

An Assessment of Motion Capture in Animated Film through an Analysis of Aesthetics

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Abstract

This study aims to determine whether motion-captured animation is better suited for hyper-realistic or caricatured film aesthetics and whether it creates or breaks the aesthetic engagement for the viewer. This will be done by analysing how each aesthetic maintains or breaks 'suspension of disbelief' in viewers towards character engagement and identification. This paper specifically aims to report on a study of body motion capture, via attaching trackers only on the body and not on the face and fingers. Films used to critically analyse these ideas will be *The Adventures of Tintin: The Secret of the Unicorn* (year) directed by Steven Spielberg to illustrate motion capture, which pertains to caricatured animated feature film aesthetics with caricatured designs. In comparison *Beowulf* (year) directed by Robert Zemeckis will be studied to demonstrate motion capture with hyper-realistic aesthetics.

Motion capture has often been critiqued negatively for its depiction of human characters and their movement as having a disturbing appearance; which is mostly criticised as effects of the Uncanny Valley - a phenomenon first introduced by Professor Masahiro Mori. There are currently 13 major motion capture animation feature films, such as *Final Fantasy: Spirits Within*, *Final Fantasy: Advent Children*, *The Polar Express*, *Last Order Final Fantasy VII*, *Monster House*, *Happy Feet*, *Beowulf*, *A Christmas Carol*, *The Adventures of Tintin: The Secret of*

the Unicorn, Mars Needs Moms, Happy Feet 2, Kochadaiiyaan, Space Captain Haddock. With the amount of motion capture being used in current animation features, especially with a local South African studio such as The Flying Circus using it as a means of saving costs on animation production, there needs to be an understanding of where motion capture is best suited depending on the aesthetic design of the film. This becomes especially imperative to animated films, because it has its own codes of depicting 'realism' that are separate to that of live action films that are discussed in detail in the paper.

To conclude, this study will aid in determining which aesthetic style provides better engagement through a critique of aesthetics the films chose to pursue and which keeps viewers succumbed to 'suspension of disbelief'. This will aid in determining whether motion capture is an appropriate method to creating animated movement for a particular aesthetic.