Tsunda Mulemba Benoft-Serge **The harmonious coexistence of sound and image for efficient** audiovisual communication: the case of Kairos Communications LTD

UMinho | 2021



**Universidade do Minho** Instituto de Ciências Sociais

Tsunda Mulemba Benoît-Serge

The harmonious coexistence of sound and image for efficient audiovisual communication: the case of Kairos Communications LTD



**Universidade do Minho** Instituto de Ciências Sociais

Tsunda Mulemba Benoît-Serge

# The harmonious coexistence of sound and image for efficient audiovisual communication: the case of Kairos Communications LTD

Relatório de Estágio Mestrado em Ciências da Comunicação Área de especialização em Audiovisual e Multimédia

Trabalho efetuado sob a orientação do Professor Doutor Daniel da Cruz Brandão

julho de 2021

# Declaração

Nome: Tsunda Mulemba Benoît-Serge Endereço eletrónico: sergetsunda@gmail.com Telemóvel: +243 977 057 388 Número do B.I.: 045L182L0

## Título do Relatório:

"The harmonious coexistence of sound and image for efficient audio-visual communication: the case of Kairos Communications LTD"

## **Orientador:**

Professor Doutor Daniel da Cruz Brandão

Ano de Conclusão: 2021

## Designação do Mestrado ou do Ramo de Conhecimento do Doutoramento:

Mestrado em Ciências da Comunicação: Área de Audiovisual e Multimédia

É AUTORIZADA A REPRODUÇÃO PARCIAL DESTE RELATÓRIO, APENA PARA EFEITOS DE INVESTIGAÇÃO, MEDIANTE DECLARAÇÃO ESCRITA DO INTERESSADO QUE A TAL SE COMPROMETE.

Universidade do Minho, 30/07/2021 Assinatura:

## **STATEMENT OF INTEGRITY**

I hereby declare having conducted this academic work with integrity. I confirm that I have not used plagiarism or any form of undue use of information or falsification of results along the process leading to its elaboration.

I further declare that I have fully acknowledged the Code of Ethical Conduct of the University of Minho.



# **Moyglare Road Maynooth Country Kildare**

# Phone: 01628 6007

# To whom it may concern, 24th March 2021

This is to confirm that Fr. Tsunda Serge, SVD is a member of the Divine Word Missionaries and completed his Media work experience in Kairos Communications at the above address.

During his time from with Kairos Communications (19<sup>th</sup> December 2016 to 19<sup>th</sup> March 2017), Fr. Serge would have recorded many aspects of Kairos production and training programmes.

In this context he has become familiar with the history and development of Kairos Communications and the work it is doing today in Ireland, Church and Society.

I have read the references which Fr. Serge has made in relation to information about Kairos Communications and I have no objections to the use of this information. This letter is written specifically with GDPR considerations in mind.

Your sincerely,

Ferbeen Freedy SUD

Fr Finbarr Tracey, SVD

086 7852182 or 01 6286007

Managing Director

KAIROS COMMUNICATIONS MOYGLARE ROAD, OOTH, CO. KILDARE. IRELAND. 353 (01) 6

# Acknwoledgments

Closing the master's degree venture in audio-visual and multimedia, I would like to thank the Almighty God for the gift of life and protection. I will take this opportunity to thank numerous people who helped me fulfil this dream. I am grateful to Professor Daniel Brandão for having accepted to direct my master's degree thesis and did so efficiently. The same gratitude goes to the professors' team at Minho University who helped me learn and develop more assets on the audio-visual and multimedia field. I am grateful to my superiors through Father Alpha Mazenga who allowed me to do the master's degree, and the Portuguese SVD Province for welcoming me, giving me an accommodation in Guimarães.

For this reason, my special thanks go to Father Antonio Leite and the Guimarães community who have since then helped me feel part of the Portuguese Divine Word Province.

I am grateful to the Irish Province, specially to Fathers Timothy Lehane, Liam Dunne and Finbarr Tracey for welcoming me to fulfil my traineeship at Kairos. I extend my gratitude to the Kairos team for their attention towards me during my traineeship. My hearty thankfulness goes to my beloved ones through my dad Tshunda Cosma and my mum Muzingu Ursule, my brothers Ignace, Nicaise, Lyly, Nazaire, Irma, Jean de Dieu, Manza, Eugénie, Pius, Nicole, Tsimba, Mvutu, Félix Kupay, Patience and Aimée, my uncles William Kazonzi, Modeste Kisambu and Arthur Pashi, my cousins Adrien Sala Mbaku and Rose Tsengele, my aunt Rose Menga, my nephews and nieces for their love and concern about my wellbeing. I remain indebted to my friends Kiyala Chrysostome, Achille Mpila, Martin Luzi, Guillaume Bumba, Godé Naniakweti, Hippolyte Mavusi, Constantin Buapale, Adelia Gamboa and Fátima Ribeiro for their friendship. I express to all of them my appreciation for their intimate relationship. I am very grateful to my elder confreres: Hugo Tewes, Alfons Müller, Guy Mazola, Sebastien Kiwongi, Willibrord Kamion, Godédroid Manunga, François Mabwisi, Georges Kintiba, Manuel Abreu, José Maria Cardoso, José Augusto Leitão, Carlos Matos Aires and Valentim Gonçalves for their advice and support.

## Abstract

The present report is the result of a three-month traineeship at the Kairos Communications LTD in Maynooth, Ireland, which has long experience in cultural and religious sound and video productions, being an opportunity to practice audio-visual and multimedia knowledge acquired at the University of Minho. Although the traineeship was focused on production and post-production of contents, the Kairos Outside Broadcasting Unit was a big asset to improve technical skills.

Based on the empirical experience acquired in the internship, this report is focused on the harmonious coexistence of sound and image for an efficient audio-visual communication. Sound and image corelates with each other as complementary elements in many digital media contents of today's different digital platforms and applications. The increasing access to smartphones with great capabilities to record, edit ad share sound and image has turn most of the users into content producers, so that today, any cultural, politic, or social event has most probably someone catching sound or image.

From the knowledge acquired with the research, an overview on the development of communication in the Democratic Republic of Congo is presented. Oral tradition has been the instrument to pass on knowledge to younger generations or convey information to the public. The development of communication in the Democratic Republic of Congo is linked to the former colonial power (Belgium) and France. France provided formation as well as equipment to update former radio journalists to the television that had been invading most of the world as an instrument of national pride. In fact, the development of political propaganda for the newly independent African countries. Every country setup a radiobroadcast to free oneself from any other dependency. It was conceived as a great instrument to disseminate ideologies to the population. The forms of communication (verbal, non-verbal, written, etc.), the power and revolution of words and images in the world and in Africa, and the evolution in Congo, from oral to digital communication, are the focus of this report, which tries to understand what had led the Democratic Republic of Congo to the new media environment and where word and image intermingle

Keywords: Sound and Image; Audio-visual Communication; Editing; Media power

### Resumo

O presente relatório é o resultado de um estágio de três meses na Kairos Communications LTD em Maynooth, Irlanda, que possui uma longa experiência em produções culturais e religiosas de som e vídeo, sendo uma oportunidade para praticar conhecimentos audiovisuais e multimédia adquiridos na Universidade do Minho. Embora o estágio tenha sido focado na produção e pósprodução de conteúdos, a Kairos Outside Broadcasting Unit foi um grande ativo para o aperfeiçoamento das habilidades técnicas.

Com base na experiência empírica adquirida no estágio, este relatório centra-se na coexistência harmoniosa de som e imagem para uma comunicação audiovisual eficiente. Som e imagem correlacionam-se entre si como elementos complementares em muitos conteúdos de média digital das diferentes plataformas e aplicativos digitais de hoje. O crescente acesso a *smartphones* com grandes recursos para gravar, editar e partilhar som e imagem transformou a maioria dos utilizadores em produtores de conteúdo, sendo que hoje, qualquer evento cultural, político ou social tem muito provavelmente alguém a captar o som ou a imagem.

A partir dos conhecimentos adquiridos com a pesquisa realizada, é apresentado um panorama sobre o desenvolvimento da comunicação na República Democrática do Congo. A tradição oral tem sido o instrumento para passar conhecimento às gerações mais novas ou levar informações ao público. O desenvolvimento da comunicação na República Democrática do Congo está ligado à ex-potência colonial (Bélgica) e à França. A França forneceu formação e também equipamento para atualizar os ex-jornalistas de rádio sobre a televisão que vinha invadindo a maior parte do mundo como um instrumento de orgulho nacional. Na verdade, o desenvolvimento de propaganda política para os países africanos recém-independentes. Cada país estabelece uma transmissão de rádio para se libertar de qualquer outra dependência. Foi concebido como um grande instrumento de divulgação de ideologias para a população. As formas de comunicação (verbal, não verbal, escrita, etc.), o poder e a revolução das palavras e imagens no mundo e em África, e a evolução no Congo, da comunicação oral à digital, são o foco deste relatório, que procura compreender o que levou a República Democrática do Congo ao novo ambiente mediático no qual a palavra e a imagem misturam-se.

Palavras-chave: Som e Imagem; Comunicação Audiovisual; Edição; Poder dos média

Part of this work was supervised in the scope of the project "Audire - Audio Repository: saving sonic-based memories", co-funded by the Operational Programme for Competitiveness and Internationalization and by the Portuguese Foundation of Science and Technology (PTDC-COM-CSS/32159/2017). This has instructed the theoretical framework of the present work, specifically on the role of sound and its relationship with image, in the evolution of the communication models and the respective emancipation of communities in the Democratic Republic of Congo.

# Table of contents

Declaração	ii
Moyglare Road Maynooth Country Kildare	iv
Introduction	11
1. Traineeship at Kairos Communications	15
1.1. Presentation of Kairos	15
1.2. My Traineeship	16
1.2.1. Introduction to the Kairos editing system	16
1.2.2. A Digital tool for creating and editing audio-visual contents	16
1.3. Operating audio-visual recording equipment	17
1.4. Projects and evaluation	21
1.4.1. Audio and video projects	22
1.4.2. Continuous evaluation	
1.5. Analysis of "MASS ON ST PATRICK'S DAY 17TH MARCH Newman University Church	
Stephen's Green Dublin"	
1.5.1. Preparation of the venue	
1.5.2. Cables and cameras setting	
1.5.3. General practice under the flow manager	
1.5.4. Video analysis	
1.6. Personal evaluation of the traineeship	52
2. Congo oral tradition in the framework of new communication models	55
2.1. Introduction	55
2.2. Communication models	55
2.2.1. Verbal Communication	56
2.2.2. Written Communication	58
2.2.3. Non-verbal Communication	60
2.3. The power of words and images	71
2.3.1. Word's power in the West	71
2.3.2. Word's power in Africa	78
2.3.3. Image's power and revolution in Congo	84
2.3.4. Intermingling word and image	91
2.4. Congo communication model from oral tradition to the digital communication	93
2.4.1. Oral transmission of knowledge	93

2.4.2. The advent of radio and television in the Democratic Republic of Congo	96
2.4.3. Congo and the new media environment	
Final Conclusions	116
References	119
Annex: SCRIPT ON SAINT PATRICK'S DAY MASS	

# Introduction

Communication is part of human inherent activities. Humans are endowed with their five senses, sight, smell, touch, hearing, and taste to communicate efficiently. This makes humans different from other animals, as they are also gifted with the ability to think. Using these five senses humans can not only communicate, but also transmit knowledge from generations to generations. Human communication has undergone a long last process from orality transmission, face-to-face dialogue, to books, written press, to even the new audio-visual and multimedia model i.e., communication through images, sound, and videos. This new model has enriched communication, and for this reason communicating efficiently nowadays is a great challenge. This challenge, which evokes images and sounds, is the point of interest in this thesis. Masters' students in Audio-visual and Multimedia of the MA in Communication Sciences of the University of Minho have an important requirement that consists of a traineeship in different communication agencies within Portugal. As for me I could not be admitted in any Portuguese communication structure by the fact of coming from a non-Lusophony country. In fact, not fulfilling this criterium did not prevent me from doing my traineeship elsewhere. Since I am fluent both in French and English, I could apply to do my traineeship in any communication agency either in French or English-speaking countries under an Erasmus denomination.

So, I was admitted to the Kairos Communication Ltd in Ireland. Aware of the impact of these two components in different models of communication I referred to earlier, Kairos was a suitable audio-visual and multimedia structure to focus my traineeship on as requirements to finish my master's degree. On the one hand, the traineeship at Kairos helped me practice different insights acquired at the first year of the Master programme. On the other hand, it allowed me to deepen my knowledge in this field through personal research. In fact, the traineeship at Kairos, Maynooth/Ireland offered me an opportunity to contact with different people when I was editing audio-visual and multimedia contents or manipulating equipment in the absence of my supervisor. My traineeship was held from Monday to Friday on a personal practicing basis under a supervisor from 8 a.m. to 4 p.m., at the same time joining the Kairos Outside Broadcasting Unit programmes. On Saturday I also made use of the time to edit my videos in the studio. The Outside Broadcasting Unit programme was a valuable experience that impacted on my traineeship understanding of a portable studio for cultural and religious events where television, radiobroadcast and internet gave different type of audio-visual content access to the audience. For this, the first chapter of the current document focusses on a report of more

than three months of traineeship at Kairos, while the second chapter focusses on an analysis of the Congo oral tradition in the framework of the new communication models.

The report on the traineeship in Ireland starts by presenting the company that accepted to host my internship experience in Audio-visual and Multimedia after a protocol signed between the University of Minho and Kairos Communications Ltd. A brief story, the geographical description and the aim of this communication company help grasp my choice among the many options available. In fact, the Kairos Communications as a religious structure was created for youth evangelization through media. As a matter of fact, at creation of Kairos, short prayer programmes were broadcasted in the National Station. This collaboration developed into Sunday worship programmes, in an Outside Broadcasting Unit for radiobroadcast and television settings at the National TV Station RTÉ (Radió Teilifís Éireann). Cultural programmes are part of the Outside Broadcasting Unit. The over 40 years' experience and the expertise acquired over the years helped Kairos collaborate with the two Maynooth universities: Pontifical University and later the National University of Ireland to provide Graduate, Undergraduate and Postgraduate courses in TV and Radio Production. Kairos organizes another media training for secondary school students to get assets to the challenging media digital revolution as part of their Irish curriculum at that stage of formation.

After Kairos Communications structure's brief historical and action plan presentation, I went on presenting its equipment and software programmes in use. The focus is on the digital tools for capturing and editing audio-visual and multimedia contents, aiming at the theoretical and practical understanding about the equipment involved in the traineeship. A study of the main characteristics and potential of the hardware systems as well as other equipment involved in my fieldwork, such as cameras, audio recorders, etc was developed. This helped me face the challenge of a twofold media traineeship, i.e., theory and practice. In fact, this chapter is focused on the achievement of professional production skills to efficiently communicate contents to an audience through audio-visual and multimedia tools.

As a matter of fact, the Zoom H4nPro audio recorder and the Sony NX5R professional camcorder were the main equipment used on field recording or indoor production. If the Zoom H4nPro audio recorder was more familiar by the fact that it was the same model used at the University of Minho, the Sony NX5R professional camcorder was a shift from the Canon DSLR camera models that were available for practice at the university. Nevertheless, the Sony was not

all new to me, since before starting my master's degree studies, I was used to Sony camcorders along with the Panasonic. Nevertheless, the previous Sony camcorders models that I used were not NX5R. Therefore, it was an exercise to be flexible to any kind of equipment for recording audio-visual contents. This understanding of the equipment involved in my traineeship was important as part of my own research to grasp its impact in the production of professional audiovisual contents. Different readings that I got from documents available on different topics on the internet as well as numerous tutorials are result of a theoretical research process that helped my praxis development endeavour. They turned to be, in fact, additional information supply to the different knowledge acquired within the several curricular units offered by the audio-visual and multimedia curriculum at the University of Minho. The theoretical part of my traineeship was followed by audio and video projects. At the end of the first chapter two of them are exposed: the first one is an audio project and the second one is a video. By describing and analysing these two projects, the challenges that I came across in the different stages of the production process are scrutinized. Afterwards, the focus turns to a Kairos Outside broadcasting Unit project. Here, the challenge was to experience the professional commitment in fulfilling the expectation of an audience from various age pattern that are used to make their choices between innumerable audio-visual and multimedia programmes offered by different channels that invade social media.

The second chapter of the current document presents a reflection on Congolese African orality in the era of digital revolution. As we will see, the survival of orality still stands as the model used for communication of knowledge. Although, different communication models such as verbal, written, and non-verbal communication are important in the communication paradigms of the digital era, the image component has been assuming an essential prominence in the efficiency of communication today. But the image, with its visual language, when combined with words may gain a greater dimension and thus improve the effectiveness of communication. Words in African rooted societies in general and the Democratic Republic of Congo in particular, convey innate power in communication that may have a relevant impact in anybody's life. The Congolese society has undergone a historical evolution process, with the advent of radiobroadcast, television, and the internet, to associate orality transmission of knowledge with audio-visual components.

Communicating effectively is a serious concern for professionals of media. The human being is endowed with sight, hearing, touch, smell, and taste as partners of communication. But

the focus of my traineeship on the coexistence of sound and image for effective communication, was a choice to encounter the needs of today's media world. The five senses help us make use of sound and image in the new technology. Communication having become mostly audio-visual and multimedia, learning to manipulate efficiently the instrument at our disposal is a way to an effective communication through sound and image. This effective communication that I intended to report is made possible by the mastering of audio-visual and multimedia equipment and technics. This is the *raison d'être* of my traineeship at Kairos.

# **1. Traineeship at Kairos Communications**

### **1.1. Presentation of Kairos**

This section is a brief presentation of the organisation where I did my traineeship named: Kairos Communications LTD. Kairos Communications is situated in the University Village of Maynooth, 20 km from Dublin/Ireland. Kairos Communications is well connected with Dublin by regular bus and train services. Maynooth is also home to the Pontifical University of Ireland and to Maynooth University which is affiliated to the National University of Ireland (NUI). Inspired by The Word Magazine, Kairos was founded as a Catechetical Magazine for Youth in 1971 and was geared towards the Secondary Schools. Over the years it developed communications technology and began producing audio/video teaching aids of students and teachers in the late 1970s '80s. In 1990 it developed a relationship with the National TV Station RTÉ (Radió Teilifís Éireann) and produced several documentaries for TV.

In 1993 it began a series of short Prayer Programmes which were aired daily on the National Station. Then in 2000, Kairos invested in an Outside Broadcasting Unit and received contracts from the National Station to produce and televise live Sunday Worship programmes. Around 1990, Kairos developed its own Media Training Programmes and worked in conjunction with the Pontifical University and later the National University of Ireland to provide Graduate and Undergraduate courses in TV and Radio Production. Kairos is now celebrating more than 40 years of service to the Irish Church.

Kairos is situated within the SVD House, a Covent which provides accommodation to seminarians and lay students attending university in Maynooth. The SVD house is also home to the English Language School. Kairos has five classrooms/ computer labs, which cater for 120 students. Kairos is home to a large TV Studio (with two studio flows, one for a small group and the other for a bigger one) and a Radio Studio. One of its major assets is the mobile broadcasting unit (OBU) which is mainly used to broadcast Masses and religious services on the National Television station, RTÉ. The OBU has recently been upgraded to full HD quality to meet all industrial standards. Kairos' income is made approximately of 50 percent from the production of religious programmes and 50 percent from its educational contracts with the universities.

Looking towards the future, Kairos is confident that it can provide courses in Media and Communications to SVD students worldwide that are tailored to the Society's specific needs. These can be both accredited and non-accredited courses, short or long, in all aspects of TV and Radio production, multi-media and social media. Maynooth is well situated to serve the Society as a hub for media and communications training and development.

### 1.2. My Traineeship

#### 1.2.1. Introduction to the Kairos editing system

As soon as I reached Dublin my first task from 19th December 2016 was to get introduced to the Kairos editing system. This was by ways of getting to know the machines and instruments involved in the production of contents as well as a theoretical reflection about communication today. Awareness of communication and the use of media today is our focus. Media is based on a trilogy use, that is "informing, entertaining and convincing" (Sorlin, 1994, p. 28). We are bound to communicate through media. But media do not have the apanage of communication which offers different models. I will look at different models of communication in our second chapter. For now, it's important to distinguish between direct and indirect means of communication Direct communication refers to interpersonal contacts between human beings, whereas indirect communication refers to the use of technical means to deliver messages (Silbermann, 1981, p.19). Theses introductive lines are important to underline the awareness of our traineeship which entails first relationship with the personnel of the structure while learning and the mastering of some multimedia techniques. The second could not do without any good collaboration with different persons of Kairos. I went on to the process of getting into the system and software programmes in use at Kairos.

### 1.2.2. A Digital tool for creating and editing audio-visual contents

As I got into the Kairos environment (this was the task undertaken the week before Christmas), I had to get used to a whole different system for the traineeship. That is why, a few considerations about the new instrument I had to discover during my audio-visual learning process is capital to understand what choices to make in the long run.

The main one was the computer system in use at Kairos. A computer is one of the essential audio-visual instruments in the pre-production and mostly in the post-production processes. So, guided by my instructor, an overview of this system was made, recalling a few practical elements of the two systems. This overview took me to notice the main differences

between the PC and Macintosh. The first one was that the PC having been manufactured by so many brands (HP, Acer, Asus, etc.) is too vulnerable by the fact of being so exposed to so many malicious software; unlike the Macintosh, which is exclusively manufactured by Apple and whose structure is equipped with Mac OS. This fact makes the Macintosh stronger and not exposed to cyber-attacks and its protection is assured. A second obvious aspect is that the Mac is practical by the fact that it has models that are built as an all-in-one, i.e., its screen is not separated from the computer. I also noticed a difference in the Mac a Doc which we do not find in a PC.

After becoming familiar with the Mac operating system, I got introduced to two audiovisual editing software programmes in use in the Kairos Communications' system. By audiovisual I mean a medium of diffusion through visual and sound images in opposition to medium focused strictly on printed texts (Fages, Pagano, Cornille e Fery, 1971). In fact, the ones in use at the Kairos Communications are mainly Avid media Composer for video editing and Pro Tools for sound editing. With my new familiarity to the Mac system, the instructor gave me some lessons to the new software in use at the Kairos editing system for a better harnessing of the tools at hand. For some days I learned these essential tools for my traineeship. The aim of learning these two tools (Avid Media Composer as video editor and Pro Tools as sound editor) apart from helping me to improve my editing abilities, was to help discover different editing tools available and adapt myself to any of them to produce audio-visual contents.

## 1.3. Operating audio-visual recording equipment

As a student of communication, particularly in professional branch, I had to master the basics of audio-visual and multimedia. So, my traineeship as part of my studies requirement was an opportunity to rehearse the knowledge that I had acquired since then and to deepen it, to gain more professionalism and competence. Having understood theoretically the Macintosh and some advantage it entails, I moved on to the practical stage.

This is to put into practice one of the aims of our Sound Design course<sup>1</sup> consisting of developing skills in the design and production of sound narratives. I used a Zoom H4nPro handy recorder device provided by Kairos. Using this device as a digital sound recorder system, digital audio fundamentals had absolutely to be considered. These digital audio fundamentals were one of the points our Sound Design course insisted on. As matter of fact, I had to call to my mind

<sup>&</sup>lt;sup>1</sup> The course original name is Sonoplastia.

these digital fundamentals, such as sampling frequency: defining the digitally well represented sound frequency range as shown thereafter:

Sampling frequency and range frequency

11025 Hz representing the range [0 - 5512 Hz]

22050 Hz representing the range [0 - 11025 Hz]

44100 Hz representing the range [0 - 22050 Hz]

48000 Hz representing the range [0 - 24000 Hz]

96000 Hz representing the range [0 - 48000 Hz]

Another digital audio fundamental to recall is the influence of the size of a sample which consists of defining the dynamic range of digital representation.

Sample size and dynamic range

8 bits representing the range [0 - 48 dB]

16 bits representing the range [0 - 96 dB]

24 bits representing the range [0 - 144 dB]

32 bits representing the range [0 - 192 dB]

A good use of these digital sound fundamentals would have an impact on the quality of the sound heard on the one hand, and the effectiveness of communication on the other, as insisted our Sound Design professor during our lessons. Let us refer to Davis and Jones' definition to grasp the concept of dB<sup>2</sup> that we come across most of the time:

The dB always describes a ratio of two quantities... quantities that are most often related to power. The reason that the dB is used is that it is logarithmic\*, and therefore smaller numbers can be used to express values that otherwise would require more digits. Also, since our ears' sensitivity is «logarithmic», dB values relate to how we hear better than do absolute numbers or simple ratios. Thus, the dB was intended to simplify things, not to complicate them. (Davis & Jones, 1990, p. 19)

The fact that a sound is increased, its loudness is felt on the human ears. Therefore, it is intensively defined in terms of a physical characteristic of the sound in air.

As for audio recording, I used the Zoom H4nPro device whose characteristics were suitable for the kind of recordings I intended to do. This audio recorder is numerical; portable and handy; suitable for recordings in any environment; provided with X/Y advanced microphones and

<sup>2</sup> This dB abbreviation that appears in the sound literature stands for 'decibel'. It is a mathematical concept.

their preamps capture and broadcast natural and faithful sound with less noise. It is provided with three recording modes: primo stereo mode (ideal for shows and instruments), secundo four channel modes, which allow simultaneous capture of ambient sounds and those coming from the console and tertio MTR or multitrack mode (which turns the recorder into a four-track studio). Apart from the three recording modes the Zoom H4nPro device tolerates a sound pressure level reaching 140 dB SPL which gives it a way to record all kinds of music up to the loudest ones. It accommodates an SD/SDHC/SDXC card to keep audio data. With its two batteries, its capacity goes up to ten hours in stamina mode. These last two characteristics took out of me any worries to go out to record endlessly any programmes. The very last characteristic is the USB port for the transfer of audio data, and which can be used as interface to be connected to the computer by its two in and two out.



Figure 1: Zoom H4nPro. Source: https://www.sound-service.eu/fr/zoom-h4npro-black-fr

Another exercise before my audio-visual projects practice at the Kairos was the preparation of video equipment. By this equipment I understand digital video camcorder, video editing computer, and digital video editing software, DVD burner, external hard drive, camcorder microphones and video tripod. I now will focus on the digital camcorder, the camcorder microphones, and the tripod as main equipment of the audio-visual production, the other two phases being the pre-production and post-production that I will deal with when it comes to my audio and video projects of my traineeship.

I am now going to focus on the digital video camcorder experience as I got into production of my projects and some preliminaries I had to consider every time that I planned a shooting. The setting and preparation of a camcorder insisted my supervisor, play an important role in the process of professional quality of the audio-visual production. First, I had to prepare the camcorder which was also used by Maynooth University students for their practice. Without the following equipment that goes with the camcorder no video shooting would be possible: batteries and memory cards. As for batteries, the first thing to do was to make sure that all of them are fully charged in order not to run out of power when I am out shooting.

The second thing is to check on memory cards. Since the camcorder had been used by many other students for practice as previously mentioned, I had to format the memory cards to create enough room for the footage I had to shoot in the field. Spare memory cards had to be prepared too just in case of more needs according to their storage capacity. Likewise, the supervisor insisted on the need to have as many memory cards as possible to avoid running short of room while shooting in case of more were needed. To these audio-visual fundamentals shall I add the white balance to be set if the auto focus was not my choice. Nevertheless, as for me, manual focus was always my choice, which requires the white balance setting. These three digital video camcorder settings exercises were to be my routine any time I had to use the camcorder to produce my projects; and the supervisor from whom I got the equipment watched whether I observed his professional advice. On the video side I used a Sony NX5R a professional camcorder that gave me all range possibilities for audio-visual practice. This Sony NX5R had features such as recording 1920x1080p footage at 59.94 fps under XAVC S codec, the AVCHD format uses MPEG-4, AVC/H.264 video codec which allows to record HD footage on random access media, for example memory stick pro duo and SDHC memory cards; so, it supports AVCHD as well as AVCHD 2.0; It allows a continuous HD footage recording between two memory cards slots. Other Sony NX5R features are three ½.8 CMOS exmor sensors and a 20x incorporated optical zoom Sony G lens with 40x clear image zoom providing clear and sharp images. It's provided with a built-in led light above the lens such as in case more illumination is needed, and two XLR inputs for microphones. The last feature of this Sony is the slow and quick motion function allowing 1080p to record at selectable frame rates.



Figure 2 : Sony NX5R. Source : https://pro.sony/en\_CR/products/handheld-camcorders/hxr-nx5r

Having given the features of the camcorder I used for my traineeship, so the practice of microphones setting was another concern of the preparation on the equipment for my audiovisual projects. Here I had to recall the same audio basics I learned during the Sound Design course I referred to earlier. Therefore, an important element to provide about the control of sound recording is the headphone. As regard to the choice of headphones to use my supervisor insisted on the ones covering the entire ears. It came then to microphone level settings. Having the controls exposed for auto or manual level for each input, a choice had to be made.

As for my audio settings, I took the manual audio setting option. Input one matched with channel one and input two with channel two. I had then to investigate the microphones which had two options: the handheld and the wireless mic kit. Another audio central is to conduct the mic truck. For this, I had to ask a question to myself while keeping the mics truck: not by having them top on the mic or by counting, switch them on and go back-side side one for channel one, channel two for mic two and back to the centre to hear both microphones in each ear. After that I had to check the visual levels on the status check button to make sure of the level between negative 20 and negative 12 db. I respectively took the switch next to me to plug it and hear my audio testing the microphones. These audio basics helped me not missing my sound recordings for my projects.

### 1.4. Projects and evaluation

After the overview of different research that I made to foster my knowledge of audiovisual and the introductions to different instruments at my disposal for my traineeship at Kairos, I started from then to produce a series of contents. In fact, I went step by step to improve by audio-visual and multimedia knowledge: first, audio projects, then audio-visual ones. In other words, I applied audio-visual techniques to produce media projects. This step of my traineeship reinforced the aim of my Audio-visual Narrative course in the MA's curricular year that urged us among others to be able to analyse the narrative and dramaturgical processes of audio-visual work, identify and characterize different genres and formats of audio-visual narratives. By audio-visual techniques, I mean "a new language, different in the structure and origin of the whole verbal message, clerical or experimental, due to eminently social electrical processes, that is, capable of an organized collective or individual reception" (Pagano, 1971, p. 93). To this he relates audio techniques (radio, disk, and recorder), visual techniques (still projections, mute cinema) and audio-visual techniques themselves (sound cinema, television, a combination of audio-visual recorder and a disk through synchronized devices, or electronic synchronized recorder machines as cassettes, and projection of diapositive for example). Multimedia is understood as "a communication technology that tends to bring together on similar media all multisensory (physical level) and computer data" (Huart, Kolski, & Leleu-Merviel, 2000, p. 3).

With this explanation, it should be noted that my projects are mostly audio-visual. I will in this chapter, present one of my different audio projects and two of the audio-visuals whose one I produced myself and the other by Kairos Communications, followed by an evaluation through the supervisor and the director of my traineeship. For both audio and audio-visual projects, a methodology was compulsory. The use of imagination helped create a scenario which undergoes a process up to the point of mastering and dissemination of contents. The first stage was to put a scenario under a form of a document or a script.

#### 1.4.1. Audio and video projects

The University of Minho/Portugal and the Kairos Communications based at Maynooth/Ireland signed a protocol to host my traineeship as requirements to complete my academic formation in master's degree in Audio-visual and Multimedia. The points to focus on during this traineeship were tripod handling, camera handling (for sound recording + video recording; importance of white balance), sound recording with a sound recorder (vox pop), editing with Avid media Composer software, sound editing with Pro Tools software, video projects (documentaries with voice over), sound projects and evaluation of projects and corrections. After the overview of fundamentals both in audio-visual and practice on new software on Mac

computer, I started then my audio and video projects. To this new knowledge acquired during the introduction to the Kairos Communications, the familiarity to the new equipment established in me a new relationship with the media framework. In fact, my body or senses participated actively in the conception and the production of an audio-visual project.

#### 1.4.1.1. "Back home" (Audio)

As the extensions and accelerators, I started my audio-visual productions from 9<sup>th</sup> January 2017. My first sound project was "Back home". This sound production was an expressive and narrative element as to reach the goal of my Sound Design course to master sound grammar at the service of communication. So, my intention with this first sound project was to develop a sound narrative from conception to production. The narrative consisted of narration trough sound identification. Therefore, sound identity was the aim of my narrative, aware of different challenges to face during the production. Amphoux helps us understand the concept of sound identity:

The sound identity can be defined as the set of sound characteristics common to a place, a district, or a city. Concretely, it is the set of sounds that make the city give the feeling of remaining identical to itself - actually or imaginatively. At the same time, it is the set of sounds that make it possible to recognize it - that is to say, to the letter, to identify it - and therefore to differentiate it from another city. It is still the set of sounds, ordinary and embodied in every life, with which the inhabitant identifies himself. (Atienza, 2009, p. 65)

I came to follow sound production process as I learned in the Sound Design course consisting of a conception of a script, sound recording and registration (digitization), editing and effects processing, sound mix and post-production and mastering. From the conception of the "Back home" my plan was to make a storytelling made of sounds only. The story is about Patrick Mc Carthy who has arrived at Maynooth train station; the train was just going back to Dublin when he started walking along the Maynooth Royal Canal home to mute swan, moorhens, grey heron, ducks, and a lot of small birds; ducks were quacking in symphony with other birds sounds while he walked with greater pace. Nothing else was audible except his rhythmic footsteps, duck's sounds coupled to other birds amazing sounds. He had to cross the road to reach home. At the traffic lights, vehicles were just stopped that their roaring formed a musical choir; the crossing sound went on that he crossed the road and rushed home. At the main entrance, he dialled the number and entered the corridor rushing to open his room and snicked to the toilet to

pee, then washed his hands and wiped them. From this script, I had to imagine a scenario to deliver sound storytelling. It is solely through different sounds that all the narration was organized to communicate. One who listened to this audio should figure out through the composition of different sounds the environment where Patrick was passing and gets the communicated message. Michel reflecting about sound and cognition states:

Many authors have shown that sound space is the first psychic space, more precociously than gestures and mimicry. The sound environment will accompany the individual in his cognitive development by various aspects. Moreover, D. ANZIEU states: "Mental abilities would be exercised first on acoustic material". First, according to E. LECOURT, the passage of the perpetual sound atmosphere in-utero to the possible existence of silence after birth, offers the child spaces and times for thought. (Michel, 2014)

After this scenario conception step, I prepared the equipment. The equipment consisted of a Zoom H4nPro audio recording device, batteries, SD cards, a microphone, microphone cable, windshield, boom pole and headphones. The microphone was crucial to the quality of the outcome of my sound narration. This instrument is capital in any audio or video projects. This implies a true understanding of the device in my different productions<sup>3</sup>.

Nisbett's definition is like the last one<sup>4</sup>. He fosters its characteristics and one of them being: "for normal sound levels a microphone should produce an electrical signal which is well above its own electrical noise level, i.e., it should have a good signal-to-noise ratio" (Nisbett, 1993, p. 36). Such characteristics increased in me the awareness in a proper use of the microphone for an efficient communication of contents. This step called to take into consideration microphone's fundamentals that I learned during my audio-visual and multimedia courses. Therefore, the choice of the kind of microphone to be used was capital. In this choice, the sensitivity<sup>5</sup> of a microphone matters a lot for the quality of the sound. As far sound input system is concerned microphones are divided into different categories. These are measurement, entertainment, reinforcement, broadcast and recording microphones each of them with its own characteristics. As for recording microphones, Davis and Jones divide them into dynamic,

<sup>&</sup>lt;sup>3</sup>For Davis and Jones, "microphone is a generic term that is used to refer to any element which transforms acoustic energy (sound) into electrical energy (the audio signal). A microphone is therefore one type from a larger class of elements called transducers-devices which translate energy of one form into energy of another form." (Davis & Jones, 1990, p. 113).

<sup>&</sup>lt;sup>4</sup> For him, "a microphone is a device for turning the acoustic energy of sound into electrical energy" (Nisbett, 1993, p. 36).

<sup>&</sup>lt;sup>5</sup> Sensitivity is to be understood as, "the voltage produced per unit of sound pressure" (Nisbett, 1993, p. 36).

condenser, electret condenser, ribbon, carbon microphones. Apart from their classification according to the method of transduction, a pickup pattern classification must be considered. "The pickup pattern is the way in which the element responds to sounds coming in from different directions, and there are several different standard patterns" (Davis & Jones, 1990, p. 121). Davis and Jones divide them into four:

The first ones are omnidirectional microphones, that pick-up sounds from all directions.

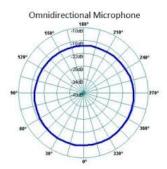


Figure 3 : Omnidirectional microphone. Source : Davis & Jones, 1990

The second ones are cardioid microphones. The name comes from its heart shape. They are the most common and are characterized by their directional quality.



Figure 4 : Cardioid microphone. Source : Davis & Jones, 1990

The third ones are bidirectional or figure-8 microphones. This figure-8 microphone is known for being sensitive to sounds that come in from the front or rear of the microphone, rejecting at the same time sounds coming from the sides. This is very useful in an interview where the voice comes from both sides.

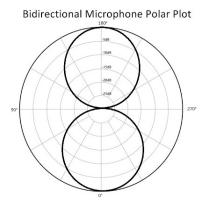


Figure 5 : Bidirectional microphone. Source : Davis & Jones, 1990

The fourth are supercardioid microphones. They are known as highly directional: They are very useful in situations where side sounds are highly to be rejected and tolerating some rear sounds (Davis & Jones, 1990).

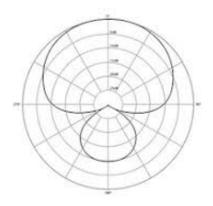


Figure 6 : Supercardioid microphones. Source : Davis & Jones, 1990

In this recording crucial step, I recalled to my mind some hints from the Sound Design course urging us to pay attention to mechanical noises, source isolation, bleed reduction and comfort. After a lot of practice and the scenario set in a document, the second step consisted of sound recording made on 10th January 2017. This was the sound system that carried along with me for my audio recordings. The choice for Zoom H4nPro as audio recorder device was made for being handy, suitable for the environments where I was going to perform. So, I made sure that all batteries were fully charged, and spare ones prepared. I carried an umbrella to protect the equipment since the weather forecast warned of a drizzle. To this a boom pole was added to be used in case of a need for a sound source. Of course, a bag was used to pack all the equipment. Having checked the train timetable before hand, I had to walk to the train station to record the

train's sound arriving at 8.13 AM, 8.34 AM and 8.51 AM even at 9.11 AM. Having arrived earlier at the Maynooth train station I made audio recording device's general settings for different scenes of the project, applying sound recording fundamentals. I placed in the batteries since I did not have another power source. I set it to 16bit/44.1 KHZ WAV because I was to record for a longer time even if the quality would be lower than the preferable 24 bit/96 KHZ WAV, known as the highest quality. From the Zoom H4nPro audio recorder fundamentals, I remind that this device is provided with both MP3 and WAV files formats, and I chose MAV file format. There is a difference between the two. While a WAV is an uncompressed and loss-less file format, MP3 is rather a compressed and lossy format. To this difference it should be added another one: WAV file format being lossless holds more details than MP3. From my choice I saved more storage room in GB in the SD card that I inserted into the device. Then I placed the SD card, set the device to the stereo mode before I turned the recorder on. As for the organization of my sounds recording, I did not have any worry since Zoom H4nPro is provided with 10 folders where different files could be placed.

After this general setting, I got ready for the first scene, the arrival and departure of the train. The internal microphones of the Zoom H4nPro device were perfect enough to catch the sound on local environment. Being omni directional, I could get my target sound which is the locomotive engine. To monitor my sound levels, I had to use a headphone, the volume having been set at 12 dB. After plugging it, I noticed that I was facing a challenge of a wind noise that was disturbing the quality of the sound needed<sup>6</sup>. In such a situation one must cut off that noise as we were taught at Sound Design course using a windshield<sup>7</sup>. So, I placed a windshield to cut out the wind noise.

This device (windshield), according to Nisbett, reduces noise up to 20 dB. As everything was ready, I switched off my mobile phone to avoid any sound interference. I plugged the headphone on the audio recorder and switched it on. At 8.07 AM I started recording until the

<sup>&</sup>lt;sup>6</sup>There are different kinds of noise: white noise, pink noise, hum, buzz, static, popcorn noise: White and pink noise are intentionally created to test signals. While the other kinds of noise are just unwanted and without any value (Davis & Jones, 1990).

<sup>&</sup>lt;sup>7</sup> "The term windshield (or windgag) covers several distinct functions, for which different devices are used. The first use, as the term implies, is to reduce noise due to wind turbulence at sharp edges, or even corners that are too sharply curved. (....) A second purpose is to reduce the effect of gusting breath or the puffs of air that accompany plosive 'p' or 'b' sound, which may displace the microphone diaphragm beyond its working range." (Nisbett, 1993, p. 72)

train arrived and left up to catch the locomotive engine noise disappearing. Then I Registered this first scene file into the folder that I named Train1. At 8.34 AM and 8.51 AM I repeated twice the recording of this scene. I listened to the two recordings and was satisfied.

The second scene was the sound of walking feet along the Royal Canal. I kept all the settings, but I adjusted the volume according to the sound source. It was a noisy place. So, to pick-up the walking feet was not that easy since I was on my own and I had to record my own footsteps. I had to record my own. Some creativity had to be applied. Here, I was to apply the microphone balance. I placed the Zoom H4nPro audio recording device in the direction of my own walking feet. I tested it several times until I was satisfied. Nisbett points out about this exercise that "the selection and placing of each microphone in relation to sound sources and studio acoustics, is called microphone balance" (Nisbett, 1993, p. 74). This exercise finds a twofold balance objective. The first he names technical is about monitoring the set-up of the recording device to pick-up the sound one needs to a suitable level. The second is to dismiss any unwanted sound. With these principles in mind, I recorded my own footsteps keeping the audio recorder at around my hip distance to the feet. I got a strong walking sound as desired. In fact, the walking footsteps were to deliver a message of a person in a hurry who wanted to reach home as fast as possible. After recording I named the files and the folder.

The third scene was the duck's sound. The Royal Canal has a very rich fauna populated by grey herons, badgers, hedgehogs, otters, mute swans, dugs/mallards, and several small birds such as thrush, chaffinch, bullfinch, blue Tits, etc. at its corridor. But my narration at this scene aimed to focus on the duck's sound. This was another challenging exercise to face to get the desired sound. And here, I kept in mind that I committed myself in sound storytelling. Therefore, by different sounds recorded I was describing the way Patrick passed through to reach home. Narration was my main concern. Marty reflected about sound identification that he understands as a categorization of a musical or a sound event. He goes on exploring the concept of narrativization and narrativity:

we will call narrativization, the process of cognitive association of a semantic or semiotic content, of experiential and potentially verbalizable origin, to a stimulus or a set of stimuli of verbal or non-verbal origin. In fact, at this stage it will be called "narrativization" any perception of meaning, whatever the causes and processes. Using the term "narrativization" rather than "narrative" or "narration", we want to affirm after Monika Fludernik that narrativity as a characteristic inherent in a work or a phenomenon does not exist. (Marty, 2012, pp. 13–14)

My recording was on a location. I was on an outdoor environment which made me consider the behaviour of such a sound and its effect on sound system. I had to assume these conditions and proceed with the recording facing all environmental factors. It is for that reason that Davis and Jones make the following description: "Outdoor environments are essentially free of reflecting surfaces or obstructing objects" (Davis & Jones, 1990, p. 43). Meanwhile, they classify three main factors that affect the sound outdoor: wind, temperature gradients and humidity. As for my sound outdoor recording, I face wind that was disturbing the quality of my storytelling. Davis and Jones divide the wind effect into two: velocity effects and gradients effects. I had to be careful that the wind did not change the direction suddenly under the effect of a crosswind while I was recording.

They explain: "A cross wind will add a velocity vector to a propagating sound wave and can shift the direction of propagation of the sound, making it appear to come from a different location" (Davis & Jones, 1990, p. 45).

Nisbett recommends it, explaining: "reflectors have been used very successfully for wildlife recording (particularly birdsong), and because they work as well indoors as out, for distant sound effects in the film or television studio (e.g., the dancers' footsteps and clothing rustle in ballet)" (Nisbett, 1993, p. 52). This would have been a way out to overcome this problem. But, according to Nisbett, its use is not widespread because of its sheer bulk. The main reason I could not lean on this possibility was also that I did not have any reflector. An alternative method would work perfectly. Having assumed the conditions in which I found myself, did not mean that I had to record anyhow.

My duck's sound target continued facing challenges. On one side the wind changed the direction all the time on the other people passing by obstructed the clarity of the duck's song. I tried to record this sound several times when the duck started again its sound. The challenge was bigger than the engine of the train that I had just recorded or the walking sound. Facing the outdoor inconvenience (wind direction and other noise around) and waiting the duck's sound to try again and again made me waist a lot of time on this scene. I was convinced that this sound was crucial to my storytelling to describe the Royal Canal. As for the sound obstructing duck's sound, I remembered the advice of the professor of Sound Design course who taught us that background sound nowadays is tolerated while recording a sound or video. In fact, that is natural for outside door recording. To face the wind's challenge, I used a wind shield to overcome the

persistent wind. My main task in this scene was to stress the sonic space or environment where Patrick was passing through, for instance the Royal Canal where a rich fauna finds a house, mostly ducks. The notion of space refers to Atienza as he states:

The exclusively geometric space is a pure abstraction of the perceived space. The sound is a vibration of the air, among others, therefore of the material composing the space. Space is the place of sensation, sound, a sensitive expression in space. The gap imposed between these two concepts must thus be called into question; there is no need to consider them separately. (Atienza, 2009, p. 13)

The fourth scene was, crossing the lights in a town outdoor environment. My storytelling should include the voice of people talking, the cars engines and the beeping sound of crossing lights. This exercise was not very difficult since I recorded this scene at a crossroad where the sounds needed were all the time available to describe the city environment where Patrick was to pass. With this exercise I aimed to show sound urban identity in my storytelling. My challenge was to clearly convey a message that is an urban space through sounds. My task here was to let my audience come across a sound description that seemingly visual senses would better convey. I wanted to reverse the tendency of people who believe in the supremacy of sight to acquire knowledge. By my monitoring of the audio recording device, I intended to express a sound description conveying to everybody, mostly the blind ones that Patrick was passing through an urban space on his way home. One could also image the time he was walking home in the evening, at noon or in the evening in this sound storytelling. On the supremacy of the sight on the other senses to acquire knowledge Atienza writes:

In the conception of the public space, the «visual space» has been put forward to the detriment of other sensory expressions. In terms of project, this visual primacy assumes the accentuation of the spatial aspects of the built environment, despite temporal and dynamic modes. (Atienza, 2009, p. 11)

Aware of this paradigm of sound design, meaning a storytelling through sounds, I had to consider my environmental setup. In fact, that noisy road crossing had all the sounds I needed. Therefore, I could pick them up in a go. First, I set up the headphone to monitor the audio recorder sound levels. And then I plugged the windshield on the audio recorder built in microphones to cut out the wind noise that was obstructing the sounds I intended to record. At this circumstance, any kind of microphone would need a windshield. It is worth reminding here

that this device is provided with omnidirectional twin microphones. I recorded several times, then went on to the next scene.

My fifth scene was at the entrance of the house. It was in a different setup. So, I had to consider primarily my sound target which was the dial of numbers sound to open the main entrance door, the opening of the door, walking on the corridor, opening of the room, rushing to the toilet, hands washing and hands dryer. All this sounds' source was to be considered as sound indoors. After considering the sound source, I looked at how sound behaves indoors. Contrary to outdoor environments where sounds are free of reflecting surfaces and obstructing objects, indoor sounds, rather, behave in a most complex way. Taking into consideration the flexibility and porousness of walls, ceiling, and floor of a room to sound, the fact that a sound behaves around the object it strikes, we agree with Davis and Jones that "refraction, reflection, transmission, and absorption are all dependent on the frequency of the sound wave and the angle at which it strikes the boundary" (Davis & Jones, 1990, p. 53). Nisbett refers to the same situation as "for wave approaching a rigid solid reflecting surface at a right angle to it, a microphone near the surface registers only pressure variations, not the pressure gradient" (Nisbett, 1993, p. 62).

I had different options to reach the sound source of this final scene. In fact, I had the first option of just using the integrated two microphones of Zoom H4nPro device whose characteristics I have already referred to, or adopt the option of directional microphone to plug-in, to get my target. Aware that my cardioid microphone would help me reduce any unwanted sounds. Davis and Jones praise these qualities stating: "the cardioid microphone is most sensitive to sounds coming in on the primary axis and rejects sounds from the sides and rear of the microphone" (Davis & Jones, 1990, p. 121). This option would have needed a boom operation<sup>8</sup>. But I was all alone to operate all the devices. Here Nisbett reminds that "when a boom is chosen as the main instrument of coverage it requires precise co-operation between its operator and the sound supervisor" (Nisbett, 1993, p. 98). So, I left this directional microphone option to favour the two omnidirectional incorporated into the Zoom H4nPro device. In fact, I would have loved any sound on the background of this scene from the main entrance to the room, but no other sound was available. Instead, door dials, footsteps, door clicks' sound were

<sup>&</sup>lt;sup>8</sup> A boom has a characteristic of reaching a sound source.

all enough for my storytelling. All these sounds ranked in a linear position stretched the narration of this scene for a clear outcome of communication.

A bird sound was missing to my recordings to stress Patrick's walking along the Royal Canal. In fact, missing a bird sound would give the impression of a dead Royal Canal environment. So, ducks' sound was not enough. For this reason, I rushed, after lunch to the Maynooth University South Campus where a lot of birds fly from one tree to another in a noisy polyphony. This was in an outdoor setup and the wind was not on my side. I had to redo my settings in other to monitor again the audio recording device. The headphone was a must in this routine exercise. I plugged it to the device. As the other scenes' recordings, I did not need the external microphone I carried along, relying on the built-in stereo mics. I monitored the device to the stereo mode as in the other scenes, I set the audio recorder again to WAV 44.1 KHZ 16bit because I was not sure for how long I had to record since I depended on birds' discovery and singing. So, I presumed that I was to record for a long time. To monitor the volume, I had two settings: for the first recording, I set it to 6 dB and for the second to 12 dB in other to choose the best sound level audio after. This bird recording ended this stage of my sound project.

Having finished the recording and digitalization step, I moved on to the editing process. Before that exercise, I had to transfer all files to the computer. I had two possibilities to go about this transfer: using a cable connected both to the audio recorder and the computer or removing the memory card from the recorder to be plugged to the computer to copy all the files. This operation had fundamentals to be put in practice from my formation at Minho; for instance, if the transfer of data option should be by USB, the audio recorder should be turned off before the connection; it is only then it will be switched on letting it load for a while. Options modes will appear from which the storage has to be chosen. I checked that all my files were transferred to the computer before ejecting the USB. Then, I opened the programme to be used for sound editing. This stage took me back to the Sound Design course that urged us to choose the equipment to be used. As for the equipment provided by Kairos Pro Tools software was the one to be used for my sound editing. At this stage I set the Pro Tools. I was already aware of the editor tools and editing environment provided by this software to make my composition.

The basics for any sound compositions are very similar when comparing Adobe Audition, I was used to work before with Pro Tools I had just learned and discovered as a professional software. I started by importing my audio files first to workspace and the audio tracks. I made the composition of my different sounds according to the scenario set beforehand. Then I looked to the editing tools and edit modes to apply effects or make some changes. Some sound digital editing basics of my Sound Design course reminded me that any changes I had to make should be with purpose, simple ones being copy, cut, and paste, complex ones by the application of sound effect (change in volumes or in frequency composition). As for the effect processing, I had to look at categories such as amplitude, dynamic processing, frequency equalization (for volume change), and delay (e echo), reverb, modulation, pitch-shifter (for frequency composition change). To these basics I had to be careful in the mixt process with the balance, frequency, spatialization, dynamics and depth. In fact, I did not need any other effects in post-production than my own in this sound composition. The main effect I applied was the bird sound that I did not catch at the Royal Canal in the windy environment, but at the Maynooth University South Campus. Then I saved my project, rendering it outside Pro Tool (by going to files, export, audio mix), I set the format WAW, 48 KHZ, 24 bit and stereo. I made the mixdown normalizing the project to -3dB.

#### 1.4.1.2. Kairos communications (audio-visual)

After my audio projects as part of my traineeship, I produced several videos to fulfil the requirements of a Kairos Communications' trainee. So, I did not only deal with sound production, but both sound and video that lead to audio-visual productions. The sound production for this exercise took me a lot of time to reach the desired quality of my audio-visual productions. Therefore, I had to practice all the insights of my audio-visual formation at University of Minho and the ones of Kairos's experience coupled to my own research on audio-visual and multimedia fruit of a lot of readings during my traineeship I have mentioned earlier. Meanwhile, this practice was to hold a formation of an audio-visual operator. As an image future operator, I had to acquire experience and knowledge from implementing the means for capturing of images and be able to transform and format shots through different techniques into an audio-visual software. In fact, the challenge of mastering media assets is obvious in the era of digital media revolution in the process of media offer these assets to trainees as the Kairos Communication structure does. With digital cameras it is possible to apply techniques at the stage of capture of images to reduce processing work at the post-production stage. Having acquired these camera techniques taught

both by the University of Minho and Kairos instructor, I implemented my audio-visual projects. These camera techniques include special effects, colorimetry, and formats. In fact, we can save time in image colour correction in post-production by just applying the correct camera white balance during the production.

In this phase I had to practice combining sounds to images for a harmonious communication. I had to implement the knowledge I have acquired at the Audio-visual Workshop in University of Minho, which expected from us the following outcomes: mastering technical and artistic aspects of the use of technologies capable of providing more value in audio-visual communication, revealing skills in the design, writing and production of short audio-visual works, presenting creative and experimental spirit in the creation of works that take advantage of colour correction techniques, chromakey and virtual studio. To these outcomes should be added the application of virtual effects and sound techniques. The audio-visual project that I'm going to present was to combine in the same relationship theory, technique, and practice. In fact, my project consisted of presenting the Kairos structure that I began on 27th January 2017. Different images accompanied the voiceover that I prepared beforehand. This voice over was written in three languages: English, French, and Portuguese. That was my main exercise. Apart from that, I intended to face challenges occurring during audio-visual productions. My intention was to get corrected for possible mistakes to acquire practical skills in the field of film directing, production, post-production, etc. After this preview I had to look at the different steps of a professional video production.

#### The script

My idea was to make a documentary about Kairos. To produce this documentary, I had to combine a voiceover, a background music, and images. With all these elements in mind, I prepared a scenario of all the production. This production pretended to be a guided tour to the Kairos structure through a voice over. This voiceover was the main datum for this guided in the three main languages chosen. The choice for these three languages was to time up the voiceover to see how it fits with different images. So, I could notice how words match with images to convey information to any student who would apply for his traineeship at Kairos. With this set-up, I wrote my script in the three languages. From the voiceover I setup a scenario of the structure of my production by a background combined to an image of the huge building where Kairos

Communications is located. Then a student should get into the compound followed by a series of different images (a microphone, a video camera, etc.) describing the studio up the first word of the voiceover Kairos communications with a panning on the outside parking where the mobile studio truck is held with a short zooming-in on its logo: Kairos Communications LTD, Television Outside Broadcasts.

Then, the inside two media rooms presenting computers for students' use for their editing practice would be presented; the TV studio images followed by the On Air sign lit, the two TV studios, one for bigger groups and the other for interviews; a panning from right to left should present the three cameras set between the two TV studios; and a closeup would show the kind of cameras of the studio. After that a shot went on the three classrooms: first, on the sound engineer room (a panning from left to right). Then came a still shot on the operator room and at last another still shot on the director's room. I focused a still shot on the door number leading to meeting room for bigger groups. A voiceover leads from this big room to the audio studio by a still shot, a hand on the mixer, followed by a shot on the On Air sign, the operator's room, then the two sound recording rooms: first the one accommodating bigger group and then the one smaller one for just two peoples. An insert of a microphone is a transition from the smaller to the bigger room. The last shot would be on the inside green signal followed by a black fade-out. I looked over and over the scenario for a better performance, having played myself the role of a scriptwriter.

## **Developing the idea**

I looked at the technical feasibility study of my project. In fact, I had all technical equipment for shooting belonging to the Kairos communications: camera, tripod, headphone, audio recorder, etc. My shooting had to be done outside and inside the structure, while the voiceover had to be recorded only in the radio studio for a perfect sound without any interference. The voiceover plays here the main role of the documentary, while the images just enriched the story been told in the video. My targeted audience was students in communication searching for a communication structure for their traineeship. It is for this reason I needed an afro beat or a Congolese rhythmic on background creating a harmonic mixing of the three elements that convey communication. This choice of the rhythmic on the background of the voice over was to combine audio-visual experience with rigorous quality to use Huart's expression. At this stage, I had to set

a methodology to use in the production of my project to avoid wasting time and getting a good quality production. Huart finds the lack of planning as one of the reasons for a poor quality of multimedia projects as he writes: "the multimedia industry is experiencing a major methodological crisis: the multimedia document is often produced without method, in a single iteration. This communication presents an analysis of current methodological problems and their repercussions on creation" (Huart, Kolski, & Leleu-Merviel, 2000, p. 2).

For this, a description of the two studios, computer classroom and the track for the outside broadcast were very important as facilities for a trainee. As for different roles to play in this video, I was all alone the producer, the director, and the actor of the film. I did not have any expenses to worry about during the production of the video since everything was provided nor did I expect any revenue from it since it was just a traineeship as a requirement to complete my master's degree in Audio-visual and Multimedia at the University of Minho. However, I had to respect all the steps in the process of cinematographic production. Therefore, an awareness of all the implications in finance and personnel involved in a cinematographic production was necessary to acquire. Having written my voiceover, I planned my production and how to go about the project. I also make a choice of the music to use for the background.

#### Filming preparation (pre-production)

At this stage, nothing special was done apart from planning my production. Nevertheless, I made a final touch at the storyboard as well as preparing all the equipment needed. Although I played all the roles of a cinematographic production process, I kept in mind what could be the implication of all of the different people involved. Some of the main cinema production roles are: the director, the production manager, the assistant director, the distribution director, who finds different actor that he listens to beforehand and the chief of studio. Dealing with image and sound capture we may have: a chief cameraman, a camera assistant to manage the focus, a sound engineer, a sound mixer in charge of sound during all the stages of the production and a noisemaker or foley artist in charge of sound effects. Then, depending on the type of production and the budget involved, we may have: a music composer, a production engineer in charge of special effects of the film, an art director, who collaborates with the production engineer, a mong other specific production roles. Through these different actors, I had the opportunity to

grasp their role in different productions of Kairos outside broadcasts. Nevertheless, I could not apply them in my productions. Instead, this long list created in me an awareness of a professional cinematographic production.

#### Filming (or production)

The voiceover was the first element to be recorded on 30<sup>th</sup> January morning, since I chose it as the main element of my documentary to which, different images would be added during the editing process. For this recording, the radio studio was the best room to get a perfect sound. I had three texts that needed to be recorded: one in English, one in French and another one in Portuguese. Since I used the Zoom H4nPro audio recorder for my audio project, I did not use it again for my voiceover recording. Instead, I chose to practice the use of the Sony NX5R which I have described earlier as it gives a high recording sound quality as well. I prepared the equipment, for instance, charging the batteries, SD cards that I formatted to get enough space for both my sound and video recordings, tripod, etc. on 28th January. I used a cardioid microphone, which is the most common and is characterized by its directional quality. I set my timer from my Samsung galaxy mobile phone to time all my sound recordings. I went to the smaller radio studio which is suitable for a small group and locked myself in for my voiceover recording having set the on-air sign on in order not to be distracted or disturbed by anybody. With the Sony NX5R sound system (as mentioned in fig. 2), I recorded the three versions of my documentary, again and again so that I could later chose the one that had a better flow and audible clear sound. I wrote down the time every recording took. I made sure that I used the headphone to check the quality of my sound recordings.

Having Finished recording the voiceover, I removed the SD and transferred all the files to the computer in the folder set for the Kairos project. Then, I prepared again the equipment for the outside video shooting. Among them were a tripod, batteries, more SD cards, a white plain paper, and my storyboard. I did not need any microphone anymore since the voiceover and the music for the background would cover the sound. As for the camera settings, I used a manual focus, a manual white balance setting it with a white plain paper, the shutter speed was as well to manual mode setting it to 50. Brown explains the importance of a white balance in the following words: A white piece of paper will appear white to us whether it's in a fluorescent-lit office, a tungsten-lit living room, or outdoors in the noon day sun. This is because our brain "knows" that it's white so it just interprets it as white. This can accommodate a wide range of color sources but, of course, in extreme conditions under a single color source such as pure red or blue, it does break down and we see the paper as taking on the color of the source. Cameras don't have the ability to adapt in this way: they will record the color of light reflected off the paper just as it is. (Brown, 2016, p. 101)

After these camera settings I looked at the tripod to which I set up all the balance so that it held smoothly the camera for all the movements (tilt, panning, still, etc.). I set up my storyboard according to different scenes<sup>9</sup>.

I should note once more that since I did not have any assistance, I played all the roles all alone and my instructor and supervisor appeared from time to time to see how I was progressing with this production. I only made sure that everything was ready, and that the camera was switched on. As a clap man I closed the clap with a clack, just for the purpose of practice, then as the director of production, I said "action". It is important to note that I only used one camera, since there was no need of using two for my documentary. The restrictions would explain some mistakes in this production. This was a technical factor according to Mascelli who explains the use of a few cameras in a documentary or other circumstance:

Few technical restrictions are imposed on theatrical cinematographers, either in the studio or on location. On the other hand, because of budget, personnel, transportation and other limitations; most documentary cameramen have less camera lighting and accessory equipment. (Mascelli, 1998, p. 59)

Most of my pictures were static shots because my documentary stressed on the voiceover, except one that was a motion picture where a student (filmed in side-line viewpoint) moved into the structure to convey a special interest to my audience, supposedly to be students one, to go to learn about audio-visual and multimedia. Therefore, during this production, I paid a special attention to the camera angles to make my storytelling visually dynamic and interesting. It is with a good reason that Mascelli states that:

<sup>&</sup>lt;sup>9</sup> It is important to explain the concept of scene that can be confused with a shot and a sequence. A "scene defines the place or setting where the action is laid". A scene can consist of one or a series of shots in a continuous event; a shot consists of "a continuous view filmed by one camera without interruption"; finally "a sequence is a series of scenes, or shots, complete in itself" (Mascelli, 1998).

The camera angle determines both audience viewpoint and area covered in the shot. Each time the camera is moved to a new set-up, two questions must be answered: What is the best viewpoint for filming this portion of the event? How much area should be included in this shot? (Mascelli, 1998, p. 11)

Talking about camera angles that I prepared in my story board, it is important to specify their different types: objective, subjective and point-of-view camera angles. The difference between these three types is: the objective camera angle is where the camera films from side-line viewpoint, while the subjective camera films as the word states from a personal viewpoint. The point-of-view camera is that whereby the scene is recorded from a player's viewpoint. This last angle is between the objective and the subjective camera angles<sup>10</sup>.

#### **Post-production**

The post-production consisted of editing the three main elements of my production – combining voiceover, background music and footage. At this stage, among the fundamentals of the composition, I paid a special attention to transitions. For transitions, I used some optical devices as fades, dissolves, and wipes. Some requirements were to be considered, for instance every scene should be taken in relation with all the sequence; the connectedness of different scenes creates harmony in the composition.

This is the reason why Mascelli points out that: "each scene should be considered as part of a sequence, or series of shots; but must be given individual attention based on story requirements" (Mascelli, 1998, p. 58). I was in front of my shooting mistakes which I had to correct though different techniques in the editing process. In fact, I used the compilation editing in opposition to continuity editing. A compilation editing is the one where the storytelling depends upon the narration and the scenes just do the illustration of what is described while a continuity editing method is the one whereby the storytelling depends on the consecutive scenes that match (Mascelli, 1998).

Before starting the editing, I presumed that my footage met all the editing requirements, such as technical aesthetical and narrative. But any failure met an adequate solution. In fact, during my production, I tried to achieve a professional projection. This challenge made me

<sup>&</sup>lt;sup>10</sup> Mascelli explains that: "The point-of-view is an objective angle, but since it falls between the objective and subjective angle, it should be placed in a separate category and given special consideration" (Mascelli, 1998, p. 22).

consider different factors which should be considered according to my storyboard: aesthetic, technical and psychological. In all these choices I had to take, I had to think how it could affect my viewers. Otherwise, my failures would have caused inconvenience on my audience. "Thus, psychological reaction of viewer is based, to a great extent, on camera angles and editorial treatment" (Mascelli, 1998, p. 59).

#### 1.4.2. Continuous evaluation

#### 1.4.2.1. Continuous evaluation of "Back home" (audio)

On 11<sup>®</sup> January my 'Back home' sound narration was evaluated. The project copied on a USB device was plugged to a computer connected to loudspeakers for a better listening. I explained to the instructor what my storytelling was all about and afterward we listened to the audio for the first time. I explained my choices in different settings I made when I recorded my projects. For instance, all the difficulties that I faced such as the wind diverting the duck's sound and why I used the windshield. Then, every scene made of 1:37 seconds was analysed. The evaluation was mostly technical without neglecting the story referred to. The first scene which was made of 22 seconds was evaluated. The instructor identified from the form point of view; sounds related to the train station. He was able to identify tickets cancellations, crossing sounds of the barrier from the platform to the outside which were audible enough to identify the environment in this storytelling. His observation was that in such a noisy place some sounds were missing, for instance people talking. His remark was that I should have added a sound effect made of people talking, in my post-production step. The first 10 seconds should have given the impression of Patrick giving the impression of being the only person going out of the platform.

Another observation was related to a short silence between the obliteration of the ticket and the train leaving, instead a fading in and out would have been more efficient. Again, from the transition point of view the fade-out of the sound of the train leaving and Patrick's walk would have been softer than sharp (second scene). On the contrary he appreciated duck's sound and the other one of a small bird. His question was how did I go about to catch such distinct sounds? I explained the difficulties I faced to get the duck's sound in the context of the wind blowing to the opposite direction and that I had to go to the Maynooth University South Campus home where there are many birds looking for food. I applied the bird's singing as a sound effect. The walking sound was perfect but too short to reach the urban traffic (third scene). The impression this scene was giving was that of a dead city without any other human being around and a crossroad that looked dead. He would have liked me to add more sounds effect to enrich the urban crossroad. Instead, if this remark was concerned, I would have applied a correction of sound effect of people talking and other sounds identifying this urban sound domain, to make a difference between this crossroads from another environment.

So, this scene was crucial to the storytelling. Atienza helps grasp the importance of such expressions talking of «sound domain» of an urban phenomenon to be understood as the set of sound expressions of a space that make sense, that signify and inhabit it (Atienza, 2009). The instructor called to my attention that sound expressions in audio projects are evaluated through identification of space and the quality of the device settings. Following the evaluation, he appreciated the natural ending of the story expression which, in fact, explained Patrick's hurry back home. In fact, this project among others that I produced was a concrete example of the Audio-visual Narrative discipline of my master's Curriculum that aimed to teach students technical and artistic skills in creating an audio-visual narrative, also to master the language of writing the argument and other key texts for an audio-visual project. His general impression was good and so an improvement from other audio projects that I created in the context of mastering the Pro Tools software.

# 1.4.2.2. Continuous evaluation of "Kairos" (video project)

The evaluation of this video consisted mostly of the voiceover, music applied in the background and the quality of different shots in the sequence. My instructor congratulated me for the voiceover quality and the music in the background that gave a lively and interesting documentary from the sound point of view. Nevertheless, he had a few remarks on the image quality throughout the documentary. He referred mostly to the first shots used to introduce the structure, which were too short and does not help the audience's sight. If I applied montage transitions this would be understandable. For Mascelli, "a montage transition is a series of short scenes - connected by straight cuts, dissolves or wipes - used to condense time or space" (Mascelli, 1998, p. 138).

To avoid these mistakes which have an impact on transitions, he advised me to turn the camera on for some seconds before the footage and leave it on for a lap of seconds after the footage. He referred me to transitional devices as pictorial and sound transitions understood as

41

methods used individually or in combination to bridge time and space. Mascelli states that: "the simplest method for achieving smooth pictorial transitions is by use of introductory titles; stating place and /or time to set the stage" (Mascelli, 1998, pp. 136–137). Another effective transition is sound transition which he suggested me to use for an aesthetical setup. Mascelli calls it sound version of pictorial transition: "narration may cover a switch in locales or explain a time change. This would be a sound version of a pictorial title" (Mascelli, 1998, p. 142). Nevertheless, he congratulated me for the use of an insert that could be applied throughout the indoors sequences, that is the "on air" shot. The "on air" is in fact a sign. Among what Mascelli calls inserts are letters' full screen, close-up, newspapers, photographs, a telegram, posters, any written or printed matters. He explains the reason why: "generally, inserts are filmed so that they overlap the frame slightly thus eliminating the background" (Mascelli, 1998, p. 32).

At the 6<sup>th</sup> minute, a pan shot, on local outside parking, from the building to the truck holding mobile studio for outside broadcasts, did not give a good aesthetical impression, since there was not a nicer tone. There was a lack of white balance which was not applied. This was obvious on the florescent white truck; thus, the colour was too light. I assessed the image quality, by the fact that the value of the hue was not well set. Brown deals with this situation as he explains: "Value is how light or dark a color is and saturation is how "colorful" it is; in videos we more commonly call it chroma saturation or just chroma" (Brown, 2016, p. 98). It was therefore very important for me to understand the basics for the two-colour models, namely hue/saturation/value (HSV) and hue/saturation/lightness (HSL). I needed warm colour (yellow through red). A warm colour is from a cool colour.

Clearly it doesn't relate to the color temperature; in fact, it works in the opposite direction (Figure 6.4). Color temperatures above 5000K are commonly called cool colors (blueish), while lower color temperatures (roughly 2,700–3,500K) are called warm colors (yellow through red). (Brown, 2016, p. 99)

Although in such a failure I would have applied colour correction at the post-production stage, the adjustment of the white balance would have been the solution during the production. I had pre-set colour balances, but my instructor advised me to do my own active white balance on the set. The white balance should be differentiated from the black balance and black shading. A black balance which is achieved automatically in some cameras is as important as the white balance. "Most cameras will perform a black balance automatically, usually with the lens capped for complete darkness. Without proper black balance, some colours won't reproduce

properly" (Brown, 2016, p. 102). A black shading is all different from the two previous ones. Brown used red company's word to explain it stating that:

Noise in any digital image is the result of both 'fixed pattern' and random noise. The former is caused by persistent variations in light sensitivity between pixels, whereas the latter is caused by thermal fluctuation, photon arrival statistics, and other non-repeatable sources. (Brown, 2016, p. 102)

# 1.5. Analysis of "MASS ON ST PATRICK'S DAY 17TH MARCH Newman University Church Saint Stephen's Green Dublin"

#### 1.5.1. Preparation of the venue

Having done my traineeship at Kairos, it was relevant to analyse a project that involved a lot of different professionals. The reason why I looked at the Saint Patrick celebration video, was to pinpoint a teamwork that involved different professionals from the pre-production, production, and post-production process of this project. Another reason was to bring out aesthetical technics and artistic skills involved for the professional outcome of the video that I looked at like a masterwork.

Therefore, two trucks left Maynooth early morning for Dublin. One of them was the mobile Kairos studio which serves for outside broadcasting programmes known as OBU (Outside broadcasting Unit) and carries cameras; the second truck held a big generator which provided electricity for all the equipment (cameras, sound system, the studio, satellite unit, etc.). In addition to the two trucks (see figure 7) there were also two vans: one of them held the satellite unit (see figure 8) while the other carried cables, all the equipment related to the sound system, lighting, etc. May I mention that the generator, the satellite van, electricity cables were all hired just for the event and explain how expensive it is to hold an outside broadcast. All the equipment involved in the live Mass broadcasting on Saint Patrick Irish day, I mean trucks, vans, cameras, etc. were under the protection of GZ security. Aware of the protocol that Kairos signed with those who hired equipment to protect them, the best thing to do was to put everything under a qualified agency for security. The unloading of the equipment from the trucks and vans to the structure needed a strong workforce. All of us got involved for a speedy placement. The same workforce helped to remove all the equipment back to the trucks and vans.



Figure 7: Kairos Outside broadcasting trucks. Source: Photo by the author, 2017



Figure 8: Satellite van. Source: Photo by the author, 2017

On 16<sup>th</sup> March 2017 by 9 AM most of the teams involved in the celebration were at the venue for the preparation and setting everything ready for the rehearsal. The team for the preparation consisted of: the Rev. Father in charge of the celebration team and director of the Newman Centre for Faith, the Director, the Broadcast Co-ordinator, the Production Secretary, the one in charge of Lighting engineering team, the one in charge of sound engineering team, the chief Cameraman and colleagues, the Floor Manager, the person in charge of the team for vision mixer, the person in charge of graphics, the one in charge of VTR, another in charge of Rigging, as unit manager, the executive producer, the producer and security, two choirs with the Music Director, the Cantor, the Organist, the Carolan String, Uillean pipes, Flute, Harp. A special attention was to be paid by different team leaders involved to whom were attached other members. All these different individuals of the celebration were recruited based on their experience. From the OBU team members, only four came from the Kairos Communications, i.e., the producer, unity manager and two of the cameramen.



Figure. 9: Light set for the illumination of the venue. Source: Photo by the author, 2017



Figure 10: One of the 6 cameras used for the celebration. Source: Photo by the author, 2017

Therefore, the preparation of the venue consisted mostly of sound system, the illumination of the venue where the celebration had to take place and setting all the 6 cameras. Since the celebration was held indoors where illumination was a serious concern for the quality of the images, electricity engineers had the task to provide light enhancement to the beautiful old dark church. From the historical cinematography techniques, filmmakers preferred daily light to perform; nowadays the obstacle is overcome by modernity in electrical energy. Keating helps understand this revolution in the film industry, namely the electric lighting. This revolution turns filmmakers to rely on the indoor artificial lighting for a shot that would have been taken outdoors. This technical simulation can be explained as he states:

By the 1920s, virtually all interior scenes were shot under artificial lighting, and even some nominally exterior scenes had been moved into the enclosed indoor studios. Industrialization's demand for efficiency provided a powerful impetus for this widespread shift: as the commitment to mass production grew more systematic, filmmakers turned away from unreliable daylight and adopted controllable electricity. (Keating, 2014, p. 32)

#### 1.5.2. Cables and cameras setting

Three main cables (see figure 12) provided electricity from the generator to the 6 cameras, the light set for the illumination of the venue, providing sound and videos from the cameras to the mobile studio while some other cables took the signal to satellite unit. To set these cables, different engineer teams were involved. I paid a special attention to the way the cables were discreetly placed along the benches on the floor using a black tape to glue them.



Figure 11: Cables setting on the floor. Source: Photo by the author, 2017



Figure 12: The three main cables. Source: Photo by the author, 2017

They were glued (see figure 11) to avoid that people moving along the aisles of the church displacing them and to enable cameramen free movements. A master rigger thoroughly controlled the placement of cables while another team placed lights at different points of the structure for a better illumination of the venue. This rigging could only be done by professionals to avoid any accident during the celebration and keep an aesthetical setting. At the same time, the 6 cameras were deployed at different positions of focus waiting that the rigging was finished and the signal on to start their rehearsal with the Floor Manager.

Each camera was placed according to its number and its role as described in the script. Every cameraman, headphones on, followed thoroughly the instructions from the Floor Manager who checked out the sound and image quality. The illumination of the venue was of a great concern, reason why its reinforcement was compulsory from qualified engineers that Kairos invited purposely. Considering the amount of equipment that the OBU required for the Mass on Saint Patrick Day at Newman University Church, I wonder if other techniques for the illumination wouldn't have been handy and cheaper. In fact, Brown suggests the use of LED Lights that produce less heat, small and very efficient. He explains the choice for LED Lights as follows:

For lighting fairly close to the scene, they have many advantages. Their compact size means they can be hidden in many places on the set and also makes them easier to handle and rig on location. There are also many LED lights that run on batteries—these can be very useful for handheld work, camera mounting, and other conditions where AC power may not be available. (Brown, 2016, p. 239)

#### 1.5.3. General practice under the flow manager

We have just mentioned different teams people involved in the production of Mass celebration on Saint Patrick's Day broadcast on 17<sup>th</sup> March 2017. We have noticed that these teams are all scattered in different physical locations, but all of them were in a perfect harmony. If the truck held different and essential technicians of the Outside broadcast Unit (Broadcast Coordinator, Production Secretary, sound engineering team, the team for vision mixer, in charge of graphics), another truck held the generator providing the electricity to run all the equipment, a satellite van transmitted the live production to the simulcast on RTÉ One TV and RTÉ Radio 1 Extra and LW 252; all other teams were in the church where the event was produced.

Somebody had to create synchronization of the main venue with all the protagonists involved that person is the floor manager. He really was the master of the ceremony. He was chosen for his skills and experience on Television and studio, in short, he knows all the job involved in the TV and Radio broadcast. Among other skills I can mention his capacity to collaborate with all the teams involved and a good sense of timing and space. Different sources give us his job description:

Television floor managers also help prepare and plan productions, supervise the live rehearsals and make sure everyone knows what they should be doing and when. They deal with any technical hitches and ensure the production floor meets health and safety regulations. In short, they prevent everything from descending into absolute chaos. (anonymous) Wikipedia also calls him a floor director and describes him as the person "responsible for giving information from the director in the control room, to the crew on the studio floor, and then back to the director".<sup>11</sup>

The floor manager of the Mass on Saint Patrick's Day TV and Radio broadcast. From the rehearsal held on the 16<sup>th</sup> minute, he was the man who made sure that all movements held by different actors were right and kept the timing as described in the script and that the choir, readers, etc. kept this timing. He made every actor rehearse again and again up to the desired performance. Although rigid like a headmaster, he was congratulated when the performance was adequate. If during the rehearsal he made sure that everything was all set to fulfil the desire performance, the same attention was on cameras, microphones, lights, etc. during the celebration on 17<sup>th</sup> Mach. And If his presence was all visible during the rehearsal, he was much hidden during the celebration, but very effective. At the end of the celebration, he was the man to be congratulated for having successfully helped for the 55 minutes the beautiful performance of all actors and different teams involved.

## 1.5.4. Video analysis<sup>12</sup>

Before analysing a few minutes of the video: "MASS ON ST PATRICK'S DAY 17TH MARCH Newman University Church Saint Stephen's Green Dublin", produced by the Kairos' OBU programme (see annex), I would like to point out some characteristics of the Irish media since this programme has a specific audience. This defined target makes media directors fulfil their expectations. We are in Ireland where Saint Patrick's feast matters a lot. Any sound and visual productions at the occasion are welcome if they are efficient. Rieffle shows the importance of this principle for media professionals: "first press managers, then the audiovisual leaders, needed to know better the profile of their readers or their listeners to improve the content of their support, to better adapt it to the expectations of the public" (Rieffel, 2005, p. 149). For this reason, the Kairos OBU team hired the best crew around among others made of sound engineers, lighting engineers, riggers, the flute, harp, studio technicians, and the floor manager for the best sound and image quality to attract viewers at the Saint Patrick's Day whose first activity was to watch the transmitted mass. All the Irish watched this from their TV or their mobile

<sup>&</sup>lt;sup>11</sup> See: https://en.wikipedia.org/wiki/Studio\_floor\_manager#cite\_note-Media-1

<sup>&</sup>lt;sup>12</sup> See: https://youtu.be/DVS3xLw3C6E

phone or listened to Radio before undertaking any other cultural activities of the day. No failure of any kind was expected. That why competence was a criterion for the choice of any actor to take part in the event. This achievement was the result of high level of skills and experience of all the technicians involved that we have just mentioned earlier. Furthermore, adequate equipment is compulsory to achieve any audio-visual professional production, but still human brain the main protagonist. Zettl is right when he gives his points of view about the stereo 3D illusion as he writes: "you should realize that even the most sophisticated hardware and software could not produce a 3D image; it is, finally, the brain that is tricked into the 3D illusion" (Zettl, 2015, p. 177).

It's fascinating to look at the colour that people used: green. It's Saint's Patrick day<sup>13</sup>. From the history of cinema, it was a great joy to celebrate coloured television event for many filmmakers. This dream has finally become a reality. Pierre Tchernia writes with pride that: "On October 1, 1967, my friend Alexandre Tarta and I made the first report in color and we chose a suitable subject: parachutists whose parachutes were bright, red, yellow, green. We made the show with the Air Force in Biscarosse" (Astruc et al., 2014). No wonder that the green in this video gives pinch the audience who is delighted to follow an interesting and aesthetical audio-visual production. In fact, we are in front of tabloidization of the Irish media to which the Kairos OBU is not an exception. This is to say that the media has changed into an entertainment format. The use of more audio-visual infotainment features is justified in this specific media.

Although Alencar and Kruikemeier (Alencar & Kruikemeier, 2018) point out the negative effects of audio-visual infotainment in European news in their comparative study on Dutch, Spanish and Irish television news programmes. They refer to its connexion to the tabloidization and sensationalism, (referring to Baym and Grabe), the banalization of serious subjects in favour of the promotion of entertainment narratives spectacles or dramatic storylines (referring to Altheide and Graber). So, they consider its benefits about message comprehension and recall by way of emotion they convey to the viewers (referring to Vettehen). In fact, authors such as Früh and Wirth<sup>14</sup> made a study of the degree of television's content effects as regard to the infotainment. This is the fruit of their argument on the moderate infotainment features' use such as camera movement, cut frequency, music background, special effect, etc. which impact on the

<sup>&</sup>lt;sup>13</sup> Please, the video online helps follow the analyse on Saint Patrick's Day. See the YouTube link on point 12.

<sup>&</sup>lt;sup>14</sup> These authors ideas are referred to by Alencar and Kruikemeier's article (2018).

quality of information and increase of retention performances. So, my analysis of the first 5 minutes of the video will be based on the three main requirements: technical requirement, aesthetic elements and narrative factors (Mascelli, 1998).

The programme starts with a 4 minutes and 40 seconds introductive VTR that begins with a musical bell that draw the attention of viewers or listeners to stop anything they were doing to follow the celebration. Mayer as Curran referred to him thinks that "Arousal theory assumes that extraneous material such as music will arouse the senses and help learners pay more attention to the primary material, which is narration" (Curran, 2012, p. 21). Then at the 8<sup>th</sup> and 9<sup>th</sup> seconds appears the huge Saint Patricks monument taken on a low angle shot<sup>15</sup>. Mascelli defines a low-angle shot as "any shot in which the camera is tilted upward to view the subject" (Mascelli, 1998, p. 41). This very aesthetical and professional shot is just in the beginning of the programme to inspire to the viewer the symbolism of the huge monument in the Irish life. Why this low angle shot in this specific monument that represents an important personage for the Irish? Mascelli helps us understand this choice as he explains that a low-angle shot on religious items, architecture, crucifix or the interior of a church may be inspiring for the audience, "because the viewer is placed in a lowly position from which he must look up to the symbol of the Almighty" (Mascelli, 1998, p. 41). Apart from religious objects where the low-angle shot may be applied he includes important personages such as a president, a judge, etc.

At 23<sup>rd</sup> and 24<sup>th</sup> seconds, linear perspective shot was taken on a huge avenue full of people dressed in green. The picture is very beautiful to see parallel lines converging and disappearing at a vanishing point, that lie both at eye level and at a camera level on the horizontal line as Zettl says. This nice graphic is called linear perspective that conveys aesthetical impact in the audience. Zettl shows this impact on the viewer as he states:

This is among the more powerful and convincing graphic depth factors. In a linear perspective, all objects look progressively smaller the farther away they are, and parallel lines converge in the distance, with the vertical and horizontal lines becoming more crowded as they move away from the observer (camera). (Zettl, 2015, p. 167)

From the 25<sup>th</sup> second to the 58<sup>th</sup>, we have a set of shots of pictures where children get involved in the feast as a way of giving continuity to this culture. This is done by combining pictures to the

<sup>&</sup>lt;sup>15</sup> Mascelli defines a low-angle shot as "any shot in which the camera is tilted upward to view the subject" (Mascelli, 1998, p. 41).

sound to create a synergistic structure. How did they go about it? No common recipe, but Zettl suggests that:

You must combine the video and audio vector fields so that they form a synergistic structure. Such a video/audio combination requires that you hear the screen event while visualizing and sequencing it and see it while working with the sound. You should try to conceive and develop the video and audio vector fields together as much as possible. (Zettl, 2015, p. 353)

From the 1<sup>ª</sup> minute, after different shots on children, the narration continues with drawing. The voiceover is made by an adult, a female. A woman draws; it looks awkward for an adult to start drawing like children. This structure was to attract a special audience: children who will listen to the story without getting bored. This technique may have another explanation that we get from Buckingham perspectives on children and the media. In fact, he speaks about three perspectives on children and television that are interconnected. The first is "moral panics". There is a serious concern about the violence that many TV programmes offer and bring a negative impact in children's behaviour. The second perspective is "plug-in-drug", expression borrowed to Marie Winn. It's the undermining of family life by TV as well as the destruction of children's capacity for cognitive development. Television has become as dangerous as drugs. The third perspective is the "consciousness industry". Media are means for ruling class to continue imposing their dominant ideologies on viewers. So, Kairos OBU has suggested an alternative perspective that is teaching about media, through various insertions of children's pictures intermingling with the voiceover (Lusted et al., 1991). Then, another audience that the programme wants to attract are students who share their experience to each other. This sound/picture combined structure with another language adequate for grown-ups conveys the message to this new target: students from America. The voiceover guides the story. Different musical instruments proper to Saint Patrick's Day or better to the Irish are shown by way of another technique: selective focus<sup>16</sup>. Mascelli explains the selective focusing when he states that<sup>17</sup>: "The human eye will always seek out the sharpest image, in preference to soft or out-of-focus images" (Mascelli, 1998, p. 219). The instructive VTR ends with a long shot of the bridge full of people rushing to Newman University Church for the religious celebration. This scene conveys a

<sup>&</sup>lt;sup>16</sup> "The technique of selective focus allows you to choose the precise portion (plane) of the z-axis that you want to be in focus, with the areas immediately in front of or behind the focused object being out of focus" (Zettl, 2015, p. 174).

<sup>&</sup>lt;sup>17</sup> "The human eye will always seek out the sharpest image, in preference to soft or out-of-focus images" (Mascelli, 1998, p. 219).

subjective camera angle. By this technique the viewer participates in the scene. Mascelli explains it as follows: "The viewer is placed in the picture, either on his own as an active participant, or by trading places with a person in the picture and seeing the event trough his eyes" (Mascelli, 1998, p. 14). Mattelart expresses the same idea as he writes: "at the speed of the moment, (...) the audience turns into an actor, and the spectators become participants" (Mattelart, 1991, pp. 147–148).

From the 4<sup>th</sup> minute and 58 seconds to the 5<sup>th</sup> minute and 25 seconds, the entrance song and the cantor picture show how synchronised, the two appear. The rehearsal with the floor manager really paid off. Sound and picture intermingle to transmit the message of love in this scene to which views are invited to. To reach this flow, Mascelli gives the following advice: "Sound should flow across scenes to be most effective" (Mascelli, 1998, p. 167). From the technical point of view, this picture gives to any viewer a desire to watch the programme. The ambient light applied on the venue gave a nice outcome. Ambient light is to be distinguished from Classical lighting, through the windows, practical and motivated lighting. Brown explains the ambient light:

The term ambient has two meanings. On location, it means light that is "just there"—generally a sort of soft, overall light in the room. In lighting in the studio or on a location set, it means an overall fill that is added, usually from big soft overhead sources. (Brown, 2016, p. 271)

# **1.6.** Personal evaluation of the traineeship

My question at the end of my traineeship was: what changed in me after three months of work experience among professionals? The first thing I came across was that I had to master some fundamentals to produce a professional master work. This awareness to read and learn has become in me a challenge. To the technical experience I acquired precious rules to know. After different outside broadcasts with Kairos, I came to understand the importance of teamwork: it's impressive to see all the work done in the process from conception to production and post-production. Many engineers were involved in the production of Saint Patrick's celebration day on 17<sup>th</sup> 2017. From conception to the broadcasting, a lot of meetings were held among different actors of this programme. All the preparation work was the fruit of collaboration between different actors to produce a script, job description of every camera and of all other people involved. Of course, teamwork is essential to produce a good quality, but I was again convinced that

mastering fundamentals on audio-visual and multimedia from my part is very important to participate in a teamwork. A good outcome of a production depends on the expertise of all actors involved.

Having participated in three OBU programmes, I experienced how everyone was committed to his task (Director, Broadcast Co-ordinator, Production Secretary, Light engineering team, sound engineering team, Cameramen and woman, Floor Manager, the team for vision mixer, in charge of graphics, in charge of VTR, in charge of Rigging, Unit manager, Executive Producer, Producer, Choirs, Music Director, Cantor, Organist, The Carolan String Quartet, Uillean pipes, Flute, Harp and GZ security) for a professional production with an Irish touch on the most awaited Saint Patrick day.

If the expertise of each one mattered collaboration under Co-ordination was another important factor to be considered. Since I was all alone on the traineeship program under the instructor, the OBU programme was a good opportunity of collaboration. I, as a trainee did not do much than giving a hand during the rigging and learning from different actors. During the celebration, I stayed beside a cameraman and camerawoman to learn or to the mobile studio to see how every sector performed. During the rehearsal, I was given a chance to hold a camera, headphones on, I could listen to the communication from the team of vision mixer and the Broadcast Co-ordinator. This experience made me commit myself more and more to doing my own research on fundamentals and different explanations, advice from my traineeship personnel supervisor and any other team members of Kairos. From this attitude and commitment, I noticed an improvement in my audio-visual production. The "back home" audio and the "Kairos" audio-visual were not the best of my production but the most challenging ones. For this reason, I chose them in my dissertation among many that I produced during my traineeship to stress where I had to pay more attention in the audio-visual productions.

I gained a lot of experience at Kairos during my traineeship. This experience was first adapting myself to any kind of device relating to audio-visual and multimedia. For instance, I had never used any product from Apple before my Kairos traineeship. Therefore, I had to do some research to understand the difference between an Apple and a Windows PC. For this reason, I invested my time to learn more about and grasp its advantages as I mentioned at the beginning of this dissertation, before I started to use a Mac for my audios and videos. Having mastered the use of this commodity, I was able to switch from my common PC Windows hardware to the Mac

53

available at Kairos. This technical ability was a very enriching experience. Apart from my mastering of Mac PC, I had to learn a set of new video editing software such as Avid Media Composer. By using this software, I came to grade its advanced tool for colour corrections that I assessed as the best. As for sound editing, my traineeship gave me a chance to learn Pro tools. I came to notice that Avid Media Composer's surround sound mixing was compatible with Pro Tools which made it easier to grasp its use. From this experience, I'm able to work with Final Cut, Vegas Pro and Sound Forge, while before the traineeship I had only used to Adobe Audition and Adobe Premiere.

My traineeship at Kairos increased my self-confidence to exhibit my videos to the public; I was aware that publishing my videos made me exposed to critics. Nevertheless, I was not afraid of that, but as a learner, this exposure created in me the will to learn more and more. In fact, since I was the only trainee at the Kairos although under the guidance of the instructor, my own research on the fundamentals on lighting, colour corrections if the white balance was not well set, etc., made me grow more and more in the audio-visual and multimedia. Therefore, my commitment since then is to continue learning to stay up to date or discover more basic audio-visual and multimedia fundamentals. So, I created my own YouTube TV Channels where my videos are posted and followed by many people. Some of them were just edited from old footages by me, but in some circumstances such as a death of a leader or any other person whose images were shot and archived by me was an opportunity to show their memories to the beloved ones. I have published 30 videos on my YouTube two channels up to now. One of them, which is related to culture "latada 2018" has scored 4684 views than all the rest. After my training at the University and the Kairos traineeship, I'm ready to take on the audio-visual and multimedia job waiting for me in the Democratic Republic of Congo.

# 2. Congo oral tradition in the framework of new communication models

# 2.1. Introduction

The first chapter dealt with the practical part of my traineeship. This traineeship aimed to prepare myself for media involvement in Africa in general and the Congo in particular. There is a link between the two chapters by the fact that the theorical chapter gives an account of the communication development in the Congo as our target from orality to new media technologies. Orality is one the best communication tools for the transmission of traditions and cultures in ancient African societies. It would be underestimating if we reduced the orality capacity of these traditions and cultures to the past. Despite the advent of writing and other communication tools, orality is still practiced transferring knowledge to younger generations. No matter, it stands nowadays side by side with the digital revolution to fulfil the same goal. The orality and other new tools provided by digital technology are in partnership in that same mission of effective communication. Although the writing culture has taken roots in Africa through colonisation, no way orality may be overtaken. It remains in Africa the principal component tool to transmit wisdom and knowledge to younger generations. Therefore, modern media have been taken as a reinforcement of oral inner communication culture. This inner African orality talent is well felt in music, modern theatre, talk shows, among others in the Democratic Republic of Congo, which we will deal with in this chapter. African orality must be understood as a core element for communicating effectively. In fact, image, sound, and scripts play an important role in the new communication models to establish dialogue, personal relationships, exchanging reports or influencing counterparts. In this chapter we will underline the process of the social communication model, from the oral to digital society in the Democratic Republic of Congo.

# 2.2. Communication models

Communication in any society is as old as the world. African societies in general and Congolese societies developed their communication from oral tradition or orality to different models that technology offers. An overview of these different models helps us understand how communication in Congolese societies fits in the world framework of interconnectedness, interactions, and interpersonal communication. McCarthy developed different types of communication known in human societies nowadays from which this reflexion will be based on to grasp communication models in the Congo at the era of digital revolution. He notes three main communication models, for instance, verbal communication, written communication, and non-verbal communication (McCarthy, 2008).

#### 2.2.1. Verbal Communication

Verbal communication is a communication where people listen to each other to understand the message delivered. This kind of communication is used for dialogue between people. It's known for being oral communication. Nowadays, verbal communication is the kind of communication mostly used in business whose medium is the voice or the phone. There are two main components in the message delivery: the sender and the receiver. The voice plays the most important role. Ancient African societies used to pass information, cultural values trough orality. Though modern models of communication overwhelm the network and the world of communication African societies still conserve the primacy of orality as principal instrument of cultural transmission and interpersonal communication. Any other model of communication comes in support of orality.

Narration or storytelling is the art of narrating stories in different societies. Elders transmit their cultural heritage young generations through storytelling. This art of telling challenges the scripture that Africans acquired through their contacts with western world as form of communication. Eloquence as component of storytelling is a criterion for an African leader to convince his audience that was used to ancestral transmission of knowledge through talented speakers. The eloquence criterion plays nowadays an important role in the vote of Members of Parliament who make use of the art of public speaking to convince their supporters. Storytelling skills make a leader exist in the African society. A suku<sup>18</sup> proverb fosters this existing asset in the society by taking part in a debate and the importance of participating into it.<sup>19</sup>

The youth both boys and girls undergo a formation to acquire competence in knowledge. This formation does not consist of any school, but it is acquiring knowledge through life

<sup>&</sup>lt;sup>18</sup> Suku is a bantu ethnic group in Angola and the Democratic Republic of Congo. Suku is an adjective, and the people are Basuku.

<sup>&</sup>lt;sup>19</sup> This proverb is "Yakala bakudia ndinga ba kudi".

experience. In fact, it is during different activities involving either boys or girls that formation take place. This formation is given separately. For boys, it is in the evening around the firewood that stories are told to form children. While boys are taken care of by their fathers, uncles, etc., while girls are formed under the guidance of their mums, ants, grandmothers, etc during different activities. In fact, knowledge that they seek, is acquired in everyday life. Mudiji on his reflexion about the language of African masks makes a focus on wisdom that can be acquired through sayings, tales, legendary stories that introduce into the art of living. In fact, it is an initiation into life (Mudiji, 1989). Storytelling is known to be an effective form of modern communication. Stories play a key role in any organization.

Communication is part of the Africans daily life. Interpersonal relationships regulate the togetherness of the community. This communication is mostly verbal and dialogued, action and reaction. Bisewo describes the African life as communicational, interactional, cooperation with other human beings. He finds this argument in the sanctuary of African "Palabre"<sup>20</sup>. In other words, he states that:

Every social group, every community is characterized by this interactive process of action reaction. Therefore, African traditional communities do not whatsoever escape to this movement. They are embedded with so many interactive structures such as "parricidal" dialogue, which is considered as favourite place of the word and speech. (Bisewo Pesa, 2011, p. 3)

This communication model has its advantage. Verbal communication firstly has the advantage of having immediate feedback, secondly it conveys emotions and thirdly it can involve storytelling as well as crucial conversations.

#### **Crucial Conversation**

They are some kinds of communications like hi-stake ones which require previous preparation, skills, and reflections. This is a bit different from a normal day to day verbal communication. It happens in business ventures to earn capital and professional lives where one defends his interests. In such crucial high stakes conversations discussions flow with a lot of emotions. (Patterson, et.al., 2002). Communication experts give recommendations in such

<sup>&</sup>lt;sup>20</sup> Palabre is a French word that stands for endless discussions according to Collings's dictionary. We prefer this French than translating it what would sweeten its essence. That is the forum where problems are argued under the guidance of elders and wise elite. This forum is public and verbal. New forms of communications will not overcome this temple of the community.

crucial conversations such as not using "but", instead, "and" is the one proper and that one should be watchful on his communication style, flexibility being the recommended practice. The African "Palabre" is by its nature emotional, requiring a lot of skills and reflections; therefore, prepared beforehand to use Patterson words. In such forums skilful elderlies are the ones in scene. (Stewart, 2001). By way of proverbs, the mastery of culture/traditions and the language skills perform in public. Such crucial conversation in Congolese traditional societies is applied in discussions concerning wedding or previous dowry arrangements for examples, also for other arrangements about a choice of a new chief of a village/kingdom, resolution of conflicts, etc. Such discussions require skilful actors. (Stewart, 2001) These skilful actors are chosen among elderly men who passed through initiation as transition to manhood. Skills in the knowledge of the language, culture, and tradition without forgetting moral integrity are criteria of choice. One needs communication ethics to integrate this social interaction forum, according to Bisewo. He defends that 'palabrical' communicational ethics are compulsory in the resolutions of conflicts. In such crucial conversations communicational ethics help reflect on "the respect, freedom, responsibility, commitment, reconciliation, mutual understanding, argumentation that nourish the discussion and/or the communication" (Bisewo Pesa, 2011, p. 6). From the crucial conversation as part of verbal communication we can pass to written communication as heritage of contact of Africa and Congo with western civilisations.

# 2.2.2. Written Communication

Written communication differs from verbal communication by the fact that the message here is printed. The characteristics points of written communication are that they are printed on paper, handwritten, memos, e-mails, appear on a screen in today's modern world and that the conversation does not occur in real time, unlike the verbal communication. So, written communication is asynchronous (it happens at different times). It means, in fact, that the sender's message can be read by the receiver at any time and that the message may reach many people unlike the conversation where it is a one-to-one communication. They are exceptions of oral message that are asynchronous such as voicemail. In addition, conference calls, speeches being oral one-to many communications, or e-mails may have one or more receivers. There are advantages of written communication such as its asynchronicity as well as its capacity to reach many readers and the fact of being the best to deliver information. Written communication appears in African societies with relationships that different European countries developed with Africa and the colonization that followed in many cases. Religion as part of this relationship offered to missionaries the opportunity to form their believers to transmit the Gospel and Christian values through education to indigenes. Every mission founded held a school and a hospital. These different schools paved the way to a new communication model in front of oral tradition. Therefore, this model is partly used by people exposed to western models of school and education. Nevertheless, this model does come to make any opposition to the verbal-communication model for which African societies are famous, instead this is the alternative communication. This model comes to sustain the way of transmission of traditions and culture to younger generations.

No wonder, these oral traditions have developed a productive literature by European missionaries who wanted to know people to home they performed their mission, as well to enrich the ethnology, anthropology, sociology of different universities which formed them. Among them we can mention François Lamal, Klaus Weiland<sup>21</sup>, Vansina, Hermann Hochegger<sup>22</sup>, Placide Tempels. Thanks to this model, we have access to a lot of information that would have disappeared with the death of different African actors who had the mission of transmitting knowledge orally. In his 1960 UNESCO speech, Amadou Hampâté Bâ argued that: "the death of an old man in Africa is a library that goes into fire". After the work of European and American anthropologists or ethnologists most of which were missionaries, a lot of PhD theses are written by Africans that are of a big value for the knowledge of different African traditions and cultures. Among those we can mention Bisewo Pesa, Dieudonné M'sanda, Mbuluku, Vincent Mulago, Kulungu, Gusimana wa Mama, Kabwita Iko, Mudiji. Meanwhile, during the colonial time the written model of communication had a force of law and could be source of a lot of stress. This was obvious when a written administrative convocation reached its addressee. Was it by the fact that scripts remain contrary to words that cannot be conserved being volatile? This will be

<sup>&</sup>lt;sup>21</sup> Klaus Weiland made a study on Suku on "la chefferie Suku de Mobanga, son organisation sous l'angle de parenté ». He published it in 1974. This german researcher stayed in the Mubanga village among the Suku tribe of the Democratic Republic of Congo for a long time to understand the organisation of clans from this sample. This helped him defend his P.hD thesis on this African tribe in this huge country in the heart of Africa.

<sup>&</sup>lt;sup>22</sup> Hermann Hochegger was a professor of anthropology having defended his P. HD thesis on African Ethnology. As Director of ethnology centre of CEEBA in Bandundu/Ville for decades, a lot of works were produced under his direction one of which I can mention "Dictionnaires des Rites" in different volumes. This long collection is a masterwork on different rites among tribes in the Congo in general, and in Bandundu in particular.

justified by the saying that "Verba volant scripta manent"! It was almost a death sentence when an administrative convocation reached its' recipient this by the cohesive feedback that expressed any written document. Even a signature applied to a document expressed the compliance to a commitment. This behaviour towards written communication encountering oral traditions does not question the orality that was by then the only way of transmission of knowledge or traditions. Rather, it is association to colonial powers as well as to missionaries linked to education providing new administrative powers, created in African populations the compulsive character that it impelled.

#### 2.2.3. Non-verbal Communication

Non-verbal-Communication is considered by many as component of verbal or written communication to convey a message. Limiting it to the two forms is unhelpful. As a matter of facts, human beings are endowed with other forms of communication. We also have communication which passes through a non-verbal language. Hartley classifies "facial expression, gaze, gestures, posture, bodily contact, spatial behaviour, clothes and appearance, non-verbal vocalization, smell" (Hartley, 1993, p. 143), as components of non-verbal communication in his reflexion on interpersonal communication.

It's not only what we say that is important in communication but what we do not say may be of a higher consideration. In Congolese societies, dialogue consists of looking at one's interlocutor, since words go along with gestures and body language. In some situations, gestures convey a different message than word pronounced. At the time of Mobutu dictatorship, a prime minister known as Bernadin Mungulu Diaka<sup>23</sup> was a subject matter expert in gestural language. In fact, in one of his speeches he asked his audience to pay attention to his body language to convey his anti-President Mobutu's dictatorship. Although, he was his cabinet minister he fought cleverly for democracy through comedy. There was no other way to awaken people's consciousness towards democracy than his body language. Mehrabian argues that:

Generalizing, we can say that a person's nonverbal behaviour has more bearing than his words on communicating feelings or attitudes to others. So we have rewritten our equation for any feeling instead of just liking. Total feeling: 7% verbal feeling + 38 % vocal feeling + 55 facial feeling. (Mehrabian, 1981, p. 44)

<sup>&</sup>lt;sup>23</sup> Mungulu-Diaka is former Congolese former politician who was involved in politics from the independence up to Laurent Désiré's regime.

Referring to the same 1967 Mehrabian's study, about orator's text and his body language, Bihu-Duval rather reports that: "the impact of words was 7%, and that of tone, timbre and intonation 35%, body language having a greater part with 55%" (Biju-Duval & Delhay, 2015, p. 44). Talking about the impact of body language in communication, Bihu-Duval argues that a body also speaks. He explains one requirement for the body to speak really in the following argument: "there is congruence (...) when the signs sent by the body are consistent and converge with the words, incongruence when they express the opposite of the words" (Biju-Duval & Delhay, 2015, p. 41).

We have for instance the body language which plays an important role in interviews of job seekers. Don't we judge people with whom we interact by their non-verbal behaviours? Our facial expressions carry out emotions that convey our state of mind. It could be considered as biased to make a judgement on somebody that we have just met for the first time, just by his body language. Nevertheless, this non-verbal consideration should be considered in our decision making if we hold a position of recruiting newcomers in an enterprise. The study of facial emotions of different candidates for a job in video tape without any sound to employ some, is of a great value as far as non-verbal communication is concerned. Just a smile can make a difference in an interpersonal communication. According to Siegman affective communicators should have the following criteria: one's body language, appearance, and tone with words one tries to convey (Siegman, 1985).<sup>x</sup> Tone is another important element whether in verbal, written or non-verbal communication. One may limit the tone to the verbal communication taking into consideration the voice. Not at all. Here the emphasis of words plays a key role in conveying a message to be understood by receivers. Non-verbal communication is of a great deal in our professional life, even in our daily exchange with our interlocutors. A few cue elements play a role in the nonverbal effective communication, Congolese are involved in as some other Africans. However, they are also present in verbal communication. In addition, they are indicators of the quality or not of the interpersonal communication:

**Body language**: A simple hug/a big one, shaking hands/dry hand, a smile/moody face conveys how confident one is with another. The body language is well observed in the Congolese societies. Words alone do not totally convey any message, but the way one acts matters a lot in communication among Congolese people. A good communicator or storyteller is not only judged by public speaking skills but, also by the fact that he moves the audience combining gestures

61

with words. This asset is part of famous evangelical pastors in the Congo sphere. People choose these churches not only because of their pastor's eloquence, but also for how those pastors combine their words and gestures. In fact, body language, hand movements, gestures and gesticulations reinforce communication for those who hold some leadership positions in society. Otherwise, it becomes stiff.

**Eye contact:** a duration of an eye contact with an interlocutor can convey that one is trustworthy or not, in the American society, for instance. In Congolese society, not looking someone in the eyes during a conversation conveys a message of lack of confidence. Such a person can be treated as a liar, not trustworthy. Cohen describes this behaviour that involves both body language and eye contact as he argues that: "fiddling with fingers, touch the nose, play with the end of his hair, direct gaze towards the ground or to the side, to grind an object while talking, for example his bag, his gloves or his cigarette" (Cohen, 2010, p. 18). At the same time, when a storyteller or an older person instructs his audience, everyone must look at the person who speaks to show interest and respect. This applies to the one who is reprimanded by an elder. He should look down as a sign of guilt and repentance. It should be considered that the way one looks at somebody and the time this take reveals a lot. For Cohen, a cultural background matters in this: "Our eye behavior, and the time we stare at people is usually determined by the culture we grew in" (Cohen, 2010, p. 49). But here I do not intend to go into considerations regarding how and how long eye contact is involved in Congolese dialogue, rather I would like to stress the awareness of some studies already done that can be applied in a culture.

**Facial expressions**: The American psychologist Eckman, studied thousands of different expressions that are produced by the human face that correspond to different emotional human states. Facial emotional expressions convey to others basic information about oneself. This can be a starting point for the inner information. Cohen writes: "Ekman dedicated a good part of his career to inventory all the expressions that could take a human face and to decipher its meaning" (Cohen, 2010, p. 134). Communication among people should not be limited to sounds and images but strengthened by the body language. The human face is part of this body language. Cohen supports this assertion as he writes: "The human being's face is very expressive. Often, no word should be said for the interlocutor to understand others feeling" (Cohen, 2010, p. 40). He names six main facial expressions that are part of any society or

culture, namely: joy, disgust, sadness, fear, anger, and surprise. Experts decoded these different facial expressions.

**Posture**: One's position on a chair or towards an interlocutor conveys information about the person. It is a silent messenger that shows that the person is attentive or is not interested. This can show a professionalism or aloofness of a candidate in an interview. Some body's posture in a group conveys an information of leadership or just a subject. A chief or leader in Congolese society is to be respected when he speaks. This needs a respectful posture from those in front of him, such as being upright. Such a posture can be of a child towards a parent. While a posture conveys that one is fully himself or self-confident, at the same time, it gives an information about a relationship between people. Cohen stresses this ego as he states: "It happens that somebody's posture shows that he is too sure of himself" (Cohen, 2010, p. 62). Such considerations make people adopt different postures according to traditional or modern patterns. In such situations, communication can be affected by both patterns.

**Touch**: A touch differs from one society to another. A handshake conveys one character in an interview situation, for example. A simple and gently touch conveys the closeness existing between persons. Children in the world touch their parents or relatives, gesture that conveys an information of a close relationship. But this global statement does not apply to formal relationships or casual ones. Talking about a touch in a relationship, the most obvious among people is shaking hands or hugging. As for shaking hands, Cohen gives a valuable information about the origin of this gesture as he argues: "there is a theory that the first men to have shook hands would have been the tribes of Yemen, at the southern end of the Arabian Peninsula.

With the expansion of Islam, this practice spread" (Cohen, 2010, p. 65). His argument against this theory is based on the Epistle of Saint Paul to Galatians Gal. 2, 9) whereby Paul shook hands with James, Cephas, and John. Islam being posterior to Christianity, no way that it was through it that the practice of shaking hands spread out. "If the New Testament is right about body language, this suggests that, both Romans and Greeks shook hands long before the beginnings of Islam" (Cohen, 2010, p. 66). To this argument, he adds that shaking hands was a sign of new peaceful relationships: "In the Middle Ages, when Knights did not stop fighting, giving a hand was a sign that people came with peaceful intentions" (Cohen, 2010, p. 66).

**Space:** The notion of space will be understood as the visual, auditive and olfactory distance between people in dialogue. As a matter of fact, this distance implies the sight, the ear,

and the nose. According to Hall, man cannot be understood without grasping the nature of his receptor systems and how any information that is received from these respective receptors is modified by culture. For this reason, he classifies man's sensory apparatus into the following two categories:

1. The distance receptors—those concerned with examination of distant objects—the eyes, the ears, and the nose. 2. The immediate receptors—those used to examine the world close up—the world of touch, the sensations we receive from the skin, membranes, and muscles. (Hall, 1990, p. 41)

The distance between two people in conversation differs from culture to culture. Yet, it is an indication about the kind of relationship between them. Edward T. Hall talks about "proxemics" referring to the distance between people. The diagram in figure 13 is of an interest in this distance that interferes in the degree of closeness of relationship between people. It conveys an information in the relationship in business.

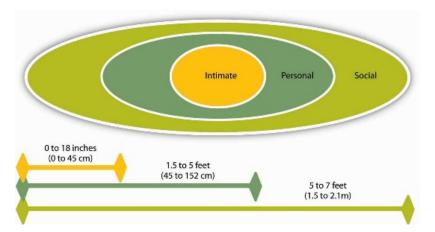


Figure 13: Proxemics. Source: Hall, 1990

The diagram presented in Figure 13 applies to Congolese in their relationships. It is a precious information to understand the proxemic that refers to one who whispers to a chief, or a leader who mingles in a crowd during a speech for example. Tactile space and visual one is mostly implied in the perception of this proxemic; Congolese easily touch each other when they are in dialogue depending, of course on the relationship involved. During the covid-19 pandemic, restrictions such as keeping a two meters distance from each other or not touching each other to protect oneself does not work at all. The visual space and the tactile one intermingles. That is why Hall does not dare to separate the two experiences. He expresses it in the following:

"Commenting on space perception, the artist Braque distinguished between visual and tactile space thus: "tactile" space separates the viewer from objects while "visual" space separates objects from each other" (Hall, 1990, p. 60).

Silent language: An understanding of the concept of silence may help us grasp how it enriches communication. A lot of researchers have studied this concept. Kenny argues that "some people answer that it is 'nothing', that it is merely the absence of sound" (Kenny, 2011, p. 67). One may presume that it is for this reason many artists search for the absence of sound, this quietness experience, quiet locals to create their works. This can be universal. Durand adds to the non-verbal list of communication the silent language inspired by Hall. He argues that communication between two people does not happen solely on verbal basis. During a dialogue, a few elements he names paralinguistic such as intonations, mimics, and gestures intervene. They are so many that one may consider them as a separate system of communication. His argument goes on as he states that people do not only communicate through words but also with their body, objects. According to him, if we admit that silence is also communication, then we cannot believe that we cannot communicate. A good number of examples goes in that line as far as Congolese communication is concerned. Two people in a conversation may introduce gestures in the middle to pass a secret message. This is obvious between young lovers whose parents do not allow a relationship; messages do not only pass-through letters, but also through using gestures from afar. Insults through gestures are part of this language. Silence is part of communication. Questioning divine silence as felt by frustrated faithful, Kenny writes: "And if one believes that there is a God, and if communications are part of his Creation, then why is he apparently silent on so many occasions when he might be expected to speak up?" (Kenny, 2011, p. 231).

To the long list of human non-verbal communication, numerous arts are part of silence language and full of interpretations and part of the cultural communication. Silence is a quality universally acquired to hold some positions in society. Kenny highlights this when he writes: "A woman of no words has been proverbially admired in some cultures. A man of few words has been respected or feared" (Kenny, 2011, p. 37). This quality is universally required. Kenny reflection on Japanese concept of silence is profound. He argued with Sai that: "Being talkative is not only offensive to others' ears but can be harmful if harmony is to be maintained. Above all, talking too much can be equated with a lack of sincerity" (Kenny, 2011, p. 59). If women play an important role in the procreation and multiplication of respective families, clans, tribes, etc.

participating actively to the education and growth, men have special ones. In fact, men must lead the society. So, to be considered or elected a leader, some qualities are required. Kenny dealt with some requirements for leadership from men: "Determined men of few or no words: these are respected. They are presumed to be strong. Leaders defer to them. They are also the heroes, or anti-heroes, of Sergio Leone's westerns" (Kenny, 2011, p. 36).

Africa and the Congo express different qualities through proverbs to transmit wisdom. Silence in communication is one of them. Women play an important role in this transmission society. Therefore, their central action in the children's rearing is considered as the cornerstone for the preservation of culture. Some Suku proverbs underline implication of women in the transmission of bad habits. This choice of women does not negatively affect the gender issue, on the contrary, magnifies women's contribution to the acquisition of qualities in the following sayings: "a goat learned to eat shreds of cloths from his/her mother"<sup>24</sup>; "a goat learns to eat charcoal from her mother"<sup>27</sup>. The last in this long list refers exactly to qualities that when they are acquired in society may cause misunderstanding between friends or relatives. Thus, silence between friends and relatives may be a consequence of misunderstanding. Such a situation can be frustrating to the point of evoking the negative power of silence that Kenny refers to: "'Silence like a cancer grows', his lyrics remind us" (Kenny, 2011, pp. 35–36).

**Cultural communication:** Durand adds to the non-verbal list of communication, cultural communication as art and literature. They are intermediary between interpersonal communication and mass communication. There is communication in a piece of art that circulates. But this art carries along the intentions and the projects or feelings of its author. This art according to him is a witness of someone that he suggests to a virtual interlocutor. Traditional culture comes across a communicational problematic that confronts its relationship with mass communication and mass culture. Some people believe that traditional culture remains of permanent values. We can note how mass communications compete with traditional culture.

<sup>&</sup>lt;sup>24</sup> "Khombu kadia masengi, ngudiandi wa mulonga bwa"

<sup>&</sup>lt;sup>25</sup> "Khombu ka dia Makala, ngudiandi wa mulonga bwa"

<sup>&</sup>lt;sup>26</sup> "Mwenda ndongu, Mwenda musinga"

<sup>&</sup>lt;sup>27</sup> "ngudia mbwa wa longa bana musondomu". These proverbs are mostly used to sanction somebody's disgusting behaviour.

Mass communications bring across new forms of expression that lead to a new culture as well (Durand, 1981). In other words, language and thought form a core in cultural communication. Whorf known as a chemist and an engineer, did not spare his curiosity and crossed his domain of research getting into a linguistic study of Sapir. Hall argues that: "Whorf's papers based on his work with the Hopi and Shawnee Indians had revolutionary implications for the relation of language to both thought and perception" (Hall, 1990, p. 1).

**Mass communications:** Teamwork is known as a characteristic that put together different media protagonists using techniques to come to their creation. This mass communication is in fact audio-visual in other terms. This teamwork character is part of African musical production. In fact, during the moonlight villagers dance under different drum players. Or in the river, girls play music that produce a fantastic polyphony of sounds from mouth and hands on water. Yet, this culture is slowly disappearing due to digital productions that new technologies have brought across the world. This point will be developed in the next pages when topics such as digital communication will be brought up.

**Artificial communication:** telecommunication and telematics. It is the development of mass communication that gave birth to novelty: that is bilateral communication between people reducing any distance between the two protagonists. Telecommunications, computer science and media are interconnected to bring a new kind of communication. The artificial communication has changed drastically interpersonal communication in the world. The Congo is not an exception. Every nation has undergone the entire process up to digital communication. As for Africa in general and the Congo in particular, this has undergone many stages up to the point where we are. Communication that was essentially oral has become scriptural since a long time. In fact, messages were transmitted up to the far distance orally. Such a communication does not involve any medium but a messenger who reports a message given him.

It is in fact, an interpersonal communication that implies a face-to-face meeting. Hartley, reflecting on this face-to-face meeting between protagonists emphasizes a specific characteristic: a medium. He writes: "I have excluded any communication which I would call 'mediated', such as telephone conversation, where some artificial medium carries the conversation between the participants" (Hartley, 1993, p. 21). We should not disregard all the advantages that this novelty

has brought into communication such as the reduction of distance between the protagonists and the celerity of the message, but this reduces Congolese typical interpersonal warmth. Of course, a lot of applications that technology has provided to today's telephones may help overcome the distance, but communication is not the same. Nowadays, many relatives in big cities in the Congo have not met for a long time, even if they talk by telephone. One of the negative consequences of the artificial communication is that the legendary African warmth is disappearing. A new communication model should be mentioned as Brandão (2014) refers to as a participatory model. Inspired by his research, we will look at the effects and the impact of participatory media in the Congo. My reflexion on the Congo in the new media environment will underline among others the participatory system for sharing the Congolese issues online.

**Sexuality and communication:** According to Durand, Sexual intercourse is more than communication, because it is in it that communication may have its origin more than language. There cannot be sexuality without communication. In fact, communication lies beneath any relationship. Before the advent of telephone, lovers found ways of communicating. An invitation can pass through a simple whistle sound produced by human mouth. This sound comes from a male to a female. It is a password between two lovers. This is a language that has a code. Hartley underlines that a language is a set of communication codes as he explains: "that it is misleading to think of language as 'one thing'. It is a set of codes which different individuals and groups use in different ways" (Hartley, 1993, p. 134). The female knowns his partner's way of whistling in to appear to a meeting point. It must be underlined that such a relationship before marriage was not acceptable unless there was a commitment for an engagement. Messages could also pass through a messenger made through close relatives.

Then, when people learned to write the old communication methods did not disappear at all, but it came rather to enrich communication. So, written messages did not need any postal service, since it did not exist, but a messenger. We all played this role in our environment as kids. Although this is still in application in remote parts of the Congo where the Internet has not yet reached or the telephone does not have any impact, in cities the digitalization of communication has changed sexuality. Internet platforms such as Facebook, Instagram, WhatsApp, etc. have become a meeting place. Such encounters lead some time to a marriage. The process goes from virtual communication to face-to-face encounters. This is what interpersonal relationship should be all about in line with Hartley who excludes the use of any medium as "interpersonal communication involves face-to-face meetings between two participants" (Hartley, 1993, p. 21). Unfortunately, virtual communication has somewhat trapped many people into sex tape. In fact, politicians or some people holding special position in the society make use of virtual communication to trap their opponents. In the globalized world people cannot avoid communicating, "in order to develop personal relationships of the following sort: where there is a high degree of trust" (Hartley, 1993, p. 22). One must be cautious of these genuine principles to enjoy encountering new people in the network. I will not finish this topic without mentioning a non-verbal language that is specific to Congolese people. In fact, the way women dress conveys a message. Historically during President Mobutu's rule married women wore double dress in loincloths as the Figure 14 shows.



Figure 14: Congolese married woman's dress. Source: Photo by the author, 1988

In addition, the ring is not too visible from afar to know that one is engaged or not. Thus, girls, who were sent to the market to buy food, used to wear double wrappers<sup>28</sup> as a symbol of dignity or respect to avoid being heckled by boys. This type of attire or dress conveyed a non-verbal communication that a girl is already engaged. We will come back to this topic when

<sup>&</sup>lt;sup>28</sup> Maputa in Lingala language.

dealing with power and image revolution. The following picture is an example of girls dressed like engaged women.



Figure 15. Girls dressed like married ones. Source: Photo by the author, 1988

After reflecting on different models of communication, an important element must be considered: emotion. Zagalo's contribution is important to understand interpersonal communication. In his study (Zagalo, 2009) on how human emotion is communicated and how interpersonal process is applied during communication, he looked at human channels of communication such as Verbal (voice) and nonverbal (eyes, facial expressions, gestures, postures, touches, etc.) components. As matter of fact, he refers to Planalp for the attribution of any emotional meaning communicated. Planalp believes that any emotional meaning is related to any "emotional connexion" which goes through recognition, accuracy, understanding, coincidence, contagion, empathy, and sympathy complex degrees. Any emotional link of communication between subjects starts with recognition, then follows coincidence as one of their emotional links. Zagalo, based on Planalp defines these levels with a special regard to contagion and empathy (Zagalo, 2009, p. 57). Emotional contagion is then the cause of emotion as well as one of the strongest processes of interpersonal emotion communication (Zagalo, 2009, p. 58). This is obvious in the case of an emotional laughter expressing happiness in someone's face which contaminates another who enters in communion with that joy. It is in this context that Zagalo reflects on the impact of communication between cinema and the spectator. Quoting Bordwell, he goes on stating that:

In the field of communication between the cinema and the spectator, it is not by chance that the close-up becomes generalized and even becomes the main highlight element of narrativization of the recent entertainment cinema (...). The fact of presenting a facial close-up intensifies and dramatizes the event on the screen, we believe that through the contagion and mimicry that this expression causes in the viewer. (Zagalo, 2009, p. 59)

# 2.3. The power of words and images

#### 2.3.1. Word's power in the West

A Human language is not the only way of communication although humans are endowed with speech. Sight, hearing, touch, smell, and taste are partners of communication for animals and humans alike. I mentioned earlier the importance of body language in communications. It is through these five senses that anybody's language can involve in communication. Frutiger argues that language or speech, or verbal communication precedes the writing. He explains which kind of language that he is speaking about: "It's however a certain kind of language, a communication system that has developed over millions of years, partially phonetic in origin but supplemented by other forms of expression that do not aim exclusively at hearing" (Frutiger, 2004, p. 93). He continues presuming that any primitive language was not only made of sound patterns, but as well as gestural, tactile, and olfactory patterns. Regarding the last argument, he wonders if the body language is not at the origin of written expressions. This reflexion makes me agree that writing was a process of communication over centuries. This process has progressed up to numerical communication that has overwhelmed the world, and now no one knows exactly where new technologies will lead us. In terms of history, the first scribes were situated sometime around the fifth millennium BCE, in the Middle East. Frutiger helps us grasp this process arguing that: "writing, as a true fixation of thought and speech only appears when drawings and signs come into direct relation with syllables, words or sentences" (Frutiger, 2004, p. 95). In other words, writing occurs only when signs were set in horizontal and vertical lines according to linear course of thought, as Frutiger still argues about the writing culture.

As far as this process is concerned, he divides the writings into two types. The first type is figurative (the ones which did not undergo any major change in the process, probably because they were pictorial symbols); the Chinese writing belongs to this group. A typical example is the Chinese sign for a horse which kept major characteristics from the archaic horse symbol. The second type is alphabetical writing. In the evolving process, primitive figurative signs were

71

abandoned. The Latin alphabet is a typical example of this group. Frutiger makes the following argument concerning this last category: "all the writings whose original figurative signs have been transformed over the centuries into purely phonetic signs, their outline having undergone an extreme simplification during the process" (Frutiger, 2004, p. 96). An example of the Latin alphabet is the transformation of a cow's head into the letter A. Prototype of writing alphabet refers to Phoenicians. In fact, at the end of 2<sup>nd</sup> millennium BC, many writing systems were in use in dialects and languages across the Middle East.

The Phoenicians were great traders of the eastern Mediterranean shores and had a lot of contacts by sea and land. As a result of these trade contacts, they knew different languages and writings. This very fact unified the scripts and languages they came across leading to a synthesis form of what is called the alphabetic writing. Frutiger acknowledges this contribution to writing paying them homage: "their genius contribution was to have isolated the consonants which had until then been fused into the syllables (ba, di, gu, etc.) to make them into smaller units" (Frutiger, 2004, p. 125). It was this insight that led to the so-called Phoenician consonantal signs which began to emerge in the  $1^{s}$  millennium BC as the prototype of alphabetic scripts. It was at the same period that the Greco-Latin alphabet in western Europe, which was based on the 22 Phoenicians alphabetic consonants and semi consonants which would turn into vowels was invented. Another very important element that contributed to literacy was the invention of the printing press by Gutenberg. This opened the abilities of reading and writing to the public is. Up to this point, it had been a privilege for clerics. So, up to this time, illiterate people could only communicate through word of mouth. In this sense a part of western Europe kept the oral traditions of communication alive in their culture as Africans did. At the same time, this did not prevent those people from using images, symbols, signs, and signals in their communications.

After having reflected earlier on some aspects of the power of the word in Africa, now I would like to focus on the developments of the word in the West. In any society, words have great importance in communication. It is in speech that the beauty of language is celebrated. Speaking with eloquence is a great art in any society. If the oral tradition of speaking is the mode for the conservation and transmission of knowledge in Africa, books or writing served the same purpose in the West. Nevertheless, new models of transmission and conservation of knowledge became available through multimedia devices in the era of the digital revolution. Words in the West are enriched by a long writing tradition that we find in books and the press. In his analysis of the

power of words, Charaudeau distinguishes between the press and the spoken word. As for the press Charaudeau makes the following point: "the press is essentially a writing area, made of words, graphics, drawings, and sometimes still images on a paper device" (Charaudeau, 2013, p. 113). There is a physical distance between the writer and the reader. This distance is as well in time, i.e., a distance between when a text was written down and when it is read. But the power of the message, the 'fire' of words is always felt by the reader, thanks to the construction of sentences and the style adopted, that is, the words chosen by the writer.

The online press nowadays has the same characteristics except that the digital devices are put together in a different way. Still, the conceptualization for the writing is more analytic than for the spoken word. In the other parallelism he drew between writing and speech, Charaudeau argues: "the writing plays the role of proof for the establishment of the truth, which is not possible, with speech which is not usually recoverable and is short-lived" (Charaudeau, 2013, p. 113). Among the advantages of this tradition, according to Mbuluku are exactness and inalterability as I mentioned earlier. The oral tradition as live tradition overcomes this fixist behaviour that is found among Muslims, Christians, and Jews. As a matter of fact, Muslims refer to their Koran while Christians and Jews to the Bible.

Western languages like French and Portuguese have their own rich concepts for dealing with words or speech. Every one of these languages offer a richness *'sui generis'* to the spoken word. So, in French I can mention *"parole"*, expression, concept, *"langue"*, language, *mot, terme, verbe* that relate to each other. While in portuguese I can mention *palavra, conceito, expressão, lingua, linguagem, termo, vocábulo, verbo.* On the other hand, the English language has, as well, its own richness for speaking about the word although it may be somewhat poorer in expressing so than the above-mentioned languages. So, we have word, expression, language. The word's power in the west must be discovered in the literature available in books accessible in different libraries and online as well as in popular sayings, proverbs in their oral counterparts. Portuguese for instance has various idiomatic expressions that express the depth of ideas. If in Africa this force of words is found within oral traditions (palabra, proverbs, etc.) by comparison, in the West, literature captures and expresses the depth of the content. Form and content matter in this exercise. Cinema, debates, discourse, films, poetry, novels, theatre, etc are the expression of and the guardian of the written word in the West. One aspect that I should not leave aside is that

the power of words in the West depends on the quality of the writing and the author's proper skills as well. At the same time, the power of words in any society is dependent on the dynamic process of the language of a society in a context. Bordeau, when reflecting on the foundation of linguistic communities, argues that: "a language lives through the activities of a social group, a speech - the group itself, at the same time, that speaks and tries to represent the functioning of the language by assigning values" (Bordeau, 2013, p. 115). External linguistic pressure can interfere provoking what Bordeau calls the linguistic integration whether the community accepts it or not. When a linguistic community integrates external newness, happens what dialectologists name the "force of intercourse", otherwise happens what she names "a steeple spirit". Since I come from an oral African tradition, I would like to reflect in a few lines on the qualities of a good orator. This choice is motivated as well by the fact that the oral tradition is part of the Western heritage even prior to the time of Gutenberg printer. So, good communication from any orator is valued for its language skills, its word style which in turn delivers a message that is enjoyable to hear. Therefore, a good writer is not ipso facto a good orator. But I believe that a good public speaker is a good writer at the same time. To encourage the power of the word in Speech I will argue in the next section about eight qualities of an orator<sup>29</sup> keeping in mind my statement that a good orator is a good writer as well.

(1) The first quality is introspection. To speak in public, it is important to know oneself, one's skills, one's weaknesses. There are people whose efforts in speaking are very high, while other people may stammer. Stammering does not prevent people from speaking in public, since many of them who are aware of this deficiency are good communicators. Some are very emotional. Andersen in her reflexion on emotions in communication states that "our emotions colour our words" (Trecasse, 2016, p. 6). This is spectacular in American presidential debates between different Democrats and Republican candidates in polls every four years. The eloquence of candidates goes with their emotions. One should positively take advantage of his own emotions or control them, since victory depends on one is convincing the people about their projects through arguments. Citizens expect convincing words and substantial arguments to decide on the candidate to vote for. At the same time undecided citizens hold back their vote until a candidate's programme helps them to choose. Knowing oneself implies freeing oneself from any visible

<sup>&</sup>lt;sup>29</sup> These qualities are based on the Newsletter Prise de Parole Formation, in the article Maîtriser sa prise de Parole on its edition of 2 November 2015: http://mag.formation-prise-de-parole.fr/maitriser-sa-prise-de-parole/8-qualites-pour-un-bon-orateur/

stress that could be noticeable to the audience. Otherwise, the outcome would be a negative nonverbal message according to Biju-Duval. He argues that: "by releasing my tensions, I prepare my body to be the vector of the message I want to transmit but not one of nervousness or insecurity" (Biju-Duval & Delhay, 2015, p. 51). The bottom line is to be relaxed. He also recommends other goals for successful speaking: such as stress control; keep the body straight; the ability to project one's voice, without putting the vocal cords under stress; and finally, to have the capacity to focus on the topic and to keep the audience relaxed. Being aware of these can enable one to master his topic and get across the message.

(2) The second quality is self-confidence. Self-confidence is that which distinguishes a good orator from one who is unsure of him or herself. One may be shy as a person but can, at the same time, overcome it while speaking. One may have a good insight to deliver, but without self-confidence his can be lost. If there is any stress, it should be hidden. One must give to the audience the impression of being self-confident. Andersen fosters the partnership of emotions and words in the act of communicating. Self-confidence is visible the way the orator manipulates the language that inspires a power of his words. In this register, Biju-Duval identifies four powers of words: representation, evocation, denotation, and connotation used by linguists. He describes connotation as the first relationship between word and definition. He argues that: "words have a poetic force, beyond their literal meaning. Connotation is a set of evocations, suggestions, associations, that a word conveys in a given context" (Biju-Duval & Delhay, 2015, p. 33). Selfconfidence arises from good preparation. Biju-Duval gives five major steps that are necessary for the preparation of a speech: (a) Know what you want to say. It is divided into two times; first, letting one's imagination work without any personal censorship, then select some ideas that could be developed. (b) In what order should the thoughts be arranged? This step is about the structure of the speech, in other word ordering ideas. (c) Choosing the words with which to say it: the style of the language to be adopted depends on the topics and the audience. (d) Memorize the speech: Memorizing the text does not mean that it will be recited, but that not having to depend on the script only allows for the speaker to make constant eye contact with his or her audience. (e) Putting the speech into action: this step is as important as the previous ones by the fact of choosing the body language to be adopted, gestures, the flow, the intonation as well all this according to the audience. The voice is an important element of public speaking. For this reason, it must be trained. Biju-Duval describes voice training through the following components:

"frequency or pitch; intensity or power, the timbre or what enriches its melody, the flow which sets the rhythm and makes the speaker master of his speech" (Biju-Duval & Delhay, 2015, p. 56).

(3) The third quality is passion. Being a good speaker does not consist only of mastering one's topic or speaking well, but also of having passion for what he/she communicates. To put oneself into the topic can move the audience, which will most likely take more interest in the contents. A lively talk convinces the audience through communicated enthusiasm. To hold the attention of an audience the quality of the speech is very important, that is the most powerful instrument. I would even like to talk about words and the tongue to refer to the act of speaking. I agree with Trecasse who defines word as the first mode of expression in communication. It is an art of communicating, says Andersen. Inspired by this definition, Trecasse fosters the importance of good use of the speech in the world overwhelmed by new technologies: "at a time new technology has transformed our way of communicating, our use of speech must be mastered at best" (Trecasse, 2016, p. 3).

(4) The fourth quality is the ability to tell stories. No matter what is the topic the orator deals with, whether it is economics, mathematics, etc. a story, or some good anecdotes in between usually amuses the audience. A good dose of humour helps to prevent boredom. Storytelling is a good partner of an orator. In fact, no one was born a good public speaker. It is a lifelong exercise that involves preparation, improvement after some failures. In this I agree with Biju-Duval and Delhay who argues that: "in any speech, the decisive part of the preparation involves being aware of one's body and an awareness of others who are the reason for our speaking in public." (Biju-Duval & Delhay, 2015, p. 15). Storytelling may not be innate, but a lifelong traineeship that involves the whole body as a partner of the speech. An orator is, in fact an actor. In his effort to convey a message, an insight he acts like the expressive actor, Charlie Chaplin, who communicated through his bodily movements, his bodily language. His work can be understood in any culture and time. Having the knowledge to communicate and use intellectual capacities is not enough to communicate, but techniques for effective communication that makes one a great communicator. It is in this sense that Biju-Duval and Delhay make a parallelism between an actor in the scene and the act of speech as the expression of thoughts of the one who speaks. Now, for a speech, the challenge is to strengthen the communication using both words and body language. A story does not work if it is boring. In my priestly ministry in Congo, I got a strategy to let kids love the Bible by telling them stories once a week at a fixed time. The

number grew again and again because I used the African talent of storyteller, followed by an explanation. Using such a method of communication, the children were very attentive and did not want the story to end.

(5) The fifth quality is generosity. This quality for an orator consists in giving to one's audience what it deserves to be listened to. The insight should be made of a good and rich content and strong arguments. The information must be delivered fully and must not be kept for oneself. Another quality of a good speech depends on the capacity of the orator/actor/preacher to listen to the audience as well. At the same time, this generosity requires that one listens to the audience. In this sense, Trecasse argues:" In order to learn to communicate, one must first learn to listen. It is with a partner that one initiates a discussion" (Trecasse, 2016, p. 3). The act of communicating is a twofold way: one speaking and the other listening. It is in these two moments that partners build up a relationship. For a speech to be relevant, it needs a listener, otherwise it becomes a monologue. So, generosity is a co-partner of efficient communication.

(6) The sixth quality is patience. Patience is one of the assets of a good public speaker. He/she should not rush from one point to another; but pause for a while from time to time to give the audience time to "digest" the information, so that the insights gained can be added to their store of knowledge. The audience asks itself questions, it reflects on the new insights acquired. That is why the speaker should come back again and again to his different points so that the audience can catch-up anything that escaped their attention. The sixth quality can be linked to the previous one. I agree with Biju-Duval who argues that by the act of preparation, the orator makes himself available for his audience to encounter his insight. The audience is, by this awareness, already participating in the preparation. The orator anticipates already the collaboration. Faithfull to his argument he vows: "I am willing that those who listen to me participate in the writing of the score of my intervention. By making myself available, I go out of myself to form an organic whole" (Biju-Duval & Delhay, 2015, p. 24).

(7) The seventh quality is flexibility. The orator should know the intellectual level of his audience and adapt his language accordingly. I agree with Charaudeau who insists on this awareness arguing that: "every communication act occurs in a certain physical environment which imposes restrictions on the performance of this act" (Charaudeau, 2013, p. 104). Suitable words will help the audience participate in the talk and animate the debate. If the audience is made of professionals yes, there the insight should be appropriate as they expect, otherwise it

77

becomes boring. On the contrary, common people can be entertained in a suitable and adapted language. Being aware of the audience implies that the orator anticipates questions that can be expected during the speech.

(8) The eighth quality is eloquence. The orator must speak clearly and have a good diction. Missing this quality can bring misunderstanding to the audience. The flow and voice should be controlled. The voice matters a lot in such communication. Charaudeau talk of voice magic as he underlines its characteristics: "the voice, with its characteristics of timbre, intonation, fluency and accentuation, reveals what is commonly called state of mind" (Charaudeau, 2013, p. 106). Biju-Duval talks of fundamentals referring to the same assets of eloquence as he argues: "it is a question of pronouncing well and articulating to be heard whereas many forget this elementary requirement, by negligence or false modesty" (Biju-Duval & Delhay, 2015, p. 57). Therefore, concepts should be understandable that is why the language must be as clear as possible. A public speaker holds a responsibility towards his audience. He is like a singer whose combination of words gives some rhythm, like a pleasant music. Biju-Duval argues that: "words set in motion imagination and affectivity. A word holds power; it touches, moves, and makes people dream. Words can, at last, lead to action" (Biju-Duval & Delhay, 2015, p. 33). He describes connotations as affective, sensual, socio-cultural, phantasmatic, creative and literary.

# 2.3.2. Word's power in Africa

From the outset, I would like to associate discourse, idiom, language, speech, talking, tongue to the concept of word. Proverbs may not be forgotten in the African languages as a way of evaluating one's eloquence in African oral tradition. In a speech, songs and poetry conveying a message, relative to a context, are considered as part of the quality of a good speech. For just as singing a song transmits a message to the audience, so do words, proverbs and songs move the audience during a speech. In other words, public speaking is an art that one should learn and be initiated to take part in the African 'palabre'. Through the art of a good speech, one communicates with the African society, one enters communion with an African Audience. No matter the origin, anyone may fulfil the criteria of a public speaker in African cultures. Mastering the language, being initiated into proverbs or songs, makes up one part of common cultural patrimony. This was the technique that missionaries applied to the evangelization of Africans.

Beforehand, they underwent an initiation into the culture and traditions that included a good mastering of local language. Where missionaries had to use translators for their homilies, it could be said that they did not enter real communion with the people they evangelized.

Edouard Graas<sup>30</sup> was a typical missionary who entered a deep inculturation process of the Suku culture, in the Democratic Republic of Congo. He underwent an ethnological training that helped him master Kisuku language and culture. He introduced Suku "palabre"s techniques and expressions into his homilies to attract the attention of the congregation. One of his techniques was to use "attention, attention guys, listen to me"<sup>31</sup>. With this inculturation consisting of the Kisuku language and proverbs, he set aside Kikongo as the official liturgical language of the diocese. With this mastering of the language this missionary is considered in Kimbongo Catholic Mission as a great evangelizer of the Suku. Even his day-to-day contacts showed that proverbs are part of the African communication. One of them I came across to be given a chance to dialogue or in any public audience, to deserve a word is: "being prevented to speak in public is a big loss"<sup>32</sup>. I have already mentioned this proverb, but I would like to insist on the fact that to be given a chance to speak in public among the Suku people it is a great privilege. To have no voice, being prevented from taking part in a "palabre" would be like being denied the existence among decision makers. One deserves to speak in a "palabre" depending upon one's knowledge of the language and upon his speech inspires words of wisdom. That is why mastering the language passes through a lot of exercises among the Suku. For instance, similar words can be mixed up to train the brain. This exercise is useful for communication training skills mostly where paronym words occur. One of the most famous sentences we had to learn as kids was about repeat fast a sentence<sup>33</sup>. We had to say it several times and faster to train. Missing words or mixing them up in Kisuku could lead to insults or non-sense.

<sup>&</sup>lt;sup>30</sup> Graas was a catholic Belgian priest who worked in the Democratic Republic of Congo from 1954 to 1995. He dedicated most of his service to simple people and the poor. He translated liturgical books into the kisuku language that he mastered. He was a photographer and a mechanic too. I remember that my dad sent me to him from time to time to buy black and white rolls of film for our studio.

<sup>&</sup>lt;sup>31</sup> "Abenu buluhue? (question), buluhuene! (answer) ntambuasenu ndikita za bu? (question), zabunda! (answer)". This technique is common when people meet to solve a problem like conflict, to discuss the marriage dowry, during funerals, etc. From time to time this rhetorical invitation is used to attract the attention of the audience and can be exaggerated. It's like when a teacher asks his students: are we together?

<sup>&</sup>lt;sup>32</sup> "Yakala ba ku dia ndinga ba kudi". The meaning of this proverb is: man prevented from speaking is dead.

<sup>&</sup>lt;sup>33</sup> "Makanvi ma mba tata kudia kulokula"

Once again, proverbs are words made of a living human experience that transmit knowledge and wisdom. Knowledge and wisdom pass mostly through proverbs. African proverbs underline the power of words in transmitting knowledge and wisdom. A proverb is a collection of words loaded with wisdom. Today's Congolese communication analysts in social media underline this when they analyse any leader's statement. For instance, the form and substance matter when transmitting any communication. As for the form, they assess mostly words, language and body language, and lyrical African expressions as well.

This shows that the mouth, words, speech are expression of human existence. To be deprived of the capacity of speech would be a serious loss in the society. This very fact has an impact on a deaf and a mute person in African cultures. In other words, the faculty of speaking is another way of existing. Mbuluku Masoka, reflecting on the faculty of speech proper to human race particularly to the linguistic group of bantu writes: "the muntu is endowed with speech. Kuyakula means both the verb to speak and the substantive word" (Mbuluku Masoka, 1987, p. 166). A speech is one of the most impactful weapons in Africa. Words have power in African cultures. They are used to bless or to curse, to solve problems or to enthuse the society. Blessings and curses are words that come from somebody's heart but are transmitted through the mouth. The Bible gives a good theological account of the Word as the presence of God within humanity: "In the beginning was the Word, and the Word was with God, and the Word was God" (John1, 1-2). Word in Hebrew is 'dabar' meaning power, logos in Greek meaning the Word of God. This concept reveals God's presence among his creatures. Likewise, for Africans, words are full of energy that they transmit. That is why when an old man dies his last words matter to transmit his heritage or to leave an important message. Everyone wants to hear the last words, the last communication. Life after his death will be led based on the last words of a family leader.

No doubt Africans expect words full of blessings from their parents, uncles, or aunties according to matrilineal or patrilinear ethnic groups. The power of Words dwells in any communication that brings good fortune in life or mischief. In this sense, Mbuluku, while reflecting on the power of words among Africans, particularly in the bantu group, argues: "that's why, for the musuku, or for any muntu, the word has a creative power, it achieves what it expresses since it manifests the inner power of the person" (Mbuluku Masoka, 1987, p. 167). This argument goes in the sense of the theology behind the Word in the prologue of Saint John's Gospel, I referred to earlier. Any research on a comparative study of the prologue of Saint John

and the bantu understanding of the creative word would give us more insights. Words have a tremendous creative impact on the individual as well as on the society for the Suku, still argues Mbuluku Masoka. This argument supports the fact that it is a woman who conceives, but the fertilizing power is released by a man. This man is a maternal uncle who pronounces words of blessings such as: "go and have a lot of children"<sup>34</sup> (Mbuluku Masoka, 1987, p. 167). These words of blessings wish to the young woman a large offspring and healthy children. The blessing words imply commitment to take effect. This commitment consists in fulfilling all the cultural rules.

Words are not to be found in books but in common songs, proverbs and in blessing ceremonies. I underlined non-verbal communication models at the beginning of this chapter. I referred to gestures, distance, etc. worth of interpretation to understand the communication that it conveys. There is a special act of communication by words, gestures, etc. in the human. I use human to avoid any distinction between female or male. In this sense Ronchi defends that: "Gesture, sounds and 'speech' are powerful communication means but they usually require the co-presence at the same time of the different subjects involved in the communication process" (Ronchi, 2018, p. 197). In fact, gestures and sounds are involved as partners of words in the process of communication in African societies. There is a school where most of ancient Africans, learned the art of speech, known as "Kinzonzi<sup>35</sup>". It is used in dowry arrangements, problem solving, etc. In big cities, people full of rhetoric are hired to defend a case or in dowry debates, regardless of which family one comes from, but based on the wisdom that his words inspire. Therefore, Kinzoznzi is a "venue" where culture and traditions are taught to young ones as they enter manhood. Different names are used to address this common practice. Words are the instrument that guides instructors to transmit knowledge and wisdom that will guide future men in the society. Beliefs such as "a man does not cry" ring in one's mind during the whole of his life in the mukhanda<sup>36</sup> initiation.

In African cultures, names given to children both male and female convey some meanings. They are named after ancestors and are transmitted from generation to generation. They can also be associated with an event that a member of the family was involved in. For this,

<sup>&</sup>lt;sup>34</sup> "lwenda lwa buta batsuki ye nsala"

<sup>&</sup>lt;sup>35</sup>In kisuku, it means the rhetoric full of knowledge and wisdom.

<sup>&</sup>lt;sup>36</sup> It's a male initiation among the Pende, Suku, Yaka tribes of the Democratic Republic of Congo.

names are expressions of words' message. I would like to make a comparative analysis between two African societies, one in the Western Africa and the other one from the Central Africa as far as naming children is concerned. This analysis is based on the power of the word. Its meaning is manifested in the name given to initiated boys. It is to be noted that many African tribes practice initiation for boys during which they are circumcised and to teach them the traditions. This rite of passage was first practiced during the time of the Pharaohs in Egypt. The Jews borrowed it as did most of African tribes. As for the concept, every tribe has different nomenclature. Some tribes in neighbouring Basuku call it mukhanda. Apart from circumcision, which is the climax of the rite, boys stay away for some weeks under the guidance of instructors who introduce them to their culture and to the suku traditions. It is a challenging initiation where deaths have been reported because of the hardness of the training. As for the Suku, every boy had to undergo the rite except boys who surrounded the king. They kept their foreskin. A study should be done to grasp why these special boys serving the king were exempted. Apart from the access to marriage that follows the rite, it is beneficial for the family as a mbaku<sup>37</sup> is formed. Mbuluku Masoka argues that: "the musuku calls mbaku the man who is versed in the mastery of custom to refer to it easily in a discussion or palabre" (Mbuluku Masoka, 1987, p. 165). A first name is given to the boy.

This new name reveals a message, it communicates a meaning. After the initiation, the boy is then identified by this new name among the Suku people in DRC and Angola. Unlike the Basari in Guinea and Senegal where names are given according to the lineage first name can indicate the position of the person in the family. As a matrilineage society, children belong to the mother's lineage. They are two lists of first names, one for boys and another for girls. These ordinals first names are also assigned to wild animals and masks. So, 1 stand for lion, 2 for buffalo, 3 for hippopotamus, 4 for Lycaon, 5 for hyena or elephant. But for hunters, hyena stands as number 1 since this animal does not fear fire. So, both boys and girls receive first-names or nicknames from their mother, brothers, sisters, or friends among the Basari. Boys keep this first name until their initiation. During the initiation, the boy chooses his last name by which he will from now on be identified as a sign of his manhood. Girls on the contrary choose their first names if

<sup>&</sup>lt;sup>37</sup> A mbaku in kisuku is a wise man provided with practical intelligence, mastering the culture traditions and public speaking skills. He is like a lawyer, a defender of the family.

they are not happy with the one chosen before. A girl receives that last name from a male age mate, known as chameleon initiation. Ferry explains: "the intervention of 'the father' of men, as the initiation chameleon is called to change a woman's name shows the importance of the male initiation system vis-à-vis anthroponyms" (Thomas et al., 1977, p. 86).

Contrary to the Basari tribe of Senegal, the Mukhanda initiation among the Suku does not have any interference from females' parents or relatives. For the Suku initiation the batch and instructors are the core protagonists of the tradition. First names are given during this initiation and are known generally by the batch, then known to the public after the initiation. This first name comes from an ancestor (Pembi<sup>®</sup>), an event (Mayoyu<sup>®</sup>) or circumstances (Makiadi<sup>®</sup>) of birth. Names are sacred and no one should be called by them but by the first name that comes from the initiation. "Zina dia mukhanda" translated as initiation first name for the Suku. It is like the baptism for Christians. The first name that was kept secret by protagonists of the Mukhanda leaks at end. It brings a newness in the initiated, the way Christianity teaches for baptism. The Mukhanda initiation was the traditional baptism, prior to the Christian introduction of western and oriental first names. This explains the fact that Congolese have three names. Former President Mobutu with his drive for indigenous authenticity prohibited the use of Christian names in baptism which explains why Congolese born during Mobuto's drive for authenticity<sup>11</sup> hold only African names and first names. In the official documents Christian first names were not mentioned.

Therefore, Joseph Désiré Mobutu became Mobutu Sese Seko Kuku Ngwendu Wa za Banga. My self, instead of Benoît-Serge Tsunda Mulemba, I called myself Tsunda Makuti Mulemba Muhondosolu as recommended by the authenticity. First names at the Mukhanda initiation as well as at the Mobutu's authenticity were inspired by nature, ancestors, events, or circumstances from which they derive their meaning. A first name can represent an animal, a

<sup>&</sup>lt;sup>38</sup> It's an ancestor's name.

<sup>&</sup>lt;sup>39</sup> First name given to a child born during cricket outbreak.

<sup>&</sup>lt;sup>40</sup> First name given to child born in a disaster circumstance or mischief in the family. The opposite would. be Makiese.

<sup>&</sup>lt;sup>41</sup> I explained it earlier, but I am back to it in a deeper explanation. Also known as Zaireanization is Mobutu's ideology that consisted in freeing the country from any colonial and western vestige in the I970s. Then, he rebaptized the country from Congo to Zaïre, the river Congo into river Zaïre; provinces and streets were rebaptized; schools were taken away from missionaries. Christian names were banned; western style dress banned to adopt Mao "abacost" for men and women could no more use trousers or skirts but loincloth. But, this ideology was banned when he announced democracy in 1990.

plant, etc. Identified through a new first name the young men enters manhood, and therefore can get married. Names are not only given to human beings, but also to masks that intervene in the Mukhanda initiation dances or any ceremonies involving Suku tradition. The Mask dances intervene at the end of the initiation to mark the outcome of the challenging experiences where the boys were in contact with the spirit of ancestors. The names of the Masks are different from each other representing an animal, etc. They are the representations of ancestors, etc. The ones that intervene at the Mukhanda dance are different from other ceremonies. Ferry identifies masks by their form and their names as he argues: "masks also carry first names; in general, everything that lives and can be ordered hierarchically is likely to bear these ordinals first names" (Thomas et al., 1977, p. 85).

# 2.3.3. Image's power and revolution in Congo

As a preamble to this section, I would like to underline a fact that concerns my own life as a son of a photographer. In fact, at a very young age, around 6 and 7 years of age, I participated in different stages of photography with my father. I was very fascinated by the whole process and dreamed to become a photographer. Since my father noticed this interest in me, he offered to introduce me to photography. He taught me how to shoot professional pictures. It was black and white pictures in the beginning. This went from fixing a roll in the camera, the development of the negative up to the process of printing the image on paper. He helped me understand the exposure, aperture, shutter speed, etc. It was very fascinating to see how an image appeared under the effect of photographic revealed product. This training helped me switch from black and white to colour photography since the procedure of producing a good photo were all the same. Another element that had awaken up in me the image's power was the fact that in most of youth's houses I visited during my younger age, I saw a lot of pictures on the wall. Most of them were famous actors like Bruce Lee, Congolese singers, and family photographs just to decorate the house. Different images on the walls were a source of dreams for young people who yielded a desire to live such a higher town experience in the future. Thus, the impact of these images on young people may be the principal cause of rural exodus in the Democratic Republic of Congo.

Apart from being a teacher, my father was known as a good photographer in my home region. So, a lot of people mostly youngsters came to him to take pictures. These photos were

84

sent to fiancés who lived most of them in big cities like Kinshasa. Everything depended on moral integrity of both partners involved of course, but also good looking. With the arrival of colour photographs, secondary school students spent a lot of money to keep souvenirs of their school time. They did not immortalize this especially important stage of their lives by writing chronic of their life, but pictures with special friends. These pictures will in the future tell the story of one's youth. It is in this sense that photographs embellished the wall in different houses as photo albums. That where photographer's expertise was important. It is not like today where people meet in social media, they become friends and this friendship develop into love. In fact, men who went to Kinshasa for job, wrote letters to their relatives to get them women to whom they could get married. This could explain why young people both boys and girls looked forward to getting pictures of themselves. The two pictures in figures 14 and 15 are an illustration of this fact.

Even nowadays that the world is undergoing a digital revolution, and everybody could have access to different devices to shoot his own photos and keep them, that does not happen everywhere. In fact, photographers are still active as ever in remote parts of the Congo. The only difference is that they use now digital material to process their photos. After state exams, second school leavers spend a lot of money on photos to keep souvenirs. Photos had another impact on family communication. I. e., separated family members for different reasons: marriage studies, work, etc. There was no other mean of communication apart from letters. These letters were attached to photographs that could reinforce the message written and create communion among relatives. Since encounters were difficult or seldom, photos were the alternative to know each other.

I have encountered photographers like Wilhelm Hoff<sup>42</sup> for whom taking pictures was a real pleasure. He loved nature. He expressed this love by taking pictures of anything that was interesting and conveyed a message. He went through all the development of photography up to the digital devices. If today the evolution of photography has made it easier to get instant pictures, decades back this passion for photography involved more commitment. Nowadays, a smartphone is enough for photography.

There is a global awareness on people that any image of a strange moment communicates better without using any language. Of course, questions may follow a picture that

<sup>&</sup>lt;sup>42</sup> Wilhelm Hoff is a German priest who worked in the Congo for many decades. He was a photographer. Through his photographs he communicated the beauty of the Congo to the world through his international religious congregation. His work is still visible in different magazines that attracted young missionaries to apply to work in the Congo.

attracted attention. This is in today's tragedy of the Eastern Congo or the Kasai region where women are raped and a lot of people are killed by use of cold steels such as machetes, pictures that have been published in social media let Congolese get together to fight against those common enemies. Pictures of mass graves prove massacres that have been happening in these parts of the country. Consciousness for the unity of the Congo has grown higher than ever.

We live at a time whereby the image seems to predominate in the audio-visual communication. A few decades back, photographers, cameramen had the *monopoly* of taking images, producing videos. Those cameramen were mostly professionals. Holding such equipment of production was a costly investment. But this has changed nowadays with smartphones, tablets, etc. Any event happening anywhere in the Congo or better in the world will likely have a footage of any quality but worth of transmitting the information. Sometimes, the reflex of assisting somebody in need, is replaced using a device to shoot or record the event and publish it in the network's applications. No need of any professional camera reporter as such since everybody becomes a reporter. This has enriched communication. So, professional communication structures are fed by any publication to complete the news. Media professionals who exploit recorded elements free of charge should be grateful to digital revolution. Nowadays, even a simple camera is worth of recording sounds and images. This device is available to the public. Images are mostly published in social networks, Facebook and Tik Tok are the most common applications in use. An image published communicates more than a text nowadays. When a text is published to pass a news, people demand still images or videos to complete the information. This very fact is an invitation to understand the power of image in todays' communication.

Therefore, images invade multimedia productions. Here the impact and the power of image on people, nowadays, will be underlined within the framework of media revolution. This was already obvious at a time media revolution was at very beginning during the World War and reflexion ad hoc were already at the menu of the intellectuals. Gollin, for instance, although arguing about the diversity of mass media, its irresponsibility at times, he underlines public's discernment towards the contents they offer. He, therefore, states about the power of the media as he argues:

There are several key assumptions underlying prevailing beliefs about media power. It is useful to recall that concern about the effects of mass media is rooted in the seeming success of propaganda efforts conducted during World War I, and by Nazi and Soviet regimes subsequently,

to mobilize, coerce or control their own citizens. More recently, the agenda of concerns has broadened, without wholly losing the edge of anxiety that characterized discussions in that early era. (Hiebert & Reuss, 1985, p. 69).

From this statement he raised some issues as the effect of media on the decline of morality (sex and violence) and social institutions (political and economic leaders). A lot of critics on mass communications flow on different assumptions: "equating of media content with media effects" and "the mass media now operate in an unrestrained fashion, and that their autonomy is prime source of their power". A smartphone has become a fierce weapon that gives proofs of any scandal, leaders' statements caught up by secret cameras if published on network have dramatic consequences. Since every smartphone holder has become a potential photographer and cameraman, the quest of any event that creates a buzz on the net has become a common use in the Congo. Or it is a weapon to destabilize any political potential rival. So, we live in a society of hunters that take photos of anybody who moves in an unethical manner. These images or footages from any eyewitness most of them media nonprofessional is Congo media analyst's provider within the country or outside. Therefore, any smartphone has become a precious information provider that helps organise programmes mostly of political interest for the Congolese. The image matters a lot to convince public opinion. The combination of an image with sound gives more credibility to communication.

We cannot understand the image revolution without grasping what it really is. Gauthier goes back to the process of visualisation that participated to the scientific imagery that leads to the image civilization. He writes: "scientific imagery, this superimposed transposition through the screen of an object that escapes the naked eye as well as to the imagination, imposes itself as much by its evidence as by its high degree of attraction" (Gauthier, 1993, p. 13). He mentions some other protagonists to the image revolutions such as electricity, discoveries from Ampère, Faraday, Edison, Gram that led to mass telecommunications. Other protagonists that followed different discoveries are the invention of telephone in 1874 by Bell and digital computer known as Electronic Numerical Integrator and Computer in 1943 through the atom. The world becomes interconnected on the net through optical fibre. Therefore, Technology rules from then over any objects. He still argues:

We transferred to the luminous medium the care not to dazzle us but to maintain a certain innovative tension, simulating a human dynamic. The light beam captures objects, penetrates

them, extracts their secret through trial and error, random attempts, or systematic planning. (Gauthier, 1993, p. 18)

He observes how light came out and illuminated streets forming what he calls a screencity. In fact, objects preparing themselves to receive light beams transform into screen. Relationship between outside and inside, i.e., the sunshine change. By the control of light, things change their configuration, their nature as well as their effects and positions change. He still argues that its control of light creates event in this new world, introducing newness in a space can remain still. This manipulation leads to the fact that image is transformed into products of event. Effects are such as the event is sweetened, commoditized, bleached through medium light creating artificial emotions that thereafter disappear. The reign of visuality begins with the event of television in many countries. This makes a serious change in the society. Gauthier still argues that:

As a mass phenomenon, the image never ceases to attract the eye, to occupy time, to build audience. The visual era contradicts R. Jakobson's hitherto correct assertion: 'language is for mankind the first means of communication'. (...) Communication through images now makes language a subtitle or element of transitions between signals. (Gauthier, 1993, p. 37)

Gauthier goes on explaining mass image offered by televisual medium. He deals with image system referring first to Benjamin who makes true passage from sublime to distraction, based on newness as necessity of contemporaneous necessity, then to Deleuze who observes the collapse of action schema for the benefit of getting into the time of image. Gauthier describes three categories of televisual image that must be considered as it flows on the screen:

1) Endemic image: redundancy is the main characteristic of endemic image to which are associated others as independency from any event, freedom from any relationship with historic duration. Mediatic image belongs to our mental world, missing audio/visual signal is like being prevented from our imaginary. The capacity to be duplicated is another characteristic to be added.

2) Dazzling image: Instantaneity is the characteristic of fulgurant image. The punctuality, speed of any event such as revolution, war, earthquake, accident, etc belong to this category. A scheduled event such as a football match still holds this spontaneous characteristic.

3) Phatic image: That the combination of the two previous ones that helps the medium to modulate the artificialized rhythm of time. Using Virilo's definition, phatic procedure is: "targeted image that forces the sight and attracts attention" (Gauthier, 1993, p. 59). Phatic

88

image evolves between the two categories endemic (on-visibility) and dazzling (pre-visibility) of a phenomenon. The medium turns into image any facts from structure that provide events such as terrorism, drug's deal, corruption procedure, etc. To explain these characteristics, he argues:

By stopping on the process, the phatic image acquires this legitimate presence that confers the approach of an endemic phenomenon, by its high degree of attraction (...) it comes from dazzling. The old and the new in this type of image a simultaneous lighting. (Gauthier, 1993, p. 59)

Phatic image helps us go over time of any event. Therefore, time becomes an elastic, extensive and retractable period. Phatic image emphasizes the ability to intervene over time. This ability over time is an essential resource for the medium to present the event. To grasp this characteristic in which media intervene Gauthier argues:

The phatic image understands the audience, communicates to it this simulated passion, this taste for the heart of phenomena, for the advent of the virtual, while combining time in such a way that it remains the masterpiece of vision things for which the event was only a pretext. (Gauthier, 1993, p. 63)

Considering phatic image as explained by Gauthier, for instance the attraction to the sight, I would like to analyse a picture I took in 2014. It is a picture of a renowned mad person in the city of Kenge. He was known for his jokes on people regardless of the position one held in society. I had a change to meet him as I travelled to Kenge. He accepted my appeal to take a picture as he was dressed like an African chief. A year later, I published this picture on 2<sup>rd</sup> August 2015 in my Bana Diocese Kenge Facebook group. I have now 3,014 members who subscribed to the group. At the time of that post, I registered 169 comments and 119 likes. On 14th October 2020, I was informed that he died. I repeated my picture to inform my friends. At the time I posted my message about his death 1,353 reacted, 71 likes under 1,554 active members at the time of post. Nevertheless 267 did not mind my post and 113 comments were registered. Shall I note that among multimedia comments, there is a video of him singing a famous religious song. A day after, I got news that he did not die but could not survive. My new post had 951 reactions, 45 likes and 19 comments. Finally, a week after, his death was announced by a doctor. Without any picture, my information did not have a serious impact. At the time of multimedia as a means of communication the Congolese public seems to prefer for audio-visual as far as the attraction of a news is concerned. No wonder a post merely with a text may not have many viewers.

Nevertheless, in different applications the reaction to posts interactivity is both audio-visual and multimedia.



Figure 16: Famous mad picture. Source: Photo by the author, 2014

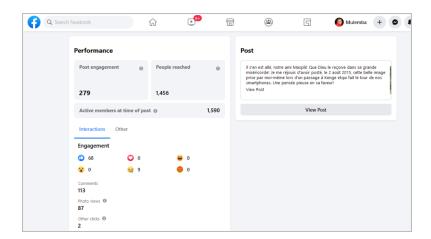


Figure 17: Comments and likes Facebook statistics of the Fig. 16. Source: Photo by the author, 2020

The picture in Fig. 17 gives comments and likes records of the six first hours after the publication.

#### 2.3.4. Intermingling word and image

It is commonly known that news can change from its original format as it is used by different media. For example, if the first publication was in a press release issued by text, other media may transform the text into a verbal message. By verbalizing the script, I mean a reading of the message that may help the audience to conform themselves to this format. Any image published in the social media may not be understood without an explanation or an analysis to convey the information. A few questions are raised about the event, the time it happened and the place. The media in the Democratic Republic of Congo are provided with abundant news. While football and music nourished editorials, nowadays it is national politics that is the main topic. Sometime sex scandals involving famous personalities can dominate the news. Currently, the Congo is undergoing political instability that is causing a lot of problems in the social life. The armed conflicts in the eastern part of the country are causing a lot of death while people have been decapitated and women are being raped constantly. In fact, much trouble is due to the involvement of leaders in the acquisition of gold, diamond, cobalt, coltan, etc. mines that nourish the conflict. The Congolese sympathize with the Eastern Congo through several images and audios that are shared on social networks which the official media do not dare to publish. The impact of the unofficial media has provoked public awareness. When an event occurs, the expectation of the Congolese is to see images first. As a result, there is a great push for reporters to get to the scene of the action first to make live videos and to be the first to get their information up-loaded or published. They too must compete to get more views on their digital channels or platforms. Sensitive images of the event can have more impact upon those who receive the information. I am just pointing out the power of image in today's communications and highlighting its impact in today's media.

Opposition politicians have come to understand the impact of modern media and so use it to get what they want from the government. They will also use it to invite the International Community to get involved. Yesterday the opposition organized an anti-government demonstration in the Congo to support Denis Mukwege<sup>43</sup>'s appeal for an international criminal court for the Congo to deal with the mapping report of crimes on the one hand and to stop the threat of balkanization to the country. In fact, citizens and opposition leaders do not see any

<sup>&</sup>lt;sup>43</sup> Denis Mukwege is a Congolese gynaecologist known for healing raped women and girls by armed rebels in the eastern Congo. For this commitment he was awarded the 2019 Nobel prize. He is a human rights activist against sexual violence towards women. Founder of Panzi hospital in Bukavu.

commitment from the government to support Dr Mukwege. There does not seem to be a firm position on the protection of the intangibility of the borders as inherited from the time of colonization. This demonstration was repressed by the police using tear gas to disperse demonstrators. The opposition leader who organized this demonstration was stopped by the police as he continued attracting followers along the road. His jeep's tyres were punctured by a bayonet, then a confusion started. This event was a great photo opportunity to pass the message to the world. For sure the demonstration did not reach the "Boulevard Triomphal<sup>44</sup>" where a message would have been delivered. Reporters made use of these spectacular images to show the aim of the demonstration that was as strong as any speech. Through this example of police repression evidence was provided showing that there is no still freedom of expression in the second biggest African country. Any image that was taken and published in any media enlightened and informed their views. Then, the image (Fig. 18) was exploited by different audiovisual and multimedia platforms.



Figure 18: Oppressed demonstration. Source: Anonymous, 2020

Even pictures taken by amateurs can be "worth a fortune" in terms of insight and information. As far as this remark is concerned, Caple argues about pictures appearing in on-line media that: "it is also necessary to take account of the pervasiveness of photographs taken by members of the public and the fact that the news media are making greater use of this imagery" (Caple, 2014, p. 356). Nobody can be indifferent to these different pictures published. Independent media according to their editorial line, will report on the event and publish different

<sup>&</sup>lt;sup>44</sup> Boulevard Triomphal is a Kinshasa big avenue opposite the national parliament and where official parades are held. For demonstrators reaching this point is very symbolic because of its proximity to the parliament.

images received form reporters or any person holding a smartphone. What is most interesting is the interactivity between members of different online platform groups, Facebook and WhatsApp being the most used. The debate on the event passed at most from face-to-face interaction (as they were used to before) to the digital hyperactivity in audio-visual and multimedia in social networks (as the new trend of debates). This development does not exclude the "parlementaire debout" debates at different crossroads of all the cities.

Any text, tweet or video from an influential Congolese leader can be uploaded and forwarded immediately on different audio-visual media online, etc. Most of their statements on a topic that is a fact of national interest enriches the media online. Twitter is the means that is mostly used for these kinds of statements nowadays. At the same time any verbal statement that is made available on any audio-visual device can lead to multimedia debates and comments in WhatsApp, Facebook platforms. In the different multimedia, comments that members post in written texts, contribute the most in the debate than do symbols, icons, emojis and gifs than are offered by applications' menus. In fact, a text needs some personal involvement, an effort and special attention to write or understand a message. A text is a personal point of view. At the same time, a screen shot message with a photo is common in our WhatsApp groups after which members comment on it. On the contrary, audio-visual comments may offer a more superficial and simplistic approach, unless it is personal. In fact, I consider emojis and gifs to be impersonal. For Falconi a text is superior to an image or an audio. Falconi argues that: "a text hardly rivals sound and image, which are much more captivating, but is less fleeting than them and frees readers from time constraint" (Falconi, 2003, p. 83).

# 2.4. Congo communication model from oral tradition to the digital

# communication

# 2.4.1. Oral transmission of knowledge

Before talking in more details of oral transmission of knowledge among Africans, I would like to acknowledge once again the value of writing in the same process. For instance, Mbuluku talks of precision and inalterability that can give way to inflexibility among Muslims (Mbuluku, 1987). In that sense, the Latin says: "Verba volant sripta manent". This anonymous old proverb quoted by the Emperor Titus in his speech in the Roman Senate, means that oral words disappear, while scripts endure. Nevertheless, words do not glide anymore with popular digitalisation of orality. The orality is at its paroxysm in the multimedia as a new model of communication. For sure that the image in new digital communication seems to be compulsory in many cases to convince one's audience, but sound is its partner for an efficient communication. Orality still challenges all new models of communication as inherited from ancestors in African societies. Multimedia communication seems to be applied only on a screen of an android, a smartphone, a tablet, and a computer, but communication in daily life remains mostly oral and knowledge transmission is no more linked to schools but to life in its orality. This is obvious in the covid-19 crisis era where radio broadcasts play an important role in the education of mass to provide them with information to avoid the transmission of the virus. I need to mention at this stage that very few people have access to the internet in the Congo for economic reasons. A few people can afford an android, a tablet, etc. and be able to access internet through them. Therefore, radio broadcast is an alternative in this mission. Despite the high cost of internet, people just link their mobile phones connected to their earphones to listen to any information that provide information or knowledge on the outbreak of the covid-19 and how to avoid it or treat oneself if they test positive.

Those who listen to such information are responsible of transmitting it verbally to their family members and friends. In kikwit<sup>46</sup>, for instance, the provincial minister of education has signed a partnership agreement with radio broadcasts around the city to give some lessons to pupils during the lockdown imposed during the coronavirus outbreak. Parents and the rest of the family (children) listened carefully to lessons been broadcast. These lessons were of common interest for many who remember them, by the fact that, long time ago, they learned them orally while in school. This is not new as at the national level, the use of distance lessons also took place via radio Okapi<sup>46</sup> in the Democratic Republic of Congo for pupils. But in the current situation the experience acquired is a big step towards new technologies facilities. These virtual lessons introduce pupils to a community of knowledge with virtual professors and colleagues using any devices to access radio broadcast. The oral strategies of lessons towards children at this young stage of their learning experience develops in them the capacity to acquire knowledge easily. Another aspect of this distance method of lessons is to create a larger community of knowledge

<sup>&</sup>lt;sup>45</sup> Kikwit is the largest city of the Kwilu province in the southwestern part of the Democratic Republic of Congo, known for the 1995 Ebola outbreak.

<sup>&</sup>lt;sup>46</sup> Radio Okapi is a United Nations radiobroadcast in the Congo.

that was before confined into a smaller group, in classroom. It is interesting to see how lessons continue afterwards through the virtual feedback in the interactivity of Facebook page provided. This interactivity on the Okapi's Facebook page enriches the feedback beyond live questions. This exercise encounters an African oral community of knowledge that widens its circle of virtual students. This interactivity is not only limited to education programmes but goes beyond other ones of common interest in the Congolese modern radiobroadcast's microcosm. The African oral capacity in storytelling is a core element, an asset to grasp different programmes. Listeners are no more around the evening firewood encounters to listen attentively to elders, instead to a device. It seems to lead to an African digital storytelling. A question may be raised about the future of other forms of communications such as the mondo<sup>47</sup> instrument, or the tango African communication environment. This cultural African background has an impact in the digital age. Further research may give orientation on how this orality heritage may affect new technologies of communication. Old communication methods such as tango<sup>48</sup> are enriched with megaphones nowadays. In fact, villages or cities are provided with a person in charge of communication by use of a big voice or a megaphone if available at this time of modernity to pass the information to the community. This enrichment corresponds with the reign of oral communication that Mbuluku encounters in the African society without writing culture. Orality through modern means on communication has an impact on medical campaigns.

In fact, megaphones coupled to African oral heritage invite the population to the immunisation of their children. Therefore, the success of attendance depends mostly on the quality of the campaign beforehand. The tango with the use of megaphones enhances the quality of the campaign mobilization. For sure, it is not in the journal or in social media that common people may get informed, but medical teams are aware of the orality of the society they deal with. Afterwards tango announcements are part of topics different groups talk about during the day to eradicate threatening outbreaks. Effective communication matters a lot in this process. Any radio broadcast may not have the same effect, unless there is one around, otherwise information passes orally. I should mention that the tango effect is greater than a message passed through a

<sup>&</sup>lt;sup>47</sup> A mondo is an African musical instrument that served to announce a specific message according to the sounds produced.

<sup>&</sup>lt;sup>48</sup> Tango is the way information is passed to members of a village after a decision is taken by the chief and his counsel. Early in the morning while everybody is still at home the man in charge of communication goes around the village shouting out to call to attention village members about any issue of common interest. It's a kind of radio broadcast that has no other instrument than human voice and legs to go around.

radio broadcast; in fact, there is more proximity of tango and people than any radio broadcast that will never pretend better reaching people in the orality-oriented societies. Of course, radio broadcasts may have bigger audience using new technologies, but nothing is sure that everybody listens to the news. Fortunately, any information that passes through radiobroadcast or tango finally is relayed orally during the day among colleagues, family members and friends. The radio broadcast, although a modern communication model is part of orality that accommodate itself better in the African communication pattern. It is in fact one of the ways knowledge is passed on, then discussed in groups. Debates are the most cherished programmes by listeners. Charaudeau explains: "The debate is known as a genre that brings together a series of guests around a host to address a specific topic, and completely organized and managed by the media" (Charaudeau, 2013, p. 218). Most debates or discussions in groups or families are based on information or issues one got from any media available. The person that has access to any information holds the responsibility towards the community to share it and cannot keep it oneself.

One of the partners of knowledge transmission in Africa in general and in the Congo in particular, is the community, a concern that it should be informed. This is obvious in communication consisting of a transmitter and a receiver; the orality of African communication has a new partnership known as digital communication provided by new technologies. Here, Africans can go from orality to media applications (Facebook, YouTube, etc.), from media applications to devices (smartphones, tablets) where information is shared among friends. Afterwards a debate is launched by hyperactivity, also orally when friends may meet in a restaurant, in the street without breaking the chain of debate using all sorts of media device to continue the discussion.

# 2.4.2. The advent of radio and television in the Democratic Republic of Congo

It would be unthinkable to talk about the advent of television in the Democratic Republic of Congo without looking at the radiobroadcast that came first. Contrary to former British colonies which are the very first to acquire this precious instrument for their propaganda in the context of the "great war" between 1924 and 1927, Belgian Congo would have its first radiobroadcast, in 1937. Ipondo Elika gives an account about the beginning of this first modern mass communication instrument in the Belgian Congo in his "*Sociographie de la Télévision Congolaise, voyage au coeur du système télévisuel du Congo-Kinshasa*, as he writes:

Three types of radiobroadcasts were organized in Congo from 1937 to the dawn of its independence. These were first, official radiobroadcast and then private ones. In the last category it should be distinguished between commercial from school radiobroadcasts. They were three official radio stations. They are Radio Congo Belge (RCB), Radio Nationale Belge (RNB) and Radio Congo Belge RCB for Africans (RCBA). (Elite Ipondo Elika, 2014, p. 33)

However, the very first radio of the Belgian Congo was Radio-Léo, belonging to the Catholic Church for the evangelization of God's people. Ipondo Elika, specifies whom it belonged to exactly, even if it performed under the label of the Catholic Church: "The first radio to broadcast to the Congo-Léopoldville, he states, was named Radio-Léo (1937). It held two programmes, one for Africans and the other for Europeans. This initiative is attributed to Jesuit Fathers of College Albert I" (Elite Ipondo Elika, 2014, pp. 30-31). In the context of war campaign, the threat was general as for colonizers and their colonies in general. The Belgians used this instrument to call attention of their colony's contribution to the great battle against the Nazi regime threatening the world, as did the British and the French under the leadership of De Gaulle. According to Ipondo the exact raison d'être of this media was threefold: "defending Belgium occupied by German troops, supporting the colony in his isolation and supporting the emancipation of black populations" (Elite Ipondo Elika, 2014, p. 33). This media was very precious at this very moment. For instance, De Gaulle from exile used this media in London, Brazzaville, Alger, Dakar, and Near-East to spread his France Libre ideology against Vichy allied to Adolph Hitler. Ipondo Elika points out that the fact of proximity between Brazzaville and Léopoldville played a special role in the spreading of his ideology across the river Congo. The Belgian colonial power, for instance made use of radiobroadcast in the colony to inform Congolese about the general threat, inviting them to participate to the war against a common enemy, before launching its own official radiobroadcast: RCB (Radio Congo Belge), in 1940. Pawells-Boon relates this story as he argues:

The launch of the official station of Belgian Congo in London is directly linked to the events of the Second World War. In September 1940, the general government installed RCB, whose weak transmitters were orientated towards Belgium and the colony. In 1942, the Belgian government in London bought a short waves transmitter of 50 KW and fixed it for a while in at Léopoldville, as well as one section of its official transmitter in London station was based in London. (Elite Ipondo Elika, 2014, p. 32)

But London was not the only place where transmitters were based. From the RCB, RCBA government's official radiobroadcasts, the last known as Belgium National Radiobroadcast had its

transmitters based in London and New York. Ipondo describes this location of transmitters in the following lines: "the Belgium National Radiobroadcast (RNB) created in 1943 is a war product. Its transmitters were based in London, in New-York and of course in Congo to assure its propaganda mission against the 'enemies' of the republic" (Elite Ipondo Elika, 2014, p. 32). This official radiobroadcast did not only fulfil its propaganda task, but also traditional programmes such as education, entertainment, and information. The RCB broadcasted latter on in European languages and Afrikans. In 1949, the radio will be turned into RCBA for Congolese in the four national languages and French. This radio spread out step by step in the provinces or better in the following towns: Elisabethville and Stanleyville<sup>49</sup> in 1955, Bukavu in 1956, Coquilhatville<sup>50</sup>, Luluabourg<sup>s1</sup> and Léopoldville<sup>s2</sup>, in 1959 (Elite Ipondo Elika, 2014). New other radiobroadcasts had been launched under Radio-Léo model. These are private commercial radiobroadcasts that Ipondo classifies into four categories: Radio-Léo (performing religious, cultural, colonial, European programmes, but its accessibility was very limited), Congolia (used for entertainment, for general interest of Congolese population, but with a very limited accessibility), Radio Elisabethville (performed entertainments for Europeans, but with a very limited accessibility as well) and the last, Radio UFAC, commercial in nature, performed for entertainments, politics, heterogeneous and active at the service of Europeans.

Another category of radiobroadcasts is school radios at the service of education. From this group, I name Radio-Collège in Elisabethville belonging to De la Sales Saint-François College whose programmes were religious, cultural, colonial at the service of Europeans. This radio writes Ipondo was of a high technical performance, but its accessibility was very limited. The rest of school radiobroadcasts was known as "radios d'Athénée" which differentiate themselves from Radio-Collège by their programmes which were mainly educational and with studios that were not open to outsiders. The following belong to this category: Radio Kasaï de Luluabourg; Radio Dendere of Bukavu, Radio d'Athénée Coq in Mbandaka and Radio d'Athénée Stan in Kisangani. It is obvious how important the Katanga province was holding all alone a big number of radio stations such as a college radiobroadcast by Catholic Missionaries in the former Katanga

<sup>&</sup>lt;sup>49</sup>Today known as Kisangani.

<sup>&</sup>lt;sup>50</sup> Today known as Mbandaka.

<sup>&</sup>lt;sup>51</sup>Today known as Kananga

<sup>&</sup>lt;sup>52</sup> Today known as Kinshasa, the capital of the Democratic Republic of Congo.

province, another was Radio de l'Union Fraternelle des Anciens Combattants (UFAC) by Mining Union and Railway Company, at Elisabethville. Nevertheless, most of the radiobroadcasts that belonged to schools, made a good use of this modern media in the educational framework.

But this is not the case for the Congolese first radio that served for the evangelization by missionaries. Ipondo argues that: "Radio-Léo, although placed in the compound of a college, its programmes did not have anything to do with school activities" (Elite Ipondo Elika, 2014, p. 32). In fact, the number of radiobroadcasts increased in this independence framework, writes Ipondo Elika, though a 120 000 weak number of receptors did not assure that every citizen had access to programmes. The situation was no more the same when the Congo got its independence from Belgium. Private and school radiobroadcasts underwent a big challenge from new authorities who tried either to suppress them or to have control over them, except in the secessionist Katanga province. Ipondo gives an account about this situation: "The first victim of the offensive of the government is Radio-Léo. Then, the school system radios fell under the same pressure from government authorities" (Elite Ipondo Elika, 2014, p. 34). No negotiation with the government gave any outcome and at the end no private radio survived when, in 1967, all were suppressed. At this year, the only political party known as MPR (Revolution Popular Movement) was created by the dictator Mobutu. He created the only radiobroadcast Radio Nationale Congolaise which benefited from the powerful equipment of the suppressed radiobroadcasts. Nothing new that this powerful instrument was at the same service, but at the service of politics as at colonial time, mostly in the "authenticité" politics of Mobutu. Ipondo text is very explicit about this:

It is in this perspective that the country acquired a powerful propaganda instrument, that historically is known as Grand Tam-Tam. This instrument will cover a large part of Africa with news of all kinds and mostly music, the Congolese popular music. Its influence became stronger with the resort to authenticity initiated by President Mobutu. (Elite Ipondo Elika, 2014, p. 35)

In fact, Mobutu Africanised the personnel at the service of the Congolese National Radio who were trained in production, presentation, animation and sound engineering by French and Belgians to cloak a proper African identity. Therefore, programmes dealing with news, music, theatre, sport, etc. benefited from the use of national languages that opened to a larger popular audience. I will come back to the role of this powerful instrument when I talk about cultural industry in the Congo that spread around Africa. Mobutu was very ambitious with his Africanization or better Congolization (Zaïrianization) of his citizens. This made Congolese people different from other Africans, which is, in fact, a pride. For instance, the use of national

languages, wearing African loincloth<sup>53</sup> for women and "abas-coast"<sup>54</sup> for men, etc. This stopped them from wearing skirts or neck ties, obviously. Therefore, the government had a task in relation with the media at hand: "to fulfil his noble mission of educating the popular mass, the government provided the radiobroadcast with a proper technical infrastructure at the country's dimension" (Elite Ipondo Elika, 2014, p. 36)

Television as media came, in 1966, to the Congo whose public was already used to radiobroadcast. If in the beginning radiobroadcast looked separate from television, in the seventies, the two formed one structure to fulfil the same mission of educating the Congolese. The French and francophone Belgian media inspired the newly independent country in its struggle to create an identity to the policy of "recours à l'authenticité". This model was in fact, coupling the radio and the television. So, the ORTF (Office de Radiodiffusion et de Télévision), for the French and RTBF (Radiotélévision Belge Francophone), for the Francophone Belgians inspired both the OZRT (Office Zaïrois de Radiodiffusion et de Télévision), now changed into RTNC (Radio-Télévision Nationale Congolaise). Same journalists had to switch to the TV to present programmes. Bihel addressing the issue of gender in the media in France at that very beginning agrees to the statement in both media: "At the beginning, the media television was built on the model of the radio, and with personalities coming from the radio" (Bihel, 2014, p. 39). A question is raised to understand the fact of the late implantation of television in Africa that had newly got their independence. In this polemic, Miquel, a radiobroadcast historian argues that:

The delay concerning television is obvious. It's due to the inadequacy of funds and equipment, the lack of qualified personnel, a very weak purchasing power that does not allow the selling and importation of receptors, lastly at the fact that the population is very spread out over immense areas, apart from some privileged centres of the population. (Elite Ipondo Elika, 2014, p. 36)

As Ipondo rightly points out, the struggle for the government to control private radiobroadcasts most of which belonged to schools, will end up in suppression of all of them in 1967. Another question is raised about the delay, a very long one from the independence in

<sup>&</sup>lt;sup>53</sup> This dress is proper to Congolese women up to now identifying whether single or not by the fact of using two kitenge or not. The maputa as called in lingala was introduced also by Cardinal Malula for nuns to identify themselves as Africans.

<sup>&</sup>lt;sup>54</sup> It's a man's suit that the Mobutu regime imposed to officials banning the western suit and necktie. This was inherited from Mao Chetung's Chinese regime.

1960 to 1967 in this unpopular decision by President Mobutu who just took power after a coup d'état two years ago. The answer is clear, that period was characterized by political unrest in the Congo. This argument does not stand all alone; another one is that of Miquel that Ipondo just referred to: the inadequacy of funds and equipment to which is added the lack of qualified personnel as main reasons. That is why funds, and all investment are provided by foreign countries despite the decolonization of Africa. The table drawn by Ipondo gives an account of the process of television implantation in the francophone Africa.

		Financial	
Countries	Date	assistance	Material help
Congo	1962	France	France, Chine, URSS
Burkina Faso	1963	France, Libya	France, Germany
Ivory Coast	1963	France	France, USA
Gabon	1963	France	France, USA
Senegal	1963	France	France
DRCongo	1966	France	USA, France
Central Africa	1973	France, Israel	France
Togo	1973	France	France
Guinee	1977	France, Libya	France, FRG, Brazil
Benin	1978	France	France, Germany
Niger	1979	France	France
Mauritania	1981	Iraq	France
Burundi	1984	France	France
Cameroun	1985	France,	France, Germany
		Germany	
Mali	1986	Libya	Britain, France
Rwanda	1992	France	France
Chad	1992	France	France
	Congo Burkina Faso Ivory Coast Gabon Senegal DRCongo Central Africa Togo Guinee Benin Niger Mauritania Burundi Cameroun Mali Rwanda	Congo1962Burkina Faso1963Ivory Coast1963Ivory Coast1963Gabon1963Senegal1963DRCongo1966Central Africa1973Togo1973Guinee1977Benin1978Niger1979Mauritania1981Burundi1985Mali1986Rwanda1992	CountriesDateassistanceCongo1962FranceBurkina Faso1963France, LibyaIvory Coast1963FranceGabon1963FranceGabon1963FranceSenegal1963FranceDRCongo1966FranceCentral Africa1973France, IsraelTogo1973France, IsraelGuinee1977France, LibyaBenin1978FranceNiger1979FranceMauritania1981IraqBurundi1985France,Cameroun1985France,Mali1986LibyaRwanda1992France

Table board 1: Partnership board for the establishment of television in the French speaking Africa

This table board is based on Abdoul Ba, Cinémaction-Télérama and Tidiane Dioh. (Elite Ipondo Elika, 2014, p. 37). From this list the Democratic Republic of Congo seems not having

<sup>&</sup>lt;sup>55</sup> This table board comes from Abdoul BA cited by Ipondo in his Sociographie de la télévision congolaise, Voyage au Coeur du système télévisuel du Congo-Kinshasa, Paris Harmattan, 2014, p. 37.

got any help from the former colonial power in the establishment of the television as a new media that was pride of one's identity in the new independent African countries. This argument cannot stand; on the contrary, the Belgium Kingdom gave a tremendous contribution to the newly established television by providing programs to this cold medium. Ipondo testifies this contribution as he explains: "Regarding the DRC (Zaïre), Belgium, the former colonizing power, largely participated in the advent of television. His contribution was prominent by providing content related to news Congovox" (Elite Ipondo Elika, 2014, p. 38). Congovox is, in fact, an agency that belong to the Belgian citizens Pierre Davister and Pierre Fannoy. Known before as Belgavox, this agency was involved in cinematography. The table deals with elements of French African speaking countries. It is good to look at another table that gives an idea about other African countries as far as their TV beginning is concerned just for the sake of comparison.

He makes a special remark about Brazzaville, the capital of French Equatorial Africa from which Allies radiobroadcast programmes were held against German occupation of France during the Second World War. Ipondo writes:

We will thus remember De Gaule's call for resistance (1944) and for the emancipation of the colonized countries (1958). This asset has enabled it to hold the status of the first television station in sub-Saharan Africa, at least in the French-speaking world. (Elite Ipondo Elika, 2014, pp. 39-40)

I have just drawn a special attention on the Republic of Congo that got its national and international sovereignty in 1960, been helped by China or URSS and Libya which got its independence after World War II granting financial assistance to Burkina Faso, Guinea, and Mali to set up television in these three French Western African francophones. In fact, no wonder that Libya which won its independence in December 1951 had already gained experience on TV management since 1968 and was convinced of the impact of this medium in the post colonisation era. But for now, I do not intend to go into the main reasons and motives of this commitment towards this financial help; this would be a subject for a further study to grasp the reason behind. Instead, it is for now important to know the motives which lead the DRC to have its own television. On this special point, I shall argue with Ipondo who quoting Abdoul BA shows what made possible the broadcast of the first TV programmes in Brazzaville on 6<sup>a</sup> August 1963. In fact, three hours TV broadcast on Friday, Saturday and Sunday were possible thanks to

102

technical and French expertise of SFTP<sup>56</sup> in collaboration with ORTF<sup>57</sup> and Thomson-CSF<sup>58</sup>. By this quotation Ipondo describes the context of political stakes that brought about African television after their respective independence. In fact, it is about the rivalry between the two capitals, the closest of the world.

As matter of fact, it was from TV programmes broadcasted from Brazzaville that Kinshasa<sup>50</sup> inhabitants could follow due to the closeness of the two towns across the river Congo. No wonder, the impact of these programmes ideologically oriented, could not be accepted by authorities in Kinshasa. Kinshasa, which had dearly earned its independence, seemed to be subjected to Brazzaville media. In fact, earning this new medium (a medium that transmitted both sound and moving images for communication), was an indicator of self-determination of a nation. Ipso facto, a project of a TV station was planned by Kinshasa authorities. It was a second independence that every African country leaned to get from their neighbour's cultural, political, and ideological influence. A television was at that post-colonial period a prestige medium, a national pride, instrument of national hegemony, an instrument trough sound and moving images to settle one's power. This is the context in which the television project of the then Congo-Kinshasa that Mobutu rebaptized Zaïre, now known as the Democratic Republic of Congo, took place. The television comes to enrich the existing media as far as communication is concerned. It is, therefore, important to know the media in their different categories to grasp their impact on the public. As matter of fact, the media are classified into cold and hot ones. A medium is cold when it allows its audience to participate, while it delivers less information. At the contrary, a medium is hot when it delivers a lot of information to the audience which is passive. Among the hot media he cites the press, radio, and cinema while cold media are posters and television. expresses this categorization as he argues:

As a cold media, television is considered in certain circles to have given a kind of cadaverical rigidity to the body politics. It is the extraordinary degree of public participation in the medium of television that explains its inability to address controversial issues. (McLuhan, 1968, p. 352)

<sup>&</sup>lt;sup>56</sup> SFTP is a French television and production company that stands as a protocol for the transfer system of files and the transport layer security.

<sup>&</sup>lt;sup>57</sup> ORTF is a French radiobroadcast and television organization that supports with its technical staff the inexperienced Congolese television.

<sup>&</sup>lt;sup>58</sup> It was a French company specialized in the development and the manufacture of electronics.

<sup>&</sup>lt;sup>59</sup> I use capitals' names to differentiate the two countries known as Congo one a former French colony and the other a Belgian one.

He argues in an article about television celebrities whose success is justified by their relaxed style. For instance, Fidel Castro is a prominent example on his television performances. Contrary to the classification of television as a cold medium he argues: "Tad Sulcz conceives the illusion that television is a hot medium and suggests that in the Congo, 'television would have helped Lumumba to incite the masses more to the riot and carnage'" (McLuhan, 1968, p. 353). Having understood that television belongs to cold media classification, I would like to explore different models of television. This exercise makes me look at Congo's television development. According to Le Champion (2018), there are 3 television models:

**Broadcasting model:** It is known as the oldest model with a wide earth's hertz diffusion. This birth model reaches a very high audience range. This model belongs to a time when the public did not have any other choice than watching the unique channels provided by different states worldwide known also as historical channels. These national channels provided the public with different programmes covering people's desires in what to watch in the timetable provided. This model is limited to the national sphere only where they are under states' control. Comments go in the sense that these models, challenged by the digital revolution will disappear.

**Narrowcasting model:** This model is not too different from the historic model which made use of cable provided with analogue broadcast channels. This new model appeared in 1990s with a novelty of being channels with same themes such as information, sport, youth, cinema, music, theatre, etc. These channels are also performing at the national level even if sometimes they cross borders. Their public is spread around themes of one's choice. Another difference with this broadcasting is its modest income depending on advertisements and editorial line strategy. The flux of audience depends on the quality of programmes provided. This is what justifies a strong challenging competition between different channels.

**Webcasting model:** This new model belongs to the internet age with different forms in the social network. This model breaks from the two other previous models we have just looked at. Here the imagination is the master law. This model plays an important role in the marketing of various enterprises doing business. It makes use of multimedia to suggest their products that are discovered through you-tube and other applications. This media new paradigm makes use of devices such as smartphones, computers, tablets to get into videos and other contents. This challenging paradigm provided by the internet breaks the notion of frontier of broadcasting and narrow-casting models. Therefore, the access is free provided one is linked to through the internet. Even if the criterion of access depends on national interests, linguistic and common acquaintances it opens to different contents. Among other characteristics of webcasting, there is also freedom of access and the challenge for public power or audio-visual system to monitor different channels through platforms such as You-tube, Facebook, Netflix, etc. This challenging new paradigm is attracted by traditional models which make use of different platforms to broadcast their videos and audios (Le Champion, 2018). For Rieffel,

The web is initially a technical space, without face to face, without physical presence: despite this coldness a priori, it gives rise to highly complex multiform exchanges (...) that transform it into a lived space where settle practices that delimit, for the participants, a common territory. (Rieffel, 2005, p. 198)

Apart from the three other models mentioned above there is catch-up TV which allows as the name indicates to cash-up a past program on a TV. This service is available in many TV channels through the TV box. In fact, this service is nothing new. The difference is that with the internet facility, one for any reason may replay a programme he missed. This service is available to attract and keep their viewers in the context of a competitive era. There is also interactive and social TV. What is new is the interaction between editors and the public which did not exist in the classic media. This novelty offers to the public the possibility to participate before, during and after a program through questions, comments, votes using their smart phones. Champion argues: "The content of a channel becomes the object of the transversal communication, of an interpersonal exchange through the socio-digital networks, what is called the social television" (Le Champion, 2018, p. 100). Most of countries in Africa are at the Internet and digital media crossroad. Charon explains this as he argues: "The Internet and digital media bring together forms of content and operators of quite distinct natures, even though the boundaries between them are often porous and shifting" (Charon, 2014, p. 45).

An issue is raised with the digital revolution worldwide about the end of classic television. Le Champion (2018) addresses this issue but argues that it will be the end of TV in the world since the number of TV channels increases every year worldwide and that if the creativity of producers dries up. Another argument is that old people are still very attached to this audiovisual. From the youth point of view, the TV remains the principal way of access to audio-visual contents. Nevertheless, the obvious question is the resizing of television: "What place and what balance against the rise of the video on the internet? The strengths of television are known, especially through its ability to provide accessible service" (Le Champion, 2018, p. 108). Lamoure's argument may give the impression of the death of television as he argues:

Television broadcasts its contents in the face of people whom it puts down not on its knees but which it sits and, by this very configuration, it sits their thought, it deprives them of a thought in motion. The viewer thinks softly, he absorbs everything, he digests what is given to him, simply satisfying to fill himself with what does not cost him any effort. (Lamoure, 2006, p. 22)

These two arguments may be applied as an indicator to address Congolese audio-visual in the digital revolution. Lamoure surely did not have yet the experience of interactive television that erupted in 2012. The state TV channel access was still free of charge. But a lot of channels offering interesting programs turned digital and need a paid licence. Most of them come from France, South Africa, or United States of America (USA). They are cherished by Congolese for their football programmes giving champion's league for instance. Sharon argues about television media:

In doing so, it is no longer a simple free media and is no longer just broadcast, because it offers channels (Canal + bouquets, Canal sat, etc.), paid programs and allows access to more and more content on demand for an audience that can itself become images' provider and programmer. (Charon, 2014, pp. 43-44)

The Congo is ever united through the many TV channels online. The benefit from this is the fact of analysis offered by experts or journalists to understand the political and social situation of the country. Through TV and other media online, common people are instructed, formed to citizenship without political colours. This is in line with Ipondo's view about the three main principles of official media in the Belgian Congo as he argues: "to defend Belgium occupied by German troops, support the colony in its isolation and promote the emancipation of black population" (Ipondo Elika, 2014, p. 33). Most of media online, independent by nature, aim to help people fight against the disinformation and free themselves from political manipulations These different channels online are audio-visual; this satisfies the public which in its majority has still its auditory and visual faculties. In addition, the Congo has among the audience deaf and blind people who benefit from the digital facilities to grasp the national and international news. To this I foster the fact that the voiceless have got a room to express their opinions. Unfortunately, the official radiobroadcast and television do not grant them this opportunity. This opportunity is offered by the different online TV and radio broad cast. There is a lot of freedom and using a

smartphone anybody can publish videos or audios to inform as many people as possible, which is challenging.

Something new enriches the media in the Congo, a new partner: any smartphone, tablet, has become a reporter. These non-professional reporters provide precious advantages, such as the instantaneous, that the many media use to illustrate a news story. In front of a lot of media competition and a very demanding audience, audio-visual elements are important. Any credibility of information depends on audio-visual inserts. Thanks to the evolution of technology in the media, Congolese TV online offer to their public debates, conferences just with virtual studios. These virtual programmes help organize debates with experts or speakers from different parts of the world without moving from home. Virtual television is the trend of audio-visual and multimedia in the Congo media nowadays. Thus, we may say the future of TV in Congo is a combination of audio-visual and multimedia. For instance, famous independent radiobroadcasters invite famous political leaders for interviews. The interview is also filmed to be relayed by TV partners. We have now filmed radiobroadcasts programmes among Congolese media whose elements are exploited by media partners. At the same time, an important political statement such as in the parliament is worth of being exploited by all media. Social media mostly WhatsApp and Facebook groups undergo hot audio-visual and multimedia debates which were traditionally oral, but now virtual. Most of them are based on some events, statements from leaders on any topic of common interest that all media deal with within their information. Of course, hot debates on media are just a sample of what people at crossroad discuss as issues impacting the future of the country.

In fact, videos or audios from a statement, a speech or a debate are cut into smaller shots to spread the information, this is how social media interfere in public life and communication. These smaller shots that reach different parts of the country have a serious echo through the oral tradition Africa is known for. Social media compete with official media in Africa, in general and the Democratic Republic of Congo, in particular.

As matter of fact, famous private media online are invited to cover official event due to their impact on their abundant audience. Thus, they have the professionalism required for any coverage. Official media have a serious rival: private online media that bring television now in our smartphones. In fact, most important news is relayed in application groups with photos or small videos that make communication very efficient by the fact of power to reach more audience and

the professionalism that goes with it. So, official channels rely more on sport programmes that are more expensive to provide, and online media do not dare to finance.

## 2.4.3. Congo and the new media environment

The Democratic Republic of Congo is not an exception to the new media environment. Telephone providers have extended their presence all around the country even to remote villages. These providers give access to the internet although poor in quality. This makes it possible to participate in the so-called global village of communication". Information that comes with small videos, whether images or audios can be received in smartphones thanks to the speed provided by the internet. Money transfers is one of the benefits of this new media. In fact, Companies such as M-Pesa (Vodacom), Airtel Money (Airtel), Orange Money (Orange), help people to make their transactions rapidly and safely. One does not need a bank account for transactions. There is a long list of other facilities that these new forms of modern media provide nowadays, for example, television subscription's; bill payments, such as Canal+. It is no longer necessary to go to the offices of the businesses but instead to use the services provided by the mobile phone Companies, such as Airtel, Orange, Tigo, Vodacom, etc. Something that may be peculiar to the Congo and that may not be found elsewhere is that the influence of the community is still unbroken, hence new technologies do not overcome it. Mattelart in his reflexion on communication (1991), argues about the centrality of the notion of globality that originates from communication. He finds a paradox in the use of devices such as computers and the modern means of communication which unite and separate people at the same time. The notion of the "global village" popularised by McLuhan does not fit any more because individuals can disappear in this global world. Instead, he prefers Brzezinski's notion of "global town" that fits better to the model of the technetronic society because of the interdependence between people. He prefers to speak of reciprocal influence than of the relationship of intimacy (Mattelart, 1991).

The Democratic Republic of Congo has surely benefited from the digital revolution provided by the development of technology in the sphere of communications. Distance studies by the Visio conference is commonly used for online studies in disciplines that some professors teach in universities around the country by zoom application for example. In fact, it is due to the lack of professors in some areas or faculties such as science and the increasing numbers of interested students that make universities use these methods of online or distant learning. This

distance teaching can also benefit many students in subjects like medicine. Normally, eminent professors would have travelled to and from different universities across the country to share their wisdom. At this time of Covid-19 Pandemics, teaching by Zoom has become an important tool for allowing different Professors to carry out, or to continue, their teaching without having to travel around the country. Another benefit of this interactive communication between Professors and students is that they can save time. The facilities arising from the new media environment have brought about the expression of increased public opinion thanks to the new phenomenon of social media which are becoming more and more established everywhere.

An overview of the genesis of all developments in the digital field would help us to understand how the Congo got into this new world. I would like to point out a few historical innovations in this revolution which contributed to the digital developments in the Congolese media environment. This historical background is very important for an understanding of the development of media in Congo. This media environment contributes to the conjunction of the digital revolution (internet, computer, etc.). So, the media were the very first to be influenced and effected by the digital revolution and the internet. Concerning this new environment, Balle argues that:

The services provided by the Internet allow for the display simultaneously on different screens, whether of a computer, television, phone, or tablet, of different documents, be they texts, graphics, sound documents, still or moving images, silent or sounded images – whose access is at one's will (Balle, 2017, pp. 36-37).

Nowadays, the use of all the facilities provided by tablets, smartphones and even computers has made communication become audio-visual and multimedia. This brings about the hyperactivity, I mean, one's reaction or comments after seeing a post of an image, a text, a video, or an audio. This can give way to the spreading of the contents more widely. Before, signing a petition was limited to e-mails, but currently, most of applications are available to request signatures for an issue of common concern.

Balle made a great link between the internet, the media and multimedia in the framework of digital revolution. He argues:

For the media world, the turmoil is twofold. On the one hand, a single technique mixes for the first-time forms of expression or categories of signals that each had their media attracted: it is the end of the beautiful harmony where writing, image, sound, and computer data each had its favourite tools. On the other hand, by mixing them on the same discs or in the same "pipes", the digital allows to go from one form of expression to another with a simple click of the mouse, and

thanks to the hypertext and hypermedia. (...) It is the Internet that promotes its spectacular growth, while at the same time it will allow it to test the resources and to imagine the potentialities. (Balle, 2017, pp. 40-41)

It is from 1991 that access to multimedia servers was possible from any computer linked to the internet. This was possible through hypertexts and hypermedia. This development was due to the invention in Geneva of the internet consultation process by Timothy Berners-Lee and Robert Caillau, in 1989, which developed into the Web known also as the world wide web (www), which gave access to one's own personal computer from all kinds of programmes, multimedia services combined with texts, words, music, images and videos from afar. In 1993 the Mosaic navigator was launched which helped for the first-time to display images on Web pages. In 1998, Sergey Brin and Larry Page launched the Google search engine. In 2007, the mobile internet was commercialized for the first time in Europe then Northern in Asia and in USA, thanks to the combination of broadband (3G) and multimedia mobile phones provided with touch screen to display smoothly web pages. Sauter praises the event of the 3rd generation as he argues that: "Another important milestone for wireless Internet access during this timeframe was 3G networks going online in many countries in 2004 and 2005" (Sauter, 2008, p. 3). In 2011, Google TV was launched in USA and years after, in France while in 2013 the "Exagon" offered 13 free Youtube TV channels through the internet.

One may not understand the media in Congo without looking into the framework of journalism. There are, in fact, two models of journalism: the report and the chronic. The report belongs to Anglo-Saxon model while the chronic model belongs to the Latin-European model. The first model has the following characteristics: objectivity, autonomy, emancipated, relationships with sources are compulsory, frequent, and confident relationships with sources, teamwork, and neutrality. The second model has the following characteristics: subjectivity, link with literature and politics, individual work, courage, honesty, and insight according to Balle. But, at the beginning of the 20th century the report model was also installed in Europe while journalism tried to emancipate itself from politics. It is impact in the Latin-European was not as great as in North America or in the United Kingdom (Balle, 2017). Congolese media were influenced by both models. In the beginning State channels under the control of the government had the monopoly of information and programmes. But with the digital revolution there was plurality of media owners in Congo. And the tendency was for the chronic model to dominate the media. In fact, this was applied to just a person using his own tablet or smartphone to publish his work.

Therefore, different applications provided by the internet helped the chronic journalists multiply their style of programmes. Most of chronic journalists were ladies and they were presenting music news and polemics about different artists. The networks, mostly Facebook and YouTube were full of channels that had invaded the media because of their popularity. The media online, simply equipped, challenged the state media by the number of their subscribers and because their audiences trusted them. I mentioned earlier how independent online media have a lot of credibility to the point of receiving organizations, political leaders. In fact, the Congolese audience is often searching for alternative sources of information. In this sense, Brandão argues that: "In fact, people have always looked for alternative communication tools to those dominated by the established powers" (Brandão, 2014, p. 51).

Media tools used in churches and political rallies play an important role in the Congolese life. Modern communication is therefore at the crossroads between emancipation and persuasion. Emancipation because people use modern technology to express their independence from politics; while persuasion, is used by religious movements to attract more followers. Balle is very provocative as he argues that:

Modern communication is the daughter of religion and politics. Since the dawn of time, both have pretended to preach, to convert, to obtain an assent. But, today, the art of those who practice communication pretend otherwise. They prefer to talk about information to gain more confidence from those whom they are addressing as well as having greater persuasive power. Emancipated communication now permeates the culture in democratic societies, while there remains the risk, for all, of some disillusionment and, for societies, to suffer all mishaps of the means that is taken for. (Balle, 2017, p. 64)

The Democratic Republic of Congo is currently facing armed groups in the rich east regions of Kivu and Katanga. Most of these groups are said to be under the influence and to be manipulated by neighbour countries who desire to have access to rare minerals such as cobalt, coltan, etc. These are valued cherished minerals for the certain industries. In such war-torn regions, journalists are targeted by attacks for reporting on how the state media tries to manipulate or supress the information. Thanks to new technologies and the digital revolution the smartphone serves to deliver information about what is happening, and they can make it public thanks to the facility of the internet. In such a situation the control of information would be crucial. Nevertheless, Reporters Sans Frontière argue that: "the arrival of new technologies has enabled information to "escape" traditional organs such as the press or radio, thus increasing

the number and types of information actors in the field" (Deloire, 2014, p. 23). In fact, according to Deloire's statement, information has been spread by any eyewitness holding a smartphone. Their work has been exploited by professional reporters or the so called "multiskilling of journalists"<sup>60</sup>. On the contrary, Caple does not agree with him as he defends that those amateur photographers spoil the new media industry, arguing:

To many within the profession, this is seen as a process of de-skilling, rather than up/ multiskilling, and the impact of such practices on quality and the value attributed to professional image capture, especially if it no longer remains the domain of the professional photographer, cannot be underestimated. (Caple, 2014, p. 357)

In this digital revolution, the gender issue also attracts one's attention. A lot of women are involved in all kinds of media. The time has passed during which gender did not matter. The issue of gender in the Congo now is of huge importance. Hatley's remarks on gender differences could help us to gain more understanding about the different assets that women can bring to the media world in the Congo. One must know the differences between male and female to make good use of the respective skills and assets in the media. He profoundly regrets that some do not take this point into consideration. He argues that: "unfortunately social scientists have not always been very sensitive to differences between man and woman" (Hartley, 1993, p. 90). Rather, his says that nowadays a lot of researchers take the gender differences into consideration to avoid stereotyping. Fortunately, the Congo media network is dominated by a great female presence contrasting with the traditional African gender issue. Bihel refers to radio as a media that was once dominated by men. He reports: "Journalist Michèle Cotta narrates her difficult beginnings in radio broadcasting. Her skills were not questioned, but on the contrary, her place on the air had some people worried. 'What a pity, lamented her superiors, that you have a woman's voice'" (Bihel, 2014, pp. 39-40).

The impact of this new media revolution in the Congo has been tremendous. These new tools of communication have helped people to archive any data that would be useful to them in the future. The African oral tradition has, therefore, found a faithful partner for the transmission of knowledge from one generation to another. One of the benefits of this digital revolution is that it enables people everywhere to sense that they belong to a bigger world society. This can be understood in a way by which people belonging to a similar interest group can share events or

<sup>&</sup>lt;sup>60</sup> Multiskilling of journalists consist of capturing of vision, sound, and words for platforms according to Caple.

happenings around the world. Nobody can prevent partners of any forum from sharing about an issue, even if it's not linked directly to their lives. The fact of their belonging to the same one world makes every concern universal. This new trend offered by the new technologies opens the Congolese to global issues, although Congolese issues are a priority. No wonder that the network is full of Whatsapp, Facebook groups, etc., who are interested to discuss issues touching national political life, of common interests at provincial level or concerning family. As member of such groups, I see the participatory aspect in debates concerning politics, the development of the local district.

The New media networks are a rare opportunity given to the public so that they can express their points of view in a medium not so different from the television, where no chance would have been granted them to do so. The virtual aspect of communication creates a close network community whereby by the fact of participation in debates members come to know, by their competence each other and develop a sense of belonging to the structure that they deal with. This is a proof of the rise of the new communication model that Brandão refers to, the Shirky's participatory media. This model is taking roots in the Congolese media. "Indeed, a new communication model has arisen with the participatory media: the many-to-many model which has progressively become the new pattern of contemporary participatory culture" (Brandão, 2014, p. 50).

A study of network digital groups would be an interesting exercise to draw out the consequences of the media in peoples' lives. Apart from politics, which the Congolese follow passionately, or by the fact that issues like Covid 19, that affects their common life, is passionately debated in new media. People can also use it to assess the government, the parliament, the president in their managerial capacity to face a pandemic outbreak in the country. Viewers in the Democratic Republic of Congo have a choice to make between different digital televisions in the competition for the Congolese media. This choice is guided by the quality of programmes that have an impact in people's life. The enthusiasm of spectators for certain digital channels is very curious. A survey of the public's attitudes would have helped us to grasps the choice. This is research I would like to commit myself to in the future. Nevertheless, this questioning leads me to grasp the problematic. Kopp suggest a great reflection about the digital channels' competition. His television quality questioning makes him talk about the real and the virtual. His concern is if the quality of a project depends or not on a programmes budget

allocation. Of course, the budgetary issue cannot replace the need for talent required for the production. Kopp argues that:

Pharaonic budgets have never replaced talent; the extravagance of resources is hardly a guarantee of quality. Contrarywise, the wretch which exposes a television with low budget transforming the poverty of the means into virtue more an ascetism than a guarantee of quality. (Kopp, 1990, p. 11)

Something proper to the Congo media consumers is the open group debates on politics, current events, or news. Political news provokes animated debates in groups known as "parlementaires debout" 1. This community platform wants to share news of common concern which might have tremendous consequences in people's lives. This "parliament" is, most of the time, the instigator of popular revendications. This platform or crossroads is a venue for the appreciation of the competence of the government. Another platform like the "parlementaire debout' the fact that football games are watched by groups of friends who regularly have debates on the teams in different championships of Europe and Africa. In fact, the many devices offering the opportunity of enjoying a football game on tablet or smartphone is not a common use; but a giant screen projection in a big hall or any appropriate venue offers the opportunity to watch interesting games such as Real Madrid vs Barcelona, or Liverpool vs Manchester United, or Angola vs Congo. With all these assets debates have extended their venue from social streets to digital platforms. The most beneficiaries of the digital platforms are politicians who hire journalists to publish their activities to gain sympathy from citizens. So, social media enriched by the digital revolution has turned into a political weapon in the Democratic Republic of Congo. Balle argues that:

From now on, "communicating" is no longer exchanging, establishing dialogue, perpetuating a person-to-person relationship, but more precisely influencing others, selling something, inculcating an idea, or giving it to a public or of an institution, an image that inclines to benevolence or consideration. (Balle, 2017, p. 64)

<sup>&</sup>lt;sup>61</sup> Parlementaires débout: I translate from French as standing members of parliament contrary to common members of parliament who meet sitting in the hemicycle. They are, in the Congo, known as political party members who meet in Kinshasa's crossroads or by newspapers' kiosks to discuss news affecting social life or politics. Animated debates follow a reading of an article of one of the newspapers. Orality characterizes the debate contrary to the hyperactivity that is common media devices provided by new technologies. In fact, members know each other first by the fact of belonging to the same party and the regularity to debates. Members are from the same political colours otherwise it could result in violence.

Social media have turned into a ring of boxers where the most talented speakers impose their ideas or richer leaders persuade public opinion through different digital television channels and radiobroadcasts, as well as application platforms. In fact, journalists publish their videos in WhatsApp groups to give their viewpoint that different members may transfer to their friends. It is also a venue for many of them to announce their future TV programmes. However, different digital platforms application groups are accused of being fake news providers. This mode of communication seems to compete with other traditional media. Apart from the politics, the European football Champion's League is the most popular programme among the public: and these include all generations, men, and women, young and old. Rivalry between team fans is the other ambiance of the game. Hot debates between Barcelona and Real de Madrid's fans on a game, referee's performance make one wonder if these two teams were really foreigners. This is possible with subscription from Canal+, in many cases, effect of new technology leading to the globalisation of events, happenings in Africa and worldwide: sex tapes, politics, sports (football) interconnectedness leading to a new community that I call: the global digital community.

## **Final Conclusions**

I was full of expectations going to travel to Ireland as an Erasmus student who had to achieve a special mission: a three-month traineeship at Kairos Communications Ltd as requirement to finish up a master's degree on Communication Sciences in Audio-visual and Multimedia at the University of Minho, Portugal. There was a twofold expectation as I planned to move to Ireland for this academic venture; the challenge of meeting what I really needed to conclude my studies enriched with both audio-visual and multimedia practical knowledge and the theoretical framework, guarantee of a holistic professional traineeship in a competitive media environment. The other expectation was to adapt myself to the welcoming structure, meaning both the team of collaborators and the well-equipped professional venue. This traineeship was made possible thanks to a protocol signed between the two administrations, the University of Minho and the Kairos Communications Ltd, and the Erasmus service that provided me with a financial contribution to my traineeship in Ireland.

In fact, the agreement mainly consisted in preproduction research, production evaluation, location filming, audio recording and postproduction editing with avid media composer (for video editing) and pro tools (for sound editing). Final cut was also one of the video editing software programmes available at Kairos that I did not learn just by the fact of improvement in the avid media composer that I had just learned. Although the learning agreement made it part of my traineeship, I focused on the avid media composer, aware that shifting from one editing software programme to a new one is matter of adaption and personal learning capacity. I described previously, a few lines the Kairos editing system that was a clue element to adapt myself to the structure in the sense of getting to make good use of the equipment available. Digital tools' understanding gave me a clue to a better control of the equipment available. Thus, the main differences between Macintosh and Microsoft Windows are of a wealth to understand choices to make in the use of one of these hardware devices in the production of contents. In addition, I made an overview of sound and video production insights along with the equipment that I used. My traineeship was a task of learning to a better communication of contents through professional preproduction, production, and postproduction. The technics acquired in the classroom, under the supervisor assigned by Kairos Communications LDT and through my personal research, converge to effective communication

skills. In fact, editing a video or an audio peace is subject to a cinematographic language that makes communication effective.

My traineeship, as the sample of work I achieved in my reflexion indicates, was an exercise between research and practice to acquire skills to communicate contents effectively. As matter of fact, any research that I achieved was twofold, getting insights about the topic I dealt with, as well as some research to complete the professional knowledge in the production of contents. This is obvious in the way I refer to some authors to understand concepts or a substantial reflexion to underline an assertion. The advent of digital revolution has encountered from now, audio-visual population orientated. Audio-visual proofs are expected to be convincing in the information whatever the content of the news. So, audio-visual communication matters over scriptural communication. Congolese media agencies endowed with all kinds of platforms offered by new technologies such as websites, YouTube, Facebook, twitter, are whistle-blowers information source regardless their outstanding popular rank. Therefore, nothing escapes to the eager media to inform citizens. In fact, the press known as fourth power has got a special mission; the one of whistle-blowers to awaken the public awareness and to rise a process of transformation of the society. This fourth power holds notoriety over national and international public opinion, to counter any unpopular decisions from the government or other structures. As a pressure instrument, it is risky for journalists who are most of the time jailed or killed. They are endowed with no other weapon than their pen and microphone that may be taken like a threat. Hence, any public leader is careful of not hitting the press. Political debates mostly known to happen face-to-face between protagonists have transited from TV platforms to digital ones. If heated debates result into fighting when protagonists are uncontrollable, the digital can also be as dangerous as the first since, by their ideologies. So, leaders may create animosity among citizens. Deadlock in social media's control is a very serious issue to stem rumours in the society. But the main challenge is how to go about the control of digital network system that offers a lot of freedom to users who benefit from different platforms.

The general conclusion of this report is an opportunity to address some threats that new media have caused in the society. These are, in fact problematics. In fact, virtualization and digitalization of interpersonal relationship are consequence of new technology that have an impact on social communication. This threat is not so different from robots that are taking employees jobs in industries. Visualization of communication in the social media world creates a

society lean on proofs to be convinced by an information. Another problem is the globalization of news through audio-visual and multimedia contents. An image, a video that is posted from any part of the world goes beyond cultural, linguistic, and physical boundaries. The impact of the diaspora in the outspreading buzz audio-visual elements is tremendous. Media protagonists have a serious responsibility regarding the ongoing problematics.

So, my traineeship at Kairos aimed to equip myself at the end of my master's studies with skills on media effective communication through sound and image coexistence. But if professional skills on the producer's side are expected to reach attentive audience, at the same time a certain attitude is protagonist to a success. Nevertheless, I had a serious limitation in analysing online media structures to unseal their effective communication capacity. In fact, such a commitment requires a prior permission according to the new European law on data protection. The pictures to illustrate my points in the traineeship final report have excluded the heads because it was impossible to get permission from the people portrayed in them. This limitation applies also to the names of different people who participated in the Saint Patrick's Mass video analysis. So, I had to mention just the role played by each one of them. Another limitation of a different kind that I encountered was that I did not have people available to get filmed or get the voice from. Therefore, I had to use the voice over to enrich my productions. In a future study I intend to look at the impact of sound and image combined in the Congolese and the impact of archives. In this future study I Intend to look at the impact of politicians' images and voices. In fact, my studies aim to look at how citizens evaluate the stability of political candidates based on data of previous positions. My study will focus on the coexistence of images and sound in debates and statements that communicates the identity of those who earn votes to lead their citizens. This study will show a balance of the coexistence of sound and image towards an effective communication.

## References

Alencar, A., & Kruikemeier, S. (2018). Audiovisual infotainment in European news: A comparative content analysis of Dutch , Spanish , and Irish television news programs. *Journalism*, *19*(11), 1534 – 1551. https://doi.org/10.1177/1464884916671332

Aron, R. (2005). Penser la liberté, penser la démocratie.

- Astruc, A., Babel, P., Barrère, I., Bellemare, P., Bluwal, M., Bourges, H., ... Tchernia, P. (2014). *50 ans de télévision*. Paris : Le Passeur Éditeur.
- Atienza, R. (2009). *L'identité sonore urbaine. Recherche sur l'incorporation critique du concept d' identité sonore dans l'élaboration du projet urbain To cite this version : HAL Id : tel-00403584.* Grenoble : Hall
- Bachimont, B. (1998). Bibliothèques numériques audiovisuelles : des enjeux scientifiques et techniques. Document Numérique, 2(3–4), 219–242. Retrieved from http://cat.inist.fr/?aModele=afficheN&cpsidt=1778948

Balle, F. (2017). *Les Médias* (Que sais-j). Presses Universitaires de France.

- Bihel, A. (2014). À la télévision, les hommes parlent, les femmes écoutent ! Paris : Belin.

Biju-Duval, H., & Delhay, C. (2015). Tous orateurs (2nd ed.). Groupe Eyrolles.

- Bisewo Pesa, I. (2011). Éthique communicationnelle de la palabre africaine. Berlin : PETER LANG.
- Bordeau, J. (2013). La boîte à outils des écrits professionnels. Paris : Eyrolles
- Brandão, D. da C. (2014). *Museum of Ransom—Towards a system for the aggregation and interpretation of contemporary participatory video as contextual cultural heritage*. UT Austin. ADDIN Mendeley Bibliography CSL\_BIBLIOGRAPHY
- Brown, B. (2016). *Cinematography theory & practice for cinematographers & directors* (Third edit). London and New York: Routledge.
- Caple, H. (2014). Anyone Can Take a Photo, But: Is there space for the professional photographer in the twenty-first century newsroom? *Digital Journalism*, 2(3), 355–365. https://doi.org/10.1080/21670811.2014.882074

Charaudeau, P. (2013). Discurso das mídias (2º ed.). (A. M. Corrêa, Trad.) São Paulo: editoracontexto.

- Charon, J.-M. (2014). Les médias en France. Paris: La Découverte.
- Cohen, D. (2010). *Comment décoder les gestes de vos interlocuteurs (et être conscient des vôtres!).* Paris: LEDUC5 Éditions. Obtido de ISBN : 978-2-84899-426-0
- Curran, A. (2012). *The Effect of Adding Relevant Music and Sound Effects to an Audio-Only Narration: A Three-Treatment Application of Mayer's Coherence Principle.* Cincinnati: University of Cincinnati.

Davis, G., & Jones, R. (1990). The sound Reinforcement handbook. Milwaukee : Hal Leonard Corporation.

Deloire, C. (2014). *Classement mondial de la liberté de la presse Censure, cyber-surveillance, lanceurs d'alerte* (J'Al VU). Paris: Librio.

Dubied, A., & Lits, M. (1999). Le fait divers (Que sais-j). Paris: Presses Universitaires de France.

Durand, J. (1981). Les formes de la communication. Bordas.

- Elite Ipondo Elika, G.-G. (2014). Sociographie de la Télévision Congolaise, voyage au coeur du système télévisuel du Congo-Kinshasa. Paris: Harmattan.
- Falconi, A. (2003). *Histoire de la communication des origines à la naissance du journalisme* (Vol. 1st). Kinshasa: Médiaspaul.
- Ferry, M.-P. (1977). Les noms des hommes et des masques chez les Basari du Sénégal Oriental, in Langage et cultures africaines . Essai d'ethnolinguistique. (G. Calame-Griaule, Ed.) Paris: Maspero.
- Frutiger, A. (2004). L'Homme et ses signes\_ Signes, symboles, signaux ( PDFDrive ) (2nd ed.).

Perrousseaux.

Gauthier, A. (1993). L'Impact de l'Image. L'Harmattan.

- Guyot, J., & Rolland, T. (2011). Les Archives Audiovisuelles Histoire, Culture Politique. Paris: Armand Colin.
- Hall, E. T. (1966). The hidden dimension. New York: Anchor Books, 1969. 1990.
- Hartley, P. (1993). Interpersonal communication. London and New York: Routledge.
- Hiebert, R. E., & Reuss, C. (1985). Impact of Mass Media, Current Issues (R. E. Hiebert & C. Reuss, eds.). New York & London: Longman.
- Huart, J., Kolski, C., & Leleu-Merviel, S. (2000). Problèmes de création en multimédia : marier l' expérience de l'audiovisuel et la rigueur de la qualité. *Elements*.
- Keating, P. (2014). *Cinematography* (P. Keating, ed.). New Brunswick, New Jersey: Rutgers University Press.
- Kenny, C. (2011). The power of silence, silent communication in daily life. London: Karnac Books Ltd.
- Kopp, P. (1990). Télévisions en concurrence. Anthropos.

Lamoure, C. (2006). *Petite Philosophie de la télévision*. Toulouse: Milan.

Le Champion, R. (2018). La télévision. Paris: La Découverte.

- Luhan, M. M. (1968). *Pour comprendre les média, Les prolongements technologiques de l'homme*. New York : Mame/Seuil.
- Lusted, D., Buckingham, D., Manzi, K., Rowe, A., Tilley, A., Wollen, T., ... Moore, B. (1991). *The media studies book A guide for teachers* (D. Lusted, ed.). London and New York: Routledge.
- Marty, N. (2012). Identification sonore, stratégies d'écoute et narrativités. Paris.

Mascelli, J. V. (1998). *The five C's of Cinematography : Motion Picture Filming Techniques*. Los Angeles: Silman-James Press.

Mattelart, armand. (1991). La communication-monde, histoire des idées et des stratégies. La Découverte.

Mbuluku Masoka, J.-V. (1987). Liberté, nécessité et ethnicité, essai d'anthrologie suku. Fribourg.

McCarthy, J. F. (2008). Short stories at work: Storytelling as an indicator of organizational commitment.

Group & Organization Management, 33, 163-193. . New York. Obtido de

http://open.lib.umn.edu/principlesmanagement/chapter/12-5-different-types-of-communication/

Mehrabian, A. (1981). Silent Messages. In *Unfriendly Fire*. Wadsworth.

https://doi.org/10.2307/j.ctt20fw8nb.9

Michel, M. (2014). Écoutez ... Le monde sonore : support d'une construction identitaire. Bordeaux: Hal.

Mudiji, M. (1989). *Le Langage des Masques Africains, Etude des formes et fonctions symboliques des Mbuya des Phende.* (F. C. Kinshasa, Ed.) Kinshasa: Saint Paul.

Nisbett, A. (1993). *The Use of Microphones*. Kings- Lynn: Biddles Ltd, Guildford and King-s Lynn.

Pagano, C. (1971). Comunicação Audiovisual (Edições Pa). Lisboa.

Patterson, K., Grenny, J., McMillan, R., & Switzler, A. (2002). *Crucial conversations: Tools for talking when stakes are high*. New York: McGraw-Hill. From

https://open.lib.umn.edu/principlesmanagement/chapter/12-5-different-types-of-communication/

Rieffel, R. (2005). Sociologie des Médias. Paris: Ellipses.

Ronchi, A. M. (2018). e-Services toward a new model of (inter)active community. Milan: Springer.

Sauter, M. (2008). Beyond 3G– Bringing Networks, Terminals and the Web Together. In *Beyond 3G– Bringing Networks, Terminals and the Web Together.* https://doi.org/10.1002/9780470741085

Stewart, G. (2001). Rumba on the River: A History of the Popular Music of the Two Congos. In *The Journal of Modern African Studies* (Vols. 39, n° 4, Issue Cambridge University Press). Cambridge University Press.

Thomas, J. M. C., Roulon, P., Bouquiaux, L., Monino, Y., Ferry, M.-P., Rey-Hulman, D., Seydou, C.,

Derive, J., & Calame-Griaule, G. (1977). Langage et cultures africaines. Essais d'ethnolinguistique. In G. Calame-Griaule (Ed.), *Homme* (Vol. 18, Issue 3). Maspero.

Zagalo, N. (2009). Emoções interactivas. Do cinema para os videojogos. Coimbra: Grácio Editor.

Zettl, H. (2015). *Sight Sound Motion Applied Media Aesthetics* (Eighth edi). San Francisco: Cengage Learning.

## **Annex: SCRIPT ON SAINT PATRICK'S DAY MASS**

MASS FOR 17 MARCH 2017			ON AIR 11.00 AM				
NEWMAN UNIVERSITY CHURCH ST STEPHEN'S GREEN, DUBLIN			PROGRAMME DURATION 55 MINS				
01 0121							
ITEM	SOURCE/SOUND	DESCRIPT	10N	DUR	CUM. DUR		
1.	introduction	VTR 4'30" TITLE+10'		4'40''	4'40"		
2.	MUSIC ENSEMBLE+CHOIR@BALCONY (ORGAN, VIOLIN, VIOLA, UILLEANN PIPES, FLUTES, IRISH HARP)	ENTRANCE HYMN		1'30	6'10"		
3.	CELEBRANT @ CHAIR	WORDS OF WELCOME AND PENITENTIAL RITE		1'45''	7´55''		
4.	HARP @ SANCTUARY CANTOR @ SANCT. RIGHT + CHOIR + ALL	KYRIE		0'30''	08'25"		
5.	MUSIC ENSEMBLE + CANTOR @ SANCTUARY + CHOIR @ BALCONY	GLORIA		2'10''	10'35"		
6.	CELEBRANT @ CHAIR	OPENING PRAYER		0'30''	11'05"		
7.	READER @ AMBO	FIRST READING ECCLESIATICUS 39: 6-10		1'00''	12'05''		
8.	ORGAN + LOW WHISTLE @ BALCONY + HARP/GUITAR @ SANCT. LEFT + CANTOR @ AMBO	RESPONSORIAL PSALM IF YOU FIND ME		3'25"	15'30"		
9.	READER @ AMBO	SECOND READING 2 TIMOTHY 4: 1-8		1'50"	17'20"		
10.	ENSEMBLE @ BALCONY + CANTOR @ SANCT. RIGHT + CHOIR	GOSPEL ACCLAMATION		0'45	18'05"		
11.	PRIEST @ AMBO	GOSPEL MATTHEW 13. 24-32		1'45''	19'50''		
12.	CELEBRANT + AMBO	HOMILY		7'00''	26'50''		
13.	<b>CELEBRANT</b> @ CHAIR + CONGREGATION	CREED		1'20''	28'10"		
14.	CELEBRANT @ CHAIR + READERS @ AMBO			2'00''	30'10"		
15.	MUSIC ENSEMBLE + CANTOR @ SANCTUARY + CHOIR @ BALCONY	OFFERTORY A ÍOSA GLAN MO CHROÍSE		2'30''	32'40"		
16.	CELEBRANT @ ALTAR + CONGREGATION	PRAYER OVER THE GIFTS		0'25''	33'05"		
17.	CELEBRANT @ ALTAR + CONGREGATION	PRAYER & PREFACE		1'10"	34'15"		
18.	MUSIC ENSEMBLE + CANTOR @ SANCTUARY + CHOIR @ BALCONY	HOLY, HOLY, HOLY		0'45''	35'00"		
19.	CELEBRANTS @ ALTAR	EUCHARISTIC PRAYER		1'20	36'20''		
20.	MUSIC ENSEMBLE + CANTOR @ SANCTUARY + CHOIR @ BALCONY	MEMORIAL ACCLAMATION		0'25''	36'45"		
21.	CELEBRANT + 2 CO-CELEBRANT @ ALTAR	EUCHARISTIC PRAYER		1'40	38'25"		
22.	MUSIC ENSEMBLE + CANTOR @ SANCTUARY + CHOIR @ BALCONY	GREAT AN	1EN	0'15"	38'40''		

23.	CELEBRANT @ ALTAR + CONGREGATION	OUR FATHER	1'10''	39'50''	
24.	CELEBRANT @ ALTAR	THE PEACE OF THE LORD	0'20''	40'10'	
25.	MUSIC ENSEMBLE + CANTOR @ SANCTUARY	THE LAMB OF GOD	1'05"	41'15"	
	+ CHOIR @ BALCONY				
26.	CELEBRANT @ ALTAR + CONGREGATION	BEHOLD THE LAMB OF GOD	0'15"	41'30''	
27.	HARP & LOW WHISTLE @ BALCONY +	COMMUNION HYMN ONE	3'00''	44'30	
	CANTOR + CONGREGATION	MAY THE GOODNESS OF THE LORD			
28.	ENSEMBLE @ BALCONY CANTOR @	COMMUNION HYMN TWO	4'10''	48'40	
	SANCTUARY + CHOIR @ BALCONY	BI ÍOSA, IM CHROISE			
29.	CELEBRANT @ CHAIR	PRAYER AFTER COMMUNION	0'25''	49'05''	
30.	CELEBRANT @ CHAIR	SOLEMN BLESSING	0'15"	49'20	
31.	ENSEMBLE @ BALCONY	RECESSIONAL HYMN	1'45''	51'05"	ROUNDED TO
	CHOIR @ BALCONY + ALL	HAIL GLORIOUS SAINT PATRICK			55'