

PROBLEMATIZING VIDEOGAMES: TEACHING STUDENTS TO BE CRITICAL PLAYERS

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Abstract

This contribution aims to familiarize educators with the unique ways in which videogames convey meaning as a media form and to provide an instrument, based on videogame theory, that educators can easily employ in intermediate and advanced English as a Foreign Language (EFL) classrooms to teach critical media literacy. In order to equip teachers with the skills needed to teach the critical media literacy of videogames, the author reviews relevant videogame theory, including Bogost's procedural rhetoric (2008a) and Consalvo and Dutton's (2006) holistic analysis. Important concepts from these schools of videogame criticism are combined with Freire's (2010) notion of problematizing to create an instrument that can be productively employed by educators to teach students to be critical players of videogames. It is found that the approach offered bridges the gap between theory and student concerns, results in greater personalization on the part of students when they analyze videogames, and is able to help students raise emergent issues that the researcher could not anticipate. It is hoped that educators will share these emergent issues and continue the discussion.

Keywords: critical media literacy; videogames; procedural rhetoric

1. Introduction

The world offers us raw materials for our simulations, and our simulations cause us to act in the real world in ways that change it to better resemble or model simulations. (Gee, 2008b, p. 257)

Teaching critical media literacy is de rigueur in education today, and it is standard practice to teach students how various forms of media try to influence them (Beach, 2007; Hammer, 2011). The most common media form discussed in the classroom is probably advertising, for it is very easy for students to see how advertising attempts to influence society at large. The transparency of most advertisements' motives makes the medium a good training ground for students before teaching them to analyze other cultural artifacts, such as documentaries, (pulp) fiction, film, magazines, music, newspapers, television and social networking sites (Storey, 2010; Zollers, 2009; boyd & Ellison, 2012). Videogames, conceived broadly to include computer games, console games and mobile games, are a media form that has

traditionally incorporated nearly all other media forms (see Wardrip-Fruin & Harrigan, 2004). Recently, this process has reversed as many other media forms now incorporate videogames into their form, most obviously demonstrated by Android applications, which advertise a multitude of products, and Google-sponsored on-line advertisements posing as games. As videogames incorporate a full range of (multi)media forms — videogames include music, storylines, film shorts, (fictional) newspapers, (fictional) television shots, cell/smartphones, and even fictional social network sites — a robust critical media scholarship has developed around them that can be employed when teaching the critical media literacy of videogames and other media that convey messages in similar ways. Teaching the critical media literacy of videogames can be part of a holistic approach to teaching critical media literacy that prepares students to confront a wide range of media artifacts they will encounter throughout their lives.

2. Method

Interpreting videogames differs considerably from interpreting literature, the media form with which most teachers who have backgrounds in English literature are most familiar. Literature is often interpreted using literary approaches such as autobiographical criticism, critical race theory, deconstruction, gender criticism, materialist criticism, new criticism, narrative criticism, psychoanalytical criticism, and postcolonial criticism (Barry, 2009; Tyson, 2015). Some of the approaches used to interpret literature have been productively employed in videogame analysis, such as gender criticism (Hayes, 2007; Lynch, Tompkins, van Driel & Fritz, 2016), postcolonialism (Mukherjee, 2016), critical race theory (Polasek, 2014), and analysis of ageism (Williams, Martins & Consalvo, 2009). Even though great insight can be obtained by employing literary approaches in the analysis of videogames, literary approaches only account for those aspects of the videogame experience that parallel the experience of reading literature. An approach is needed that provides students with a deeper understanding of how videogames convey meaning differently, or signify differently, than literature (Zimmerman, 2004) in order to inculcate students with the skills to be adept interpreters of videogames as a unique media form (see Aarseth, 2004; Pearce, 2004).

Some scholars have provided suggestions of ways in which to use videogames in the classroom (Beach, 2007), and useful compendiums of activities for teachers to employ to use or discuss videogames in the L2 language teaching environment (Mawley & Stanley, 2011). While greatly respecting this work, the approach employed here seeks to equip students with a holistic understanding of the signification practices and persuasive techniques of videogames by asking them to reflect holistically on the videogames they play regularly and

discuss their reflections. It is hoped that by making students cognizant of the ways in which videogames disperse signification across their multimodal elements and processes, students will gain analytical skills to interpret videogames and other media artifacts that employ similar techniques.

To equip teachers with an understanding of the ways that videogames convey meaning, a necessary prerequisite for teachers to guide their students in interpreting media artifacts, an overview of the processes through which videogames convey meaning is provided below, followed by a discussion of ways to teach these skills. A few sample instruments are provided that teachers can use in their own foreign language classes to apply these approaches (Appendix), which can be useful for teachers who want to carve out a space for critical discussion in an EFL classroom (Love, 2013). It is recognized that every media artifact demands that a teacher construct a unique instrument to analyze it, and, as such, the instruments provided here serve as examples and a training ground in how to conduct an analysis. It is hoped that teachers will adapt these approaches and develop their own instruments rather than simply use these tools as prescribed activities, though the activities could also be used that way.

3. How do videogames convey meaning?

According to Zimmermann (2004), understanding videogames depends on comprehending four concepts: 1) *narrative*, as videogames are a new narrative form that combines multimodal digital storytelling with games; 2) *interactivity*, as videogames require a player to engage with a game cognitively, functionally, and culturally, and some games require players to engage with other real and non-real players in multiplayer environments; 3) *play*, which is “the free space of movement within a rigid structure” (p. 159) that can be intellectual, physical, semiotic or cultural; and 4) *games*, which are “a voluntary interactive activity, in which one or more players follow rules that constrain their behavior, enacting an artificial conflict that ends in a quantifiable outcome” (p. 160). In all of these categories, a player actively moves the game, or plot, forward while playing the game, in the course of which s/he actively experiences agency/immersion as the results of her/his actions take shape in the game world through the player’s interaction with the game and other players (see Mateas, 2004).

Murray (1997) describes cyberspace narrative, analogous to a game world, as characterized by immersion, agency and transformation. Immersion is a better term than agency to describe what a player experiences in game worlds as agency implies an ability to change a world, while most game worlds offer very limited choices. The lack of choices

offered in most game worlds suggests that agency is a facade because the game is fixed: usually players end up making choices that they were led to take during game play (Domsch, 2013). Agency is highly dependent on programming, and few games provide truly open-ended environments.

The ergodic school of videogame criticism tends to privilege the pure playing moments of the game when the player is actively controlling an avatar or other representation on the screen and focuses interpretation of videogames on those moments (Eskelinen, 2004; Aarseth, 2004; Pearce, 2004). Even so, many in the ergodic school recognize that other elements of gaming, such as narrative aspects, do affect the player's interpretation of the game. As such, the field of videogame criticism is properly characterized as a spectrum rather than a dichotomy due to the fact that the exact proportion of time spent between a player directly controlling her/his on-screen representative/avatar and performing other game activities varies greatly by critic and game title, and performing these other activities affects how a player/critic interprets the game. As such, agency varies greatly by game title. When teaching students to analyze agency and immersion in videogames, it can be fruitful to ask them to reflect on what they can and cannot control in the videogame environment as well as what elements in the videogame environment make them, or prevent them from, feeling immersed.

While videogames share some elements with other media forms, they contain a unique combination of multimodal elements, the exact configuration of which varies by individual game and genre:

It's clear that games can signify in ways that other narrative forms have already established: through sound and image, material and text, representations of movement and space. But perhaps there are ways that only games can signify, drawing on their unique status as explicitly interactive narrative systems of formal play. (Zimmermann, 2004, p.162)

How can students be taught that the games they play signify differently than other media artifacts? The best way to teach them to analyze videogames processes of multimodal signification is by posing similar questions to them, such as the following: Can you think of some aspect of the videogame in which meaning was conveyed using a variety of multimedia sources? How does the combination of sound/image/text/space in the videogame you are examining construct meaning beyond what could only be conveyed by one of those media sources? How does this surplus of meaning affect your understanding of this videogame and the meanings it conveys?

Bogost (2007) proposes that videogames possess a unique rhetorical form that conveys meaning through processes rather than by stating propositions: “*procedural rhetoric* is the practice of using processes persuasively just as verbal rhetoric is the practice of using oratory persuasively and visual rhetoric is the practice of using images persuasively” (2007, p. 28). While elements of visual rhetoric and oratory rhetoric contribute to procedural rhetoric, Bogost (2007) believes games differ from other media forms in how they make arguments: arguments are perceived by a gamer playing through the game, experiencing, and acting on the multiple processes in the game. Bogost (2007) compares this process to an argument by enthymeme in which “[t]he player *literally* fills in the missing portion of the syllogism by interacting with the application, but that action is constrained by the rules,” (p. 34) or procedures, of the game. In this process “[t]he player performs a great deal of mental synthesis, filling the gap between subjectivity and game processes” (Bogost, 2007, p. 43), a process akin to reader-response criticism’s task of *filling gaps* between individual readers and texts (see Tompkins, 1980).

It is not one enthymeme, but a whole host of them that the player must fill in when playing a videogame. To simplify, Bogost views games as composed of groups of small processes, which he calls unit operations: one process is invoked to buy an item, another process is involved in persuading people, yet another process is used for combat (2008b). Each process has its own computational rules that govern how the fictional world of the game operates. The argument a specific videogame makes, the rhetoric of the game, emerges from not simply one process or procedure, but the combination of them all, which together construct “arguments about the way systems work in the material world” (Bogost, 2007, p. 47; see Gee, 2005). Bogost aims to create critical players who are capable of “playing a videogame or using procedural systems with an eye toward identifying and interpreting the rules that drive that system” (2007, p. 64). Interpreting those rules demands that players interpret and assess the messages that the unit operations are conveying to players. While the concept of unit operations can seem complex at first for students, asking them to think of each action they perform in the videogame world as a unit and the game as a combination of all of the units can help them grasp the concept. As these processes can be seen as a critique of real life processes (Bogost, 2007; 2008b), the procedural rhetoric of videogames can affect the opinions of players about issues in real life. Bogost labels videogames that make effective arguments *persuasive games*.

As videogames have become a mainstream media form in society with sales figures surpassing those of movies (Nath, 2016), it is imperative for educators to teach critical media

literacy of videogames as they teach other forms of cultural criticism (see Ryan, 2010). Students need to be taught to think about the meanings conveyed by all aspects of play and examine the whole experience of gaming from the moment of first viewing advertising on websites, posters, television; to downloading and/or installing the game, during which a variety of menus and screenshots may be viewed; to playing the game, during which many menus may be perused, in-game videos may be viewed, and a variety of other activities will be engaged in; to viewing the list of scrolling credits at the end of the game; to discussions with friends about a game during play and after (see Zimmerman, 2004). Even a simple achievement screen encapsulates the values of the gaming system in that it openly displays the actions that are rewarded in a game while ignoring other actions performed by a player that may also be worthy of reward but have chosen not to be by the videogame designers (see Consalvo & Dutton, 2006). As such, achievement screens betray the actions that the videogame designers value in the game world.

Lessons could be designed around all of these experiences related to playing videogames. The processes involved in playing a videogame, which include active immersion, agency, interfaces, narrative elements, multimodality, and procedural rhetoric, all contribute to a player's experience and interpretation of a game as the meaning(s) of a videogame is created through the accretion of experiences and their agglutination in the flow of the stream of consciousness of the player (James, 1890; Zimmerman, 2004). To phrase it more succinctly, all aspects of gameplay contribute to the overall message of the game and slightly change how a player interprets the game. As such, a method for analysing videogames in the classroom needs to account for all of the multimodal moments experienced while playing a videogame, the procedural rhetoric of the game, the gameplay itself, and the videogame as a distinct multimedia form.

While all approaches to media analysis enlighten certain aspects of the object of critique, often the effect(s) produced by the entire media artifact is ignored. When an entire media artifact is examined, certain themes may emerge as prominent in a similar fashion as to how themes emerge during qualitative analysis of data, such as grounded theory (Corbin & Strauss, 2015). Guiding students to discover these overarching themes teaches them how to analyze media artifacts, how to recognize themes running throughout media artifacts, and how to analyze the way those themes fit into the larger message the media form conveys. This complex form of media analysis teaches students to reflect on larger issues that they would not consider if not asked to stretch their minds, thereby producing critical players.

4. Teaching students how videogames signify

It seems that it should be relatively easy to teach students about how games convey meanings multimodally as most digital natives are used to consuming a wide range of cultural artifacts multimodally on a daily basis. Even so, it can be difficult to get them to think critically about that consumption (see Ryan, 2010). Digital natives have been habitualized into analyzing games for their aesthetic values or trendiness, having observed most popular media sources analyze videogames and other cultural media artifacts in a manner that shows little concern for the ideologies media artifacts bear or how these ideologies are conveyed (Zagal & Bruckman, 2008).

Though a variety of theorists have proposed methods of videogame criticism (e.g., Gee, 2005; Malliet, 2007; Mäyrä, 2008), Consalvo and Dutton's (2006) is the easiest for an individual teacher who wishes to teach students how to interpret and critique games from an ideological, whole-game, perspective to apply. Its strength and usefulness lies in offering a template of categories for game critics to apply to a game: immersive play, interfaces, ideology, and narrative aspects. Their simple four-part structure for analyzing a videogame helps new interpreters account for the multimodal aspects of a game and encourages them to construct a holistic analysis. Consalvo and Dutton offer their approach as a means by which to perform cultural critique but are not overtly concerned with Bogost's procedural rhetoric. Yet procedural rhetoric is a process that occurs throughout all the aspects of a game; it functions in a similar manner to a subcode that continuously tracks experience and erupts into the criticism. As such, an approach is needed that follows Consalvo and Dutton's categories of analysis for holistic game analysis, but expands on them to make a more comprehensive instrument that incorporates insights offered by other approaches to videogame analysis, such as procedural rhetoric.

The following analysis will progress through each of Consalvo and Dutton's (2006) categories (Object Inventory, Interface Study, Interaction Map, and Gameplay Log), provide a description of each of these tools, and suggest ways to adapt these tools in order to incorporate other theories of videogame analysis to the teaching of videogames. In fairness, Consalvo and Dutton view their categories as heuristic tools to get the player thinking about objects in the game rather than as part of a prescriptive method that must be adhered to. They describe their method as "a preliminary template for critical/textual game analysis.... [that] is meant to serve as one way (likely among others) for game analysts to approach games in a way that is systematic but not rigidly so" (2006, "Game Analysis," para. 7). Their method provides some guidelines to conducting what could otherwise be an overwhelming task, while

being open to incorporating other elements. They also provide questions that encourage students to start thinking about other questions that could be asked about videogames using their categories. As Consalvo and Dutton's list of questions encourages expansion of its categories, it is a useful resource to consult if one is having trouble thinking up questions for a category. One problem with encouraging a student to employ Consalvo and Dutton's questions is that they set an agenda that restricts the analysis conducted to their questions and concerns rather than the student's concerns, though, as mentioned above, Consalvo and Dutton are not intentionally prescriptive. Many critical media literacy approaches are also subject to the same criticism: they tell students what to look for in a media artifact, usually centered around the big three issues of race, class, and gender (Sung & Pederson, 2012), which many students even at grade school levels have already become adept at spotting through the regular raising of these issues in mainstream classes, such as literature or social studies. This standard approach to teaching critical approaches of analyzing media is far too limiting for a class of active minds that can think of a wider range of problems for analysis related to videogame play than their instructors, who have limited experience of games and the current social world of gaming.

One way to go beyond the standard approach to critical media literacy is to have students problematize (see Freire, 2010) issues they see in games, which may bring problems to the attention of teachers, and the public at large, of which they were unaware (Frasca, 2004, employs Freire's concepts in videogame design). Focusing on problematizing issues that students identify in videogames also ensures that a class is student-fronted (see Love, 2012). Some students may wish to examine how games depict adolescents or the relationships of teachers with students or parents with children, and the now-dated game *Bully*, an action adventure game set in a fictional school and its environs, comes to mind as a game in which adults' relationships with adolescents were depicted.

Since popular games are being the most widely consumed, a game such as *League of Legends*, an online, multiplayer battle arena game, is one of the best titles on which to test this approach. Conversations with players have informed the researcher that it is common knowledge that Korean players of the game have to have thick skin as a culture of gaming has developed in which players regularly insult and swear at players who have joined their team if they play badly, make mistakes, or even if the team one has joined simply loses to another team. The researcher suggested to one student that he make the topic of his presentation "How to play *League of Legends* without swearing at other players." He replied that it was impossible to play *League of Legends* without swearing.

The most important point in developing fruitful discussions using this approach is to keep these discussions student-driven rather than instrument-driven: it is imperative for the teacher not to dictate to students what to analyze. Instead, s/he should try to elicit from students the problems that should be discussed to problematize the game. This can be accomplished by beginning with a casual discussion about the game that focuses on asking students which games they play, how often they play them, what games are popular, etc. Once students have warmed up to the discussion and the teacher has discovered a popular game or games, s/he should steer the conversation to ask students to discuss what problems they see in the game by asking questions such as the following:

- What problems do you see or experience while playing this game?
- What problems do you see in how this game depicts the world?
- What problems do you see in how this game depicts social relations?
- What problems do you see in how social relations develop around this game (the social side of gaming)?
- What are some problems that emerge with other players when you play this game?

One reason for beginning with a general discussion of the game is that problems related to a game often only emerge through a general discussion, rather than direct questioning. The teacher needs to pay close attention to the discussion for clues that may betray problems, and then ask further probing questions in a process very similar to Freire's problematizing (2010). Once an issue has been identified, the teacher can steer the conversation to consider each of Consalvo and Dutton's categories, in turn, under the focus of problematizing videogames. The sample instruments provided below combine problematizing with each of Consalvo and Dutton's categories as well as Bogost's procedural rhetoric. A similar format to Consalvo and Dutton's format of presenting questions for each category is followed below because Consalvo and Dutton realized their approach demands analysts to think about games holistically while it also helps to "develop research questions that look at ideological assumptions operating in a game" (Consalvo & Dutton, 2006, "Game Analysis," para. 9).

we fully expect that this methodology will be modified.... But for now this methodological toolkit – interaction mapping, object inventory, interface study and logging gameplay – is offered... as a way to make the research thorough, without losing those aspects of games – play and emergence – that make them the dynamic artefacts of culture that they are. (Consalvo and Dutton, "Summary," para. 1, 2006)

Adhering to the expectations of Consalvo and Dutton, a modification of their theory to incorporate procedural rhetoric with the specific goal of creating critical players is proffered below.

5. Participants

Though the researcher has been discussing videogames with EFL teachers and learners in a variety of classes since 2008, a pilot test of the instruments was administered to a group of first-year undergraduate students attending a task-based English course at a medium-sized, mid-ranked provincial university in South Korea in 2017. The group was composed of 4 females and 9 males who were between 18 and 21 years of age. The average ability of students was upper-intermediate.

6. Consalvo and Dutton's Object Inventory

the fact of reality, the real fact, is not the object but our sensation of it, which is where it exists.

(Pessoa, 2001, p. 65)

In numerous games players collect items, numbering in thousands in some role-playing games. Consalvo and Dutton (2006) suggest the critic “create an object inventory that catalogues all known objects that can be found, bought, stolen or created, and produce a detailed list or spreadsheet that lists various properties of each item” (“Object Inventory,” para. 2). This list can be used to examine the game world’s underlying concepts, such as its implied economic system or how it constructs gender (Consalvo & Dutton, 2006). Consalvo and Dutton recognize that each game contains unique objects and unique ways of using objects (though game genre similarities may exist), and thus suggest unique categories of objects will have to be generated for each game. They also suggest examining how the player/character and other non-player characters in the video game interact with game objects. Charting all of the interactions would be an impossible task, so it is best to start with a problem and chart interactions that relate to that particular problem. It is useful to ask a general question to first get students thinking about problems that they may have not considered before, but if students have already identified a problem to investigate, they can skip to the second question. The following questions can be employed to stimulate discussion:

- What are some problems with objects in the game?
- Can you name any objects in the game that relate to the problem you identified?
- How do objects in the game relate to the problem of _____?

- What messages do the objects relay that relates to the problem of _____? Can you think of any problems with these messages?
- Do the objects convey any message related to a message being communicated via procedural rhetoric that relates to the problem of _____? If so, how?
- What are the social aspects of objects in the game, both in-game and out-of-game, that relate to the problem of _____? Do the social aspects of the games present any other problems?

7. Consalvo and Dutton's Interface Study

the interface is a continuous feedback loop where the player must be seen as both implied by, and implicated in, the construction and composition of the experience. (Newman, 2002, "Playing Games," para. 1)

The creation of meaning while playing a videogame is a combination of not only the game world choices made by the player but also the host of interfaces through which the player encounters the game. There is the physical interface of keyboard and mouse, or controller for a console system (see Konzack, 2002), but this physical interface is more about playability and interaction than meaning creation, though meaning can spill over into every aspect of a game. According to Consalvo and Dutton,

the interface can be defined as any on-screen information that provides the player with information concerning the life, health, location or status of the character(s), as well as battle or action menus, nested menus that control options such as advancement grids or weapon selections, or additional screens that give the player more control over manipulating elements of gameplay. (2006, "Interface Study," para. 1)

Interfaces that do convey meaning and are subject to critical analysis are the on-screen controls one sees while playing the game as well as the host of menus through which the player navigates the game world, for these interfaces convey to the player what the game creators deem is important in this game world. While engaged in gameplay, the player may be interrupted by a variety of interfaces: by dialogue boxes to which s/he must respond by making choices that affect how the game progresses, cut-scenes (short 'filmic' scenes that advance the plot), and a variety of other game menus, some of which pop up and others which the player must bring up. Within these menus, players have access to information that is not part of the (ergodic) playing experience of the game engine (the programming that generates the game).

In adventure games, players often peruse inventories; read about quests; read manuscripts that give background information about the characters, items, factions, or culture

in the game; access help menus; view maps; view player attributes and abilities; (re)view cut-scenes; upgrade/modify attributes, skills and equipment; have conversations with in-game characters; buy and sell equipment; and perform a host of other functions that vary by game. Interfaces comprise all of the extra game menus that provide information about what the player is doing other than directly navigating and interacting with the environs and characters of the game world, though sometimes interfaces are used for navigation. While playing games, much time is spent outside of the direct game world, and it is usually in interface menus that this time is spent: a player equips items and discovers information about the game world, such as items or quests, through interfaces. All of these interfaces contribute to the multimodal experience of a player and procedural rhetoric of a videogame.

Consalvo and Dutton's Interface Study attempts to chart "the information and choices that are offered to the player, as well as the information and choices that are withheld" (Consalvo & Dutton, 2006, "Interface Study," para. 2). It "reveals clues about the ideological assumptions of the game" and what is valued in the game world (Consalvo & Dutton, 2006, "Interface Study," para. 2). Educators should aim to teach their students to constantly think about the choices that videogames offer them and reflect on how these choices betray what the game values and esteems. Relevant questions for a discussion about interfaces, beginning with a general question, are these:

- What are some problems with interfaces in this game?
- How do the interfaces add additional information about the problem of _____ that could not be obtained by playing the game without consulting the interfaces?
- What messages do the interfaces convey in relation to the problem of _____? How do they present this information?
- Can you identify any aspects of the interfaces that relate to the problem of _____ mentioned above?
- Do the interfaces convey any messages via procedural rhetoric related to the problem of _____? If so, how?

8. Consalvo and Dutton's Interaction Map

Video game spaces are more than simply the sum of their code – they are experiential spaces generated through code and the player's interaction with the execution of that code through the medium of the screen. (Taylor, 2003, para 1.)

Consalvo and Dutton's Interaction Map is a much less wieldy tool of analysis than the item inventory and interface study. It consists of "examining the choices that the player is offered

in regards to interaction — not with objects, but with other player characters, and/or with Non-Player Characters (NPCs)” (2006, “Interaction Map,” para. 1). Because of the intricate relationship of interaction to events, Consalvo and Dutton (2006) suggest that “The overall ‘story’ of the game can be discerned here [in the Interaction Map], if there is one, in order to raise questions about narrative or the ideological implications of the plot” (“Interaction Map,” para. 6). They note that this is too broad a task to be applied to every interaction in a game and suggest using it only as a heuristic category (2006). Consalvo and Dutton also note that it is important to replay a game to play out different choices that may not be visible on a first play through. While Consalvo and Dutton are primarily interested in in-game interactions, the rise of massive multiplayer online gaming (MMOG) raises the importance of charting multiplayer interactions as they can be part of the problems players experience in gaming (for example, the above mentioned issue of players being shamed by other players if they play badly while playing *League of Legends*). Relevant questions for teachers are these, again beginning with a general question:

- What are some problems with interactions in the game?
- How do interactions with other players relate to the problem of _____?
- How do interactions with NPCs relate to the problem of _____?
- How many game interactions did you note that are related to the problem of _____?
- Are these interactions forced by the game or are they part of emergent play?
- What kind of problems do you have with other real players when you play?
- What does this tell you about the problem you earlier identified of _____?
- What ‘story’ is told by the interactions?
- Does this story relate to the problem of _____?
- What does this tell you about the ideology of the game?
- What could you do to solve this problem or just make it less of a problem?
- What messages are being conveyed by the interactions of players in-game and out-of-game?

8. Consalvo and Dutton’s Gameplay Log

Gameplay is “the kernel at the center of the machine, the engine that drives all of the other [game] elements, putting the *game* in the game-story” (Zimmerman, 2004, p. 162). The

Gameplay Log aims to track these processes, a category which Consalvo and Dutton describe as

The most nebulous — the overall "world" of the game and the emergent gameplay that can come into being.... the researcher is looking for the "unexpected" in gameplay (among other things) to see how (potentially) open the game is for players.... [and] studies such things as emergent behaviour or situations, the larger game world or system, and intertextuality as it is constituted with the game. (2006, "Gameplay Log," para. 1)

This category allows the player to "put together the 'larger picture' of the game that might have been fragmented through analysis of discrete segments such as the interface, objects or interactions alone" (Consalvo & Dutton, 2006, "Gameplay Log," para. 4). This category also serves as a space in which a player can record overall impressions of the game and anything else the other categories might have missed.

Though they did not divulge their reasons for naming this category of gameplay analysis a log, that they did appears to appeal to common qualitative research techniques of keeping logs, journals, and diaries to record a researcher's field notes, observations, and reflections (Creswell, 2007; Emerson, Fretz, & Shaw, 2001). Consalvo and Dutton's term 'emergent gameplay' further pays homage to this social science research tradition that looks for emergent data, or unanticipated behavior of subjects, in a social situation. A log of gameplay is a repository that can be perused to discover emergent behavior.

Regardless of the specific questions asked, Consalvo and Dutton's focus here is on gameplay and what may be missed in an analysis of the minutiae of a game, as shown by their comment that this analysis looks to uncover "the overall 'look and feel' of the complete world that the game constructs" (2006, "Gameplay Log," para. 1). Questions that could be posed for this category are these:

- What emergent behavior (for example, a game cheat), or behavior that is not expected by game players, have you seen?
- What emergent behavior have you seen "outside of the game", for example, behavior that players regularly engage in before agreeing to join a team or after a game has finished?
- Are there any other kinds of emergent behavior you can think of?
- Is any of this emergent behavior a problem?
- Have you noticed any intertextuality in the game?
- Does this intertextuality relate to the problem of _____ identified earlier? If so, how?

- Are there any aspects of the game in general that relate to the problem of _____ that have not been discussed?
- How many intertextual connections did you see in the game related to the problem earlier identified of _____?
- Is anything gained by the overall playing of the game and using the gameplay log that relates to the problem of _____ that has not been discussed?

9. Weaknesses in Consalvo and Dutton's approach

One weakness of Consalvo and Dutton's approach is that many of their categories overlap. Objects relate to interactions, interactions relate to the interface, and interactions relate to emergent experience. The concept of story, which Consalvo and Dutton place at the level of interactions, overlaps with all four categories they use to analyze videogames (object inventory, interface, interactions, and the gameplay log), for all the multimodal elements of a videogame contribute to a player's understanding of the story told including her/his experience of the story. The critical player's understanding/interpretation of the game, or construction of its story, is based on an amalgamation of all of the factors discussed above.

Consalvo and Dutton analyse intertextuality in the gameplay log, but intertextuality is ubiquitous in most genres of videogames and influences the interpretation of game elements in all of Consalvo and Dutton's categories. An individual mind does not maintain Consalvo and Dutton's divisions as s/he plays and experiences the game and the host of intertexts it contains. An individual player is subject to "the intertextual drive" (see Riffaterre, 1990), which determines that wherever a player encounters something that reminds her/him of something else, that encounter forcibly recalls an intertext from her/his unconscious. As such, discussions of intertextuality could be used when discussing any of Consalvo and Duttons' categories.

Bogost's (2007, 2008a) concept of procedural rhetoric could also be incorporated into any of Consalvo and Dutton's categories as the arguments made by procedural rhetoric emerge by accretion and agglutination in a player of a variety of game elements. It was for this reason that the questions regarding procedural rhetoric were integrated into the questions based on Consalvo and Dutton's categories above. Similarly, logging a player's thoughts and responses lies between all of these categories in gameplay because it is impossible to separate them in/from the individual game player's stream of consciousness. A strict adherence to the categories could be used as a tool for writing up a description of a videogame, but this description would be inherently contradictory to player in-game experience. As such, it seems

best to integrate elements of intertextuality, story analysis, and procedural rhetoric when they arise in an analysis rather than limit a discussion to when these concepts confer with Consalvo and Dutton's categories. With these provisos in mind, it may be best at the end of an analysis to ask additional questions such as these:

- Is there an overall message conveyed by the game from all of the elements via procedural rhetoric that you would not have noticed without reflecting on it?
- Did considering all of the elements above in relation to the problem(s) you identified help you to see a message conveyed via procedural rhetoric that you were not aware of when you began this project?

Even though many of Consalvo and Dutton's categories contain concepts that overlap with other categories, thinking about Consalvo and Dutton's categories, in turn, while conducting an analysis, does help to uncover aspects of a game that could be easily overlooked without a systematic approach to guide the reflection. All of these questions have been combined into a worksheet for the convenience of anyone wishing to employ the approach with her/his own classes (see Appendix).

10. Conclusion

Media literacy skills, including requisite skills to interpret videogames, are essential to any educator working in a twenty-first century environment. The discussion above has been provided to familiarize educators who are unaware of critical media literacy and practices with techniques they can use to analyze videogames. It is hoped that they will pass these concepts on to their students so that their students can be more critical about their consumption of cultural artifacts. This approach parallels Chamberlin-Quinlisk's goal of making students critique media artifacts that they like, not just those that they do not (2012). The approach offered above is not comprehensive and will require constant adaptation. It is hoped individual instructors engaged in teaching their students to critically analyze videogames will adapt and add to the questions in each of the sections above as the author has adapted and added questions to Consalvo and Dutton's categories of analysis.

The uniqueness of the approach offered above is that it attempts to integrate procedural rhetoric and Freire's process of problematizing to Consalvo and Dutton's holistic game analysis. Whether the procedural rhetoric of a videogame is effective or not is only determined by the individual player's personal reaction to the message conveyed and whether s/he changes her/his course of actions, or manner of thinking, after playing that videogame. Incorporating Freire's concept of problematizing to students' analysis of videogames is an

approach that is not extant in the literature on critical media literacy (Frasca, 2004) that attempts to bridge the gap between theory, praxis, and student concerns (see Johnson, 2009). Problematizing videogames personalizes videogame analysis for each student and carries the possibility of raising emergent issues to the attention of educators at large. It is hoped that educators will pass some of the knowledge they gain from this problematizing of videogames back to the academic community.

The greatest strength of the approach is that a typical undergraduate student could easily apply the approach outlined above heuristically to produce a fairly lucid piece of cultural criticism of a game s/he may already know intimately from hours spent in its game world. With practice, students should be able to apply these concepts to other media artifacts, not just videogames. It is hoped researchers will expand upon and develop this approach and suggest other concepts that need to be incorporated when teaching students to critically analyze videogames that have been overlooked in this approach.

Acknowledgements

I would like to thank the anonymous reviewers for their comments that helped immensely in strengthening the arguments proposed by this article.

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Appendix 1. Problematizing Videogames: A worksheet for students

Write down the name of the videogame that you would like to analyze: _____

Procedural rhetoric: the message collectively conveyed by all of the processes and events of a game that may differ from explicit statements made in the game

Problematizing the game

What problems do you see in how this game depicts the world?

What problems do you see in how this game depicts social relations?

What problems do you see in how social relations develop around this game (the social side of gaming)?

What problems do you see in this game or do you experience through the playing of this game.

What are some problems that emerge with other players when you play this game?

Discussing Agency and Immersion: how much a player feels s/he can influence elements in the game world

At what points in the game do you feel that you are in control?

What can you control in the game?

What can you not control?

When did you feel most immersed in the game?

Why did you feel immersed in the game?

What prevents you from feeling immersed in the game?

Overall, did you feel that you possessed a lot of agency in this game? Why or why not?

Teaching multimodal meaning: how meaning is conveyed using various types of media

Can you think of some aspect of the videogame in which meaning was conveyed using a variety of multimedia sources?

How does the combination of sound/image/text/space in the videogame you are examining construct meaning beyond what could only be conveyed by one of those media sources?

How does this surplus of meaning affect your understanding of this videogame and the meanings it conveys?

The Object Inventory: all the objects in a game and what you can do with them, e.g., a potion you can obtain, buy, sell, or give away

What are some problems with objects in the game?

Can you name any objects in the game that relate to the problem you identified?

How do objects in the game relate to the problem of _____?

What messages do the objects relay that relate to the problem of _____? Can you think of any problems with these messages?

Do the objects convey any message via procedural rhetoric that relates to the problem of _____? If so, how?

Can you think of any problems related to objects in the game? What are they?

What are the social aspects of objects in the game, both in-game and out-of-game, that relate to the problem of _____? Do the social aspects of the games present any other problems?

The Interface Study: interfaces are all the menus, screens, dialogue boxes, inventories, cut-screens, pop-up screens, in-game books, etc., that interrupt directly playing the game

What are some problems with interfaces in this game?

How do the interfaces add additional information about the problem of _____ that could not be obtained by playing the game without consulting the interfaces?

What messages do the interfaces convey related to the problem of _____? How do they present this information?

Do the interfaces convey any message via procedural rhetoric related to the problem of _____? If so, how?

The Interaction Map: all the ways one interacts with non-player characters (NPCs) and player-characters (PCs) in the game (in-game and out)

What are some problems with interactions in the game?

How do interactions with other players relate to the problem of _____?

How do interactions with NPCs relate to the problem of _____?

How many game interactions did you note that are related to the problem of _____?

Are these interactions forced by the game or are they part of emergent play?

What kind of problems do you have with other real players when you play?

What does this tell you about the problem you earlier identified of _____?

What 'story' is told by the interactions?

Does this story relate to the problem of _____?

What does this tell you about the ideology of the game?

What could you do to solve this problem or just make it less of a problem?

What messages are being conveyed by the interactions of players in-game and out-of-game?

The Gameplay Log: a record of play – your impression of the game that may have been missed in other categories; the look and feel of the game

What emergent behavior (for example, a game cheat), or behavior that is not expected by game players, have you seen?

What emergent behavior have you seen outside of the game, for example, the behavior players regularly engage in before agreeing to join a team or after a game has finished?

Are there any other kinds of emergent behavior you can think of?

Is any of this emergent behavior a problem?

Have you noticed any intertextuality in the game?

Does this intertextuality relate to the problem of _____ identified earlier? If so, how?

Are there any aspects of the game in general that relate to the problem of _____ that have not been discussed?

How many intertextual connections did you see in the game related to the problem earlier identified of _____?

Is anything gained by the overall playing of the game, and using the gameplay log, that relates to the problem of _____ that has not been discussed?

Is there an overall message conveyed by the game about the earlier identified problem of _____ via procedural rhetoric that you would not have noticed without reflecting on it.

Additional questions:

Is there an overall message conveyed by the game from all of the elements via procedural rhetoric that you would not have noticed without reflecting on it?

Did considering all of the elements above in relation to the problem(s) you identified help you to see a message conveyed via procedural rhetoric that you were not aware of when you began this project?