

## Ludorative Acts: Questioning the Existence of Performative Acts in Video Games

SF. Luthfie Arguby Purnomo<sup>1</sup> & SF. Lukfianka Sanjaya Purnama<sup>2</sup>

### Abstract

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This paper aims at questioning the existence of performative acts in video games and proposing the presence of acts, for the purpose of this paper, called ludorative acts. To prove that ludorative acts are existent, the award-winning and commercially successful Konami's Metal Gear Solid franchises are analyzed. The analyzed titles are Metal Gear Solid, Metal Gear Solid 2: Sons of Liberty, Metal Gear Solid 3: Snake Eater, and Metal Gear Solid 4: Guns of the Patriot. The findings reveal that ludorative acts have four characteristics distinguishing the acts from performative acts. They are mechanistic-narrative, configurative, spatial-multimodal, and HCI (Human Computer Interaction)-Infovis (Information Visualization) bound. The emergence of these four characteristics from which ludorative acts are constructed roots from the fact that ludology, the science of play, and narratology, the study of narratives, are the primary substances of video games. The two substances are linguistically embodied through the appearance of two different language uses in video games. They are instruction based expressions, derived from the ludology of the video games, and narration based, rooted from the narratology of the video games.

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**Keywords:** ludorativeacts, digital games, mechanistic-narrative, configurative, spatial-multimodal, HCI-Infovisbound

### Introduction

#### 1. Introduction

Talking about video games is talking about the science to which video games are studied, ludology. Ludology is a discipline that studies games in general and video games in particular (Frasca, 2003). The term differentiates itself from the long lasting narratology, the studies of narrative (Bal, 2009). In the context of video games, ludology is closely related to viewing video games as games and thereby ludology attempts to exclude the narrative aspects of video games while narratology remarks that video games are a narrative which takes a different form like movies (Simons, 2007). Though ludology and narratology are claimed to be different (Juul, 2001), they are two important characteristics comprising what video games are.

In regard to linguistics, ludology which is mechanistic in nature is assumed to generate instruction based expressions while narratology which is narrative in nature is narration based. The question occurring with these two different natures is how the games express themselves when the aforementioned two natures of ludology and narratology have to be presented together. The result is, for the purposes of this article, what is called as ludorativeacts. This paper aims at questioning the existence of performative acts in video games and proposing ludorative acts in video games by revealing the characteristics distinguishing the acts from performative acts.

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<sup>1</sup>English Letters Department, State Islamic Institute of Surakarta, Jl. Pandawa Pucangan Kartasura, Central Java, Indonesia.  
Email: [theluthfie@gmail.com](mailto:theluthfie@gmail.com), +6285647075920.

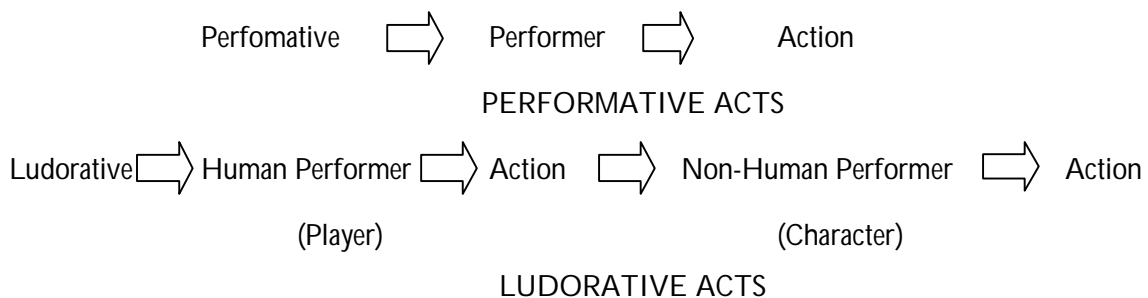
<sup>2</sup>English Letters Department, State Islamic Institute of Surakarta, Jl. Pandawa Pucangan Kartasura, Central Java, Indonesia.  
Email: [lukfiankasanjaya@gmail.com](mailto:lukfiankasanjaya@gmail.com), +685647369216.

The video games analyzed are Konami's tactical stealth action game franchises: *Metal Gear Solid*, *Metal Gear Solid 2: Sons of Liberty*, *Metal Gear Solid 3: Snake Eater*, and *Metal Gear Solid 4: Guns of the Patriots*. The games are selected due to their complexities in game mechanics involving action characteristics of action role playing games and unconventional presentation of stealth-based action. The richness of the game narratives referencing to histories and philosophies is the second reason behind the title selection.

## 2. Characteristics of Ludorative Acts

### 2.1 Mechanistic-Narrative

The first characteristic of ludorative act is mechanistic-narrative. This first characteristic is different from Austin's performatives though sharing basic common traits. Performative acts are the use of language to perform various sorts of acts (Austin, 1962). The acts imply that the doers of the action are either the addressers or the addressees. This concept of acts is vague in digital video games as video games involve human players and non-human characters to which the human players have control upon. The following illustration might help clarify the statement:



**Figure 1: Performative Acts and Ludorative Acts**

As implied by the above illustration, performative acts find themselves an ambiguity in digital games as the interactivity between humans and the game characters blur the performer of the acts. Aarseth terms this interactivity 'ergodic', a non-trivial way to traverse into literatures (1997). This interactivity requires an act which allows the players to engage in the interactions between humans and computers (Human Computer Interaction//HCI) and that act is not simply performative but mechanistic and narrative. The obscurity does not only lie on the interactivity but also performativity, all aspects of the human ability to use symbolic representations to influence the world outside the representational system (Sweetser, 2000). Performativity, based on Sweetser, roots from human ability and this signifies that the aspects to employ symbolic representations rely on the abilities the humans have. This condition is not locatable in video games because video games are not connective only to humans but also the characters of the games. Though video game characters depend on the players, at some point, they are independent from the interference of the players. The conditions happen when glitches or bugs occur prompting the characters to behave by themselves, as found by Bissell in *Gears 1* (2011). Their presence disrupts the players and to some extent, frees the characters from the hegemony of control by the players and thereby, every aspect in video games is mechanistic.

The word mechanics, etymologically derived from Greek word *mekhane* (Partridge, 2006), is identical to engine. The word 'engine', based on Merriam-Webster, refers to 'a machine that changes energy'; 'the vehicle that pulls a train'; 'something which is used for particular purpose'. In relation to the term 'mechanistic' for the first characteristic of ludorative act, the meaning of the word 'engine' is eminent within the word 'mechanistic' as this characteristic changes the sequence of action from human performer to non-human performer through specific devices like controllers or keyboards to execute particular purposes.

Meanwhile talking about the word 'narrative' means discussing about the ten features it has as proposed by Bruner. They are narrative diachronicity, particularity, intentional state entailment, hermeneutic composability, canonicity and breach, referentiality, genericness, normativeness, context sensitivity and negotiability, narrative accrual (Bruner, 1991). In the context of video games, the ten features of narrative correspond to playtime, cutscenes, character creation and customization, infovis, HCI, gameplay, game genres, gaming experience, in-game configuration, alpha and beta. The conformity between the ten features of narrative Bruner proposes with the features video games have indicates that the narratives in the games are, to some extent, linear to narratives in any other forms but with some distinction.

In relation to the term mechanistic-narrative characteristic, in the perspectives of ludorative acts, refers to the merging of the game mechanics and the game story to which the players respond by controlling the characters. In *Metal Gear Solid*, when the players engage in a fight against Revolver Ocelot, a cutscene functioning as PBD (Pre-Battle Dialogue) appears. In the cutscene, the name 'revolver' is derived from the gun type he uses and the characteristics of the gun is explained by Ocelot himself before dueling Snake. He says, 'Greatest handgun ever made. Colt single action army. Six bullets. More than enough to kill anything that moves.' The lines Ocelot remarks indicate that he can only shoot Snake six times and after that he needs to reload his gun. It implies that the reloading time Ocelot spends is the perfect time for the players to move Snake to attack him. This implied game mechanics message informed through the narratives in the form of pre-battle dialogue suggests that the dialogue has ludorative acts to which the players act. This is the mechanistic-narrative characteristic of ludorative acts.

Mechanistic-narrative also involves multimodality of video game characteristics, which will come into a discussion in detail on spatial-multimodal section. The multimodality of video games, based on Malliet comprises two major characteristics: characteristics of representation and of simulation. Characteristics of representation encompass audiovisual style and narration while characteristics of simulation cover complexity of controls, game goals, character and object structure, balance between user input and pre-programmed rules, and spatial properties of the game world (2007). It signifies that ludorative acts present themselves in the video games through the projections of those two characteristics. An example for this is when Naked Snake fights a legendary sniper by the name The End in *Metal Gear Solid 3: Snake Eater*. Before the battle is engaged, The End shouts to Snake from a distance. He says, 'Do you hear me, Snake?' and 'You will make a fine quarry for my final hunt.'

When he says the lines the SFX (sound effects) plays an echo and the VFX (visual effects) displays The End on the center of the screen illuminated by blatantly bright light as his background. These two characteristics of representation suggest the players that to defeat The End, the players should pay attention on the sound and the light. Since The End is a sniper, he camouflages and blends himself with his surrounding, in this case it is a forest, and he, due to the nature of sniping, distances himself from the target, Snake. It suggests the players to seek for him and not to make any disruptive noises to prevent The End from detecting Snake's presence. In relation to the equipments the players could select for Snake, the above implication transferred to mechanics-narrative characteristics suggests that Snake should equip himself with a device which could detect the presence of somebody and could detect body temperature. The devices are Anti Personal Sensor (AP Sensor) which will vibrate the controllers of the players when Snake is close to a human and Thermal Goggles, a body temperature or heat detector. Combining these devices, Snake could defeat The End. In relation to the lines The End says, the words 'hear', 'quarry', and 'hunt' suggest a connection with SFX and VFX. The word 'hear' suggests the AP Sensor while 'quarry', which could also mean 'search', and 'hunt' suggest the Thermal Goggles. This connection further implies that the mechanics and narrative in video games are intertwined and incorporative.

The case above suggests that ludorative acts differ themselves from performative acts from the presence of mechanics-narrative in the forms of characteristics of representation and simulation. In the case of The End, the SFX and VFX blended in the story hint the players to execute an action by configuring the character, Snake, to equip himself with in-game devices which share also external impact to the players and that is the vibration of the controllers. This condition further suggests that game mechanics and game narrative, from which the term mechanics-narrative are formulated, are existent and their existence signifies the presence of an act specifically found in video games, the ludorative acts.

## 2.2. Configurative

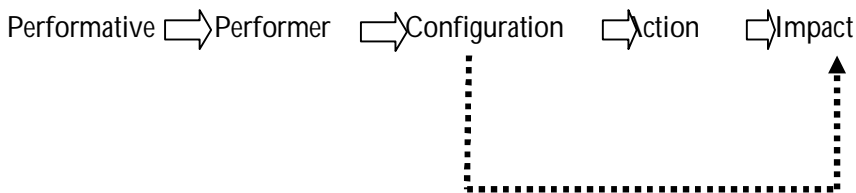
In game studies, the word 'configurative', based on Eskelinen, constitutes of the configuration of temporal, spatial, causal, and functional relations and properties in different registers (2001). The configuration of the aforementioned relations and properties is executed through internal and external manners. Internal configuration refers to in-game configuration exercised by the players such as configuring the buttons of the controllers, the screen related mechanics, the menus and other in-game mechanical configurations.

Meanwhile external configuration refers to the involvement of external wares, devices, and digital contents configured to influence the games, the gameplay, and the game experiences. Game Shark, Memory Card, DLC (Downloadable Contents), Arcade Controllers are the examples of external configuration.

In relation to performative acts, configurative is also present in the acts but the presence is different from that of ludorative acts. The difference, besides stemming from the sequence of performers as perceived from Figure 1, emerges on the impacts of the configuration.

- A says that A will kill B (performative)
- A configures B's death as an accident (configuration)
- A kills B (action)
- A is free from charge (impact)

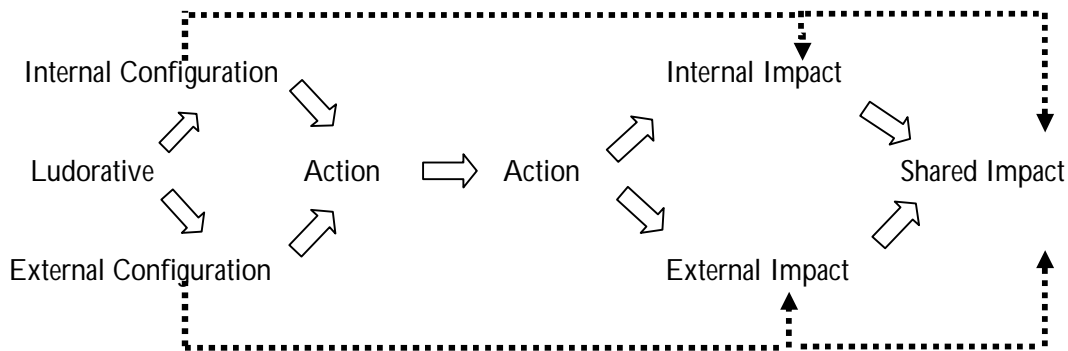
The connection between A, B, the bike, fixing action, and configuring action can be illustrated as follows:



**Figure 2: Configuration in Performative Acts**

If the killing is executed in video game worlds, the sequences will be as follows:

- A (character) says that A (character) will kill B (character)(ludorative)
- A (player) configures the method of killing B (character) by equipping shotgun with A (player)'s vibration(internal configuration) feature of the controller is on(external configuration)
- A (player) through A (character) kills B (character) (action)
- A (character) kills B (character) (action)
- A (player) receives the shock from the controller when A (character) fires the shotgun(external impact)
- B (character) dies (internal impact)
- A (character) could proceed to the next stage (shared impact)
- A (player) could proceed to the next stage (shared impact)



**Figure 3: Configuration in Ludorative Acts**

As seen from the above figure, ludorative acts will always trigger the emergence of shared impacts, the impacts shared by the human performers (players) and the non-human performers (game characters), an impact which could be found also in performative acts if the acts are executed by more than a performer. This difference on the impact emergence constitutes the difference between performative and ludorative acts. The example for the configurative characteristic of ludorative is from *Metal Gear Solid* on the section where Solid Snake has to engage in a fight with Psycho Mantis, a mind-reading assassin.

It is impossible to defeat the gas-masked man without performing an external configuration and that configuration is to replace and reinsert the controller from port 1 to port 2. If this configuration is not executed, Psycho Mantis will be able to read any moves the players input to the controllers to hit him. The game hints the players about this game mechanics, to change the controller port, through the dialogue Snake's superior, Colonel Campbell, utters. The colonel says to Snake, 'Don't let him read your minds! Be a blank slate!' The word 'slate' is identical to a tablet for writing and the color of grey. If the players are able to catch the hint, they will notice that it refers to the Playstation controller. A game controller is like a tablet for writing as the players have to do any kind of typing like actions with a controller. Though there are other color variants of Playstation controller but the most famous of all is the original color, grey. The other meaning of 'slate', based on the Merriam-Webster, is 'to designate for a specified purpose or action' and thereby the dialogue attempts to suggest the players to configure the controllers. If the players fail to understand this and they could survive for some period, Campbell will hint the players with more explicit expressions. He says, 'He's using his psychic ability to read your Controller's moves. That's how he's evading your attack. You've got to do something so he can't read your Controller's moves. Think! There must be some way!'. Again, if the players are still unable to decipher the puzzle, Campbell will say the most explicit expression to help the player eventually. He says, 'I've got it! Use the Controller port! Plug your Controller to Controller port 2. If you do that, he won't be able to read your mind!'

If the example above is perceived from Austinian perspectives, the actions of perceiving the hints are the locutionary acts, the acts of expressing utterances with the illocutionary actions being the configuring actions and the perlocutionary acts being the mission accomplishment. This is not true since locutionary, illocutionary, and perlocutionary acts are seemingly causal while the acts in the games are cyclical and iterative. By cyclical and iterative characteristics mean that the players could replay the games to obtain what has not been yet accomplished. The cyclical and iterative characteristics are the discrepancies of the realized and the intended gameplay (van Rozen and Dormans, 2014) prompting both the players and the designers to readjust themselves to achieve the desired goals in playing the games. The existence of DLC (Downloadable Content) which could alter the gameplay and gaming experience is one of the evidences.

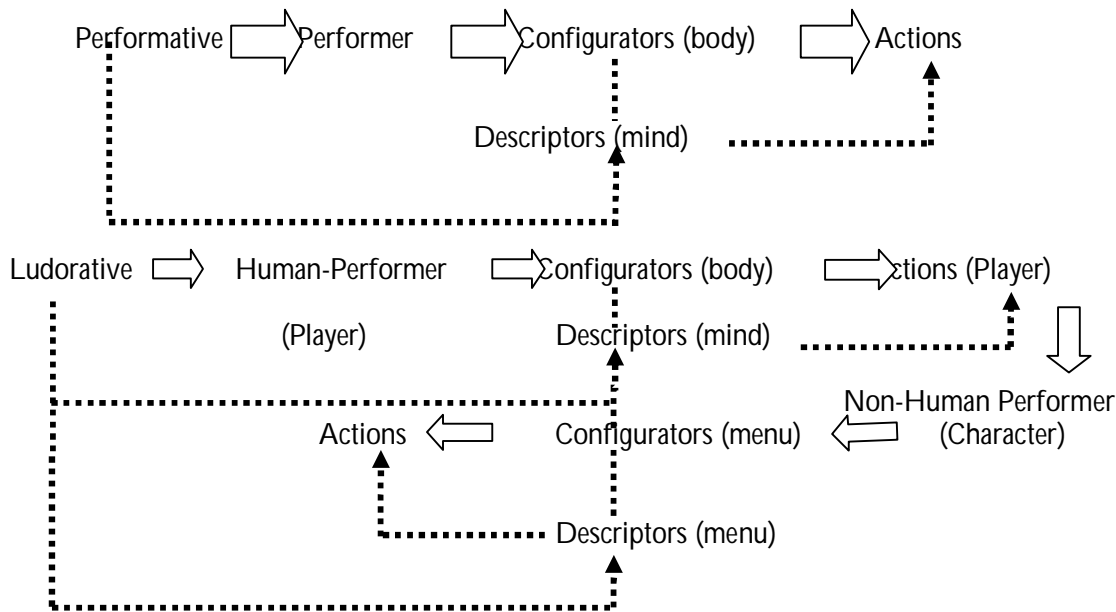
The example above indicates that the game mechanics, as also seen from the previous example about mechanistic-narrative, is still incorporated into the game narrative though the it is encrypted through metaphoric expressions. The employment of grading from implicit expression to the explicit one signifies that the game attempts to interact and cooperate with the players so that both the game and the gamers could achieve a shared impact: accomplishing the mission and proceeding to the next mission.

### 2.3. Spatial-Multimodal

Spatial here does not refer to spatial domain of video games (Manovich, 2001) involving the player and the character as discussed in mechanistic-narrative characteristic. Spatial here refers to the limitation of character usage in some sections of the games to generate an action due to the existence of limited space to which the words are displayed on. Spatial problems especially emerge when a game is localized and translated to which Mangiron and O'Hagan call it 'restricted translation' (2006). Therefore a special attention should be given to the word choice to prevent any disruptions related to exceeding number of characters. In relation to ludorative acts, the limitation of character usage denotes that the actions executed by the players root from the limited space menu.

An example to illustrate this statement better is the names of weapons Solid Snake uses in *Metal Gear Solid*. Weapons like Chaff G. abbreviation of Chaff Grenade, Stun G. standing for Stun Grenade, Therm. G. for Thermal Goggle and other abbreviated weapons. Each name and picture of the weapon are slotted on small boxed menus appearing on the left, right, and bottom screens. When the players select a weapon, a larger box appears on the middle screen containing the information of the weapon mainly their functions. It indicates that spatial limitation in the menus containing the abbreviated weapons functions as configurators and the large boxed menus containing the description of the weapons function as descriptors. Configurators allow the players to configure any methods to execute an action, the action deemed to be the solution for the presented problems, while descriptors allow the players to learn in detail about the configurators before the players configure their actions. Configurators and descriptors are found in any game genres.

In relation to performative acts, the configurators and descriptors which are the body and the mind of the doers are unimodal. By unimodal, it reflects that the action one executes is assumed to be the result of the agreement between the mind as the descriptor and the body as the configurator. A different situation is found in video games. Actions executed by the players are not only the result of the agreement between configurators and descriptors of the players but the agreement of configurators and descriptors of the game characters and the agreement between the players and the characters. Thereby, the relationship between configurators and descriptors in video games is multimodal.



**Figure 4:** Configurator and Descriptor in Performative and Ludorative Acts

As seen from Figure 3 above, the performers of performative acts are unimodal while ludorative acts, rooting from its complex relations between players and characters, are multimodal. The multimodality of video games happens due to the multi interactions the players through the characters have in the games. The interactions encompass music and story/action/image, and psychophysiological changes resulting in different levels of anxiety and different playing tactics (Wharton and Collins, 2011) and these multimodal interactions are implemented through ludorative acts. The ludorative acts executed by the players through the characters root from both linguistics and non-linguistics triggers. One of the examples has been explained before in the case of The End in *Metal Gear Solid 3: Snake Eater*. Another example is from *Metal Gear Solid 2: Sons of Liberty* when Raiden, the protagonist, combats Fatman, an expert in explosives.

In the last section of the fight, Fatman says to Raiden that he has the last bomb hidden somewhere on the area they are having a fight at the moment. When asked where he hides the bomb, Fatman says that it is very close and it is the job for Raiden to locate its whereabouts. After saying that, Fatman dies and the bomb is active. The players have to swiftly examine the area to locate the bomb. If the players do it conventionally, they will not have much time until the bomb explodes. If the players carefully examine the linguistic hints in 'Very close.' and the non-linguistic hints displayed from the way Fatman sits down before he dies, the players will know that Fatman hides the last bomb beneath his body. Comprehending this, the players through Raiden will have to lift Fatman to uncover the bomb and disarm it. This case shows that ludorative acts are HCI-bound since the players have to engage their interactions in the focus of the linguistic and non-linguistic aspects of the video games. In the case of Fatman, the ludorative acts are expressed through linguistic and non-linguistic hints. The linguistic hints range from words to lines. The linguistic aspects, besides functioning as a hint for appropriate ludorative acts, also function as a narrative construction, be it on a word level. The example for this is Beauty and the Beast unit in *Metal Gear Solid 4: Guns of the Patriots*. Beauty and the Beast unit consists of four beauties with post traumatic disorders from which the unit name is derived from. They are Screaming Mantis, Laughing Octopus, Crying Wolf, and Raging Raven. Their names construct their narrative in the manner of the characters while at the same time suggesting their fighting style from which the players could configure the best actions to defeat them. An example for this is Laughing Octopus.

As the name 'octopus' suggests her body is like that of octopus with tentacles acting as her weapons and with character as octopus also. Laughing Octopus hides and blends herself with the surrounding to decoy the enemies before attacking them. This fighting style is in line with octopus' survival methods. If the players apprehend these linear characteristics, their ludorative acts will be well prepared. This fusion of narrative and mechanics in the form of hints contributes to the aesthetics of the games and provides a play experience established through the interactions between the players and the video games and the players and the information visualization.

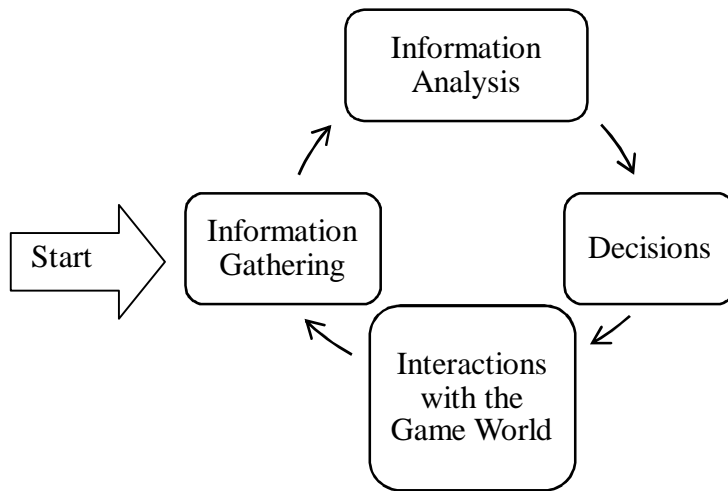
The above example, in the view of speech acts, is revolving around the discussion of 'world-to-word direction of fit', (the action of) picking out a certain logical property of a psychological attitude: namely, the fact that it displays a certain two valued logical structure (Archer, 2015). Searle classifies this direction to fit into the words-to-world direction (statements, predictions, etc.) and the world-to-words direction (commands, promises, etc.) (in Humberstone, 1992) but further, Searle and Vanderveken postulate four directions of fit by adding double direction and null direction (in Ruiters, 1993).

The problems of identifying direction to fit in video games are the necessity to segregate players and characters into two separated domains. If applied, this treatment will violate the fundamental premise of interactivity, the reciprocal needs. If those two performers are treated with the same treatment of direction of fit, then, the necessity to position players as words or characters as worlds or vice versa should be taken into account. But, this type of treatment violates the granularity of video games, the level at which the processes that give rise to A-Life (be it synthesized or calculated) are modeled (Lecky-Thompson, 2008) from which the video game characters are endowed with artificial intelligence (AI) to allow them embark in A-Life (Artificial Life). Therefore, it is safe to say that directions of fit in video games take another form and that is command of fit. The word 'command' refers to the input the players execute to respond to the presented context the players face through the controlled characters. In command of fit, the focus is on the structural relationship of the values shared by the players and the characters from which four possible values sharing could be postulated. They are command-to-cosmos, cosmos-to-command, command-to-command, and cosmos-to-cosmos. The detail of this command-to-fit will be presented on a separate paper.

#### **2.4. HCI-InfovisBound**

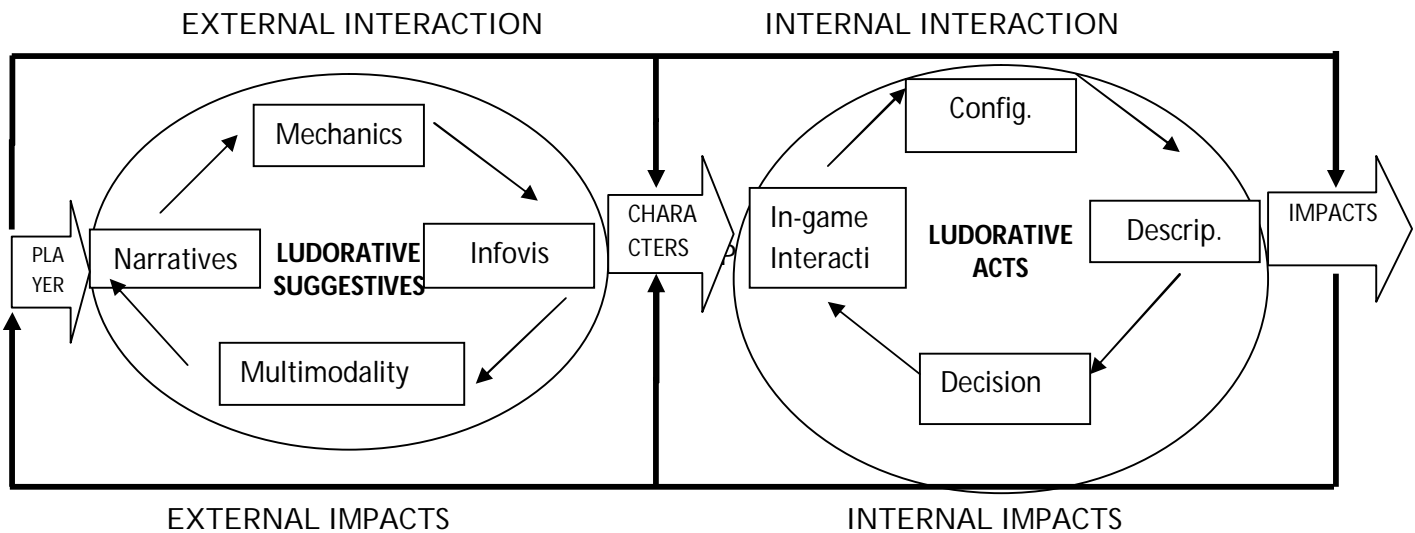
Interactions to computers involve the dialog between the user and the system as the user explores the data set to uncover insights (Yi et. al., 2007). The dialogues occurring between the user and the system are implemented through HCI (Human Computer Interaction), the study of the interaction between people and computers (Dix, 2009). It signifies that ludorative acts will not emerge if HCI is not existent and this type of interaction is the core differentiating ludorative and performative acts. In relation to ludorative acts, as discussed before on spatial-multimodal section, the actions executed by the players are through their interactions, besides with the controlled characters, with the menus available in the video games. These menus along with their linguistic and non-linguistic characteristics are represented through information visualization (infovis).

Information visualization is the creation of graphical representations of data that harness the pattern-recognition skills of the human visual system (Stone, 2009). In gaming world, the information visualization is designed for playful purposes and, borrowing Medler and Magerko's term, is called playful visualization, visualization that supports and promotes play (2011). This visualization is represented through the designs of game structures as the configurators of ludorative acts from which interactions are performed. The structures, constructed through programming language, are map, objects, player definitions, avatars, physics, events, and rules (Ebner et. al, 2013). In *Metal Gear Solid*, for instance, the weapon selection menus are presented in the shapes of colored and transparent boxes allowing the menus to blend with the game screen. This design is to prevent any visual distractions for the players which might generate a discontented play experience. The following diagram from Fabricatore (1999) might help clarify the connection between information presented visually and play experience.



**Figure 5: Play Experience Cycle**

When the players start controlling the characters to immerse themselves into the gaming world, the players gather the information about the game mechanics and gameplay. After procuring the information required, an analysis toward the information comes to execution. The analysis is required to execute decisions toward the presented problems in the video games. In the end, the actions are performed by exercising an interaction between the players to the computers. After the players exercise the actions, the cycle repeats from the start once more and it will determine the play experience of the players. It signifies that ludorative acts contribute to the play experience of the players. If the above cycle by Fabricatore is modified from the perspectives of ludorative acts, it will appear as follow:



**Figure 6: The Cycle of Ludorative Acts**

Figure 6 above indicates that ludorative acts are triggered by the emergence of, for the convenience of this paper, ludorativesuggestives, linguistics and non-linguistics aspects functioning not only as parts of narratives but also parts of mechanics from which the players engage into an action. The ludorativesuggestives received by the players are executed by an action transmitted into the characters from which ludorative acts are executed. The actions performed by the characters, then, generate impacts shared by the characters and the players. Receiving the impacts, the players engage again with ludorative suggestive and then, the same cycle repeats until the game is over, completed, or turned off.



### 3. Conclusion

*Metal Gear Solid*, *Metal Gear Solid 2: Sons of Liberty*, *Metal Gear Solid 3: Snake Eater*, and *Metal Gear Solid 4: Guns of the Patriot* elicit scientific proofs that ludorative acts are existent.

A unique interaction in the form of HCI (Human-Computer Interaction) generates the acts, the acts that generate a relationship between the characteristics of video games and the players. Ludorative acts are distinguished by the presence of the characteristics from which the acts are constructed. They are mechanics-narrative, configurative, spatial-modal, and HCI-Infovis (information visualization) bound.

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