

**THE INDISPENSABILITY OF SOUND IN FILM PRODUCTION:
PSYCHOLOGICAL EFFECT ON THE AUDIENCE AND CHALLENGES TO THE
FILM DIRECTOR**

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Abstract: The success of any film production is anchored on the conglomeration of both auditory and visual elements in a seamless form for edification of the audience. Film production is a collaborative art involving various individuals: producer, director, performers, technicians, designers, and administrative personnel. These individuals contribute their indispensable roles for the success of the production under the leadership of the director as the general overseer. Sound plays inevitable role in the final look of a film for the actualisation of its primary function of edification. The thrust of this study is on the indispensability of sound as an auditory element in filmmaking, its psychological effect to the audience and the challenges to the film director in achieving quality sound through his sound designer in a low budget film. The main objective of this paper is to ascertain the impact of bad and good sound in film to audience. This article uses literary methodology in the gathering of data from appropriate secondary sources: journal articles, books and internet materials. Data gathered were critically reviewed, examined and analysed. The paper discovers that bad sound causes psychological trauma to audience, thereby leading to audience apathy, poor patronage and low income generation from the sales of film which in turn affect all stakeholders which could be as result of the director lack of creative ingenuity regarding sound in film and professional negligent. It concludes that every units, departments or element in filmmaking is relevant and it should be given adequate attention to achieve a successful production.

Keywords: Sound, film production, psychological effect, film director.

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Introduction

Film production is a collaborative art involving various individuals: producer, director, performers, technicians, designers and administrative personnel. These individuals contribute their indispensable roles for the success of the production under the leadership of the director as the general overseer (Akam, 2014). Giannetti and Leach (2001:10) posit that; film is a collaborative medium, and many individuals-producers, directors, screen writers, actors, technicians-contribute to the final effect. Robert Kolker (2002:87) and Bordwell and Thompson (2010) affirm that collaboration is the core of cinematic creativity. From the most independent filmmaker to the largest studio production, people work together, share the labour and contribute their particular expertise. Irrespective of the size of production, the coordination, supervision and controlling of the filmatic elements are under taken by the director who is responsible for the final effect of the film. The director coordinates the staff to create the world of the film; he or she is usually considered the person most responsible for the final look and of the film. It could be deduced from the assertions that the director bears the responsibility if the film is either success or not success in all ramifications.

The success of any film production is integrated in a seamless whole. This means that all elements of the film: visual and aural elements are blended in a unified form without disintegration. Sound plays an inevitable role in the final look of a film for the actualization of its primary function of edification of the audience. No matter how perfect the visuals of any film will be, the sound remains an important aspect of a film but its importance is often overlooked. Rocksore Soundz (2012) opines that it has often been the case that in television, cinema, and especially in amateur or semi-professional productions, the sound has been seen as secondary to the picture. Good picture with poor sound may see the off switch flicked by many viewers. Mamer (2009:215) affirms that no matter how strong the visuals, sound is a critical component of any film and is often one of the glaring weaknesses in student and independent projects. That is why it is the film director's choice that drives the rest of the crews actions. The director is responsible for determining the look-the visuals and auditory aspects of the film (Mamer, 2009).

The thrust of this study is on the indispensability of sound as an auditory element in filmmaking, its psychological effect to the audience and the challenges to the film director in achieving quality sound through his sound designer in a low budget film. Film production in the context of this paper is refers to any video film production through digital camera. The main objective of this paper is to ascertain the impact of bad and good sound in video film to audience. This problem will be discussed under the following sub-headings: the indispensability of sound in film production, bad and good sound in film production: causes and remedies, the psychological effect of sound in film to audience, challenges to the film director, conclusion and recommendations.

The Indispensability of Sound in Film Production

It is apposite to begin this discourse with what sound is all about from different views of different scholars. Sound is the movement of energy through substances in longitudinal (compression/rarefaction) waves. Sound is produced when a force causes an object or substance to vibrate and the energy is transferred through the substance in a wave. Typically, the energy in sound is far less than other forms of energy (Infoplease, 2014). Sound is a form of energy, just like electricity and light. Sound is produced when air molecules vibrate and move in a pattern called waves, or sound waves. Sound is air molecules compressing and separating, generally represented as a wave. Sound is also seen as water-or light for that matter it flows into any area that is not completely blocked out of. One of the characteristics of sound is that it emanates from a source and becomes the vibration of elements in a transmission medium, usually molecules in the air. For instance the clapping of hand and the slamming of the door produces sound waves, which travel to ones ears and brain (Bordwell and Thompson, 2010). Sound is a veritable element in the cinematic experience. It refers to everything we hear in a movie: words, sound effects, and music. This means that they are three types of sounds in audio-visual production: the performer voice (dialogue), the sound effect and the music.

Sound is associated with its properties: loudness, pitch, and timbre, used to define the overall sonic texture of a film. Properties of sound enable audience to recognize different characters voices. There are two categories of sound: diegetic and non-diegetic. Diegetic sound refers to all those audio elements that come from sources inside the utopian world of the screen, including dialogue, doors slamming, footsteps and so on. Non-diegetic sound refers to all those audio elements that come from outside of the imaginary world we see on screen, including the musical score and sound effects like the sound thunder, earthquake and many others. Sound is used to heighten a mood, provide us with information about the location of a scene, advance the plot, and tell us about the characters in the story.

Sound is arguably one of the most important elements to be manipulated and controlled during production and post-production. Often filmmakers most times focus their attention on the visual elements of the video film ignoring the quality and the role of sound in film. In fact, audiences seem to be more annoyed by poor sound quality than by poor, set, costume, make-up and cinematography. Sound crew has one of the most frustrating jobs on a film set because sound is rarely given the need attention that camera and lighting receive. Because so many fellow crew members are devoted to the picture-camera, crew, gaffer, grip crew, design people, make-up, script supervisor and so on (Mamer, 2009:235). One could contend that the sound crew can feel largely outnumbered and overwhelmed by the visual people or whatever appears in front of the camera which is refers to as *mise-en-scène*.

Despite the lack of respect for sound in film production, it remains one of the indispensable elements. Sound is used to bridge the transition between shots in the continuity style. Sound can also be used to reintroduce events from earlier in the diegesis. Sound design is not about assembling of neat effects, loud gunshots or

using a car crash and special effect (SFX) for every bang or crashes in any video film. It is not about having the loudest sound in film. Sound design is a process of experimentation to create an audio environment that supports the on-screen action and engages the audience. The true sound designer is constantly listening, learning and experimenting. Sound provides a form of continuity or connective tissue for films (filmsound.org, 1999). Kiser (2014) argues that sound can be the director's best friend and the easiest and most cost-effective way for the director to communicate. Sound remains an important element of film production and creates a very strong effect for the success of any film production, but sometimes sound remains quite unnoticeable.

Sound is a powerful film technique for several reasons. For one thing, it engages a distinct sense of emotion and mood. The music score as type of sound is very indispensable in film mostly in absent of dialogue (performers' voice), and then it is likely to fade unnoticeably down gradually just as the characters resume talking. The technique is called sneaking in and sneaking out. The rhythm, melody, harmony, and instrumentation of the music can be associated with a particular character, setting, situation, or idea and can strongly affect the viewer's emotional reactions (Bordwell and Thompson, 2010). Scholars have expressed their views on the indispensability of sound in general and music in particular in filling the gaps when there is no dialogue, bridging the scenes or as signal or expectation tone for horror and mysterious appearance of a character, actions or situation. Because music is one of the most peculiar conventions in movies that is why when two people kiss, there's need for the audience to hear music in the background. Or when a platoon attacks the beach, a symphony should provide the inspiration behind their assault. Of course, no one has a soundtrack in their real lives. But in movies, we not only accept this convention, we demand for it. Music can be used for a number of effects in a movie. The most obvious way music scores are used is to guide the emotional response of the audience. Music in film sometimes provides clue, tells audiences how the filmmaker or director wants them to react to a given scene. (<http://thecinematheque.ca/education/wp-content/uploads/2012/02/LanguageofFilm07.pdf>). It is imperative for a director to tell his/her audience more about the purpose of the film with the use of sound because it will help in engaging the audience's imagination. A good sound in film must be free from unwanted ambience, which is sound from other sources unless there is need for the purpose of the production. Sound guides the audience attention through the reinforcement of the production theme by evoking the character or situation which in turns ignites audience emotion and mood. Sound supply an overall sense of a realistic environment, it establishes the period, time and location. Its reinforces interaction with the actors and the world of the play or screen, reinforces the action on screen or on stage, illustrate and support emotion, create focus and foreshadowing

Poor and Good Sound in Film Production: Causes and Remedies

Poor sound in film is where the auditory elements of the film are not clear, clean, misplaced, misused and interrupted by unwanted noise from other sources like environmental noises from both natural and manmade during shooting on location

or in editing booth. While good sound is the appropriate application, usage and management of sound elements in audio-visual pieces in both on location and in the editing booth. An interesting revelation was made that, locations can present extensive challenges. Given the goal of clean dialogue and effects, responding to horrible acoustics, passing airplanes, traffic noise, air conditioners, heating systems, a host of other complicating factors can make recording on-location a real nightmare (Mamer 2009:217). In as much as sound is indispensable in film production, poor sound is worse than bad visual images. It damages a movie far more than a bad cut in editing. Bad sound could certainly affect the emotion of the audience and loss of interest in watching the film. Bad sound is the most offensive and annoying aspect to a bad film. It could be argued that bad sound in any movie could lead to film apathy, low patronage and loss of interest by film enthusiasts from watching films. It could be debated also that this ugly situation could lead to low income generation from the sales of film which in turn will affect all stakeholders. In a similar vein, good sound increases audience enthusiasm and interest to watch a film. Good sound could hold audience spell bound in their closet while watching a movie. While bad sound causes disconnection between the audience in the real world and the illusion of the screen, good sound keeps them connected.

To avoid the unforeseen consequences of bad in film production it is imperative for director in both high and low budget film project in the company of his or her location manager and sound designer to embark on a research tour to proposed locations to familiarise themselves with the level of environmental sound from various sources that might affect sound production and reproduction on locations. Rea and Irving (2001:186) admonish that:

Having preaudiolized the project's sound requirements, the production sound mixer should visit the locations next. Walking through the actual spaces in advance will reveal any inherent sound problems that the production sound mixer must deal with before the start of principal photography.

The director and his sound crew members on locations trip should take note of the following: the wideness of the location, the type of acoustics of the location. Attention should also be paid to sound emanating from electrical or household appliances like sound from refrigerator or air conditioning systems, traffic noise, churches, restaurants shops, clubs, schools, aircraft noise and how they will affect the sound during shooting. Rea and Irving (2001:187) further lament that many unfortunate crews have found out that their supposedly quiet neighborhood suddenly invaded by a team of construction workers and their equipment. Once they get started, there is nothing they can do about the noise. The director of low budget film should ensure that his/her sound designer gets the clear sound on-location with good microphones rather than wait for automated dialogue replacement- ADR in the post production.

In fact, most film directors are of the view that location dialogue recording on set is often done with the knowledge that it will be replaced. Most sound effects are also

done in post production. Despite all of this, everything should be done to get high-quality location sound, particularly for filmmakers with small budgets. When working with limited resources, dealing with inadequate sound can be an expensive, messy, and time-consuming process (Mamer, 2009:235). Bad sound could also come from noise from the camera. Camera noise can also be problematic, particularly when working with older cameras. The camera can be muted with a heavy jacket or other noise-deadening material. Wind noise could also cause bad sound in a film. The director should take into consideration wind noise because it could cause terrible havoc on the sound through the microphones. The solution to this problem is to shield the microphone with wind shield, blimp or zeppelin. A story may be great, with perfect visual footage, but nothing can make the story and visual elements receive poor patronage faster than bad sound.

Furthermore, in order to get good sound on location the director should ensure that the sound crew especially the boom operator goes closer to the source mostly the performer(s) than the camera. The best solution is to use a separate audio recording device that is away from the camera. The sound recorded on the location is could be refer to as production sound and it is an extremely important aspect of any film or video production. The location or production sound should be examined, recorded, and mixed with the same care eagerness; zeal and importance give to the visual element. For a director to get good sound in a production, he must first of all get good microphones such as omni-directional and unidirectional microphones. Omni-directional microphone picks up sound in a spherical pattern, that is, equally in all directions. This approach is not particularly useful because of the more focused recordings required for sound in motion pictures. Unidirectional or cardioids microphones pick up sound in a heart-shaped pattern, hence the name. They pick up sources in front of the microphone to the general exclusion of sources behind. The shotgun variation, cardioids are designed to pick up sound in a narrow angle. Because of the need to focus on specific sound, these short cardioids (shotgun) and super cardioids (super shotguns) unidirectional microphone is the best for good location sound recording.

The sound crew is generally comprised of two people the sound mixer and the boom operator in a low budget film. In a large budget film the need for a third person who is cable puller and also the sound log that is person in charge of the log of the daily activity of the sound crew. The sound mixer has four main responsibilities: to determine microphone positions for the best sound reproduction, addressing any excess noise that interfere, and determining how best to work with acoustics of the shooting space and monitoring the audio levels for optimal recording. At the direction of the sound mixer, the boom operator generally handholds the microphone on boom above the head of the performer. The closer the microphone is, the more the recording can be focused on the subject or source. The boom operator needs to be aware of two problems of which he or she may be the source casting boom shadows on the scene and allowing the boom to drop into the frame. The solution to this is consulting with the camera crew (Rea and Irving, 2001, Mamer, 2009; Bordwell and Thompson, 2010). The poor or bad sound in film could be as

result of inexperienced boom operators who for the sake that he or she would not want the boom to appear in a shot may be tempted to hold the boom so high that the boom could amplifies ambience). In fact, it is the camera operator's responsibility to identify both boom shadows and encroaching microphones in the shot while it is the boom operator's responsibility to do away with them. For a good sound to be achieved, the director should ensure that performers, camera crew and sound operators rehearse practically well before commencing shooting.

The problem of bad sound can be avoided by taking advantage of the acoustic properties of the microphones in order to control the relative levels of the dialogue by positioning and angling the microphone rather than by electronically adjusting the gain (volume) at the recorder or mixing panel. This is why the boom operator is such an important player and why he should be provided with a good headphone. Rea and Irving (2001) notes that the recording chain is only as strong as its weakest link, and a good microphones is essential to a high-quality recording. The production sound mixer's goal is record sound consistently from shot to shot. Audiences expect the sound quality of a motion picture or video to flow seamlessly and continuously. The realistic consistency or continuity of the final sound track is the goal of the entire production and postproduction sound team.

The Psychological Effect of Sound in Film to Audience and Challenges to the Film Director: The Way Out

Psychology could be viewed as the study of behaviour and the mind as well as how people think, perceive, communicate, act and react to issues, events, situations, circumstances and people. The behaviour and mind (emotion and mood) of human beings could be affected negatively or positively based on a given circumstance. In the same vein the content of a film in general could affect the audience. Also, sound in particular could affect the audience negatively or positively.

We can say that human beings cannot exist without sound because sound is part and parcel of human existence. Sound could also be detrimental to human health especially bad sound or noise. Chepesiuk (2005:n.p) points out that:

It is not difficult for a person to encounter sound at levels that can cause adverse health effects. During a single day, people living in a typical urban environment can experience a wide range of sounds in many locations, including shopping malls, schools, the workplace, recreational centers, and the home. Even once-quiet locales have become polluted with noise. In fact, it's difficult today to escape sound completely.

The World Health Organization-WHO (1999) in her Guidelines for Community Noise declares that, "worldwide, noise-induced hearing impairment is the most prevalent irreversible occupational hazard, and it is estimated that 120 million people worldwide have disabling hearing difficulties. Growing evidence also points to many other health effects of too much volume. The effects of sound do not stop with the ears. Non-auditory effects of noise exposure are those effects that do not

cause hearing loss but still can be measured, such as elevated blood pressure, loss of sleep, increased heart rate, cardiovascular constriction, labored breathing, and changes in brain chemistry. According to the WHO (1999) in her Guidelines for Community Noise, these health effects, in turn, can lead to social handicap, reduced productivity, decreased performance in learning, absenteeism in the workplace and school, increased drug use, and accidents.

The psychology of film is a sub-field of the psychology of art that studies the characteristics of film and its production in relation to perception, cognition, narrative understanding, and emotion. A growing number of psychological scientists and brain scientists have begun conducting empirical studies that describe the cognitive and biological underpinnings of motion pictures or what has been called "psychocinematics".(Shimamura, 2013). Film is rather unique as it involves an integration of visual and auditory stimuli. In narrative films, plots are guided by camera placement and movement, dialogue, sound effects, and editing. Besides the new field of investigation in film (psychocinematics), all elements of film production have psychological effect to the audience with sound inclusive. Sound: performers' voice (dialogue), musical score and special effect in film or theatrical performances has value when it is part of a continuum, when it changes over time, has dynamics, and resonates with other sound and with other sensory experiences. Thom (1999) declares that sound is not simply to make it possible to record good sound on the set, or simply to hire a talented sound designer/composer to fabricate sounds, but rather to design the film with sound in mind, to allow sounds contributions to influence creative decisions in the other crafts. Cohen (2001) asserts that considering music and emotion within the context of film also has the advantage of bringing knowledge from psychological studies of film to bear on questions regarding music and emotion.

Sound effects can be used to create mood or atmosphere in a film through pitch, tempo, and volume. This will show how the director expects the audience to respond to a given sound. For instance, high-pitched sounds, including screams or squealing tires, help to create a sense of anxiety, while low-pitched sounds, including the sounds of waves or the swinging of a door, can be used to create a sense of calm or mystery. Perhaps the most interesting use of sound in a movie is the very absence of silence. Silence can be used to build up scenes intensity or to foreshadow impending doom. Sound is used to enhance drama and to help illustrate the emotional content in the story. It is also used to manipulate the feelings and sentiments of viewers (Jeffrey, 2008). Many kinds of sound have direct storytelling role in film making: dialogue and narration tell the story. Narrative sound effects can be used for example to draw the attention of the characters for an off screen event. The creative responsibility also lies in the manipulation of sound in order to suspense, anticipation, expectation, fear, anxiety, excitement in the mind of the audience.

Sound shape the understating of visual images it enhances audience interpretation of the situation and image. Soundtrack can clarify image, events, contradict them, or

render them ambiguous. A quiet passage in a film can create almost unbearable tension, forcing the viewer to concentrate on the screen. The most basic reason to use music in a film is to enhance the way an audience perceives certain scenes. In most cases, music can provide boosts of emotions such as love, sadness, excitement, and so on. Good sound in film production is used to enhance the visual images in the temporal world of reality on screen. The psychological effect of sound in film could be either negative or positive from good or bad sound of production.

Film directing is an essential aspect in film making that runs through the three major phases of film production, pre-production, production and postproduction. Mamer (2009:27) posits that film is organized into three critical phases: preproduction, production and post-production. It is the responsibility of the director to coordinate and supervise these phases or processes of film making which is a collaborative art. Augustine-Ufua Enahora (1989::103) avows that film is a public art, a collaborative creation which is aimed at the audience. The director stands at the centre of the communication process, shaping and transmitting the message from its Sender (writer/originator) to its Receiver (audience). The film director in studio, independent, students, and low budget productions face some challenges in order to accomplish his or her vision of the production.

The low budget film director could face managerial, human, materials and financial resources in order to actualize good audio to justify the indispensability of sound in a production. The lack of equipment is a big challenge to a director in low budget film to have good sound. Even with inadequate equipment a low budget film director can only achieve the production purpose with few apparatus through hard work, determination, creativity and interest. The director should be someone with good managerial, leadership and communication skills for effective communication with his' /her collaborators. In their opinion on effective communication and good working relationship between the director his cast and crew members, Rea and Irving (2001) state that production sound mixers ability to record the best sound possible in any situation depends on her ability to communicate properly with the director of photography and the director. In addition to this, the production sound mixer must be sensitive to the needs of the actors. He or she must use the utmost act and grace when placing microphones on the performers. Ultimately, the recording of quality production sound relies on successful teamwork between the production sound mixer and the boom operator. The mixer is not a magician; she can only record sound that is properly captured by the microphones (Rea and Irving, 2001). Because they usually work at a distance from one another, they need to develop a short-hand communication that enables them to work quietly and efficiently. The sound team also needs to be able to communicate effectively and unobtrusively with the camera operator regarding the microphones relationship with the frame line. The lighting plan can cause problems if the sound boom creates a shadow that can be seen in the frame. During the lighting setup, any boom shadows should be dealt with before the lights are fixed with the use of flags and cutters on the lights. During the shoot, the elimination of boom shadows must be a coordinated effort between

the boom and camera operators (Rea and Irving, 2001; Mamer, 2009; Bordwell and Thompson, 2010).

Poor acoustics at locations is serious challenge that a director might faced. For instance, without good microphones especially the boom microphone which the production sound mixer might need to position away from disruptive sounds to minimize their presence on the track he or she might end up recording poor sound with poor equipment. Common troublemakers are refrigerators, air conditioners, fluorescent lights, traffic noise from the windows, and natural echoes in the location. Sound blankets might also be required to eliminate the problem. Sound blankets can be used in a variety of ways to deaden the sound of live rooms by baffling the reflective sound echoes caused by hard floors, ceilings, walls, and windows. They can be taped to walls, hung by the corner or stands over windows, or even draped over refrigerators and air conditioning units to create a quieter environment.

Unwanted noise from camera, mostly the old one, is another challenge that could affect good sound in film production. This is most noticeable when shooting interiors in a confined space. Creating a soundproof housing for the camera, might reduce the noise that emanates from the lens mount, magazine, or body of the camera. This muffling can be accomplished with a blimp which is a jacket that is specially designed for the camera. An independent film director in a low budget project can create his/her own camera jacket with anything that will deaden or prevent the camera noise, such as a changing bag, foam rubber, or a coat or jacket.

The director might face difficulty during the shooting of crowd scenes with little or no good equipment. This will prevent recording clean, clear or good dialogue on the set. To avoid having any dirty or bad sound from the crowd or unwanted sound should not overlap the dialogue. The director should ensure that the performers with spoken line at that scene to project their voices to surpass the crowd and the music. The film director reserves the right as the general overseer of a production to give final verdict in any discussion concerning the film project. Because if he or she fail to exercise his/her power with respect to his/her collaborators he/she might face the conflict of supremacy among his crew. The director's relationship with his sound designer should be as intimate as that with director of photography and other units. In creating a soundtrack, the film director should select sounds that may be abstract, horror or melodious, etc to fulfill a particular or general function or purpose of the film which traditionally is enshrined in edification.

Conclusion and Recommendations

Sound remains an indispensable element in film production. Without it, the purpose of the film will not be actualised. Sound effects can make a scene scary and interesting. It is the most powerful tool in the film director's success in terms of its ability to seduce and make the audience interpret sound the way they feel within their emotions for watching any movie. The paper discovers that bad sound causes psychological trauma to audience, thereby leading to audience apathy, poor patronage and low income generation from the sales of film which in turn affect all

stakeholders: the country or community, producers, director and his/her collaborators. Any bad sound in film is the faulty of the director because he/she is the captain of a given production. It could be as result of the director lack of creative ingenuity regarding sound in film and professional negligent. Finally, every unit, department or element in filmmaking is relevant and it should be given adequate attention to achieve a successful production.

The study highlights the following recommendations:

- No aspect or element of filmmaking should be underrated
- The director should ensure good and harmonious working relationship with his cast and crew members
- The director should be industrious, creative, determining, focus and intelligent person
- The sound team should be creative and talented persons
- Well-meaning individual, the government, private and public sectors should encourage film production in the country through sponsorship.
- Filmmakers should endeavour to produce films with rich content: educative, informative and entertaining.

References

- Akam, K.O.** 2013. Issues of Auteurship in Productions: A Comparative Analysis of Stage and Film Productions. Unpublished MA Dissertation, University of Nigeria, Nsukka.
- Bordwell, D.** and Thompson, K. 2010. Film Art: An Introduction 9th Edition, New York, McGraw-Hill.
- Chepesiuk, R.** 2005. Decibel Hell: The Effects of Living in a Noisy World. Retrieved 30th August, 2014, from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1253729/>.
- Cohen, A.** 2001. Music as a Source of Emotion in Film, viewed on 15th July, 2013. <http://www.upei.ca/%257emusicog/research/docs/musicsrcemotionfilm.pdf>.
- Corral, C.** 2013. Sound 101: Building Your Sound Kit. Retrieved 30th September, 2014. <http://www.mindwarpllc.com/blog/sound-101-building-your-sound-kit>.
- Crocket, J.** 1999. Low Budget Sound' Retrieved 15th July, 2013, from <http://filmsound.org/QA/lowbudget-sound.htm>.

- Enahora, A.U.** 1989. Film Makers and Film Making in Nigeria: Problems and Prospects. *African Media Review.*, **3(3): 103**.
- Giannetti, L.** and Leach, J. 2010. *Understanding Movies*, 2nd Edition, Toronto, Pearson Education Canada Inc.
- Hibbard, M.** 2014. *Sound Design 101: Making Your Film Sound Great*. Retrieved 1st October, 2014, from <http://www.premiumbeat.com/blog/sound-design-101-making-your-film-sound-great/>.
- Holman, T.** 1999. Roles of sound, retrieved 15th June, 2015 http://filmsound.org/articles/roles_of_sound.htm.
- Jeffrey, V.** 2008. *The Role Of Sound Music And Sound Effect In The Film Industry* Retrieved 15th July, 2013, from <http://www.entertainmentscene360.com/index.php/the-role-of-sound-music-and-effect-in-the-film-industry-31997/>,
- Kiser, G.** 2014. *Insider Tips for Creating the Best Sound Design for Your Film*, Retrieved 29th September, 2014, from <http://www.indiewire.com/article/insider-tips-for-creating-the-best-sound-design-for-your-film-20140801>.
- Kolker, R.** 2002. *Film, Form and Culture*. 2nd Edition, New York, McGraw-Hill.
- Koo, R.** 2011. *Music vs. Silence: 5 Simple Rules for a Better Film*. Retrieved 15th July, from 2013. <http://nofilmschool.com/u/ryan>.
- Mamer, B.** 2009. *Film Production Techniques: Creating the Accomplished Image*, 5th Edition, Belmont, Wadsworth Publishing Company.
- MediLexicon International Ltd**, 2014. *What is psychology? What are the Branches of Psychology?*. Retrieved 20th August, 2014, from <http://www.medicalnewstoday.com/articles/154874.php>.
- National Institute on Deafness and Other Communication**, 2013. *What is Sound?*. Retrieved 20th August, 2014, from http://www.nidcd.nih.gov/health/education/video/pages/sound_vid.aspx.
- Online Etymology Dictionary**, 2001. *Psychology*. Retrieved 29th August, 2014. from www.etymonline.com/index.php?term=psychology
- Pacific Cinémathèque**, 2012. *Sound in Filmmaking*. Retrieved 15th July, 2013. <http://thecinematheque.ca/education/wp-content/uploads/2012/02/LanguageofFilm07.pdf>.



Pantoula, E. 2012. The Narrative Role of Sound in Films. Retrieved 1st October, 2014, from <http://epantoula.blogspot.com/2012/01/narrative-role-of-sound.html>.

Rea, P.W. and Lrving, D.K .2001. Producing and Directing the Short Film and Video. 2nd Edition, Boston, Focal Press.

Rocksure Soundz, 2012. Sound for Film and Video: The Importance of Getting Good Audio. Retrieved 15th July, 2013, from <http://soundworkscollection.com/news/sound-for-film-and-video-the-importance-of-getting-good-audio>.

Shimamura, P. 2013. Psychocinematics: Exploring Cognition at the Movies. Oxford University Press.

Thom, R. 1999. Designing A Movie for Sound. Retrieved 15th July, 2013, from http://filmsound.org/articles/designing_for_sound.htm.