Into the Digital Sandbox: Procedural Rhetoric and Co-Authorship

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The following paper considers videogames as compositions, both in terms of designed artifacts and as enacted in-process texts composed in the moment through the interaction of players and processes. Considering both highlights the difficulty of studying interactive media, which often restructures itself in active, unpredictable ways through users. It also extends terms like composition to consider emergent and distributed creations in addition to the designed, procedural artifacts that inform interaction, addressing tensions of ownership and player agency.

While most of the field tends to take up authorship and gaming in terms of the design process, I argue that in playing a videogame, something—a level, a character, a city, a story, etc.—gets composed, and this composition is indebted to the ongoing interplay of human and computer. This is not to critique the focus on game design, but by grounding compositing in the act of playing, I hope to highlight how interactive media like videogames complicate our view of authorship and composition. On the one hand, a game is an interactive artifact largely defined by its authored procedures, but gamers also exert their own agency, using those procedures in unpredictable ways. Considering the game both as an artifact and as an in-process site of interaction highlights the complexities of interactive media and what may constitute a composition, particularly as platforms like YouTube and Twitch make streaming videogames a viable hobby or income. As players claim ownership of a stream, what this stream is becomes pertinent, and grounding composition in play, instead of publishing or sharing, includes the nonpublished, private composing that all players do—though this may be another question to examine. Before discussing this view, however, I want to ground the conversation in procedural rhetoric and procedural authorship, as these tend to be dominant concepts when discussing authorship and player interaction.

In procedural rhetoric, as Ian Bogost (2010) described, "arguments are made not through the construction of words or images, but through the authorship of rules of behavior, the construction of dynamic models" (p. 29). Procedures refer to the constraints built into the game that inform what one can or cannot do. To detail this, Bogost used many examples, like the *McDonalds Video Game* by the Italian-based La Molleindustria. In this game, the player uses underhanded tactics, like feeding cows growth hormones, to appease a greedy corporate command structure. By constructing a system of procedures that the player must interact with(in) that expresses corporate greed and exploitive labor, argued Bogost, the game critiques fast food in the real world. In this outlook, the game's rhetorical power derives from how the designers use "procedural authorship" to construct arguments, a concept also echoed by Noah Wardrip-Fruin (2009). Instead of creating alphabetic text and visuals, procedural authors create systems that users interact with. While these systems may have visuals, narratives, text, etc., the primary focus of procedural authorship is on the authoring of processes, not content, making it a unique type of authorship largely connected to new media.

But as Bogost (2010) also argued, the game requires the player to complete the argument. A procedural argument is emergent, coming from players interacting within the procedures. As Bogost wrote, "a procedural model like a videogame could be seen as a system of nested enthymemes, individual procedural claims that the player literally completes through interaction" (p. 49). And as Richard Colby (2013) extended, this interaction involves the audience as the gamer in the meaning-making process. Invoking Lloyd Bitzer, Colby argued that gaming could be a rhetorical situation, but like Bogost, he focused on the design aspect of a game, arguing, "The actual game (or text) has to exist beforehand," reducing the role of the audience, except in the case of play testing (p. 214). In this design-centered outlook, players and player experience remain important, but in terms of what the game is, the procedural and visual dimensions tend to dominate, not in-process play. From the perspective of design, this makes sense, but for the player, the rhetorical situation as well as its emergent arguments remain.

Using a more distributed sense of invention, some scholars have considered a more player-focused outlook, however. James J. Brown, Jr., and Eric Alexander (2016) used Collin Brooke's (2009) *prioaretic*

invention to argue that players continue the invention process of a game, even if they may not be designers. As Brown and Alexander argued, invention continues beyond the product of the designer, with the player finding new possibilities within the procedures of the game. By interacting with the game, players exert agency through their choices and abilities, allowing invention through play, not just in the process of design that created the game. As they wrote, "Designers compose procedures that create a model of the world, but players move through the world in unpredictable ways" (p. 274–275). As constraining as procedures may be, an inevitable wiggle room remains for the player, a "possibility space" as Katie Salen and Eric Zimmerman (2004) called it. Some games, like *Minecraft*, are radically open-ended, allowing a considerable possibility space, and others, like *Pong*, remain limited. In either situation, though, a skillful designer anticipates uses, and players may inevitably find new ones. Recognizing this potential for player agency, Brown and Alexander (2016) argued that we should consider the invention process in both design and play (p. 271).

But this expansion requires more examination, as one must articulate what the player is inventing. While a designer clearly produces a game as their iterative process evolves, player invention proves more ambiguous. Thus, I argue that a more fundamental outlook is at stake: A game also exists as an ephemeral composition. As Alexander Galloway (2006) wrote, "If photographs are images, and films are moving images, then video games are actions. . . . Without action, games remain only in the pages of an abstract rule book. Without the active participation of players and machines, video games exist only as static computer code" (p. 2). Galloway viewed videogames as purely emergent media, not really existing until being played. It does not exist as its rules or potential, but only through (en)action, coming into being through play. Similarly, Bernard Suits (2005) argued that a game of chess plays out in a bounded time and space, while the "institution" of chess exists more abstractly, across sessions. Suits and Galloway differ in particulars, but they both highlight the issue of emergence, showing how a fixed pre-authored set of rules lead to multiple expressions in a game. Complicating this further, Brian Upton (2015) argued that players also bring their own constraints, like strategies or player goals, further structuring a game beyond the raw pre-authored procedures.

While the volatility of in-process games offers its own challenges, I do not think it bars gaming from the status of composition, though it forces one to rethink some perspectives. John Alberti (2008) noted, "From the perspective of print-based theories of literacy, gaming is an inherently dialogic discursive space, one that problematizes the distinction between 'reading' and 'writing,' 'process' and 'product'" (p. 267). As Alberti argued, we play games much like a musician plays music: The music emerges from our approach to the pre-written composition, playing as we read. While the written-out notes, clefts, rests, etc., remain fixed as a composition in a more traditional sense, singular sonic interpretations live on as something else apart from that collection of inky notation. Steve Jones (1992) made a similar argument regarding recorded music, as many bands use live concerts to re-create studio recordings, trying to capture a more Platonic fidelity to the studio version. Like music, videogames require enactment, though they may exist in a latent, alternative, or virtual form, and that enactment is bound by time and space.

Calling the situated act of play a composition may seem minor, but it recognizes the tension between a game artifact or title and a game session, both called *a game*. Despite the similar terminology, they are different rhetorical situations. On the design end, composers consider what sort of in-the-moment games their work may lead to, and each time one sits down to play this game, those same procedures and content remain in a largely stable rhetorical artifact. But in-the-moment play may produce unique expressions as the player exerts their input and processors run the code. These expressions, which I am calling compositions, come from the designed game but produce a unique game inflected by the *kairotic* dimensions of that moment and its human and nonhuman participants. Furthermore, each situation requires different skills or literacies, and as the rise of streaming and machinima shows, they may produce different texts.

The distinction between a game title and a game session may not matter much when idly playing *Fallout 4* alone at home, but issues of ownership arise as one captures and shares this content. A player may record the videogame in a walkthrough, for example, or they may use the game to produce machinima and comics. This capacity to use a game as a composing software and share the fruits of that

playbor brings significant questions. Like other fan work, these compositions disrupt ideas of intellectual property and copyright, and like posting music online, posting a playthrough potentially gives the game content away, hurting sales. From the other side, Trebor Scholz argued in his introduction to *Digital Labor* (2013) that one could see this playbor as exploitative, with players showcasing the product and creating content with it for little to no pay. Using *The Sims* as a case study, Tanja Sihvonen (2011), for example, showed the wealth of fan content produced through the game and how a company, like Maxis, works with fans in a symbiotic, though sometimes fraught, manner to advance profits. While these issues and others deserve further examination, they all begin by crediting the player a degree of authorial agency in play. Furthermore, one may want to only credit shared play sessions as compositions, but this treatment contrasts that of other digitally mediated composing. For example, one may not share or publish every piece typed in a word processor, but numerous compositions, and variations on base compositions, exist on a computer.

Moving to a close, though, I want to stress one final thing about why I focus on the term *composition*. First, though some versions of a game, like a recorded video, may give a stronger sense of permanence or textuality, I want to stress that that one does not need to see authoring or composing only as constructing a new artifact that exists discretely or concretely as an object in the world. Instead, I argue that it can be a way of exploring and working with an interface, composing by giving unique expression to an interactive artifact which may or may not be captured. As Kevin Moberly (2008) argued, "This activity. . . is often constructed as play rather than writing or composition," despite its rich expressive capacity (p. 291). I suspect that part of this interpretation, which seems persistent today, rests in the ephemeral, in-process nature of this composing. But as Collin Brooke (2009) argued, "what we think of as products (books, articles, essays) are but special, stabilized instances of an ongoing process conducted at the level of interface" (p. 25). If we wish to open the composition field to new media, we either need to remain inclusive about what constitutes composition or guard our terminology as context and technologies change, exploring and explaining our decisions.

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