

# Deceptive Design in VR Games: Lies that invite Surprise and Pleasure

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## EXTENDED ABSTRACT

Deceptive design as laid out by Gualeni and de Mosselaer (2021) refers to the intentional construction of false player expectations with the goal of providing them with more surprising and pleasurable experiences. In line with their definition, these deceptions are either of a narrative, aesthetic, or mechanical nature. Game elements are positioned in ways that leverage a player's prior gaming experiences to suggest certain behaviors and outcomes, whilst deceptively hiding their true nature. If a deception is revealed to players to provide them with a moment of shock or surprise, then it is an overt deception. On the contrary, if a deception is never revealed as it provides a more enjoyable player experience by remaining concealed, then it is considered a covert deception. Unlike the concept of dark patterns (Zagal et al. 2013), deceptive design focuses on improving the player experience; player habits and expectations are subverted with the objective being to provide them with a more valuable experience rather than to extract value out of them.

Whilst there is existing literature analysing a variety of deceptive design patterns in digital games (Podda 2024; Gualeni & de Mosselaer 2021) and research on the application of dark patterns to VR applications (Hadan et al. 2024), no research has been done on how deceptive designs are implemented in VR titles. As such, this paper is an analysis of deceptive design patterns in a multitude of existing VR titles and an investigation of if and how the unique affordances of VR hardware and software, as well as associated player expectations and habits, alter the ways in which deceptive design patterns are implemented in VR to maintain their emotional impacts on players. The results of this analysis can aid game designers in setting up deceptive moments in VR games through providing them with reference to existing trends and showcasing how and why deceptive design patterns in VR differ from those in other digital games.

A collection of deceptive design patterns from VR games has been put together in a manner similar to the work of Podda (2024), where the following information is

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highlighted and analysed through an exploratory analysis: game of origin, description of design pattern, inferred design objective, overtness vs covertness, and relevance of any ludic knowledge. The inferred design objective describes the assumed goal of a given design pattern, derived from factors such as context of the implementation, comments from developers, and player responses. Additionally, since Podda's (2024) work centered solely on mechanical deceptions in traditional digital games, and this paper looks at all categories of VR deceptions, it is also specified if a deception being analysed is a narrative, aesthetic, or mechanical one. These types of deceptions may experience different trends, and as such it is beneficial to differentiate between them during analysis.

This paper also establishes a new categorisation for deceptive design patterns referred to as Level of VR Dependence. This categorisation specifies if a deceptive pattern in a VR game would be identical (VR dependence is low), altered heavily (VR dependence is mixed), or break completely if implemented in a non-VR digital game (VR dependence is high) whilst maintaining its inferred objectives.

Through this ongoing analysis, three trends have emerged relating to deceptions that are heavily altered for or native to the medium of VR i.e. deceptions with a high or mixed level of VR dependence. Since those with a lower level of VR dependence remain uninfluenced by the affordances of VR, they do not reflect VR deceptive design practices and are excluded from these trends.

**The first trend** is deceptive design patterns that leverage data from VR technology to facilitate player intentions and covertly create more pleasurable player experiences. This includes games like *Half-Life: Alyx* (Valve 2020), which secretly modifies hand physics to make player actions smoother, and *Horizon: Call of the Mountain* (Guerrilla Games and Firesprite 2023), which uses eye-tracking to apply a slight aim assist to thrown objects. As is the case with both of these examples, these types of deceptions are generally mechanical.

**The second trend** is deceptive design patterns that bring player attention to the technological nature of a VR experience. This includes deceptions in games like *Accounting+* (Crows Crows Crows 2017) and *Virtual Virtual Reality* (Tender Claws 2017), which have players put on VR headsets inside the VR environments. In both instances the deception is used to prompt players to question the lines between realities and virtual realities, as well as to deliver moments of surprise when players realise that the layers of VR are recursive and go much deeper than they thought.

**The third trend** that emerged is deceptive design patterns that subvert tropes which are exclusive to VR games. An example of this is how *FNAF: Help Wanted* (Steel Wool Studios 2019) includes the VR trope of having its main menu be a diegetic, safe, first-person environment, and subverts it by incorporating the climax of the game's horror and narrative elements into this main menu area as the game progresses. This encroaches on a space that other VR games have taught players no action takes place in, and as such it enhances the horror and memorability of the game's narrative climax. The main distinction between this and similar deceptions in non-VR games which encroach on assumed safe spaces, is that the type of space being subverted is commonplace in VR games whilst being exceedingly rare in non-VR counterparts. As

such, VR players have significantly stronger expectations of how these diegetic first-person main menus should operate.

This research highlights an overlooked area of VR game design and sheds light on how the affordances presented by a given hardware and software stack shape the ways in which designers must approach deceptive design. Aside from the taxonomy of existing VR deceptions established, this research also aims to examine deceptive patterns found in traditional digital games that were absent when analysing VR titles, and identify and promote potential future deceptive design patterns that are emerging through newer and upcoming VR technologies.

## REFERENCES

- Crows Crows Crows. 2017. Accounting+. VR Game. Crows Crows Crows & Squanchtendo.
- Gualeni, S. and de Mosselaer, N. V. 2021. Ludic unreliability and deceptive game design.
- Guerrilla Games and Firesprite. 2023. Horizon: Call of the Mountain. PSVR2 Game. Sony Interactive Entertainment.
- Hadan, H., Choong, L., Zhang-Kennedy, L. and Nacke, L. E. 2024. "Deceived by Immersion: A Systematic Analysis of Deceptive Design in Extended Reality." *ACM Computing Surveys*. 56 (10), 1–25.
- Howell, P. 2016. "A Theoretical Framework of Ludic Knowledge: A Case Study in Disruption and Cognitive Engagement." In *10th International Conference in the Philosophy of Computer Games*, Valletta, Malta.
- Natale, S. 2021. *Deceitful Media: Artificial Intelligence and Social Life After the Turing Test*. Oxford University Press.
- Podda, D. G. 2024. *Mechanics-Based Methods in Deceptive Game Design*. University of Malta.
- Steel Wool Studios. 2019. *Five Nights at Freddy's: Help Wanted*. PC VR Game. ScottGames & Steel Wool Studios.
- Tender Claws. 2017. *Virtual Virtual Reality*. PC VR Game. Tender Claws.
- Valve. 2020. *Half-Life: Alyx*. PC VR Game. Valve.
- Zagal, J. P., Björk, S. and Lewis, C. 2013. "Dark Patterns in the Design of Games." In *Foundations of Digital Games 2013*.