

Framework to consider in developing your proposal

1. Research Question and Project Rationale

what do you plan to research? how will you research it?
& why it is important to research this subject?

I am going to focus my research on photorealism in the film industry. There are many different opinions and techniques about this, such as how can digital photorealism help with safety issues during live action shooting of 'impossible to shot' scenes, or how some people consider photorealism in filmmaking to be 'too realistic' therefore it takes you out of the story being difficult to empathise with, or what photorealistic animation could be considered, a live action movie or an animation movie. This topic has many directions that can be followed, and I would need to structure it in a way that everything looks connected. I am thinking in narrow it down to the controversy that photorealism has always been into the film industry (pros and cons rather than technical aspects) as it could be interesting to analyse the reaction of the audience throughout the years and how it could possibly develop in the future. My research method would be focused on peer reviewed sources found on internet or library, but I will possibly try to conduct a survey amongst students, lecturers at university and some more people outside VFX industry to ask about their feelings towards photorealistic films (I will have to create a selection of the best-known photorealistic movies, so people taking the survey are familiar with them).

2. At least 5 keywords

Photorealism

Computer Generated
Imagery

Filmmaking

Safety

Uncanny Valley

3. Situate your proposal in relation to key texts, issues and debates.

Name and explain authors relevance to your project proposal

Melki's dissertation called *An Investigation Into The Creative Processes In Generating Believable Photorealistic Film Characters*, focuses in the process of creating believable photorealistic film characters as well as its benefits and challenges. The research was also made through interviews with several expert industry practitioners and the comparison of all the participants statements.

The importance of photorealistic VFX in filmmaking industry as a tool to avoid shooting dangerous live action scenes, is explained in Wadmare's essay *Recent Trends Visitation in VFX and SFX in the Animation World*. (add The Visual Effects Arsenal reference – ebook downloaded)

Manovich's explains in their book how it is a common opinion that the CGI will never be as realistic as images gathered by camera lenses (uncanny valley). However, they also counter argue that these opinions are mistaken, explaining why they think this and how this CGI practice is in fact becoming more realistic than traditional photographs.

Agrawal and Aurin in their *Non-photorealistic Rendering: Unleashing the Artist's Imagination* essay, and Cooper in their *Personal Thoughts on Non-Photorealistic Rendering analysis* explain the challenges and techniques that artists have faced with photorealism (and its issues with the so called 'uncanny valley'), and how some artists have opted for NPR (non-photorealistic rendering) to create a simpler and cartoony style (animation). Moreover, in *Sidelining Photorealism: 'Speed Racer' and Articulation of Digital Effects Labour*, Jeng explains how photorealism has always been the leader in the film industry and how some movies like 'Speed Racer' have opted to side-line this style to help foreground the work of digital visual effects artists.

On another aspect, Meena explains in their *A Novel Method to Distinguish Photorealistic Computer Generated Images from Photographic Images* research how photorealism has revolutionary the filmmaking and game industry and, at the same time, how these photorealistic techniques have been used with malicious intentions and how important it is to learn how to distinguish real assets from computer generated ones.

4. Research Methodology and Analysis

Include names of case studies, images, material examples like artworks, games or films.

My main research methodology will be based on peer reviewed material searched on Google Scholar as I found some papers with interesting case studies about my topic such as Melki's dissertation called *An Investigation Into The Creative Processes In Generating Believable Photorealistic Film Characters*. This thesis is also being supported by some books and peer reviewed papers that include some more technical aspects about Photorealism in filmmaking such as Manovich's book *The Language of New Media*.

I am also planning to make a survey amongst students, lecturers and people outside VFX industry (general audience), to gather some qualitative data about their thoughts and feelings about Photorealism in films such as *Inception* (bending reality digitally and making it look 'real'), *The Lion King* 'live action' remake (how believable is the character's performance of a 'real' talking lion against the cartoon version of this film), *Rogue One: A Star Wars Story* (replacing deceased actors Carry Fisher and Peter Cushing for CGI versions of their characters Princess Leia and Grand Moff Tarkin, respectively), or *Avatar: The Way of Water* (the mix of practical effects and visual effects to avoid shooting in the ocean for safety issues and also avoid previous experience with bad CGI).

5. Bibliography (not included in word count)

Harvard Style – For guidance on how to reference correctly (using your UAL login)

see appropriate examples on <https://www.citethemrightonline.com/>

Agrawal, A., and Auryn (2009). *Non-photorealistic Rendering: Unleashing the Artist's Imagination* (online). Available at: <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5167490> [Accessed 25 April 2023]

Cooper, D. (1999). *Personal Thoughts on Non-Photorealistic Rendering* (online). Available at: <https://dl.acm.org/doi/pdf/10.1145/563666.563690> [Accessed 25 April 2023]

Jeng, J. (2023). *Sidelining Photorealism: 'Speed Racer' and Articulation of Digital Effects Labour* (online). Available at: https://books.google.co.uk/books?hl=en&lr=&id=KLOqEAAAQBAJ&oi=fnd&pg=PA153&dq=photorealism+in+film&ots=r8349MIY8s&sig=aEhMvSbwORZ1C0leMCKO8dnpnEns&redir_esc=y#v=onepage&q=photorealism%20in%20film&f=false [Accessed 25 April 2023]

Manovich, Lev (2002). *The Language of New Media*. First paperback edn. Cambridge: The MIT Press.

Meena, K. B., and Tyagi, V. (2019). *A Novel Method to Distinguish Photorealistic Computer Generated Images from Photographic Images* (online). Available at: <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8985711> [Accessed 25 April 2023]

Melki, H. (2019). *An Investigation Into The Creative Processes In Generating Believable Photorealistic Film Characters* (online). Available at: https://pure.ulster.ac.uk/ws/portalfiles/portal/78290411/Henry_Melki_Thesis.pdf [Accessed 25 April 2023]

Wadmare, S. (2021). *Recent Trends Visitation in VFX and SFX in the Animation World* (online). Available at: <http://ilkogretim-online.org/fulltext/218-1617213160.pdf?1682423818> [Accessed 25 April 2023]