Persuasive Strategies and Video Games: An Insight into *Age of Empire III*

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Abstract

This study investigates the role of visual signs and modes in the meanings interpretation of visual depiction and also the ideology behind this visual manifestation. It also explores various persuasive strategies through the semiotic manifestation of the video game *Age of Empire III*. This study reflects the way of meaning making in which video game has been designed to incorporate itself in the virtual world. So, multimodal semiotic analysis of video game: *Age of Empire III* has been undertaken in the light of G. Kress, T. Leeuwen's (Kress, Leeuwen, 2001) theory of multimodal communication and S. Littlejohn's (Littlejohn, 1999) concepts of elements, environment, game design, and gameplay, and storyline and action outcome interactions. It is a qualitative type of research. The multimodal framework and concepts of various terms have been used as an eclectic approach in the study. The study reveals that this video game's manifestation is an indirect programming of the player in the game who plays and follows the instructional pattern whereas the game introduces the semiotics in form of game choices and gives players the thought of free will. This dual potential has manifested to persuade and provide entertainment to the player or viewer.

Keywords: multimodal semiotic discourse analysis (MSDA), social semiotics, age of empire III, video game, visuals, modes, signs.

1. Introduction

Multimodal semiotic discourse analysis (MSDA) is an approach which aims to analyze the communication of modes and signs in video game visuals (Kruspe, 2004). Visuals represent modes in different contexts such as actions, visual, written, verbal, gestural and three dimensional aspects of video game in an interactive way. Meanings of modes and signs in video games are interrelated with social semiotics (Schaden, Patin, 2018). This study focuses on the cooperation of modes and signs in visual manifestation. The sign level analysis of video game depicts the ideology or strategy behind the visual construction. The semiotic elements analyzed in the video game are non-verbal and verbal signs, written words and sentences, appearance, color, music and framing. These elements are in form of modes and signs.

Age of Empire is the game which invokes the discourse of video game the form of history representation. *Age of Empire III* is point of focus in this research studies. This video game has been developed by the Microsoft Corporation's Ensemble Studio and published by Microsoft Game Studios. The computer PC version of this videogame was released in 2005. *Age of Empire III* is the

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advanced sequel of the first two sequels. In this video of *Age of Empire III the Industrial Age* represents three civilizations: Napoleon Bonaparte for the French colonial Empire, Suleiman the Magnificent for the Ottoman Empire and Ivan the Terrible for the Russian Empire (Oberdörfer, Latoschik, 2018).

Video games integrate persuasion and mind controlling by the manifestation of their dual nature, constructive visualization and participative role of viewer (Oberdörfer, Latoschik, 2018). This study critically explores the strategy of sign and mode makers behind the visual depiction of the video games. This study answers the question: How do the persuasive strategies of signs and mode makers depict in the video games visualization? This study reflects that this video game appeared to be the most interested, vital and favorite literature for researchers in the field of video games multimodal semiotic analysis.

2. Materials and methods

This study employs the application of more than one frameworks of multimodal semiotic analysis and has involved the general application of meaning interpretation of various multimodal semiotic analytical studies, hence, claimed as using *eclectic* approach. An eclectic approach became necessary for the study as the complex nature and structure of video game renders (Perry et al., 2009). Especially, the examination of the signs, modes and medium of the videogame visuals necessitated *multi-interpretive strategies and multi-theoretical* multimodal semiotic analysis. Paradigms, parameters and practices of *qualitative* research have thoroughly been used for the accomplishment of this study.

Primary resource of data is video game *Age of Empire III* in form of video visuals. The secondary resources are books, internet etc. This study has selected the video game *Age of Empire III*'s only five video visuals from amongst many videos of it. The selected video reflects the video representation of Industrial age that proceeds to Imperial Age in the video game *Age of Empire III*. This video has been obtained from the following website: http://youtube.com/.

3. Discussion

Semiotic interaction between game visuals and audience are different from other media, TV and films. Game design, delivery and manifestation circulate different sign interaction. Moreover, modes, signs and rules define the game play. In this process the semiotic design explains the process of decision making for users. Sign is the device which directs the players as well as the virtual world of video games. The fun making signs and signifiers in form of gender and social representations (Adams, Dormans, 2012).

Each video game involves implicit and explicit persuasive strategies with different modes and signs. These signs and modes provide artificial intelligence to the players in the form of design patterns of video games. The game choices in game play are the semiotic loops which define change meanings with change choices. L. Freina and M. Ott (Freina, Ott, 2015) elaborate on video games as the plot oriented manifestation in which player is the author of game event rather than the designer. Player creates his own story by availing choices in the game play.

Through this semiotic design in the game play, the player gains consistent embedment in the game. Video games are changing organic entities that have specific designed semiotic software with some marketing strategies. For marketing purposes more innovative and players' satisfactory semiotics are used as game play of every video game (Oberdörfer et al., 2019).

J. Bezemer and G. kress (Bezemer, Kress, 2008) define multimodality as "inter-disciplinary approach that understands communication and representation to be more than language". C. Jewitt (Jewitt, 2013) defines this communication and representation as it is manifested on variety of modes that contribute in meaning making process of visuals. These meanings are socially shaped over time. People make meanings through construction of these modes in visual manifestations. Set of rules are introduced in form of signs in the games. Players use these signs or modes appropriately to complete the game levels. The semiotic textures of the video game are the structural game design which is experienced by player. The video game is a process aswell place symbols generate cognitive resonance in players (Schaden, Patin, 2018).

M. Danesi (Danesi, 2007) has defined goals of semiotics. According to him the ultimate aim of semiotics is to build meanings as human product in the form of symbols, narratives,

symphonies, paintings and comic books based on some scientific theories and mathematical theorems.

R. Barthes (Barthes, 1957; 1964; 1968; 1972) defines semiotics as it is the semiotic development of science. The science of interaction of signs into text is to create further signs which are in more complex form. E. Brown and P. Cairns address the importance of implication of multimodal approach in the sign system science (Brown, Cairns, 2004).

In 1960, the founder of International Association for Semiotic Studies (IASS) has continued Saussure's conceptual framework in their works. Semiotics as 'science of sign' J. Bateman (Bateman, 2007) has used the term 'semi sphere' and gives philosophical basics on this multimodal semiotic analysis approach.

G. Kress and T. Leeuwen (Kress, Leeuwen, 2006) claim about semiotics. According to them main school of semiotics are crossing the boundaries and developing the theoretical frameworks and applications including all semiotic modes and all fields. In the Modes and Media of Communication C. Jewitt and G. Kress (Jewitt, Kress, 2003) describe the 'multimodal' perspective in Barthes's famous work of mythic sign as an analysis on static visual image and Barthes interprets this visual image with reference to his personal first experience. These static visual images were repeatedly viewed and part of the most dynamic audio-visual media in those days. His work on static visual image has limited semiotic system (sign resource system) i.e. one visual mode or one expression sign system.

Multimodal dynamic semiotic resources make multiple meanings interpreted in the form of analysis. Advertisement discourse differs in culturally determined interpretations of audio-visual multi dynamic media. W. Arens (Arens, 2002) has talked about corporate television advertisement or associative connective advertisement. This advertisement communicates name and depicts some philosophy of the company. R. Arnheim (Arnheim, 1974) claims about corporate advertisements that these advertisements seldom show direct marketing of the company product rather more on the persuading audience through intense emotions and values depiction in the advertisement (Adams, Dormans, 2012).

R. Hodge (Hodge, 2009) claims that visual text has qualities and techniques which resemble more to the concept of metaphor construction through the associative connectedness with audience and persuasive rhetoric forms within images. M. Bakhtin's (Bakhtin, 1981; 1935; 1986) takes a notion of amalgamation of different techniques of hetero-glossia and intertextuality. Amalgamation of different ideological concepts, myths, beliefs, values, inviting multiple readings, mixing multiple genres and changing voices are different techniques for interpretation of visuals images and videos.

R. Hodge and G. Kress (Hodge, Kress, 1988) have given the theory of multimodal communication. They have given the multimodality view in which common semiotic system operates in form of different modes. According to their observation in the theory of multimodality, digitalization creates different modes and material realization and these different modes technically have the same level of representation. Their theory is about the relationship between conceptual and material level realization in multimodal communication. The top level is common semiotic principle level. This defines the action, emotions and framing. Framing is the common semiotic principle in which the boundary structure of gameplay is different depending on different modes. Multimodal refers to the combination of modes and different semiotic principles at the same time. Modes are the methods used for representation of message. This multimodality and semiotic principle have been conducted in methodological framework of Kress and Leeuwen (Kress, Leeuwen, 1996) by using theory of multimodal communication. Images and sound are hardcore of multimodal discourse and hearing and sight are the "public senses (Baldry, 2007; Freina, Ott, 2015; Russell, 1921; Sterne, 2003).

S. Littlejohn (Littlejohn, 1999) defines four elements of the game system. The four elements are objects, attributes, internal relationships and environment. Objects are the variables in the system and can be physical or in abstract form depending upon the nature of the system. Attributes are the qualities of the objects in the game system. Internal relationship is the relation among objects of the game system. This includes strategic interaction as well as the player's relation. Whole game system has an environment that is a game context in the form of game surroundings. It tells what kind of system it is and also describes the interaction between the objects and gameplay. Appearance includes overall role of objects in the game. This includes direct meanings,

characters, artifacts, color, non-verbal and written expressions. Environment includes basic system of the game and the area occupies enemies and objects in the game visuals. Space tells how big the area is and how denser the environment is. Vagrant perspective is in which player examines different parts of the field without any type of strategic movement. Typological and geometrical perspectives are there in the video games. Geometrical aspect means that the player moves in all directions in the game filed continuous freedom of movement whereas the typological means the players have discrete and non-overlapping position to move. Environment of the video game is both static and dynamic. Static environment remains unchanged with the player's activities in the game world and the dynamic one remains changing or modified by the player's activities. Realtime environment allows the players to be active and independent to the adversaries in the game world whereas turn based environment allows players to play in turns. Teleology perspective is in which the game setup is finite and infinite. Finite is in which some games reaching a clear winning point and infinite has not a clear ending point. Action and consequence interaction establishes a system of meanings in the game world. Framing is all about the structural, visual and conceptual aspects. Furthermore, primary deals with pictures and visuals framings and secondary deals with the contextual framings of the visuals. Color has also signified role. Story of the game reveals through the relationships of agents and objects in the game world. These actions and consequences of agents and objects proceed as well as reveal storyline or context of the game.

4. Results

While analyzing whole video game the most considerable thing is to make sense of the video game. Game design is the important thing to make sense of video game. Game design includes all instances such as visual appearance, signs, images, physical objects and system of environment. Game design is necessary for the initial understanding of the video game. Through this picture the physical objects in their visual appearance are the specific building structures, red flag , cropping by the settlers, grassy ground, domes and minarets in building structures, lighted area with shadowed invisible area, wind power generators, artifacts of settlers, smoke from certain building, at the top industrial age in the game *Age of Empire III*. All these things give the viewers and players unique aesthetic sense. Flag represents the power and authority of one's territory. This is the flag of Turkish Muslim country now a day and in this video game its name is Pour Paris the Ottoman. Building structure, especially, dome and minarets show Muslim culture. Monumental two slopes with bricks construction buildings also show culture of this territory. Color of settler's artifacts relates with the flags color i.e. red and white, shows the nationhood and individuality in the three civilizations. The smoke from chimneys depicts industries and factories indicating the development of this civilization.

Bottom of the visual design represents the game pattern instructions. These instructions appear throughout the game and are same for each civilization. At bottom left side map of the game facilitates the player to reach certain point of territory area. Lighted area is the discovered area and shadowed the invisible undiscovered area. Red dots and lines show the presence of Pour_ Paris on the map. The arrow in the game is the agent or the representation of the player in the game. Agent takes action producing consequences. Completion of these consequences are communicated in form of written and verbal signs. It means game communicates in written and also in verbal and non-verbal signs. The yellow inked written English sentences are the completion of player's activity in the game. White inked sentences are the communication of instruction guide when player's arrow comes to any block in the instructions bar. Green line below the flag in the instruction bar indicates the lifeline of specific civilization. On the instruction bar values of meat, wood and gold are mentioned with its iconic representation and values for players to know how about the economy status of each civilization. Likewise written expression of arsenal shows the placement of military equipment and weapons with its non-verbal sign or iconic representation of hammer and stone slab. This also shows old historical era and its weapons manufactured by hammer. The wooden and iron representations in instruction bar are also a temporal depiction of design pattern. Temporal depiction means that at the specific historical era wood and iron were the most useable things for construction.

On the first sight picture of the *Age of Empire III* represents the minute features of the game. Critical analysis of this picture shows the game theme and whole game itself. The title of the game is written in capital letters with larger font size of the letters "E" and "S" are written in bigger in size in the written sequence of the title. This reflects that the game deals with empires and also that

more than one empire. As in *Age of Empires* three civilizations are introduced in form of Empire structures. This is the reason behind foregrounding of alphabet "E" and "S". The written words "AGE" and "EMPIRE" are foreground because in the game temporal representation of historical era enforces historical time period. "AGE" and "EMPIRE" words show the power authority and introduce civilizations in the game. Both words have signified conception. Roman number III shows third sequel as well as the signified conception of three "I" as three autonomies and power of empire ship. Second interpretation is the three capital letters "I" show the use of first person in the title page is a deliberate representation depicting three separate civilizations i.e. Pour Paris, Elizabethans and Napoleons and culture patterns with power of their own and authority. Moreover, three "Is", represent three different warriors different artifacts depict different civilizations and empire ship. The representation of warriors only depicts the war theme of the game. The scary mark shape in framing the three "I" marks the war and the aggression theme representation in the game. The background of these three "I" shows the war field, flags, warriors, sea boats and grassy grounds these are all about theme representation. Grassy grounds, cropping and fishing show specifically the old historical depiction.

Macro level analysis of this game deals with the actions and outcome. It deals with what is happening in the game and how the game is proceeding through the representation of the actions and outcome in form of signs. In the picture the player Pour Paris has given the action of attack through archers. The red marked line on the set of archers represents command of action to attack on the Napoleons by the player. The red and white cross shows the war situation in the game. This flag is also used as signifier and gives the signified conception of war. The fire at Napoleon houses represents the consequence of the action taken from the player Pour Paris. These all are signs and represent the happening.

At micro level, the analysis of the game sign represents the game elements and modes. These game elements and modes are to be considered in deep observation of the visual signs in this picture. Game pattern and game instructions are the denotation of the hidden game representation. Like in the picture the instruction bar tactics has signifiers in form of iconic representations. Shoot bombard, bombard movement with two red arrows, open doors with entering arrows, skull as killing and death signifier and archer with red arrows are the iconic representations of the actions that are taken through the player. The red and blue dots on the map are also the signified representation of the people of Pour Paris and Napoleon civilizations. All commands have been depicted in the picture in grey curtains with commands images. The hammer and slab in the middle of the instruction bar shows that these commands are from arsenal the set of military equipment. The scene of the great bombard in the game is about the war. These commands and instruction pattern make the sense that the player is free to do anything in the game giving the player signified conception by taking action and consequences procedure in the game. This procedure provides the pleasure through the semiotics of the game to the player.

One visual of the game focuses more on the instruction bar. It is the representation of design pattern and rules the player is supposed to follow. Through these rules or design patterns player performs actions and in result consequences happen. This procedure precedes the videogame with its understanding of context and meaning. The player is taking action for settlers to construct power house in the picture and these actions and outcomes communicate in verbal and written words with the construction of completion sound in the game for player's guidance and acknowledgement. The instruction bar provides the action pattern for the players. In it there is a further choice for the player to choose freely. Building power house as field requirement in the game strengthen the resources and civilization. There is a game of strengthening power, authority, resources, economy and food. For this process each civilization has to make possible strategic actions and outcomes within instructional bar and game design. These actions and outcomes build up the meanings and context of the game. These actions are presented on the instruction bar in an iconic representation with written signs. For example in the instruction bar "build" word leads to building structures in iconic representations such as first one is of manor housing, second one is of market, third one is of mill, fourth one is of planation, fifth one is of fishing, sixth one is of frontier outpost, seventh one is of trading post, eighth one is of mosque, ninth one is of boundary wall, tenth one is of barracks, eleventh one is of stable, twelfth one is of artillery foundry, thirteen one is of arsenal, fourteenth one is of capital. The vocabulary used for these building structures is also temporal representation of historical era. In the middle there is a representation of settlers with

depiction of male and female with their color and artifacts. In the instruction bar the two iconic representations are red marked showing that these two building actions i.e. mosque and frontier outpost have been constructed in the game. In this picture the settlers and crops give meanings of raising food production and economy of the Pour Paris as well as strengthening of its civilization. This strength leads towards individual power and victory of civilization in the game.

In another visual of videogame, the objects are huts, cooking utensils, fire, wooden caned boundary of trading post, great bombards with horses, warriors on horses and guard janissary. All these objects are the representation of concrete visuals. Attributes of these objects are the performance of these objects in the game. Like hut represents the nomadic settings because it is a trading posts of anyone civilization in the game. As nomadic setting the utensils, fire and wooden caned boundary are be like the historical era. Great bombard depicts its initial representation of war history and in the game it bombards through the instruction of player for defense and war purpose. The attributes of horse rider and warriors guard janissary perform wars following instructions in the game. These clearly depict the representation of old historical era and war theme in the game. Internal relationship of these objects represents that the nomadic setting, trading post, warriors and bombards are instructed to attack on trade post. Environment is the representation of nomadic and war theme. The visualization of objects in the game system such as the bombards, guard janissary, trading post and horse riders are depiction of the old historical era.

In the game the objects are Pour Paris houses, mill, power houses, plantation, settlers and flags. All these objects are the representation of concrete visuals. Attributes are the performance of the objects. Houses are the representation of Pour Paris civilization and culture. Mill is working in exhausting the smoke and fans are in front of the wall. The settlers are cropping and coining the crops. Power houses are working and wings are moving. The setting is of Pour Paris's home civilization. Internal relationship is the objects relation in the game. Mill and power house are working and settlers and the inhabitants are cropping. Building structure is in accordance with the historical representation of this era and civilization. Flag represents the Pour Paris's civilization. According to S. Littlejohn (Littlejohn, 1999) game system has two types i.e. open and close. The open system has interchangeable quality of mass and energy between environment as well human interaction. In close system, it has nothing interchangeable. Game system has three frames: formal, cultural and experiential. Formal system is the close and self-contained system of the game system. Cultural system is the open system and game intersects with other contexts such as society, language, history etc. Experiential system is bit tricky. It understands game as either open or close. Some parts of the game are internal in the system and are considered close.

According to the definition of S. Littlejohn (Littlejohn, 1999) of game system, *Age of Empire III* has an open system and cultural system. The objects in the game environment and as well as the interaction with player have the quality to interchange mass and energy. Within game the objects relations, actions and outcomes are transferring mass energy in form of performance outcome process. For example; cropping in the game results in enhancement of resources and economy in the game. Warriors attack in the game results in destruction and fire.

Interpretation

The communication of visual material signs and conceptual signifier's relationships represent the dual potential of the video game world. This video game also represents the dual persuasive strategy. This dual persuasive strategy has been manifested in different ways through the game design. This video game manifestation is an indirect programming of the player in the game as following the instructional pattern by introducing game semiotics in form of game choices and giving them thought of free will. This dual persuasion has manifested to provide entertainment to the player or viewer.

In *Age of Empire III* all modes the instructions, action, outcomes, pattern, environment, game design, gameplay and storyline have designed in descriptive manner. For example, in visuals the action in the instructional bar is fore grounded as white writing in a black block. Outcome completion and communicative writings for players are in yellow color. This representation in the game visual has shown the game designer's deliberate manifestation and has given the importance to actions and its choices than to the completion. This represents the semiotic signs introducing and programming technique of the game designer for the players in the game. All visualization has been done on dual potential and this is the strategy of the game designer for mitigating the virtual effect of the video game world in the video game *Age of Empire III*.

Persuasive strategies are designed to maintain the dual potential aspects in the video game. Direct naturalization or visual realization in the video game has been used to mitigate the virtual aspect of video game. An indirect programming of the player is to follow the instructional pattern by introducing game semiotics in the form of game choices and also gives them thought of free will. This dual potential has manifested to persuade and provide entertainment to the player or viewer. This dual potential strategy has been deliberately manifested in different ways throughout the game. In this video game there is the age description at the top of the each visual such as industrial age and imperial age. This has been done by the designer deliberately because in this video game there is representation of historical old era and in history gradual changes happen.

Age description at the top has been done to represent gradual evolution in the game as like history and has been tried to make visual realization by mitigating the virtual aspect of video game. Apparently, the choices provided to the player have manifested to lessen the game complexity and to provide the free will strategy to the player. This has been done for programming of the players to follow the instructional pattern and game semiotics.

Color has represented exclusive role in the whole videogame. This has used to maintain difference within civilizations. Apparently, it has designed to represent the history because in history there is crystal clear difference between civilizations. Indirectly game designer has tried to hide the uniform structural pattern of the game. Music such as bagpipe sound, warriors, sword etc. have apparently manifested for visual communication. It has also been used for instant and immediate programming of players to know game semiotics and instruction pattern.

Representation of the nature in the game such as natural resources, trees, grassy grounds, cropping, animals (deer, buffalos, eagles), fishes have manifested by the designer for old era depiction and mitigating the virtual aspects of the this video game. History and war theme has represented for temporal depiction of old era in a modern world for creating interest in the audience and persuading the player. It enhances the leadership and ruling quality in the viewer or player. Use of three prominent names of the history for three civilizations in the game have represented for visual realization or naturalization process. Pour Paris's flag has represented the Turkish flag, Elizabethan and Napoleon represent the mitigation of the virtual aspect of this video game because these three civilizations have some same era relationship in the history. The use of old era based vocabulary for many objects in the game such as guard janissary, veteran hussar, veteran skirmisher, locomotive, arsenal, fort Ramadi, lokata and barracks etc. is also very significant.

The player in the game world has been represented in the form of arrow. This representation has manifested to empower the player in the game. This strategy has been designed to enhance the ruling and leadership quality in the player by providing the sense of authority in the game world. In representation of architecture and artifacts (weapons, place and clothes etc.) are the active historical elements whereas in real history, these were passive historical elements. Finally, the passive elements of history are represented s active and it has been done deliberately in naturalized manners to mitigate the aspect of virtual in the game.

5. Conclusion

Ideology behind the video game visuals has dual persuasive strategic characteristics. Through direct concrete visual construction, the representation is near the reality or has been naturalized in the virtual world construction. The video game world has indirect integration to provide programming of the players to follow instructional construction by providing choice pattern for making sense of free will. This construction is for the purpose of mind control in the name of free will. War, historical era and power, empire-ship has strategic construction to increase market product demands. The game's semiotic design represents ideology to meet the public needs with the particular strategy of persuasion. In *Age of Empire III* all modes, the instructional patterns, action, outcome pattern, environment, game design, gameplay and storyline have been designed in descriptive manner. For example in visuals the action in the instructional bar has been foregrounded as white writing in a black block whereas outcome complete the communicative writings for players in yellow color. This representation in the game visual has shown the game designer's deliberate manifestation giving the importance to the actions and choices than to the completion. This represents the semiotic of introducing and programming technique by the game designer for the players. All visualization has been done on dual potential and this is the strategy of the game designer for mitigating the virtual effect of the video game world in the video game *Age of Empire III*.

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