

CRITICAL ANALYSIS OF AUTEUR THEROY IN CHRISTOPHER NOLAN'S SCIENCE FICTION FILMMAKING

Dr Alice Angel D. PhD.

Assistant Professor in MGR Educational and Research Institute and Cluster Head, Thanthi group.

draliceangel@gmail.com

ABSTRACT

Science fiction films are a literary genre that deals with ingenious and innovative concepts. Why do Christopher Nolan's movies are with the concept of time? Four of his movies Prestige (2006), Inception (2010), Interstellar (2014), and Tenet (2020) which has Time as a major factor are taken for analysis. The article is supported by auteur theory where Nolan as a futuristic filmmaker is known for the usage of time, as he bends, reverses, breaks, and saves it. Nolan's movies often bring some aspect of manipulation of time to the table, which has contributed in no small way to his reputation for unimaginable plots.

KEYWORDS: Science Fiction films, Communication, Auteur

INTRODUCTION

"The secret impresses no one. The trick you use it for is everything.

I think audiences get too comfortable and familiar with today's movies. They believe everything they're hearing and seeing. I like to shake that up

— Christopher Nolan"

Science fiction (sci-fi) is a genre of hypothetical fiction that deals with innovative science and technology. It includes cybernetics, time travel, exploration of space, immortality, parallel universe, artificial intelligence, extra-terrestrial life, mind uploading, and singularity. Science fiction movies predict many innovations that already exist like robots, atomic bombs, and borazon the names of which match their fictional predecessors.

Science fiction films are often unpredictable. Sometimes, they cannot be considered a science but can be said as pseudo-science, depending primarily on quasi-scientific artistic fantasy than logic and conventional scientific theory. It can vary based on the viewer (Michaud, Appio 2022). Sci-fi films are not always set in space. At times the film plot unfolds on the Earth's surface and to make it exciting, the elements of robotics, machines, and monsters are added to it.

Science fiction films are consisting of certain topics, themes, and plots that frequently appear (Barron, 2004). They include but are not limited to space and time travel, AI, advanced computing, virtual reality, robotics, aliens and extra-terrestrial life, genetic experimentation, transhumanism, cloning, etc. The setting is done in the future or alternate timeline. It may involve aliens in outer space or unknown civilisations. The application or invention of new





principles in sci-fi films includes such as psionics; nanotechnology; faster light travel; social or political systems that are different from the known past or present (Cavanaugh, 2004).

SCIENCE FICTION AS A GENRE

Early short films by George Méliès, Gaston Velle, Max Fleischer are depictions of science fiction like a trip to the Moon or Mars. Some film critics say that science fiction films came in the 1950s from Destination Moon films. Early writing of sci-fi movies has dealt with science communication techniques, lineage, and with plot summary (Voskuyl, 2009). Sci-fi film theories and criticism has been routed in the auteur which focuses on the creative filmmaker behind the film. Over time, sci-fi films shifted towards a separate genre that develops definite characteristics (Milner, 2012). As the number of sci-fi films increase, studies, film theories, and criticism has also become more specialized. The sci-fi genre has become a trend and the making it grows each year (McLuhan, 1994).

"Breaking rules isn't interesting. It's making up new ones that keeps things exciting- Nolan"

This genre inspires technological development. Star Trek's communication led to the advancement of mobile phones. Total Recall instigated the creation of driverless cars. Star Wars led to the implementation of AI and other concepts and technologies. Communication gadgets and the ideas used in sci-fi films soon are adopted by our real-life technologies successfully. Sometimes sci-fi movies are a mixture of real life and fantasy (Rosen, 2001). It has varied subgenres and when it is based on a cultural and societal representation the viewers will be able to relate more. Moreover, sci-fi films offer a pretty realistic representation of the future (Shaw, 1999).

Sci-fi movies help the audience to exist in a new and unseen world which let them escape from the stressful life and sends them across the words of aliens who travel in spaceships or the post-apocalyptic future (Adorno, 1979). It makes the audience explore the hidden worlds around them through future technologies and alien races. Under the Skin film also let the viewers extraterrestrial lives (Schwartz, 1997). Gravity film had great cinematography and visual effects that took the viewers to see an imaginative world beyond their reach. Sci-fi films are relevant, and this genre is not going anywhere anytime soon as the storytelling has the space of putting the characters in the film in situations beyond imagination (Gowran, 1996).

Sci-fi films are ground-breaking. Their communication makes technology shape society and culture. They assess the brain cells and motivate the imagination. Four of Christopher Nolan's sci-fi films Prestige, Inception, Interstellar, and Tenet are taken for critical analysis in this research article.

NOLAN'S SCIENCE FICTION FILMS Prestige:





Rival stage magicians at the end of the 19th century in London. They are fixated on creating an illusion on stage, engross in competitive rivalry with tragic consequences. The film itself is an act of magic that turns wheels and grand designs. The storyline of prestige is haunting, inducing works of the modern-day wizard. It is one of Nolan's character-based movies and largely an engaging story with the filmmaker's obsession and the only film to feature David Bowie and Nikola

Inception:

A professional thief steals information by infiltrating the subconscious of his targets. Nolan is a spectacle master and aesthetic filmmaker trading in a dealing a vernacular that is distinctly nerdy. Nolan's women are ghost-like and the men are in handsome suits. They oftentimes move like in a 3D chessboard (Scalzi, 2005). They are brimming and riddled with twisted technicalities. His characters are completely entertaining. At the time of Inception, it was criticized that Nolan's imagination was limited. The film was one of the great masterpieces of popular entertainment of the 21st century.

Interstellar:

Christopher Nolan set this film in a dystopian future at a time of struggling humanity. The film is about a group of astronauts who travel through a wormhole near Saturn to find a home for our mankind. The film Interstellar is the closest Nolan has got in his career to touching the singular beauty. It's his longest film and the only one of his films that spent a substantial portion in space. It is also Nolan's most experimental one and nakedly emotional. It is a cerebral film with a profound solemnity. The fiction that the Earth is being choked to death by dust is a future exploration. "We've forgotten who we are". He called humankind pioneers, explorers, and not caretakers. As a filmmaker, he searched in space for a habitable planet, through which his viewers explored worlds, black holes, and the farmhouse book rack. To him, Christopher Nolan is telling a simpler narrative.

Tenet:

Former CIA agent operates the flow of time to prevent an attack from the future to thrash out the present world. It was released to brave the pandemic in theatres. Tenet is considered to be the lifesaver of the film industry. It is also the most ambitious film that Nolan has ever made. Tenet's filmmaking is like a never-ending instruction manual in which the characters are thinly drawn. This film had repeat viewings as Tenet is all plot based. There was no subtext going. Visual effects won Oscar along with Cinematography and haunting score. This sci-fi is Nolan's technical masterpiece.

CHRISTOPHER NOLAN AND HIS TIME FACTOR

Genre:

Almost every venerated director has their signature genre or a particular sub-genre for what they are renowned for. The influence of science fiction movies can be identified as in the early





2000s Memento interlaces colour sequences with black and white scenes playing out chronologically, all because the protagonist cannot remember anything beyond the last 15 minutes. More to involve dreams, the film Inception includes a time-altering element where each layer of the dream incrementally runs faster than reality (Seed 2011). The film Interstellar explores the dilation of time as it pertains to space travel and wormholes. Dunkirk film uses a time frame and Tenet film in which Christopher Nolan messed with the timeline by introducing the mechanism of inversion which reverses a person or object time travel but in real-time (Westfahl, 2005).

Realm of Reality:

Christopher Nolan as a director finds time as an intriguing area to explore in film and he revealed time as a cinematic of the subject. Nolan says that the film medium is the sole method for humans to explore and experience time differently. In our life, time goes forward in an understanding of time with the current scientific knowledge. But Nolan, backwards time, slows it down and speeds up. The film viewers who see his films in theatres experience events over a period of hours, days or years and live through his overlooked phenomenon made of creativity. It is an enduring art form that offers the viewers to relate to time while letting them experience stories beyond the realm of reality (Prucher, 2007).

Unique Experience:

The director's recurring manipulations of time depict strange and impossible ways of moving backward, living for decades inside a dream, aging rapidly, etc. He as a director proves that time and camera are inseparable friends. He uses time as a subtle element in some cases and obviously in others. The time of Nolan as he used in Dunkirk heightens the tense evacuation (Bordwell, Kristin, 2009). Sometimes the viewers watch his films without noticing his toying with the clock. In interstellar and Inception, the characters of the film travel through time at different speeds and sometimes the characters are unable to readjust to reality. Unlike his other films, in his Tenet he takes his paradox to its logical conclusion, the Temporal Pincer movement. Two hours aren't enough for Christopher Nolan's films. He wants to provide his viewers with a unique experience of time (outlaw, 2016).

The plot of Interstellar had two plans A and B. The A involved Cooper transmitting quantum data back to Earth to develop a gravitational propulsion theory through which we humans can build spacecraft and fly off the earth to another galaxy. Plan B is Cooper's crew should find the Lazarus crew to establish a colony in the other world. Though the viewers of Christopher Nolan get confused at first, in the end, they will arrive at a sense of understanding yet revisiting that is hard and is more complicated than that.

Sci-fi films have turnstiles, which are portals through which one can move backwards in time from the entry point. From that point, one can enter another point. One can move forward from a point in time and can travel back too, which means two versions of the same person exist





simultaneously. Tenet film has many machines yet majorly focuses on vault in an art storage facility and a warehouse (Lewis-Kraus, 2014).

CRITICAL ANALYSIS OF AUTEUR THEORY

Critical analysis can be done in theories, concept, terms, arguments, viewpoints, methodologies, research results and conclusions. In this research article the researcher is critically analyzing Auteur theory with respect to Christopher Nolan's films. Critical thinking involves observation, analysis, inference, communication and problem solving. Auteur Nolan as a filmmaker likes to use the same actors. Though his films have established actors, he never rethinks to dare and risk for a new talent (Thorne, 2014). His casts are always very distinctive. Nolan uses practical effects unavoidably. Apart from CGI, he uses camera stunts and other visual effects. Nolan's visual scale is always big. His initial films had grand ideas, but the budgets are lower. Nolan's intelligent blockbusters are spectacle alongside of thought provoking. In his filmmaking the music complements the actions.

Nolan a New One:

Nolan slowdowns the conventions of the existing genres to challenge the viewers ideas about movies. Nolan has started his filmmaking career with low-budget movie making like Following and Memento and rapidly Nolan became a blockbusting director (Luckhurst, 2005). His evolution as a bigger filmmaker and his plot-driven films reflects his passion in making the viewers to revise their expectations about how a popular, big-budget and a success movie can be. Nolan achieves this success by thinking popular genres like superheroes, war, sci-fi, thriller and mysteries. Old genres are still lovable like the films of Quentin Tarantino, Coen Brothers, Paul Thomas Anderson yet there are new tricks in sci-fi of Nolan's (Rushton, 2011).

Nolan's filmmaking:

When he takes a new genre, his viewers got excited. Nolan as a filmmaker has a distinctive style who has given a scope by the studio to standalone from the existing normal who can make a crowd, please. Nolan gets critical appreciations for everything he does whether it might be films based on comic books, sci-fi as apocalyptic family drama or a psychological drama. He involves emotions yet in a sci-fi way (Nolan, 2010). Nolan builds the films as a complex art form, and he has a prevailing quest for it. The reach and talk of the films are usually based upon the story and the script but this filmmaker Nolan's mission was to challenge what viewers think about his filmmaking which means he is not just interested in the story but in filmmaking too. He shows his immense interest in all aspects of the film by highlighting the needed parts in any given film (Mottram, 2002).

Films in silent era usually an instrument plater play alongside the visual in the screen and at times the film does not need any sound at all, whereas that silence itself is a needed now. Now, films have visual images, structure sound. Christopher Nolan as a filmmaker sees film as a work of art rather than the story to be told. Nolan has been experimenting with both 70mm and





IMAX. Nolan is known for his bold scores and very loud films overwhelm the dialogue of the film. Theatres in US have put on a hoarding to inform the film viewers that their equipment is fine and if they have any complaints in audio and they need to take it up to Nolan (Grant, 2008).

Dialogues and BGM:

When Hollywood reporters asked for the reason, he said it was purposeful. He needs his film to be sound, bold and adventurous. Apart from dialogue clarity, Nolan believes in story and emotional clarity. Nolan explains that the music and sound effects mixed down will help the viewers to understand everything that is happening in the film (Mottram, 2013). Sound is also a part of storytelling. Vivian Sobchack, a film theorist explains the difference between sci-fi and fantasy films where sci-fi films achieve a belief in the viewing images and fantasy films suspend our disbelief. Sci-fi films push the boundary of the viewers rather than being a complete alien in the narrative. In this way, Auteur theory is taken to support Christopher Nolan's cerebral filmmaking of sci-fi films (Giardina, 2014).

Nolan as Auteur:

"Everybody's situation is unique, and the one thing I've learned is that instead of copying someone else's model for a low-budget film, you really have to look at what you've got available and see how you can tell the story you want to tell, using the things that you have around you.- Nolan"

Auteur describes the director of the film in the context of cinema. Auteur is the one who exerts a high level of film-to-film and often fills parallel roles like writing and acting in their own films (Faraci, 2010). Truffaut wrote about the films of new French directors whom he termed auteurs. He argued that the filmmakers who write and direct their own films have a unique vision. This idea embraced the new French filmmakers which are called as New French Wave. Christopher Nolan who writes and directs his sci-fi films have a personal vision of inventions (Barthes 1977).

Auteurs like Nolan have technical competence, interior meaning, and a distinguishable personality. They are the captain and top in craft in terms of filmmaking abilities. The multiple components of filmmaking are high-level. Nolan is a technically gifted one who has a unique style of filmmaking. Viewers can expect consistent themes to be explored. Auteurs create films that are unmistakably theirs (Calvisi, 2013). Nolan in his sci-fi films has layers of meaning and they go beyond solely entertainment oriented. Maybe not for all his viewers but for a dew it may take years of time to understand his film. But the auteur Nolan has been training his viewers to do it. An involuntary internal data base is built every time his viewers watch his films. Over time, their reception and tastes grow (Barrett, 2012).





Auteur theory of filmmaking is a major creative force in the motion picture. Nolan directs his films without drama. When the budget increases, the complexity increases. Nolan has a passion for filmmaking and is committed to keeping his narratives a secret (Astruc, 1948). His scripts are both technical and substantive. Nolan always uses single unit set up even for action sequences. Nolan is influenced by MC Escher who helps him to blur the lines between art and science. His habit of making non-linear storylines is particularly influenced by Waterland. Nolan's filmmaking is concerned with a point of view. The cinematography makes the viewers to understand the character at any given moment. They will not feel detached as if they are watching a movie from unknown POV (Alguire, 2014).

Nolan commonly uses flashback in his filmmaking style. His flashbacks occur in dreams or perhaps something reminds a character from the past. They are shown in black and white sequences and the flashbacks told are less successive. He is a distinguished director who overly work for his demographic audience's intelligence. His lines are comprehensible only after a few watches, even for his fan. His contemporary blockbusters who are commercially hit have a great cast, novel soundtracks, action packed sequences, visuals and camera. He believes in his craft and his shots will subtly engage the viewers on the screen.

Nolan's reputation as a director, he says he offers the films of realism. He denotes about cinematic realis with filming techniques, technical realism with actual locations and effects, subjective realism as the POV of the viewers, psychological realism with relatable human motives, and scientific realism with factual science (Sooke, 2015). Nolan is a modern auteur, who has made himself as a recognizable and commercial filmmaker. When the industry identifies the best auteurs, they give power and money to them and benefits from commoditizing them as a brand. The auteurs itself are used as a marketing tool in selling of films as a commercial strategy to organize viewers reception and distribution. The term auteur has become a celebrity recognition and Nolan has certain advantage over others due to his literary and writing background and at time he breaks cinematic rules (Aitken, 2001)

Nolan also works as a co-writer of his films along with his which increases his credibility. He also handles the camera like a pen in creating the visual narratives (Levitz, 2008). Some argue that auteurs theory discredits the writers, cinematographers, producers, editors, etc. whereas Nolan learned all the key responsibilities of the filmmaking process and credited in those roles as a co-worker too. Jack of all trades, master of none is what needed for an auteur to take control over the film. They need to know the little of everything but not needed to be specialized one. It is because of that Nolan's visionary world comes to life through his collaborative efforts (Tallis, 1988).

Nolan's films are with non-chronological are his stylish signature. Though Nolan's endings are open and vague he makes it clear by the screenplay design and continues to do so. Nolan has once started that if something is new and not understandable, no answer can be sought by the





viewers. They cannot get an answer at the end while the film is objective. There should be sense of reality and consistent rules by subjectivity such that the viewers can understand and connect to the story. Though auteurs are strong in what they do, they often face criticisms for their new works. Nolan is criticized for always using memory and time, yet he explores and offer a unique experience to his audience. Despite the argument Nolan representing women in his films, he never has treated women as objects. They are always subject (Williams, 1980).

Uniqueness:

Nolan is film nerd who admires and explores everything about film. He is technically sound and understands the boundaries of filmmaking. He creates a collaborative working environment where respected departments work for the best of the film. He always has special elements that are incorporated in his films as he knows film history. It does not talk down to his viewers. No political standards or morals the way anyone should behave (Vidal, 1976). His concepts are simple on which he builds a world around. It is more of realistic portrayals in a modern environment, race for survival between the people who travel in different space and entering to human's dream to know what they are hiding. Well developed characters. Nolan revolves around a discovery journey that work which is Nolan's forte (Maciel, 2014).

CONCLUSION

The four movies that are taken for the research were Christopher Nolan was born to make. Nolan is a distinctive filmmaker. He makes too clinical films, largely uninterested in female and non-white characters. His times are trickery. Nolan has found a way to make big-budget films that he wants his viewers to talk about, dissect and revisit. Apart from Time Christopher Nolan is very much interested in memories. Even while Nolan makes a crime drama, a superhero, or a war film he is remarkably consistent in science fiction. While Nolan is accused of being emotionless, he considers memory to be tied to our emotions.

"I want to deal with the world of dreams, and I realized that I really had to offer the audience a more emotional narrative, something that represents the emotional world of somebody's mind"

Nolan is never interested in following rules. Time is a tool of arsenal in his science fiction films. He bends Time according to his will. Initially, when the film starts, his films seem to be chronological, and it becomes a thrill of realizing what the viewers have assumed is not true. Suddenly two consecutive scenes don't logically follow each other, and the events happened at different times. It is not a trick and is an integral part of moviemaking. The viewers suddenly feel surprised and dislocated realizing all their assumptions are a matter of perceptions in the world.

His films slowly construct what the viewers discover on their own. It is like a dance between Christopher Nolan and his viewers, who work together to find the answers alongside the





protagonist. The temporal disorientation of the viewers mimics the protagonist and makes for a more powerful viewing experience. Christopher Nolan's love for messing with time never ends alike his interest in memories. It goes in hand with time. Moreover, our memories are the initial gate such that the past is real to us. In Nolan's world, memories can be faulty, but time isn't.

Nolan's viewers lose track of something that happened and fail to recognize it initially. His filmmaking repeatedly compels them to re-examine the fact of occurrence and how they fit into other life events. More than the world we live in, he gives a lesson about a multiplex. Dunkirk, a war film in which Nolan had treated Time. It has separate planes of time which outright from the beginning of the film and cut throughout. His characters are made in the set like one set travel in a course of the week, another set travel in a course of a week, another set over a day, and another in an hour. In a two-hour feature film, sometimes Time moves much more quickly for some sets of characters than for others. It is abnormal to bring Time into a historical film. It is hard to represent which tends to distort memory and perception of time.

Viewers may guess that different time planes might converge at a point in time. But unexpectedly, from that convergence point where the characters eventually converge on each other and start to move along separate timelines suddenly exist in the same place, at the same time, and at the right moment to avert utter disaster. Nothing is inevitable in war, no one is responsible for what happens. Its chances are both victory and defeat. Great man theory, superhero or to make the eventual moment of rescue to look like inevitable and Nolan dismantles the tendency of war films. In war nothing is inevitable. The larger the films have become, the more the viewers appreciate the learning of Auteur and every time the viewers demand novelty.

"It's most important to just throw yourself into it, just putting everything into the project that you're working on-Nolan"

References

- 1. Michaud, Thomas; Appio, Francesco Paolo (2022). "Envisioning innovation opportunities through science fiction". Journal of Product Innovation Management. 39 (2): 121–131. doi:10.1111/jpim.12613. ISSN 0737-6782.
- 2. Luckhurst, (2005), Professor in Modern and Contemporary Literature Roger; Luckhurst, Roger. Science Fiction. Polity. ISBN 978-0-7456-2893-6.
- 3. Prucher, Jeff (ed.). Brave New Words: The Oxford Dictionary of Science Fiction (Oxford University Press, 2007) page 179
- 4. Seed, David (2011). Science Fiction: A Very Short Introduction. OUF Oxford. ISBN 978-0-19-955745-5.

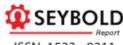




ISSN: 1533 - 9211

- 5. Scalzi, John (2005). The Rough Guide to Sci-Fi Movies. Rough Guides. ISBN 9781843535201. Archived from the original on 2 April 2009. Retrieved 17 January 2007.
- 6. Gowran, Clay. (1996) "Nielsen Ratings Are Dim on New Shows." Chicago Tribune. B10.
- 7. Milner, Andrew. (2012) Locating Science Fiction. Liverpool: Liverpool University Press.
- 8. Barron, Neil, ed. (2004) Anatomy of Wonder: A Critical Guide to Science Fiction (5th ed.). Westport, Conn.: Libraries Unlimited, ISBN 1-59158-171-0
- 9. The Science-Fiction Film in Historical Perspective (Le film de Science-Fiction sous une perspective historique)
- 10. Examination the effect of science fiction films on science education students' attitudes towards STS course Hikmet Surmelia * a Educational Faculty, Mersin University, Mersin 33169, Turkey
- 11. Cavanaugh, T.W., Cavanaugh, C. (2004). Teach science with science fiction films: A guide for teachers and library media specialist. Worthington, Ohio: Linworth Publishing, Inc.
- 12. Voskuyl, H. (2009). Science fact in science fiction. Learning Environments, 7-10, June.
- 13. Rosen, Philip. (2001) Change Mummified: Cinema, History, Theory. Minneapolis: U Minnesota P.
- 14. Schwartz, Carol A. (1997) Videohound's Sci-Fi Experience: Your Quantum Guide to the Video Universe. Detroit: Visible Ink.
- 15. McLuhan, Marshall. (1994) *Understanding Media: The Extensions of Man.* Massachusettes: The MIT Press,
- 16. Shaw, Harry E. (1999) Narrating Reality. Ithaca: Cornell University Press.
- 17. Adorno, Theodor W. and Max Horkheimer. (1979) "The Culture Industry: Enlightenment as Mass Deception." *Dialectic of Enlightenment*. London: Verso. 120-167.
- 18. Lin, K-L., Tsai, F-H., Chien, H-M., & Chang, L-T. (2013). Effects of a Science Fiction Film on the Technological Creativity of Middle School Students. Eurasia Journal of Mathematics, Science & Technology Education, 9(2), 191-200.
- 19. American Psychological Association. Diagnostic and Statistical Manual of Mental Disorders. 5th ed. Washington, D.C.: American Psychological Association, 2013.
- 20. Westfahl, Gary, ed., (2005) The Greenwood Encyclopedia of Science Fiction and Fantasy: Themes, Works, and Wonders. (three volumes) Greenwood Press.
- 21. Bordwell, David A and Kristin Thompson. (2009) Film History: An Introduction 3rd ed. McGraw-Hill,
- 22. Outlaw, Kofi. (2016) "5 Christopher Nolan Movie Criticisms That Are Totally Valid." Screen Rant. Screen Rant, 11 Nov. 2014. Web. 16 Jan.
- 23. Lewis-Kraus, Gideon (2014) "The Exacting, Expansive Mind of Christopher Nolan." *The New York Times*. The New York Times.





ISSN: 1533 - 9211

- 24. Thorne, Kip. (2014) The Science of Interstellar. W.W. Norton and Company (Forward by Christopher Nolan).
- 25. Rushton, Richard. (2011) The Reality of Film: Theories of Filmic Reality. Manchester University Press.
- 26. Prestige, The. Perf. Christian Bale, Hugh Jackman, Michael Caine, Scarlett Johansson. Dir: Christopher Nolan. Touchstone Pictures, 2006. Blu-ray.
- 27. Nolan, Christopher & Jonathan Nolan. (2010) Inception: The Shooting Script. (Preface by Jonathan Nolan). California: Insight Editions.
- 28. Mottram, James. (2002) The Making of Memento. London: Faber and Faber. 2002. Pg. 186.
- 29. Johnson, David Kyle & William Irwin. (2011) Inception and Philosophy: Because It's Never Just a Dream.
- 30. Howard, James. (1999) Stanley Kubrick Companion. London: Polestar Wheatons.
- 31. Grant, Barry Keith. (2008) Auteurs and Authorship: A Film Reader. Malden, MA: Blackwell Pub. Pg. 8.
- 32. Calvisi, Daniel & William Robert Rich. (2013) Story Maps: The Films of Christopher Nolan.
- 33. Barthes, Roland. (1977) "The Reality Effect." The Rustle of Language, translated by Richard Howard. New York: Hill and Wang.
- 34. Astruc, Alexandre. (1948) "The Birth of a New Avant-Garde: La Caméra-Stylo." The New Wave. Ed. Peter Graham. Trans. from Ecran Français.
- 35. Aitken, Ian. (2001) European Film Theory and Criticism: A Critical Introduction. Edinburgh: Edinburgh University Press. 2001.
- 36. Vidal, Gore. (1976), Who Makes the Movies? The New Yorker Book Reviews. http://www.nybooks.com/articles/1976/11/25/who-makes-the-movies/
- 37. Williams, Christopher (1980). Realism and the Cinema. Routledge Kegan & Paul.
- 38. Tallis, Raymond. (1988). In Defense of Realism. Lincoln and London: University of Nebraska Press. Pgs. 21 and 195.
- 39. Sooke, Alastair. MC Escher: An Enigma behind an Illusion. 6/24/15. http://www.bbc.com/culture/story/20150624-arts-most-famous-illusion.
- 40. PGA, "Code of Credits New Media," Producers Guild of America Code of Credits, 2013.http://www.producersguild.org/?page=coc nm.
- 41. Levitz, Paul. (2008) Batman Tech. Warner Brothers.
- 42. Maciel, Tamela. (2014) "What Does a Journey Through a Wormhole actually look like?" http://physicsbuzz.physicscentral.com/2014/11/what-does-journey-throughwormhole.html.
- 43. Giardina, Carolyn. (2014). Christopher Nolan Breaks Silence on 'Interstellar' Sound (Exclusive). 11/15/2014. http://www.holly
- 44. Faraci, Devin. (2010) "Never Wake Up: The Meaning and Secret of Inception." CHUD. http://www.chud.com/24477/never-wake-up-the-meaning-and-secret-of-inception/.





ISSN: 1533 - 9211

- 45. Calvisi, Daniel & William Robert Rich. (2013) Story Maps: The Films of Christopher Nolan.
- 46. Barrett, Deirdre and Patrick McNamara (2012). Encyclopedia of Sleep and Dreams: The Evolution, Function, Nature and Mysteries of Slumber. Volume 2: M-Y. California: Greenwood.
- 47. Alguire, Timothy (2014) "Science Center of Iowa Blog: Interstellar in 70mm IMAX." 10/31/2014.http://www.sciowa.org/explore/sci-blog/imax/

