Approaching the Analysis of the Spectatorship of AI in Saltybet.com

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EXTENDED ABSTRACT

The proposed submission is a paper-in-progress that seeks to examine the appeal of watching AI compete against one another. This paper takes, as its primary case study, Saltybet.com [1], a streaming site which uses the M.U.G.E.N. fighting game engine [2] and various player-made AI characters, and has them fight in exhibition and tournament matches. Spectators of these matches can bet fake money or 'salty bucks' on the outcome of a match and a small community has grown around *Saltybet's* unusual entertainment prospect.

Many discussions of AI focus on their ability to be optimised for a specific task and only rarely is the appeal of AI as a form of entertainment, particularly one which involves so much blunder and imperfection, a focus of discussion. Even within the realm of games AI are often discussed for their capacity to compete with or best human players in games like Chess, Go or DOTA2 [3] or to learn how to perform a very specific task within a game-space defined by a fitness function [4] [5]. Although highly competent AI typically occupy the academic mainstream's attention, Saltybet stands as an example of how inefficient or 'bad' AI can be a source of entertainment. This entertainment seems to stem from a mixture of the AI's behaviour, the visual depiction of an AI character as well as the context in which the spectatorship happens. Saltybet is framed in a very similar way to many Twitch livestreams of fighting games between human opponents. The key difference is that no human players are present, something that is typically a core part and appeal of watching others play. In presenting this paper the author seeks to open a discussion on the place of AI designed to entertain as well as the use cases of AI that are sub-optimal or - to put it characteristically - 'foolish'. A central question that this proposal seeks to answer is what is the appeal of AI vs AI spectatorship?

Saltybet streams typically involve a series of betting phases and phases where fights actually occur. During the betting phase, betting spectators can speculate on which character will win based on their visual appearance, gambling fallacies, character loyalties (e.g. characters from a series such as DragonBall Z), traits such as having a sword (which makes it likely that a character will have large disjointed hitboxes) or prior knowledge of a specific AI. Bettors can choose how many 'salty bucks' to wager based on their assessment of the AI which is repaid depending on the odds assigned to the character and whether or not they win or lose. Then the fight begins, usually with the best of three rounds determining the winner. When matches begin it often quickly becomes clear who will win or lose due to certain behaviours or traits of the AI such as extremely damaging attacks, stun-locking an opponent so they cannot act, inactivity on the part of a poor AI or many other imbalanced behaviours. Throughout the betting and fighting phases a live chat feed can be seen next to the broadcast where players participate in discussion of the matches and *Saltybet* itself (as illustrated in Figure 1).





Alongside Saltybet, this paper also briefly considers other examples of entertaining and foolish AI including: community streams of various Mario Party games (disparagingly dubbed 'Mario Retardy'[6]); autonomous AI robot competitions (Robot Sumo [7], Robot Soccer [8]); mistakes by everyday AI companion applications (e.g. Alexa [9], Autocorrect [10]); and procedurally generated matchmaking between AI (BadCupid [11]). These examples will be examined, with video examples and a live demonstration of Saltybet.com itself, to help answer the central questions of this paper and supplement the discussion of the appeal of Saltybet. A distinction is made between those AI that are intentionally implemented to be incompetent (Mario Retardy, BadCupid), those AI that emergently develop behaviour perceived as ridiculous (digital evolution, artificial life, RobotSumo) and mixtures of emergent and intentional foolishness (Saltybet). Currently the study seeks to document typical instances of spectatorship with reference to the SaltyBet stream's live chat as well as surrounding community material including the twitch chat, comments on archived footage. The intentions of the people that stream and design these AI will be scrutinised.

The intention of making AI entertaining for spectatorship is worth discussing especially given the focus of AI researchers. Lehman *et al.*'s [12] collected anecdotes of various evolutionary computation and artificial intelligence projects that surprised their creators with bizarre, unusually inventive or extreme behaviours shows that there is a rich font of discussion, yet to be tapped in the field of artificial intelligence. The examples discussed in Lehman et al.'s case studies share much in common with *Saltybet* and other AI vs AI games for their apparent entertainment value. Media studies sources including Taylor's [13] comprehensive discussion of the Twitch platform, Fagan's [14] speculative analysis of the appeal of the Roman games, Geertz's [15] ethnographic study of Balinese cockfighting and Klastrup's [16] concept of shared 'player stories' will be used to

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help understand the situation and experience of watching AI play against each other.

The appeal of AI spectatorship appears to come from a mixture of othering (seeing the AI as separate and inferior), characterisation (typically as foolish or ridiculous) and the thrills associated with other traditional sports spectatorship (skilful play and climax). These aspects of the appeal of AI spectatorship are highlighted for discussion and their place in wider discussions of AI will be interrogated. In discussing the appeal of the spectatorship of AI many potential, related causes must be disentangled from one another in order that a clear understanding of the phenomenon of AI spectatorship can be fully understood. The pleasures of gambling, for example, might be a more prevalent factor than others given the inherent psychological appeal of betting on outcomes (even mundane outcomes). Does the appeal lie primarily with the AI themselves or elsewhere?

A proposed hypothesis of the paper is that AI vs AI spectatorship feeds on the desire to anthropomorphise AI and thus narrativise the spectated event. Scholars such as Bryson [17], Gunkel [18] and Floridi & Sanders [19] have discussed the risks of anthropomorphising AI in this way which makes for an unusual opportunity to discuss the moral patiency of AI in a context which seems harmlessly entertaining but also superficially resembles activities such as dog-fighting or cock-fighting. However, this anthropomorphisation seems to fill in for the absence of the spectacle of human players while also serving as a satisfying and morally acceptable way of othering the focus of spectatorship (often by discussing the AI's lack of intelligence, skill or sensibility). This 'perceived foolishness' appears to be the central appeal and this paper presentation intends to discuss this aspect of AI in depth.

Ultimately, the proposed submission seeks to open a discussion on the potential directions of this paper as well as the subject of AI spectatorship more generally. How does understanding the appeal of Ai spectatorship inform its future and what developments could be made in this space? The author intends for the presentation to bridge discussions of how AI is understood in the fields of both computer science and the humanities as well as in a gaming context.

REFERENCES

- Salty Bet, 'Salty Bet,' saltybet.com. [Online]. Available: https://www.saltybet.com. [Accessed: Feb. 21, 2019].
- [2] Elecbyte., 'M.U.G.E.N. Version 1.1 Beta 1,' mugenarchive.com, Jul.
 27, 2013. [Online]. Available: https://mugenarchive.com/forums/downloads.php?do=file&id=5283
 -official-mugen-1-1-beta-1-elecbyte. [Accessed: Mar. 2, 2019].
- [3] A. McAloon, 'Deepmind AI faces off against (and defeats) Starcraft 2 Pro Players,' gamasutra.com, Jan. 24, 2019. [Online]. Available: http://gamasutra.com/view/news/335138/DeepMind_AI_faces_off_a gainst_and_defeats_StarCraft_II_pro_players.php. [Accessed: Mar. 2, 2019].
- [4] G. Martínez-Arellano, R. Cant, and D. Woods. 'Creating AI Characters for Fighting Games using Genetic Programming.' *IEEE*

Transactions on Computational Intelligence and AI in Games. 9, 4, 423-434, (2017).

- [5] Geijtenbeek, T., Van der Panne, M. & A.F. Van der Stappen. 2013. Flexible Muscle-based Locomotion for Bipedal Creatures. In ACM Transactions on Graphics, (Proc. of SIGGRAPH Asia 2013). 32, 6, [Online]. Available: https://www.goatstream.com/research/papers/SA2013/. [Accessed: Mar. 2, 2019].
- [6] Ultranick24. 'Mario Retardy Stream #1,' Twitch, 2013. [Video Archive]. Available: https://www.twitch.tv/videos/48477291. [Accessed Mar. 2, 2019].
- [7] Robert McGregor. 'ロボット相撲,' YouTube, Jun. 19, 2017 [Video File]. Available: https://www.youtube.com/watch?v=QCqxOzKNFks. [Accessed Mar. 2, 2019].
- [8] HTWK Robots. 'Nao-Team HTWK vs. Nao Devils Final RoboCup German Open 2018,' *YouTube*, May. 1, 2018 [Video File]. Available: https://www.youtube.com/watch?v=ZwAjHTI21Dg. [Accessed Mar. 2, 2019].
- [9] N. Chokshi, 'Amazon Knows Why Alexa Was Laughing at Its Customers,' nytimes.com, Mar. 8, 2018. [Online]. Available: https://www.nytimes.com/2018/03/08/business/alexa-laughamazon-echo.html. [Accessed: Mar. 2, 2019].
- [10] N. Wood. 'Autocorrect Awareness: Categorizing Autocorrect Changes and Measuring Authorial Perceptions,' Honors Thesis. Florida State Univ., Tallahassee, FL, USA, 2014. [Online]. Available:

https://diginole.lib.fsu.edu/islandora/object/fsu:204751/datastream/ PDF/view. [Accessed: Mar. 2, 2019].

- [11] Kitfox Games. 'Badcupid: Book of Love,' badcupidgame.com [Online]. Available: http://www.badcupidgame.com/#/. [Accessed: Mar. 2, 2019].
- [12] J. Lehman et al. The Surprising Creativity of Digital Evolution: A Collection of Anecdotes from the Evolutionary Computation and Artifical Life Research Communities. <u>arXiv:1803.03453v3</u> [cs.NE] Cornell University. 2018.
- [13] T.L. Taylor. Watch Me Play: Twitch and the Rise of Game Live Streaming. Princeton University Press. Woodstock, England, UK. 2018.
- [14] G.G. Fagan, The Lure of the Arena: Social Psychology and the Crowd at the Roman Games. The Cambridge University Press, Cambridge, England, UK, 2011.
- [15] C. Geertz, 'Deep Play: Notes on the Balinese Cockfight.' Daedalus, 134, 4, 56-86, (2005).
- [16] L. Klastrup, 'What Makes World of Warcraft a World? A Note on Death and Dying.' in *Digital Culture, Play, and Identity: A World* of Warcraft Reader. H. Corneliussen, and J, Walker. Eds, The MIT Press, Cambridge, Massachusetts, USA, 143-166, 2008.
- [17] J.J. Bryson, 'Robots Should Be Slaves,' in Close Engagements with Artificial Companions: Key Social, Psychological, Ethical and Design Issue. Y. Wilks, Ed, John Benjamins Publishing Company, UK, 63-74, 2010.
- [18] D.J. Gunkel, *The Machine Question: Critical Perspectives on AI, Robots, and Ethics.* The MIT Press, Cambridge, MA, USA, (2017).
- [19] L. Floridi, and J.W. Sanders. 'On the Morality of Artificial Agents,' *Minds and Machines.* 14, 3, 349-379, (2004).