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## Re-examining Digital Effects in 'Kumawood' Science Fiction Film Titled 2016

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### Abstract



Digital technology and its impact across the world has influenced the use of digital effects in Ghanaian filmmaking, particularly Kumawood science fiction films. Most often, the use of digital effects in such films are only considered for showmanship. Meanwhile, the idea behind using special or digital effects is to create an illusion of reality, fantasy and believability. Also, the digital effects created in science fiction films should form part of the narrative. The study examined some digital effects used in 2016 (2010), a Kumawood science fiction film. The research employed a content analysis method. Specific scenes were selected from the film 2016 (released in 2010) and the digital effects discussed. The article in an attempt established that the use of digital effects created in some Kumawood science fiction films aimed at showmanship or a kind of exhibition. It is recommended that use of digital effects must form part of the narrative.

**Keywords:** digital effects, special effects, science fiction, *Kumawood*, films

## Introduction

Film is a powerful medium of communication that imitates reality. Filmmakers in every narrative must create an illusion of reality as well as intrigue the audience in the end. Since the birth of cinema, filmmakers have used several special effects to tell their stories that have affected audience emotions and sensibilities. Lumière brothers in their attempt to affect audience emotions succeeded in the making of *The Arrival of a Train* (1896). Although the narrative is told in a single scene, the train arriving at the station was filmed in a manner that appeared as if it was popping out of the screen and entering the theatre auditorium. This created a lot of anxiety and awe among audience who were available at the theatre during that time. It marked the beginning of using effects in film (Bordwell and Thompson, 2004). Also, pioneer filmmaker, George Méliès, renowned as the father of special effects experimented with a lot of effects in his films. The release of his maiden film *A Trip to the Moon* (1902) presents one of the earliest science fiction films in film history, which employed special effects such as vanishing shots, dissolves and wipes to attract the audience (Bordwell & Thompson, 2004). To date, special effects or digital effects appear in many films especially science fiction genres.

In the opinion of Johnson (2011), science fiction film genre in a scholarly definition evolves around subjects based on technology, science, futurism or images from the unreal. Science fiction films are usually characterised by physical and dreamlike images, settings and locations. The films that normally employ special effects or digital effects are supposed to attract human perceptions. Nowell-Smith (1996) mentioned science fiction films, horror and fantasy adventure as three different genre grouped under fantasy films. According to him, such films go beyond the normal and aim at creating an illusion of reality. Hughes (2014) observed that despite the illusions and artificiality involved in science fiction films, the narrative always revolve around human relations.

In the Ghanaian film industry, a cohort of filmmakers known as *Kumawood*, in Kumasi are also affected by this phenomenon. Yamoah (2014), described Kumawood films as films made or produced in the Akan language by a group of filmmakers in Kumasi. Further, he noted the origin of the term is not known but it is believed to have been coined from Kumawood Film Festival and Akoben Film Festival. In my opinion, I strongly believe the term resulted from the merger of 'Kumasi' and 'Wood'. It is obvious that the coinage took its root from Hollywood. Kquofi and Croffie (2017) also observed that Kumawood is categorised into two forms of filmmaking such as the *Twi* and the *Twiglish* films. The *Twi* films are the films made in *Asante Twi* and the other made in the combination of *Twi* and English. To date, the influx of films made in Akan seems to overshadow the English made films. As observed by Croffie (2014), out of the ten films released weekly in Ghana, seven are made from Kumawood. This served as sigh of relief for a dying film industry

even though some scholars are against the way Kumawood films have overshadowed the English made films. To date, *Kumawood* filmmakers keep producing films of various genres and employing effects in them, for instance, films in the likes of *Azonto Ghost* (2013), *2016* (2010), *Godfather* (2015), *Kyeiwaa* (2010), *Obonsam Besu* (2017) and *The Killer* (2015).

The euphoria of using digital effects in most Hollywood films has caught up with *Kumawood* filmmakers, Ghana. It is noted that some Ghanaian audience find it problematic in relating such effects used in certain *Kumawood* science fiction narratives. As a result, there is some form of misinterpretation and miscommunication among audience. Factually, whether the effects are used with reasons of intriguing the audience or aesthetic purposes, it must relate to the narrative being told. As echoed by McClean (2007), things employed in films not only because of its technical advantage, but as part of the narrative must contribute to the film's themes. Also, using digital effects in science fiction films must not be exaggerated or for marketing purposes. Some scholars in likes of Tamakloe (2013) and Adjei (2014) have attempted in writing about the existence of the *Kumawood* film industry, but there is a dearth of research on the digital effects in *Kumawood* science fiction films. According to Tamakloe, the film industry in Ghana can be grouped into three such as *Ghallywood*, *Kumawood* and those that does not bear the expression "wood". She referred *Ghallywood* to films produced in Ghana by filmmakers in competition with *Nollywood* filmmakers in Nigeria. Also, she likened *Kumawood* to filmmakers who produce films in *Twi*, an *Akan* parlance. Adjei (2014) mentioned actors and actresses in *Kumawood* films emerged from the Concert Party tradition as well the *Akan* language used in such films. The study explores the digital effects used in *2016*, a *Kumawood* science fiction film. It also suggest ways in which digital effects can be employed effectively in *Kumawood* science fiction films.

## **Review of Related Literature**

### **Overview of special and digital effects in science fiction films**

According to Olson (1994), special effects employ certain techniques such as miniature effects, matte painting, laboratory effects and rear projection. Whereas the laboratory effects employ optical printers to create several effects, rear projection uses projected images through translucent screens. In this process, actors perform in front of the background photograph and then filmed. Digital effects used in science fiction films employ blue screen or green screen effects and other computer controlled camera effects. He further mentioned that miniatures save huge production budgets in relation to constructing physical sets. For Olson, if gorillas can be created through digital effects then creating human digital is what we should expect in the near future. As expressed by Prince (2011), all effects created through analogue means are known as special

effects or practical effects, whereas the effects generated digitally are termed digital effects. On the other hand, computer-generated imagery (CGI) refers to the actual elements created in the film. As elaborated by Metz (2008), the use of these terms normally depends on where the effect is applied. He explained that whenever the effect is applied on set it is known as practical or special effects whereas digital or visual effects is done in-camera or post-production editing. For this fact, whether filmmakers achieve the effects through mechanical, optical or digital means, it has to improve on the stories being told. Filmmakers must use diverse ways to communicate their thoughts to an audience. The development of special effects from the days of Georges Méliès' *Trip to the Moon* (1902) till today's digitally composited Hollywood films has influenced most filmmakers globally. Current digital effects used in science fiction films have made them more believable and natural in look (Hanson, 2005).

Aghanya (2012) in a recall, touched on his experiences when he watched *The Matrix* (1999). According to him, at the end of the film, he realised that it used a lot computer special effects in the making. He believes that the computerised special effects used in the film made it a success. In his opinion, most filmmakers are moving towards using such effects in the films to make a box-office hit. LoBrutto (2005) confirmed that models in *The Matrix* (1999) were created in detail and had realistic movements. He stressed that a lot of research went into the design of the settings and backed with scientific facts as compared to early science fiction genre.

On the other hand, Kaitlin (2011) mentioned films that have employed (CGI) and other digital effects in the digital age. For instance, *Terminator 2: Judgement Day* (1993), *Jurassic Park* (1993) and *Toy Story* (1995). In recent times, the use of digital effects in science fiction films can be linked to *Blade Runner 2049* (2017), which marks a sequel to the initial *Blade Runner* (1982). In the film, a post-modern architecture was employed to create the buildings in the cities. After watching the film personally, I was marveled at the way computer-generated imagery (CGI) and chroma key techniques were employed in enhancing the appearance of major characters that projected the narrative in the story world. For example, the creation of Joi (played by Ana de Armas) as a hologram character in the film. Also, the use of digital matte paintings to create some cities in the film gave it a spectacular look ("Behind the breathtaking", 2018).

### **Concepts of Bazin's realism and Gunning's *Cinema of attractions* in spectacle**

In view of Andre Bazin's theory of realism to Tom Gunning's *Cinema of attractions*, it is impossible to separate the idea of creating realistic films from fantasy films. Bazin (1967), a classical realism theorist, asserts that realism in film is achieved through space rather than the narrative or themes. On the other hand, Gunning's (1990) most

prominent article, titled *Cinema of attractions, early film, its spectator and avante-garde*, explains the notion behind the use of most tricks in early films and today's Hollywood blockbusters, and its repercussions on the audience. Gunning (1990), encapsulates that *cinema of attractions* is a film's ability to capture the audience attention through special or digital effects. Further, he explained that this kind of "showmanship" separates the audience from the narrative. In a rebuttal, I personally believe that digital or special effects should form part of every narrative and not to be used in films only to attract the audience. In the opinion of Bazin (1967), an attempt to achieve realism in the cinematic space must help tell the story. Besides, the introduction of digital effects have provided more opportunities to make the digital effects created in science fiction films more believable as part of the narrative. According to Bukatman (2003) as cited by Ryu (2007) the use of effects in science fiction films form magnificent technologies that creates instant sensual feeling. For Bukatman, special or digital effects have existed since the beginning of cinema and it solely depends on the development of the technology involved. Therefore, it depends on how the individual views it. Bukatman sees special effects in science fiction films as technology and also as cinema.

## **Methodology**

The study employed a qualitative approach and used a content analysis research design of *2016* (2010). Neuman (2017) described content analysis as method in research used to analyse a text. He further noted that text in this context may refer to words, pictures, symbols and themes. In this study, the images are viewed as text and analysed. For sampling method, the film *2016* was purposefully selected based on the researcher's personal judgment. The film is popular and accessible. It presents certain issues pertaining to digital effects that are worth analysing. Besides, the director of the film, bearing the pseudonym Ninja, is renowned for making science fiction films coupled with a lot of digital effects in *Kumawood*. Six (6) specific scenes were selected from *2016*, interpreted and analysed.

## **Results and Discussions**

### **2016 synopsis**

Oppong Wiafe (played by Ebenezer Donkor, alias *Katawere*), a renowned scientist, discover that an unusual spaceship has landed on earth. In this spaceship are aliens who have plans to destroy Ghanaian citizens and settle down in the year 2016. News about these aliens are sent through radio, television and print media to all citizens. The aliens arrive at midnight and start their mass destruction in Ghana. Some people believe the presence of these aliens and others express doubt until they meet them physically around. Several aged, young adults and children run into hiding. Meanwhile, some unemployed young adults take advantage of the situation and raid several homes

for valuable goods. Maa Dorcas (played by Rose Mensah alias *Kyeiwaa*) who initially doubted the story meets an alien and escapes. Wiafe's son, Daniel (played by Evans Owusu Addai) is killed by an alien that infuriates him to create a cyborg to attack the aliens. This initiative is taken to save the rest of the Ghanaian natives in existence. In revenge, Oppong Wiafe creates a metal cyborg to fight these aliens, but requests for a human heart from the indigenes to be placed into it to function. Finally, Maa Dorcas' son Samuel (played by Samuel Frimpong) voluntarily donates his heart to be placed in the cyborg to function. The cyborg is then sent out to destroy all aliens. It succeeds in destroying the aliens and Oppong Wiafe receives compliments across the country.

In figure 1, is the interior of Wiafe's computer science laboratory where he did his investigations. The room is decorated with a lot of computers, mobile phones, furniture set, telephone and other gadgets.



*Figure 1. Interior of Wiafe's science laboratory. (Source: 2016)*

As seen in figure 2, is an alien roaming in town looking for human beings to destroy. In the film, two aliens arrived in the country to destroy human beings and take hostage of the land.



*Figure 2. An alien looking for natives to destroy. (Source: 2016)*

Below in figure 3, is a native killed by an alien who attempted to escape. Another means of killing people was to use its tongue to pull people closer whenever they attempted to running away.





*Figure 3 A native killed by an alien. (Source: 2016)*

Below in figure 4, is Wiafe's cyborg as he transforms into flames in an encounter with an alien. Such effects are created with 3D softwares such as Adobe After Effects, Boujou, Maxon Cinema 4D, Auto Desk Maya.



*Figure 4. Wiafe's cyborg metamorphosize into flames. (Source: 2016)*

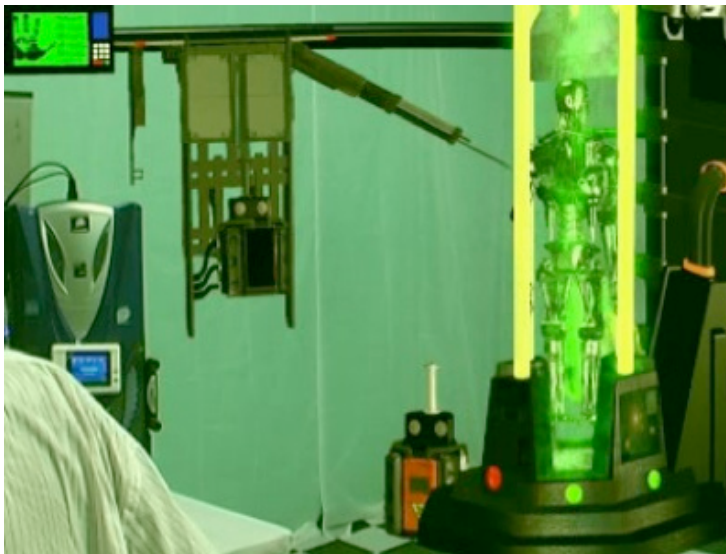


In figure 5, is the cyborg created by Wiafe in a brawl with an alien exchanging weapons.



*Figure. 5 Wiafe's cyborg in a battle with an alien. (Source: 2016)*

As seen in figure 6, is the cyborg created by Wiafe to fight the aliens.



*Figure 6. Wiafe seen at his science laboratory creating the cyborg. (Source: 2016)*

From the above findings, it is observed that the interior architecture and style of the science laboratory does not reflect the futuristic aspects of the film. As revealed by LoBrutto (2002), science fiction films challenge production designers to create futuristic settings that do not exist. In my opinion, creating the interior of the science laboratory in a television studio would have presented the designer with several options to achieve a character-defined set. As emphasised by Johnson (2011), set design represents a key role in all science fiction films which reveals its futuristic aspects. Complicated set designs and enhanced with lighting can add to the film's visual tone. Also, the set decoration can be enriched with certain digital effects.

It is discovered that the 3D alien models created had dark brown colour palette in relation to the background colours. Upon a critical look, one can imagine that the models were not modified to fit the background colours of the settings in the film. In watching the film, I am unable to link the aliens to the story world and perceive it as fake. It is noted that the model character was either picked from a clip art store, 3D preset character or created by a Digital Effects Artist. Colour grading or colour correction should be key here for it to integrate with the environment.

Again, from the findings, it is observed that Wiafe's decision to fight the aliens in the film creates a cyborg from metals. Personally, the cyborg does not seem to be real because it appears in a human form and in other scenes as cyborg. To create such figures effectively in science fictions films, Digital Effect Artists can rely on the use of latex or silicon body suits, prosthetic make-up, computer-generated imagery (CGI), stop motion and animatronics. Although the scene where the cyborg turns into a human being makes the storyline a bit contrived, the flames created around him as it encounters the alien relays an emotional response to me. Besides, the ropelike weapon that is used by the aliens to destroy the citizens look believable. The digital effect is transformed in a manner that makes it more realistic.

The scene that entails the creation of the cyborg to hunt these aliens at the science laboratory has issues with believability and authenticity. The supposed three-dimensional mechanism looks very flat in a close-up shot.

## **Conclusion**

Presently, filmmakers across the world are employing more digital effects to reduce the cost of expensive budgets proposed for films as well as show fantasy and reality. Therefore, the idea of creating showmanship with such effects to attract a box-office should go alongside with the illusion of reality in the narrative. Also, the digital effects should project the narrative forward and not only focus on showmanship, in that manner it would create lasting impressions on the minds of an audience. Hence, after

watching a film, one must always carry a message home. Although an attempt was made by filmmakers in creating digital effects in 2016, they must ensure that the effects created is believable and forms part of the narrative. The staging of digital effects must be choreographed and executed properly. In conclusion, the hiring of professional film crew such as Visual or Digital Effects Artists and Visual effect supervisors must be encouraged by *Kumawood* filmmakers to handle such executions. Also, professional Production Designers must be hired to create futuristic settings and fabricate props that depicts the era envisaged. Such futuristic worlds can be created by employing virtual simulations.

## References

- Adjei, M. (2014). The video-movie flourish in Ghana: Evolution and the search for identity. *Research on Humanities and Social Sciences*, 4 (17), 61- 68.
- Aghanya, O. I. (2012). Computer graphics and special effects: A creative way of producing Igbo-themed movies for the global audience. *Mgbakoigba: Journal of African Studies*, 1, 1-9.
- Bazin, A. (1967). *What is cinema?* (H. Gray, Trans.). Berkeley and Los Angeles: University of California Press.
- Behind the breathtaking visual effects of *Blade Runner 2049*. (2018). Retrieved from <https://www.digitaltrends.com/movies/blade-runner-2049-visual-effects-john-nelson/> on April 16, 2018 at 7:00 am.
- Bentum, K. J. (Director) & Adam, M (Producer). (2016). *Azonto ghost*. [DVD]. Ghana: Mustapha Adam Productions.
- Bordwell, D. & Thompson, K. (2004). *Film art: An introduction* (7th ed). Boston: McGraw-Hill, Inc.
- Bukatman, S. (2003). *Matters of gravity: Special effects and superman in 20th century*. U.S.A.: Duke University Press.
- Cameron, J. (Director/Producer). (Director/Producers). (1991). *Terminator 2*. [Motion Picture]. USA: Carolco Pictures.
- Croffie, G. K. (2015). A discourse on cultural elements in "Akan" films. Master of Philosophy thesis, Kwame Nkrumah University of Science and Technology, Kumasi.
- Hanson, M. (2005). *Building sci-fi moviescapes: The science behind the fiction*. Oxford: Focal Press.
- Germain, K. R. (Director/Producer). (2016). *The Killer*. [DVD]. Ghana: Prestige Broadcasting Network Movies.
- Gharbin, F. F. (Director/Producer). (2015). *Kyeiwaa*. [DVD]. Ghana: Paul Gee Films.
- Gunning, T. (1990). The Cinema of attraction: Early film, its spectator and the Avant Garde. In Hughes, H. (2014). *Outer limits: The filmmakers' guide to great science fiction films*. London: I.B. Tauris.
- Johnson, M. K. (2011). *Science fiction: A critical induction*. Oxford: Berg.
- Kaitlin, B. (2011). *Between reality and realism: Cgi and narrative in Hollywood Children's films*. Department of Communica Faculty of Arts University of Ottawa.

- Kquofi, S. & Croffie, G. K. (2017). Aberration of cultures: A study of distortion of Akan Cultures in Kumawood movies in Ghana. *International Journal of Research in Humanities and Social Studies*, 4 (5), 8-16. Retrieved from <http://dx.doi.org/10.22259/ijrhss.0405002>.
- Lasseter, J. (Director) & Arnold, B. (Producer). (1995). *Toy story*. [Motion Pictures]. USA: Pixar Animation Studios.
- LoBrutto, V. (2002). *The filmmaker's guide to production design*. New York: Allworth Press.
- Lumière, A and Lumière, L. (Directors/Producers). (1896). *The arrival of a train* [Motion Picture]. France: Lumière.
- McClellan, T. S. (2007). *Digital storytelling: The narrative power of visual effects in film*. Cambridge: The MIT Press.
- McTiernan, J. (Director) & Davis, J. (Producer). (1987). *Predator*. [Motion Pictures]. USA: Twentieth Century Fox.
- Méliès, G. (Director/Producer). (1903). *A trip to the moon*. [Motion Picture]. France: Star-Film.
- Metz, A. M. (2008). A fantasy made real: The evolution of the subjunctive Documentary on U.S. Cable Science Channels. *Television & New Media*, 9(4), 333-348. DOI: 10.1177/1527476405315117.
- Neuman, W. (1997). *Social research methods: Qualitative and quantitative approaches*. Needham Heights, MA: Allyn & Bacon.
- Ninja (Director) & Nkansah K. S. (Producer). (2015). *Godfather*. [DVD]. Ghana: Ninja Movie Production.
- Ninja (Director) & Nkansah K. S. (Producer). (2012). *Obonsam besu*. [DVD]. Ghana: Ninja Movie Production.
- Ninja (Director) & Nkansah K. S. (Producer). (2010). *2016*. [DVD]. Ghana: Ninja Movie Production.
- Nowell-Smith, G. (Ed.). (1996). *The Oxford history of world cinema*. New York: Oxford University Press.
- Olson, R. (1993). *Art direction for film and video*. London: Focal Press.
- Ryu, J. H. (2007). *Reality & effect: A cultural history of visual effects*. Georgia State University. Department of Communication.
- Scott, R. (Director) & Lauzirka, De. C. (Producer). (1982). *Blade runner*. [Motion Picture]. USA: Ladd Company.
- Tamakloe, A. (2013). *Social representation in Ghanaian cinema*. Unpublished Master of Philosophy thesis, University of Ghana, Legon. Retrieved from <http://197.225.68.203/handle/123456789/5516>.
- Villeneuve, D. (Director) & Yorkin, B. (Producer). (2017). *Blade runner*. [Motion Picture]. USA: Alcon Entertainment.
- Wachoski, L. (Director) & Silver, J. (Producer). (1999). *The matrix*. [Motion Picture]. USA: Warner Brothers.
- Yamoah, M. (2004). The new wave in Ghana's video film industry: Exploring the Kumawood model. *International Journal of ICT and Management*. II (2), 155 –162.

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