near a place where another VURP created her story. Through that, she explores a limited and defined number of lexias, she can experience old memories, being influenced by them but she has also the opportunity the leave her version of reality, creating a new "pin" in the virtual emotional map that overlays the physical world, a new lexia for future participants. The difference between the exploratory interactivity that *Rider Spoke* is made of is that the author of the maze is not the author herself but it is the past VURP. Here the author created a *white sheet* leaving the authorial responsibility completely in the hand of the VURP. In *Rider Spoke*, all participants are the authors, because there is no *audience*.

Of course, the possibility to increase the volume of the database through the recordings makes the form of interaction of this iDoc also ontological. The level of intimacy and introspection of the questions pushes even further the feeling of "what shall I give to the system?" and since what is at stake on those questions is the reality of the VURP, influenced by other riders' answers, the VURP becomes both input (the recording) and output (the listening of previous recording), making *Rider Spoke* a dynamic system (Dubberly, Haque and Pangaro, 2009:online). The exploratory and ontological forms are bond together since *Rider Spoke* was conceived as an experience that could allow the VURP to influence and be influenced: the recordings are

available only *in situ*, during the experience, not retrievable through a website from home. The VURP has to be there, be on a bike and be in that public dimension that the locative experience could offer: *the listener* must be in the same emotional and experiential situation of *the speaker*.

The city is a very important part of the game/experience. It is to the city that *Rider Spoke* asks the VURP to confront herself, as the place made of diverse group of people with background and identities, the “organization of differences” (de Waal, 2007: online). The locative media is mandatory in terms of experiencing the city that could afford this double perception (digital and virtual). In *Rider Spoke*, the hybrid space creates two different interfaces the VURP can navigate, the virtual, which is the map on the device and the physical one, the city. The VURP is asked to ride the bike and find a place, but there is no control on the location she would choose. The level of agency of the VURP is very high because she is responsible of the decision: in *34 North 118 West*, she can choose between a certain amount of fixed choices that would then be mediated by the locative media, while here the whole city is in her hand. There are no fixed points, there are no right or wrong answers she could take, it is just her and the city. Of course, the uncontrollable and unpredictable variables that the physical world carries are a key component of this game: the VURP could feel tired of biking, could feel cold or could feel frightened of riding a bike in a big city and these variables could definitely change her experience and her journey.

Through the listening and the answering of the question *Rider Spoke* asks her, the VURP would create her version of reality, which is the relationship between her and the city, becoming, the more the piece goes on, the relationship that she has with herself. Even though it is a totally private experience, the line between private and public afforded by the media blurs: the VURP knows that the things that she will eventually say will be listened by other riders. Creating lexias that would then be listened/watched by other VURPs happens with any participative iDoc, but the physical space of *Rider Spoke* enhances the public dimension of the act: listening to real voices of real people in a real city, that shared a piece of their life in the exact same spot where the VURP is standing and being herself a future voice to future participants, allow her to create a place out of a space where ‘space has been seen in distinction to place as a realm without meaning—as a “fact of life,” which, like time, produces the basic coordinates for human life’ (Cresswell, 2004: 10).

Even though this piece is considered, by the author themselves, a game, it is difficult to see it as such. According to Salen and Zimmerman’s definition, there is no definite enacted conflict that would lead to quantifiable outcome, which is probably the quality of the experience itself, and, of course, it is the opposite of “quantifiable”. The only element that could categorize it as a game is the presence of behaviour constraining rules. The creator, or the designer, asks the VURP to experience the space through a specific tool (the bike), at a specific time of the day, answering a certain amount of questions. Still, it is probably not enough to consider it a game, but it is enough to consider it an experience, with constraining behavior rules in order shape the piece, designed in order to make the VURP experience reality in a different way: could be the spirit of freedom

of riding a bike (or the fear of riding it), could be the more relaxed attitude of the city at dusk when the working day is over (or the city that starts to go out and get wild).

Even though *Rider Spoke* was created to be experienced in situ, Blast Theory took part of the “Growing Knowledge: The Evolution of Research” exhibition at the British Library, a showcasing about how innovative research tools might have changed research. *Riders have spoken* is browsable interface portaying a drawn city where it is possible to listen some of the answers riders from all over the world (London, Brighton, Adelaide, Sydney, Linz) answered during their performance. What is really striking is the level of intimacy and introspection of the answer, especially towards the end of the experience. The reality they are experiencing is their reality, it is about themselves, and that becomes obvious towards the “make me a promise” answer. Many of the questions in *Rider Spoke* are about their past, probably created by Blast Theory in order to put the VURP in a reflective and introspective mood till the catharsis of the last promise. From this point of view, the reminiscence of past events (fig.9), plus the reprocessing of it through the public sphere created by the media and the comparison with other VURP’s reality, could be the trigger to self-awareness that could lead to a potential change expressed by the promise (fig.9). As cognitivist Bruno Bara states, ‘ogni cambiamento può essere collegato a un evento del mondo, magari questo collegamento non è ovvio all’inizio, e viene stabilito a posteriori. [...] Ciò che conta è l’interpretazione soggettiva dell’evento, non la sua parte oggettiva¹’ (1997:55).

1) “Every change can be linked to an event of the world, maybe this link is not obvious from the beginning and it is established in retrospective. [...] What matters is the subjective interpretation of the event, not its objective part”. Translation by the author.

Q1. When you have found somewhere you like, give yourself a name and describe yourself

Mora, 2009 LINZ

"Hi, my name is Mora, I am from Linz and I like good books.. and.. good films ..and..also too much sleeping unfortunately... that's something i don't like about myself.. A part from that I love travelling.. and good concert... that's it."

Q2.Think of a party that yo went to and find a spot to tell me about it.

Duncan, 2009 SYDNEY

"It was [...] 2005.. I stepped into the dancefloor.. and there he was.. the big..bully.. muscular [...] ... he reached out to my arm, unzipped his fly and filled his cock into my hand... uhm.. [...] the next day we met up .. uhm.. and we had sex on the cannons... out on the city harbour..uhm.. under the stars.. and it was beautiful."

Q3: Find a cler view of the sky and tell me what keeps you awake at night.

Anonymous, 2008 LONDON

"I guess what keeps me awake at night is... sort of... never moving on..The though of.. always being trapped and chained into the same existence.. to the same... the same place [...] .. unable to find a way out... [...] and then I guess what really keeps me awake at night is when i am in that situation asking myself 'what is the meaning?'... "

Q4: Find a place where you feel sure. Tell me about leaving and not returning.

Anonymous, 2009 SYDNEY

" [...] my ex-wife... with.. uhm ... my daughter.. she's causing some many problems.. so many demands... and I just can't handle it.. uhm... I am just going to ... you know... get through... bit by bit ... it doesn't matter how much she can try to destroy me but... then I think of my daughter and I think.. well... one day she'll know... one day she'll know what's actually hap-pening... one day she'll find out."

Q4: Find a doorway and tell me the role secrets play in your life.

Richard, 2008 BRIGHTON

" [...] in 1999 .. my partner at the time... had an abortion.. [...]"

Q5: Will you make me a promise?

Anneke, 2009 SYDNEY

"[...] I promise to be less fearful... less worried all the time that something will always go wrong ... i wanna be bolder... [...]"

Emily, 2008 BRIGHTON

"[...] I promise to stay true to myself and remember that I am not alone..[...] I promise to hold onto... love... to nurture it.. to be kind .. to be true... to other people and to myslef... not to shut myself off from other people... [...] .. not to walk away from things that are important to me... walk out from people who is important to me [...]"

Anonymous, 2008 LONDON

" Tomorrow.. I promise... i will the very least... try .. not to feel jealous ... when other people come up with better ideas than me.. "

Fig. 9: Some of the riders' answers from "Riders have spoken"

Conclusion.

Interactive documentaries have a huge potential. As narratives about reality, they could really shape the way we perceive the real, potentially changing the way we live. The way we interact with them is of course the key with which we could modify considerably the way we negotiate the reality that's being conveyed. In a linear documentary, we, as viewers, negotiate what the author has created for us, but our role is quite limited: the point of view of the author is still the prominent aspect in the negotiation. We could disagree or agree with her, but we can't break/stop/influence the narrative flow that was previously created.

The interactive affordances of the computer from this point of view brings a reorganization of the relevance of these two actors, putting the viewer in a situation where she can actively create her reality. Of course, the role of the author is still very important, even in this scenario: as the designer of the experience, she is in charge of the level of interactivity the viewer will now be able to exert. As we've seen, not always she is willing to give this option to the user, but sometimes it happens. And it happens through the interactive choices that she allows the VURP to take.

Now we can interact, but how? Is there a difference between the way we could interact with the narrative flow that could have actual repercussion on the way we perceive reality? Yes. Depending on the form of interaction we could choose to intervene with the flow, on the way the author shaped our experience with the artifact and the media that also negotiate the reality, as I proved with the three case studies. In *America's Army* the gamification of the experience creates in the VURP a sense of immersion that would make her feel in another world, not certainly in the real one. It is just with the intervention of DeLappe that the player realized what was happening: when he dragged the reality in the game, a closer reality, she modified her behaviour. In *Prison Valley*, the experience made of a low level of interaction shaped as internet browsing is enhanced with the possibility to interact with the characters of the iDoc and other VURPs through a participative system created by the author. While with *Rider Spoke*, the user through a journey in the city listening to fears, frustrations and hopes of other VURPs and recording her own version of reality is able to actually change of perception of reality, making a promise, that can be considered the preamble of personal change. The public dimension of the experience, the possibility to add her version of reality and being influenced by the voices of many other VURPs, the rules that the author created to enhance the elements of introspection and freedom put *Rider Spoke* in a different level compared to other documentaries that don't exploit the full potential, in terms of reality-shaping, of this form of narrative.

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Figure 1: America's Army [Online] Available at < <http://cdn.gamefront.com/wp-content/uploads/2010/07/americas-army.jpg>>

Figure 2: Forgotten Flags [Online] Available at < <http://thalhofer.com/news/wp-content/uploads/2008/08/vf8-screenshot-500x208.jpg>>

Figure 3: Core Sample [Online] Available at < http://www.terirueb.net/core_sample/images/core_sample_overview_header.jpg>

Figure 4: Collapsus [Online] Available at < <http://workbookproject.com/culturehacker/files/2010/10/test.png>>

Figure 5: dead-in-iraq [Online] Available at < http://www.unr.edu/art/delappe/gaming/Dead_In_Iraq/Dead_in-iraq_jpegs/encouraged_join.jpg>

Figure 6: Fig.6: Some of the players' responses to DeLappe's 'dead-in-iraq' [Online] Available at < http://www.unr.edu/art/delappe/gaming/Dead_In_Iraq/Dead_in-iraq_jpegs/encouraged_join.jpg>

Figure 7: Prison Valley [Online] Available at <<http://prisonvalley.arte.tv/?lang=en/>>

Figure 8: Rider Spoke [Online] Available at < http://www.fact.co.uk/attachments/101_rs_barbican_marije_bike_836.jpg>

Figure 9: Some of the riders' answers from "Riders have spoken". Available at the British Library in "Growing Knowledge: The Evolution of Research" exhibition.

Glossaries.

3G It refers to the third generation mobile phone system, known as 'the broadband of mobile'.

Wi-Fi Wireless Fidelity, applies to all implementations of the 802.11 wireless standard.

GPS Global Positioning System. Used to detect the latitude and longitude co-ordinates to obtain absolute

positioning.

PDA personal digital assistant, also known as a palmtop computer or personal data assistant is a mobile device that functions as a personal information manager.

FPS First-person shooter video game

VURP Viewer, User, Reader, Player