Beyond the implied player – transgression and contingency in digital games
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The glitch phenomenon

An 8-bit buffer memory overflow at level 256 of Pac-Man causes a “killscreen” that prohibits the player from continuing to play. A software bug in The Elder Scrolls IV: Oblivion allows players to clone thousands of objects. Digital games are, and aways have been, rife with bugs, glitches and exploits. These can range from funny “ragdoll physics” quirks, to malign crashes. In between these two extremes however, there is a space of software symptoms that are neither inconsequent nor terminal to the game. Meades has already discussed the emergence of the “glitcher” community devoted to the discovery and documentation of such phenomena.[1] Such practices, essentially diverge from the intentions of the games’ creators, however could be said to be productive.[2]

Black box rules

Rules are a fundamental aspect of games. As Juul writes: “[the] interaction between game rules and game fiction is one of the most important features of video games”[3]. Aarseth mentions: “[the] potential player, before becoming an actual player, must receive some instructions, either from the game itself, or from a guide or accompanying material. Thus, the player is created, by these instructions, and by his or her initial learning experience”[4]. While however in non-digital games the rules and their judgement is left to the players’ interpretation of the given instructions and material, in digital games the situation is quite more complex.

The software running in the machine, that produces the content and enables gameplay, is not only responsible for the “bookkeeping” of the score and progress, but additionally functions as the juridicial agency in real-time during gameplay. Costikyan, while enumerating sources of uncertainty in games, following Malaby’s game definition as “contrived contingency that generates interpretable outcomes”,[5] briefly mentions: “[the] problem of analysis is compounded by the fact that the underlying algorithms are not exposed to the player”.[6]

Indeed videogames, are essentially black boxes. More often than not, instead of the rules, the only given instructions are the controls, and what the player, in diegetic terms *should* do. What one *could* do is usually implied, relying on initial experience, as Aarseth holds. What one *couldn’t* do is left for the player to explore, in her search for the “possibility horizon” of the human-specific simulation, as Gualleni supports.[7]

Digital games and their contingent uncertainties

However, beyond Costikyan’s listed uncertainties,[6] lie much more grave contingencies. Fazi mentions in her critique of software as axiomatic systems: “by specifying the rules of the game, [it is expected] that we can also know what we can achieve by playing it”.[8] In the absence of clearly stated rules though, the player must accept what the software allows her to do, at face value. Fazi suggests that software has its own “experienceable dimension” and self-determination,[8] held separately from empirical phenomena and as such, self-referentially consistent. Drawing from Turing’s incomputability[9] and Gödel’s incompleteness[10] theorems, the underlying premise, indefeasible of the software medium remains: no software can be proven to properly run, before it has actually run, and until all possible interactions have been exhausted.

Concluding, what this paper suggests it twofold:

Firstly, that it is practically **highly improbable** to eliminate all software bugs from any piece of software. In videogames, even “exhaustive” play-testing, cannot disprove the

contingency that the software might allow the player something that its designers didn't foresee, or worse, that is contrary to the their intentions. Consequently, we have to accept that bugs, glitches and exploits, very possibly lie undiscovered inside the possibility spaces of videogame software -in both "progression and emergence"[11] games- as they keep being discovered, either manually or artificially[12].
Secondly, that such unforeseeable emergent happenings, might as well go unnoticed by the player, who unless is told otherwise or knows the intentions of the designers, has to accept everything as part of the game.

Previous approaches[5],[13] have produced game definitions of contingency, however of a limited scope. Drawing from Ayache's analysis[14] of Pierre Menard's rewriting of Quixote in Borges[15], this paper suggests a similar reading of gameplay as an inherently contingent activity of (re)creating meaning, encompassing the full potential, inescapable materiality and side effects of the videogame substrate, as well as the dérives and transgressions from the mold of the implied player.

Ludography:
Pac-Man (Namco, 1980)
The Elder Scrolls IV: Oblivion (Bethesda, 2006)

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