Diversity of immersion mechanics in video ludic novels

Before we begin, we'd like to thank all the persons involved in this year DH Unbound event. We're truly happy to be here, to discuss and exchange with follow researchers all around the world. Our research is part of the LQM partnership, and we would like to thank them for their support throughout our research. Moreover, our research are part of larger research projects on digital literature and interactive fictions, supported through our respective research affiliation, the Canada Research Chair in Digital Textualities at Univrsité de Montréal and the Canada Research Chair in Digital Arts and Literature at Université du Québec à Montréal.

Our presentation, titled *Diversity of Immersion Mechanics in Visual Novels*, aims to give a better insight on immersion mechanics in the broader field of interactive fiction.

As digital interactive stories, Visual Novels are often associated with video games. They hold novel-like literary characteristics enhanced by music, voices, images, videos and interactions, and are at the junction of different artistic forms, such as game, literature, and cinema.

The Visual Novel genre has Japanese origins (Choi, 2019; Crimmins, 2016). The genre brings together a wide range of ludic and interactive forms and is structured generally through literary narratives. When speaking of its Western counterparts, interactive stories and other hypertexts usually come to mind (Bouchardon, 2008) under the umbrella term of "narrative video games". While Visual Novel mobilizes a handful of interactions, if any, echoing their name of novels enhanced with pictures, Western narrative video games put the emphasis on ludic mechanics, notably Quick Time Events mechanics, which are sequences of action relying on both speed of execution and fast interpretative processes.

Adding an interactive layer on narrative works increases the interpretative possibilities. Interactivity blurs art categories, and ask us to rethinking the conceptual frame in which we usually set them. Hence our proposition to study the difference between visual novel and interactive narrative through what we call the 'spectrum of interactivity'. One side of the spectrum points towards literary forms with close to no ludic interactivity, while the other side points towards literary forms with dominant interactive mechanics, inviting the reader player to discover the virtual narrative space.

For all practical purposes, we selected three games from our larger corpus as to illustrate the principal characteristics of this spectrum. While discussing these three games, one must keep in mind that they are but a small sample of a larger pool of games with nuanced forms of interactivity.

Our first game is *Synergia*, a game developed by Top Hat Studios and published in 2020. This Visual Novel is a sample of the minimum limit of interaction needed in the interactive fiction space. This visual novel follows the traditional codes of its genre. Players press or touch a button in order to progress through the dialogues. The player's agency is at its lowest level.

Our second game represents the more interactive-oriented side of the spectrum. The 2018 hit *Detroit: Become Human*, developed by Quantic Dream, is a good example of QTE games. Players must actively pick their path in the branching narratives while interacting with non-playable characters and the environment. The choices may sometimes be impulsive and spontaneous, and will depend on the player's own interpretations of the narrative world. There, the player's agency may be at its highest level.

Finally, to illustrate the space in between, we'll discuss *Va-11 Hall-A* a visual novel with mini-game mechanics developed and published by Sukeban Games in 2016. *Va-11 Hall-A* mobilizes different mechanics and narrative structures in which the player navigates. Skills and abilities are called upon at different degrees, and in different fashions, and may have no impact on the narrative. The game's story is refined through interactions sometimes on the minimal interactive level, sometimes on the maximal level.

Our presentation is divided in 3 sections. Firstly, we'll define the concept of immersion through interactivity. Secondly, we'll detail the interactivity spectrum in order to identify its main characteristics. We'll then follow with an analysis of our games, starting from each side of the spectrum before discussing the space in between.

Immersion and Interaction collide

Our reading of immersion draws from Murray's work, as her work brings together textual and video game studies. In our sense, Murray offers an adequate starting point to think immersion in gaming contexts.

For Murray, immersion is a "metaphorical term derived from the physical experience of being submerged in water." (Murray, 1997, p. 98). The immersion feeling occurs when a person is carried away by the flow of information and sensation, or through simulated experiences. (ibid.) This brief definition is shared within the game studies field, not without criticism.

Murray's immersion becomes more complex when agency and interactivity are added to the equation. She updated her own definition in the reedition of her book *Hamlet on the Holodeck* in 2016: "When we are immersed in a consistent environment we are motivated to initiate actions that lead to the feeling of agency, which in turn deepens our sense of immersion. This phenomenon can be thought of as the Active Creation of Belief." (Murray, 2017, p.114)

> Digital works and games ensure readers and players can formally interact through specific devices and interfaces. Immersion goes beyond the fusion of action with awareness, as Csikenzetmihaly stated (Csikenzetmihaly, quote by Murkherjee, 2015, p.179).

> In our analysis, we extend Murray's immersion with Murkherjee's and Calleja's works. For the former, immersion becomes "implication". In ludic context, immersion results as "a combination of configurations and imagination." (2015, p.176) For Calleja, video game studies call for a new notion altogether. Calleja proposes "incorporation", which he defines as a way "to account for the sense of virtual environment habitation." (2011, p.169)

While both scholars used different words, they share similar conclusions. Immersion in digital fiction or digital narrative coexists with interactivity. Immersion participates in the creation of the player's agency; it is made possible by interaction, and in interaction.

Interaction must be understood here as a reciprocal action between two things. Immersion arises when players act within the virtual world and the world will move to their interactions' rythmn. All interactions take part in the creation of the player's experience within the game, and thus help to sustain agency.

While Marie-Laure Ryan proposed interaction and immersion as two complementary and alternative methods (1999), Murkherjee suggests that they are the two sides of a same coin, that is to say, that immersion and interaction occur exactly at the same time, but at different degrees and levels, following the player's implication or, more aptly, 'incorporation'.

The immersion-interaction dialogism lends itself adequately to visual novel analysis, in that the concept sets the player at the core of the interpretative exercise. (Dumoulin, 2021) On the one hand, the player immerses themself, in Murray's sense, in the work. On the other hand, the player *plays* within the game, they interact with it, Through interaction, the player takes an integral part of the story, thus confirming their immersion as they follow, and participate, in the narrative action of interactive stories (Gervais and Archibald, 2007).

Low Interaction Level

In low interaction level games, the predominance is given to the text, as said earlier. It supports most of the narration: it describes the actions, setting, and scenary; it also details the sequence of actions, enhanced most of the time by simple and static images. When the text wins over the player's manipulations within the gaming world, we consider the game on the minimal level side of the spectrum of interactivity, which will now be discussed.

Like classic printed novels, the sequence of texts which constitute the narrative follows a linear pattern. While it may be possible to choose between different narrative possibilities throughout the games, mostly at specific key points in the story, the act of reading is itself perceived as linear by the player. The narrative is felt as a branching story with minor narrative possibilites, or in limited numbers.

In RadiArt's *Synergia*, we follow a detective as she works on cases of violence between humans and androids. The story unfolds linearly. In order to progress in the game, the player only needs to press "next" through their controller "A" or "X" buttons, a mechanic that will display the following text. This minimal gesture is similar to that of turning a page. Throughout the 20-hour gameplay, the player has up to a dozen of choices. Each choice offers two narrative directions. These characteristics indicate a low interactive level.

However, the narrative choices are really important in the narrative. For example, the first choice the player needs to take is to choose between killing an android, strongly suspected of having become violent towards humans, or to let it run away. This choice dictates how the police department will react to the protagonist behaviour, and shows their mental state and their adherence to the values of society. The two potential narratives are therefore very different and place the responsability of choice on the player.

Following the synthesis made by Jesper Juul (2005), we can consider interactions and skill as one of a game definitional elements. The near absence of manipulation, or at least its place in the background in the player experience, leaves our corpus on the margins the videoludic field.

The actions produced are then limited to the game textual possibilities. They denote the narrative experience. These moments of tension, where branchings occurs and where the protagonist must make an important choice, we call them narrative nods. Here, the player's implication is fundamental. Contrary to classical video games where it is possible to guide each of the avatar's movement, in Visual Novels, what interest us here, it's that it's possible to act only in briefs, delimited moments.

This limited interactivity brings us closer to literary studies. If they think immersion by the text – notably by the study of sci-fi literature (Langlet, 2006) –, these theories are primordial to the analyse of visual novels.

Choices, for their part, bring us closer to hypertextual studies; the navigation made possible by textual choices are similar to a navigation made possible by clicking possibilities on any website.

As we understand it, Visual Novel can be analyse as interdisciplinary objects with multiple layers of analysis. To situate interactivity allows us to have a great perspective on works that plays with the genre's rules, or that contest how video games must be played. This is the case of Team Salvato's *Doki Doki Literature Club!*, which breaks the fourth screen-wall, and Appnormal Team's *Stay*, a game that continues to progress while the player is offline.

High Interaction Level

On the opposite side of the spectrum are games involving a higher level of skills and interactions. Theses interactions give players the necessary tools to invest themselves in the ludic space, to be *incoporated* in it, resulting in a strengthen relation with the ludic adventure.

The Visual Novels on this side frequently contain QTE, or Quick Time Event. Coinced by Shenmue developper Yu Suzuki, back in 1999, the expression defines cinematographic sequences inside a video game during which players must press certain keys, or move the joystic, to influence how the story unfolds. Sometimes, players have limited windows of opportunity and must take split second choices that may affect their gaming experience entirely. These actions demand that players react to what is being shown on the screen; reactiviy becomes a part of the game mechanics. On this side of the spectrum of interactiviy, players must illustrate their skills, regularly and constantly.

With that in mind, *Detroit: Become Humain* by Quantic Dream sets a good example. In this game, players fellow a story arounds three different characters with their own narrative branchings. The game progresses according to three modalities: 1) play sequences in which the player moves themself the avatar and interacts with the game environment; 2) cinematics without interaction, similar to movies 3) cinematics with interactions, namely QTE.

For example, during the game prologue, the players must confront a rogue android who has kidnapped a young girl. The player can interact with the environment, and decide what to discuss with the policemen. But all interactive possibilities will lead to the kidnapper's death, and maybe the death of the girl kidnapped. Tailored experiences can conceal this lack of possibilities in the fact that the player studies the game world and learn about it.

Through interaction and immersion, the player can feel their avatar's affect. In *Detroit*, like in other QTE games, the player can try the different narrative segments times and again to further develop their comprehension of the virtual world.

In this sense, *Detroit* constitutes a prime example of interactivity with narrative branching structures. The actions chosen by the players are coded, just as the narrative choices would be in a Visual Novel without interaction. The main difference here is that the gaming space is mechanically invested. The player's agency is mobilized in the virtual space in order to progress in the story.

Detroit highlights the intrinsic qualities of interactivity. We see the shift from Murray's immersion to Calleja's incorporation, in that the players invest the ludic space with actions that demonstrate a form of skill. In this sense, the literary nature of the text is enhanced by a playful form.

There is indeed a dialogue between interactive narratives and hypermedia works (Gervais, 2020), as "interactivity affects the fundamental structures of the narrative" (Gervais and Archibald, 2007). In Visual Novels with strong interactions, reader must navigate and interact with the narrative. However, Visual Novels seem to remain an object at the edges of the literary and gaming fields. As mentioned in the previous section, the presence of textual "choices" echoes hypertextual studies; but the additional layer of meaning added by the degree of interactivity required, in the sense of skill and speed of execution, testifies of the ludic contribution, at least according to an understanding that places skill at the heart of its definition, as Juul proposes. The actions expected in the game, although ultimately having repercussions dictated by the game's code, allow players to move through a narrative tree.

The Space In-Between

Some Visual Novels are placed between between the two ends of the spectrum. If the core of their narratives and interactions focuses on text and multiple choice navigation as describe ealier, these games also intregate other aspect, other more playful mechanics. These moments are scripted as brackets in the narrative. They required that player perform more or less complex actions in order to progress. These actions as well as the way they are performed impact the overall gaming experience.

In *Va-11 Hall-A* by Sukeban Games we play as a bartender who chats with her customers. Most of the story takes place through dialogues, but they are influenced by the degree of inebriation of the characters. Their level of drunkenness is decided by minigames in wihich the player must mix drinks. The non-playable characters might be quicker to confide about their secrets if they have had some alcohol. However, too much alcohol can force the discussion to a sudden stop, preventing the player from learning more about the current topic and potentially removing opportunities in subsequent dialogues. It may lead the player to choose answers more randomly, without any relevant informational basis on which to decide what's best to say.

The same can be said of *Coffee Talk*, in which preparing comforting drinks helps to build confidence with characters. Or in *Robotics;Notes*, where decisions are set by battles on a gaming application in the protagonist's smartphone, through a mise en abyme of interfaces.

The literary immersion described above is set up by the narration but is reinforced by the concrete agency of the player: their actions and performances in the "minigames" influence the story's progress. Choices are then no longer made solely through hypertextual mechanics, but through pure ludic agency (Triclot 2017; Aarseth 1999). These detailed manipulations fit perfectly into the narrative, including the everydayness of the gesture - preparing a drink, playing on a smartphone - in the constructed narrative and participate in the minimal gap necessary for immersion, defined by Marie-Laure Ryan (2015). For example, serving customers give a sense of incorporation, strengthen the narrative, and helps in designing narrative possibilities.

Concluding remarks

To conclude, our presentation allowed us to detail certain aspects of the spectrum of interactivity. The games discussed here are representative of the narrative and ludic structures of Visual Novels, which became apparent to us during a more substantial corpus analysis.

From a reading at the crossroads of interaction and immersion, we have developed a spectrum of interactivity that allows narrative as well as ludic studies to participate in the formal analyses of Visual Novel, and more generally Interactive Fictions, and to recognize the player's agency in them. *Detroit: Become Human* as well as *Synergia* illustrate adequately the two ends of the spectrum, and *Va-11 Hall-A* gives us the necessary example to illustrate the space in between, where narration and narrativity are intertwined with mechanics. As we further analyse the games in our corpus, we strive to develop this theory further by exemplifying the narrative and mechanics possibilities of interactivity.

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Thank you (for your attention).

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