

How contemporary documentaries on the archaeology of Central America (re)present Indigenous Peoples and the Indigenous perspective

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# **Indigenous Peoples Framed**

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# **Chapter 1 - Introduction**

#### 1.1 Context and problem definition

In 2007 the United Nations adopted the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). Part of this declaration addresses representation of Indigenous Peoples in the media. Article 16 states:

- "1. Indigenous Peoples have the right to establish their own media in their own languages and to have access to all forms of non-Indigenous media without discrimination.
- 2. States shall take effective measures to ensure that State-owned media duly reflect Indigenous cultural diversity. States, without prejudice to ensuring full freedom of expression, should encourage privately owned media to adequately reflect Indigenous cultural diversity."

In particular the second part of article 16 was taken as a starting point for this study. UNDRIP calls for different types of media to include Indigenous Peoples in a respectful and representative way. Unfortunately, Indigenous Peoples have been stereotyped and misrepresented in the media (Butler 2018, 2) even after years of change and progress since the times of conquest and colonisation. In news articles, Indigenous Peoples from all over the world often find themselves being referred to as 'wild Indians', 'Eskimos', 'Aboriginal' or other names instead of the actual names the Indigenous Peoples use for themselves (Cadena and Starn 2007, 4). Even the term 'Indigenous Peoples' has a turbulent background, which will not be discussed here since that is too large of a topic on its own. In chapter 3, paragraph 3.1 the definition of Indigenous Peoples that was used for this study will be explained.

An example of misrepresentation and stereotyping is the Hollywood movie "Apocalypto" by Mel Gibson. The storyline is best summarised on IMDB: "The Mayan kingdom is in decline. The rulers insist that the key to prosperity is to build more temples and offer human sacrifices. Jaguar Paw, a young man captured for sacrifice, flees to avoid his fate (www.imdb.com)". This movie is fictional, but the filmmakers do claim to give the audience a window into the past. They say they have consulted with a professor in Meso-American archaeology. Also, the language spoken in the movie is Yucatec Mayan. This is problematic because as other experts say, this movie is not historically accurate at all. Zachary Hruby, a Maya expert from the University of California Riverside, agrees that there are historical inaccuracies in this movie (www.news.nationalgeographic.com). First of all, the Mayas are portrayed as a people

that require human sacrifice and they get the sacrifices from small hunter-gatherer groups in the hinterlands. However, the Mayas are not known for taking prisoners outside of times of war with other polities. There is also no data to support that the Mayas carried out sacrifice on such a large scale as portrayed in the movie (fig. 1).



Figure 1: A pile of human bodies from the sacrifices the Maya made in the movie (still from the movie: Apocalypto).

Apart from those inaccuracies, the biggest problem for Indigenous Peoples is that the characters in the movie speak a form of Yucatan Mayan. This way the Indigenous Peoples today that speak that language can be stereotyped and people may think they are descendants from Mayas like the characters in the movie. This gives a wrong image on the Indigenous Peoples of today as their beliefs, rituals, and language have changed a lot since then. In fact, they might never have been like the beliefs and rituals we see in the movie.

## 1.2 Importance of correct representation of Indigenous Peoples

Media can be an excellent way for Indigenous People to stand up for themselves and keep their heritage alive. An example of the importance of media is when radio helped the current Maya of Guatemala preserve their language. In 2005 the Guatemala Radio Project was started, to help local radio stations broadcast to Maya Peoples across Guatemala (Alia 2010, 121). They promoted Indigenous music and culture and through that also kept the language alive. Apart from that, it helped to keep everybody

informed, since not everyone can read, but most people can listen to the radio (Alia 2010, 123). This is a great example of why media should be available to everyone. And it not only should be, it actually is the right of Indigenous Peoples as stated in article 16 of UNDRIP (paragraph 1.1).

#### 1.3 Archaeology and Indigenous Peoples

Regrettably, archaeologists (and researchers from other sciences) have not always collaborated with Indigenous Peoples in the past. In 2005 for example, an Indigenous archaeology student discovered a set of footprints from Pleistocene Australia. Yet when an article was written about the discovery, in the Journal of Human Evolution, the credit went to the non-Indigenous dr. Cupper from the University of Melbourne (Alia 2010, 36). Fortunately, the relationship between archaeologists and Indigenous Peoples has started to change for the better. Archaeologists have started to give credit to Indigenous Peoples when writing their articles, they have helped with educating Indigenous Peoples about their past by helping to build museums etc.

The question is, whether this progress is reflected in documentaries about archaeology as well? Do documentary filmmakers who want to make a movie about archaeology collaborate with Indigenous Peoples, like archaeologists do? Documentaries appeal to a big audience who will be influenced by these films. How the audience forms its opinion on Indigenous Peoples in a documentary is influenced by how Indigenous Peoples are portrayed (Butler 2018, 4; Francis and Francis 2010, 211). Filmmakers have the power to create an image on Indigenous Peoples. It is important to realise that an audience may believe the things they see to reflect the truth. Archaeologists need to be aware of this fact when taking part in the making of a documentary that is (partially) about the history of certain Indigenous Peoples. The way Indigenous Peoples are represented is the way the audience will look at them, also in real life.

The aim of the research presented in this thesis is to find out how Indigenous Peoples are currently being (re)presented in documentaries about archaeology. The focus is on documentaries about the archaeology and heritage of Central America.

#### 1.4 Research questions

The main research question of this study is: How are Indigenous Peoples (re)presented in contemporary documentaries on the archaeology and heritage of Central America?

The operational questions are:

- 1. How can cinematic language be used to present characters in a documentary?
- 2. How do documentaries include Indigenous Peoples or an Indigenous perspective?
- 3. Are Indigenous and non-Indigenous characters presented equally, or is there a difference?

In order to answer these questions three documentaries were analysed. This was done by focussing on the characters of these films. The first sub question will be addressed in chapter 2. This chapter explains how stories are told through image and sound in movies and documentaries. It also provides the theoretical framework that was used to analyse the characters of the documentaries. Chapter 3 provides the definition of Indigenous Peoples that was used in this study, the research method that was used to collect and analyse data from three documentaries, and what sampling strategy was used to pick the three documentaries. Chapter 4 contains the analyses and results from the gathered data. Chapter 5 discusses the results.

# **Chapter 2 - Introduction into the Cinematic Language**

In this thesis the characters of three documentaries have been analysed. Keeping in mind how movies and documentaries are made, but with the eye of a researcher. The word *character* may seem out of place. This word is typically used in fictional films for the people on screen who act like the character in the script of that film. However, in documentary films we can also speak of a character. This is a person who does not follow a script, but acts as they would if the camera would not be there. It can also be an expert who is being interviewed about their knowledge.

The characters of the following three documentaries were analysed:

- 1. Lost Kingdoms of Central America Between Oceans and Empires by the BBC
- 2. Maya Underworld The Real Doomsday by National Geographic
- 3. Cracking the Maya code by PBS

Why these documentaries were sampled will be explained further in chapter 3. In order to answer the first research sub question, this chapter explains how camera and sound is used in filmmaking. How filmmakers influence what the viewer sees, to make it fit into the story the director wants to tell. When you know why a filmmaker chooses a certain narrative and why they choose certain camera angles to show it, one can understand better what they want to tell. When a director decides they want to make a documentary on a certain subject, they have to decide what story they want to tell about that subject. For example, if you tell 5 people to make a film about cows, each film will tell a different story, because everyone sees the subject from a different perspective. Thus a documentary tells the story the filmmaker wants to tell, it is their narrative (Lievaart 2015, 340). This is important to keep in mind in order to find out how Indigenous Peoples are being presented in documentaries about archaeology.

## 2.1 Different genres of documentaries

As with literature and fictional film there are genres within the documentary genre. A genre is when documentaries use certain formal qualities of the cinematic language (Nichols 2010, 143). It is possible to combine genres. Bill Nichols describes the different genres as *modes*. Most television documentaries, such as the ones analysed in this thesis, belong to Nichols' *expository mode*. This mode started in the early days of documentary making and remain till today. The expository mode emphasizes and relies on the spoken word to convey the message to the public (Nichols 2010, 154). The

audience is addressed directly either through the voice-over of a narrator or through a host (Nichols 2010, 167). The visuals shown provide evidence of what is being told (Nichols 2010, 168). This mode gives the impression of objectivity on a subject.

Within this mode different types can be distinguished. The first type is the reconstruction. This includes biographies and historical events. Reconstructions are often used in documentaries about archaeology. You could call this type of documentary a news report on the past, because it can somewhat show what the past must have looked like (Verstraten 2008, 70). The outcome of the documentary is usually already known to the public. It is common to re-enact historical events and facts. This way the past can be shown visually instead of only being explained by a voice-over or a talking head (Bordwell and Thompson 2013, 353). A talking head is someone, usually an expert, talking about the historical event and explaining what happened, how it happened etc. They are filmed from the waist or shoulders up, making it seem like they are solely a head that is talking (hence the name "talking head"). But only looking at someone who talks about such an event is not visually pleasing. That is why filmmakers use reconstructions. They can also use historical images, for example old movies, pictures, or drawings. Or filmmakers film the locations and objects that the expert talks about, which they often do in archaeological documentaries. For example, the site or excavation will be shown whilst the expert talks about it in a voice over.

The second type is the *quest*. In this genre the audience joins the *host* in search for something. The host is the person who guides the audience through the movie in the quest towards answers. Answers to questions that are usually raised in the introduction of the movie by the host themselves. The outcome of this type of documentary can be unsure to the public, will the host be successful in their quest? The filmmakers will want to make the host seem like an authority figure (Bowen 2018, 39), like the right person to go on this quest. This way the character seems the most appropriate to explain most of the story and lead the audience. Similar to a news reporter, the host will often talk directly into the camera to create a direct connection to the audience (fig. 2). This is called a *direct address* (Bowen 2018, 40). Since news reporters are also filmed this way, it makes the host seem as though what they are telling is true, even though it may only be a theory.



Figure 2: The host (character 2.1) is directly talking into the camera about a site (still from the movie: Maya Underworld – The Real Doomsday).

The biggest question for the filmmaker using this genre will be: how can you make your search visible? Usually the host goes to experts to answer his questions. Of course these genres can mix. Oftentimes documentaries about archaeology are both a quest to find something out about the past, as well as a reconstruction of the past.

#### 2.2 Interview styles

In documentaries about archaeology the filmmakers often call on archaeologists as experts to tell part of the story (Pepe and Zarzynski 2012, 101). They interview them and use these interviews in the movie. These interviews can be filmed in different ways. For this study the characters interviews were categorised in four different interview styles. The first interview style is already introduced earlier in this chapter: the talking head. As was previously explained in paragraph 2.1, this is when a character is filmed from the waist or shoulders up (fig. 3). The focus of the audience should be on the person who is talking, which is why there is usually not much else to see in the shot of a talking head besides the character.



Figure 3: An example of a talking head.
Character 3.2 in documentary #3 (still from the movie:
Cracking the Maya code).

The second interview style is when a character is being interviewed *in action*. What this means is that the interviewee is doing something while being interviewed about that activity (Pepe and Zarzynski 2012, 103). For example, an archaeologist was filmed and interviewed in the field whilst excavating (fig. 4).



Figure 4: An example of character 2.5 (on the right) in documentary #2, who is interviewed whilst in action (still from the movie: Maya Underworld – The Real Doomsday).

The third interview style is *interaction*. This is when two people are filmed simultaneously. Usually the host is in shot together with the interviewee and they are having a conversation about the topic at hand (fig. 5).



Figure 5: An example of the host (character 1.1, left) interviewing an expert in a museum (character 1.3, right), in documentary #1. This interview style is called: interaction (still from the movie: Lost Kingdoms of Central America – Between Oceans and Empires).

The final interview style is the *voice-over*. Sometimes part of an interview is used as a voice-over. A voice-over is the recorded sound of a characters interview, that will be put together with visuals other than the person who is talking. This is done to tell a more visually pleasing story. A voice-over should only tell information that is missing from the images (Lievaart 2015, 346). It is also possible for a documentary to have a *narrator*. What this means is that the story is being told through oral statements by an unseen person (Garwood 2013, 102). A narrator is never seen during the film, only heard. A narrator narrates the entire film and ties all the stories from the other characters together. Some documentary makers also choose the host to narrate some parts of the film, instead of having a separate narrator.

#### 2.3 Motion pictures

A motion picture is another word for moving image. Moving images is what a film consists of. A documentary is a film and a film primarily tells its story with these moving images (Verstraten 2008, 17). The images are shot with a camera and a camera looks different at reality. Therefore, filmmakers need to learn the cinematic language in order to tell their story in a clear way to the audience. A camera enlarges details, steers our attention, and also leaves a lot of information out (Verstraten 2008, 72). The camera operator (together with the director) decide what they want in the shot and what they want to leave out. They decide by looking at what shots would fit the narrative best. In a

theatre you are watching a play from a distance. There is no direction as to where you should be looking, at what detail you should be paying attention to. With film you can steer the audience's attention (Lievaart 2015, 48). However, when the filmmaker does not "speak" the cinematic language, the audience might not get the right message (Bowen 2018, 2). It is not only important to know this cinematic language for making movies, but also for analysing them.

#### 2.4 Types of shots

Bowen describes a *shot* as: the recording of subject matter from a particular point of view at one time (Bowen 2018, 9). In this paragraph the different shot types are described. These are also the shot types the characters were analysed by.

Where you position the camera tells just as much as what is in shot. How you film something or someone, tells more than what you are filming (Verstraten 2008, 73). The first shot type is the *wide shot* (fig. 6). A wide shot provides a clear overview of a large area. The focus is on the location (Bowen 2018, 10). In documentaries about archaeology these shots can show the audience an overview of a site for example.



Figure 6: An example of a wide shot.
Character 1.1 in documentary #1 (still from the movie: Lost Kingdoms of Central America — Between Oceans and Empires).

The second type of shot is the *long shot* (fig. 7). This is usually when a character is in shot with their whole body (head to toe). The long shot still gives an overview of the location, but shows the character more clearly than the wide shot (Bowen 2018, 16). In documentaries they can be used when the host is talking about and introducing a new site in the movie. The host will walk around it, whilst talking. This way the shot both shows the site and the character.



Figure 7: An example of the long shot. Character 1.1 in the intro of documentary #1 (still from the movie: Lost Kingdoms of Central America – Between Oceans and Empires).

The third shot type is the *medium shot* (fig. 8). In a *medium* shot you can see the characters posture and upper body language, since this shot shows the character from the waist up (Lievaart 2015, 49). It is the shot type that is closest to how we view the real world around us (Bowen 2018, 10). This shot is most commonly used for interviews in documentaries.



Figure 8: An example of a medium shot. Character 1.1 in documentary #1 (still from the movie:

Lost Kingdoms of Central America – Between Oceans and Empires).

The fourth and final shot type is the *close-up* (fig. 9). The close-up shows the character from very close by. It steers the attention of the audience to details (Bowen 2018, 20).

This can be used to let the audience know what the character is talking about is important for the story.



Figure 9: An example of a close-up. Character 1.2 in documentary #1 (still from the movie: Lost

Kingdoms of Central America – Between Oceans and Empires).

# 2.5 Camera angles

The camera also defines the *perspective* from where the audience looks at the character (Lievaart 2015, 49). This perspective is caused by the angle in which the camera is placed to film the subject. There are three basic types of camera angles that are used (fig. 10).

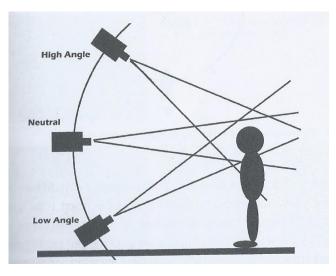


Figure 10: Sideview of the camera which can be placed in different angles in relation to the subject it is filming. The figure shows the high, neutral, and low angle (after Bowen 2018, 49).

The first angle is the *high angle*. This is when the camera is placed higher up and it is facing downwards towards the subject being filmed (fig. 11). It can also be called a birdseye view since it is similar to a bird looking down when it is flying (Lievaart 2015, 50). It

therefore means the audience is literally looking down on the subject in the film, so that subject (or maybe even the character) seems less important.



Figure 11: An example of a high angle. Character 2.1 is explaining how people were sacrificed by the Maya's. He was filmed from a higher perspective so the audience looks down on him (still from the movie: Maya Underworld – The Real Doomsday).

The second type of angle is the *neutral angle* also known as eye-level. This is when the camera is placed at the same level of the eyes as the character (therefore the name "eye-level") (fig. 12). When the camera is placed this way the audience sees the character as an equal (Bowen 2018, 58).



Figure 12: An example of a neutral angle. Character 2.1 is filmed at eye-level (still from the movie:

Maya Underworld – The Real Doomsday).

The third camera angle is the *low angle*. The camera is placed lower to the ground facing upwards towards the character being filmed. With this perspective the character appears more important, heroic, or significant since the audience is literally and figuratively "below" the character (fig. 13) (Bowen 2018, 62). This angle can help make experts seem knowledgeable and important for the story.



Figure 13: An example of a low angle. Character 2.1 is filmed from below whilst going down into a cave making him seem more heroic (still from the movie: Maya Underworld – The Real Doomsday).

Not all filmmakers agree that these perspectives have these exclusive meanings. Bordwell and Thompson say there is not just one rule. It also depends on the context of the story what meaning a perspective can have (Bordwell and Thompson 2013, 191). Yet what is also important to remember: documentaries try to make the experts and characters seem as smart as possible to make the story as convincing as possible to the public. This is why the makers of these films have probably used these angles with these meanings behind them.

#### 2.6 Placement in frame

Creating lines in a shot is also a way to direct the audience's attention. Diagonal lines make everything more lively, they suggest depth, movement and tension. However lines do not just emphasize dynamics (Lievaart 2015, 60). Lines can form a composition that enhances the image or focuses the attention. Filmmakers use the *golden ratio* (also known as the rule of thirds) in order to create balance in a shot and direct the focus of the audience (Bowen 2018, 45). The golden ratio is a tool not only used in filmmaking,

but also in other art forms such as painting. The golden ratio when used in film is when you divide your image in a raster of three by three (fig. 14). This raster is made of lines that intersect. There are four intersections, which are the strongest points to place important subjects in a shot. When a character is placed at one of the intersections, the audience automatically looks at the character.

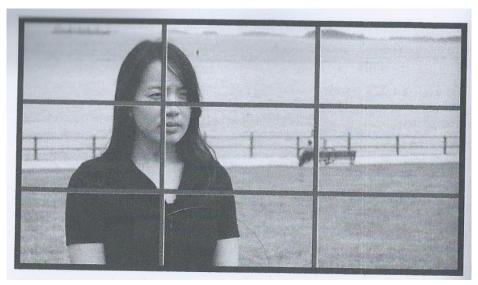


Figure 14: An example of the golden ratio raster placed over an image. The places where the raster lines intersect is where the audience looks at automatically. The raster lines intersect over the face of the girl, so that is what the audience will look at (after Bowen 2018, 46).

Similarly, characters can be placed at different points in the depth of the filming space. What this means is a character can be placed in the foreground, middle ground, or background of the shot (Bowen 2018, 95). The *foreground* is when the character is closest to the camera, and the audience. Since they are filmed up close, the audience can focus more easily on the character and is more likely to listen better to what they are telling. The *middle ground* is where the filmmakers usually place a character. Most of the important actions by the characters are carried out here, because it is easier to get everything they are doing in shot (Bowen 2018, 96). When a character is in the *background* it is usually because there is something else more important in shot that the audience needs to look at (Bowen 2018, 97). In documentaries this may be a site the character is telling about.

#### 2.7 Editing

What a shot or image communicates to the audience, is determined by a number of factors. One of those factors is a shot can get a different meaning from other shots

(Lievaart 2015, 53). The camera is the eye of the audience but not the brain. Most of the movie is inside the heads of the viewers. Shots and the order you place them in bring up associations that the viewer does not control (Verstraten 2008, 91). As soon as you realise the questions you can raise by simply changing the order of the shots, you can use it to your advantage and create a different story.

The *Kuleshov effect* was demonstrated by Lev Kuleshov around 1921 (fig. 15). He used the same shots to tell a different story. He used a shot of an actor with a neutral looking face, then following that shot a shot of a bowl of soup, and then finishing with the exact same shot of the actor. The audience reported that the man looked hungry. However when the same shot of the actor was used, but with a shot of a dead woman inbetween, the audience suggested that he looked mournful. The editing made the viewers assume an expression on the actors face that was appropriate for him, while there was no difference in the expression on his face. In this case the editing created the story (Bordwell and Thompson 2013, 228).

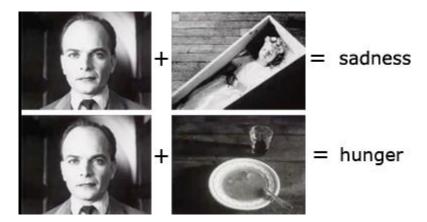


Figure 15: The Kuleshov effect. The interpretation of the expression of the man changes when a different shot follows the shot of his face (www.jordanrussiacenter.org).

#### 2.8 Sound

Good sound in a movie goes unnoticed. Bad sound however makes a movie unbearable to watch. Many sounds work on an unconscious level for the audience. The audience does not notice that sounds make the consecutive shots feel natural (Bordwell and Thompson 2013, 268). Sound is usually underrated by filmmakers but different sounds can tell just as much as the visual proof (Verstraten 2008, 129). However, sound can be dependent on the visual proof (Verstraten 2008, 148), dependent on the function of the sound. The different functions of sound and music in a film are:

- It can display the sounds that we see in a scene. For example when we see someone talk, we want to hear what they are saying, or when we see a car door being slammed, we need to hear that as well (Bordwell and Thompson 2013; Verstraten 2008).
- Sounds also suggests the mood in a scene. For example when the story takes
  place outside on a sunny day and we hear birds sing, it gives the suggestion of it
  being spring.
- Sounds can also give an emotional suggestion in a scene. When we hear low, soft tones it suggests a threat. It can also reflect the characters emotion, for example when a tough looking man walks towards a woman to ask her out but you hear his heartbeat at the same time. This suggests that the man is more nervous than he seems to be (Lievaart 2015, 160).
- Sounds can also indicate place, for example a crowded café. This way it is not necessary to show the whole café, but only the sound is used to imply that it is a café filled with other people (Bordwell and Thompson 2013, 267).
- Sounds can also suggest something is happening outside the shot. An example can be when someone walks angrily out of a room and slams the door shut. We do not need to see the door being slammed to understand what happened (Lievaart 2015, 161).

All these functions of sound are important in both fictional movies and documentaries. They work on an unconscious level for the audience and make the audience more emotionally involved in the story (Bordwell and Thompson 2013, 267). Music also plays a role in setting the mood in a film (Verstraten 2008, 155). Often in documentaries about the archaeology of Central America, the images of the jungle get paired with drum and pan flute music. This music can be found anywhere on the internet and is often described as "jungle music", "tribal music", "Aztec music" etc. It helps to set the mood in a movie and helps form the storyline.

For this thesis the focus for analysing the characters was on the shots the characters were in. The characters were not analysed by editing or sound, but only on camera work and the amount of time they were shown or heard. It can be useful to analyse the characters by sound and editing as well, as this may yield different results. Chapters 4 and 5 briefly reflect on how the filmmakers used sound and editing. However, this study did not statistically analyse the editing or the use of sound, since this thesis focusses on the portrayal of the characters in shot and if there is a difference in Indigenous Peoples

and non-Indigenous characters. Now that the cinematic language has been introduced, it is possible to move on to the next chapter where the methods used to collect data from the movies are explained.

# Chapter 3 – Research methods

The analysis included three documentaries (see paragraph 3.5 for the sampling strategies):

- 1. Lost Kingdoms of Central America Between Oceans and Empires by the BBC
- 2. Maya Underworld The Real Doomsday by National Geographic
- 3. Cracking the Maya code by PBS

The characters of these films were studied, to examine how Indigenous Peoples are represented in these films and if they are presented differently than other characters. The characters of these documentaries have been analysed according to multiple categories and variables to see if there were differences between the characters. And if there were differences, what was the reason for that? Was that because the characters were Indigenous Peoples? Or could the difference be explained with the rules of the cinematic language? The method used to collect data to perform these analyses is ethnographic content analysis, a qualitative research method that is explained in this chapter. How the three documentaries were chosen, how the categories and variables were chosen and how it was determined if a character was an Indigenous person or not, is also explained in this chapter.

# 3.1 Defining who is Indigenous

In order to define if the characters in the three chosen movies were Indigenous, a definition of Indigenous Peoples was needed. How can they be defined? Is there one definition for all the different Indigenous Peoples? And what definition is suited to use in this study?

In order to ensure that the rights of Indigenous Peoples are being preserved, the United Nations created a declaration of rights for Indigenous Peoples: UNDRIP which was adopted by the General Assembly on the 13<sup>th</sup> of September in 2007 (www.un.org). This declaration is now supported by almost all countries. However, the UNDRIP is not a legally binding declaration and it does not offer a detailed definition of Indigenous Peoples. Many different organisations have tried to define Indigenous Peoples. On a global scale, on a governing level, scientists and academia, and Indigenous organisations have all tried to define Indigenous Peoples. Therefore, many definitions exist. Jeff Corntassel lists those definitions and the pros and cons of those definitions in his article: Who is Indigenous? 'Peoplehood' and ethnonationalist approaches to rearticulating Indigenous identity (Corntassel 2003). As he explains in his introduction, it is best if

Indigenous Peoples are only defined by Indigenous Peoples themselves (Corntassel 2003, 75). He has examined many different definitions and gives his own rearticulated definition. In Corntassels words Indigenous Peoples are:

- "Peoples who believe they are ancestrally related and identify themselves, based on oral and/or written histories, as descendants of the original inhabitants of their ancestral homelands;"
- "Peoples who may, but not necessarily, have their own informal and/or formal
  political, economic and social institutions, which tend to be community-based
  and reflect their distinct ceremonial cycles, kinship networks, and continuously
  evolving cultural traditions;"
- 3. "Peoples who speak (or once spoke) an Indigenous language, often different from the dominant society's language even where the Indigenous language is not 'spoken', distinct dialects and/or uniquely Indigenous expressions may persist as a form of Indigenous identity;"
- 4. "Peoples who distinguish themselves from a dominant society and/or other cultural groups while maintaining a close relationship with their ancestral homelands/ sacred sites, which may be threatened by ongoing military, economic or political encroachment or may be places where Indigenous Peoples have been previously expelled, while seeking to enhance their cultural, political and economic autonomy."

Corntassel is an Indigenous scholar and has carefully fused several definitions. Therefore this definition has served as a guide for identifying the Indigenous characters in these documentaries. In order to define whether or not the characters in the movies were Indigenous persons or not, some steps were taken:

- The first step was to look at how the filmmakers approach the character. Maybe the host introduced them as an Indigenous person. It is also possible the movie used nametags on screen when the character was introduced. Maybe the character introduced themselves as an Indigenous person. This step is in line with part 1 of Corntassels definition where Indigenous Peoples identify themselves. If the movie introduces the character as Indigenous, it may be assumed that the character has told the movies makers to introduce him or her that way.
- The second step was to use language as an identifier. This step is in line with part 3 of Corntassels definition. Especially in Mexico there are a lot of Indigenous languages and it is one of the main identifiers for Indigenous Peoples

- there and to what group they belong. Since two of the movies are about the Maya and the connection to the present, this was a promising tool for identifying the characters.
- The third and final step was to search the internet for extra information on the characters. A summary of this information is given in appendix 3. Most characters in the movies are scholars, either schooled in Western countries or the countries where the movies were shot. Additional information about these characters, what they studied and what they are working on, can be found on websites of the universities they are employed at. Often when someone working in the field of Indigenous research they are vocal about it online. This is in line with part 1 of Corntassels definition where Indigenous Peoples identify themselves. They can do that online using their scholarly platforms.

If these steps were followed and there were no signs that a character was Indigenous, they were not counted as such in this study. Chapter 4 shows which characters were identified as Indigenous and which were not.

#### 3.2 Introduction into ethnographic content analysis

Ethnographic content analysis was used as a method to analyse the documentaries. Ethnographic content analysis is a form of content analysis, which in turn is a qualitative research method. Qualitative research methods focus on the point of view of the people studied, instead of the point of view from the researcher (Liamputtong and Ezzy 2005, 2). The result is that the context of the content becomes clear to the researcher which makes it possible to research the process and the meaning of the content (Krippendorf 2019, 29). That is the first reason ethnographic content analysis was used for this thesis. Understanding the process is important for film, because it is an organisational product (Altheide and Schneider 2013, 15). What this means is that the product (the film) exists of multiple facets coming together in one product. For film, the different facets are the script, the camera work, the sound, the editing, etc. A lot of people work on different parts of the product, but they need to work together to create one end product. This thesis focusses mostly on the camerawork, of which the most important parts have been explained in chapter 2.

A second reason for using ethnographic content analysis is that when the process of data collection has started, it is possible to reflect and return to the drawing board to

see if there are more variables that are important to incorporate into the analysis (Altheide and Schneider 2013, 37).

Thirdly, ethnographic content analysis offers a method for systematically studying how filmmakers use visuals (Altheide and Schneider 2013, 33). As Krippendorf explains in his book: "(...), content analysis is an unobtrusive technique that allows researchers to analyse relatively unstructured data in view of the meanings, symbolic qualities, and expressive contents they have and of the communicative roles they play in the lives of the data's sources (Krippendorf 2019, 51)."

The aim of content analysis is to find a way to analyse the meaning of the subject matter whilst still being able to make valid inferences from the data. However, most content does not have a single meaning (Krippendorf 2019, 28). Therefore it must be clear what data will be analysed and how it will be analysed (Krippendorf 2019, 24). This will be explained in the next paragraph.

# 3.3 The use of ethnographic content analysis

The method used for this study was based on *Qualitative Media Analysis* (2013) by Altheide and Schneider. The authors define the term *document* as: "Any symbolic representation that can be recorded or retrieved for analysis" (Altheide and Schneider 2013, 6). In the case of this study, the term document refers to the documentaries that have been analysed. Altheide and Schneider explain the process of ethnographic content analysis step by step. These steps and how they were implemented in this research will be explained in this chapter.

After the selection of the research topic (step one), the next two steps focus on becoming familiar with the context of the document that is being researched and to look for examples of that type of document (Altheide and Schneider 2013, 39). Chapter 2 explains the cinematic language and part of the filmmaking process, providing the knowledge needed to collect data from the documentaries. How this data was collected will be explained in the next paragraph.

# 3.4 Data collection

Step four, according to Altheide and Schneider (2013, 44), is to set up categories to guide the data collection. For this study, a character form was drafted. It consisted of

seven categories by which each character was analysed (appendix 1). For a description of each category and the variables within that category see appendix 2. In chapter 2 the categories and variables were explained more elaborately in the context of film. Someone was counted as a character when they were interviewed in the film, when they were introduced by the host, when they were telling something as an expert, or when they were in a conversation with the host.

The first category was 'screen time'. The purpose was to record the total amount of time a character would be on screen.

The second category was 'time speaking'. The purpose was to record the total amount of time the different characters could be heard during the movie.

The third category is 'activities'. The purpose of this category was to observe and count what kind of activities the characters took part in. However, after collecting the first data from the first movie (step 5 by Altheide and Schneider 2013, 44), it became clear that this category was not needed to analyse the characters.

The fourth category was 'interview style'. The purpose of this category was to count how many times the characters were interviewed in the different interview styles.

The fifth category was 'placement in frame'. The purpose of this category was to count how many times the characters were placed in different parts of the frame.

The sixth category was 'camera angle'. The purpose of this category was to count how many times the characters were filmed from different camera angles.

The final category was 'shot size'. The purpose of this category was to count how many times the characters were filmed in different shot sizes.

#### 3.5 Sampling strategy

The sampling rationale used in this thesis was theoretical sampling (Altheide and Schneider 2013, 55). This strategy is used to compare documents and seek patterns among them (Altheide and Schneider 2013, 57). The ideal sample range is when there

are samples of, in this case, each genre of documentary film (Altheide and Schneider 2013, 60). Then one would have a complete range.

The documentaries were sampled using five criteria:

- The focus of the movie had to be on the archaeology of Central America, in
  order to give the possibility to the filmmakers to make use of Indigenous
  Peoples who are descendants from the many people that lived there in the past,
  studied by archaeologists. The filmmaker needed to have the opportunity to call
  on these Indigenous Peoples as experts to talk about their heritage and their
  point of view on the past.
- 2. The documentary had to be produced in the past ten years to study the current practice of documentary making. UNDRIP was signed in 2007 and according to UNDRIP, States have to ensure that the State owned media reflects Indigenous cultural diversity and has to encourage privately owned media to do the same (General Assembly 2007, 8). To study whether or not production companies (State or privately owned) implemented these guidelines from UNDRIP in their documentary making practices, the ten year mark was chosen.
- 3. Movies of 45 to 60 minutes were chosen. The filmmakers would have about the same amount of time to tell their story. Therefore, it is possible to compare how the filmmakers chose to make use of their characters. How long they let them talk compared to the host or the narrator or compared to other characters, for example.
- 4. Movies from different genres were chosen. This way a more complete range is covered with this thesis.
- 5. Movies from different production companies were chosen. Production companies often have a certain brand they want to attain, for example National Geographic. Therefore, they produce documentaries in a certain way. To study how the different production companies (might) implement an Indigenous perspective in their own way, documentaries from three different production companies were chosen.

The three documentaries that were sampled are shown in table 1.

Table 1: Information of the sampled documentaries.

Documentary #	1	2	3
Title	Lost Kingdoms of	Maya Underworld –	Cracking the
	Central America –	The Real Doomsday	Maya code
	Between Oceans and		
	Empires		
Production	2014	2012	2008
year			
Duration	00:59:17	00:44:58	00:52:48
Genre	Quest	Quest and	Reconstruction
		reconstruction	
Production	British Broadcasting	National Geographic	Public
company	Corporation (BBC)		Broadcasting
			Service (PBS)
Director	Dominic Gallagher	Rick King	David Lebrun
Main film	Costa Rica	Mexico	Mexico,
locations			Guatemala,
			Honduras
Topic	The rise and fall of	A quest to answer	How the Maya
	ancient civilisations in	the question: is the	hieroglyphs were
	Costa Rica and what	world going to end	deciphered by
	influenced this.	in 2012 as predicted	scholars over the
		by the Maya?	course of the 20 <sup>th</sup>
			century.

The data was first recorded on paper character forms and after collection (step 8 by Altheide and Schneider 2013, 62) it was transferred from the paper forms to a Microsoft Excel database. In the remaining four steps of Altheide and Schneider's method (Altheide and Schneider 2013, 68-72) the data is analysed and compared by looking at "extremes". Chapter 4 reports these analyses. In the case of this study this was done using the independent samples t-test to check if there were significant differences between characters within one variable. There is a significant difference if the p-value is less than 0,05 (p<0,05). Paragraph 4.1.3 shows an example of how this was calculated. After all variables and characters had been compared using the independent samples t-

test, the results showed whether or not some characters were filmed differently than others. Combining those analyses showed how the filmmakers portrayed the characters in that movie. With those results the research questions were answered (chapter 5).

# Chapter 4 – Analyses and results

In this chapter the data that was collected from the three documentaries was analysed and explained. The characters (a more detailed description of the characters can be found in appendix 3) have been analysed using different categories. The results of these analyses are discussed in this chapter. The three documentaries will each be analysed separately.

#### 4.1 Documentary 1

Table 2: General information of documentary 1.

Title	Lost Kingdoms of Central America – Between Oceans and	
	Empires	
Director	Dominic Gallagher	
Production company	BBC	
Production year	2014	
Genre	Quest	
Duration	00:59:17	

#### 4.1.1 Abstract

This documentary is part of a series about the lost kingdoms of Central America. In the series Dr. Jago Cooper (the host) takes the audience on a quest to answer questions about forgotten civilisations and how they came to rise, but also how they came to fall. In this movie Dr. Jago Cooper explores Costa Rica (fig. 16).

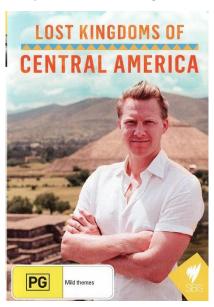


Figure 16: Character 1.1, Jago Cooper explores Central America (after www.imdb.com/title/tt4058292/).

His goal is to find out who the people were that lived in Costa Rica in Pre-Columbian times. He wants to answer the question of how the civilisations of the ancient Costa Ricans rose, flourished and eventually fell, and why that story is still a mystery. He does so by visiting several experts (characters) on several sites. They can tell him specifics about that site, the people that were there in the past and what that site was used for by those people. At every site he answers questions, but also gains new questions which lead him to the next expert on the next site. The movie ends with him visiting possible descendants from the ancient Costa Ricans. An Indigenous Peoples, where he speaks with the shaman and gains answers to the movies big question. According to this shaman the ancient civilisations fell because of the invading Spaniards and the diseases they brought with them. Jago, however, gives an alternate possible explanation. He says it is possible when communities grew, the once bountiful resources became more scarce, leading to conflict about the resources and causing downfall of those communities. The movie ends with a summary of what Jago learned about the ancient Costa Ricans. In this movie, only one of the seven characters was identified as an Indigenous person, character 1.7 (table 3). See appendix 3 for more information about the characters.

Table 3: List of characters in documentary 1.

Character #	Name	Indigenous person?	Gender	Role in the movie
1.1	Jago Cooper	No	Male	Host and narrator
1.2	Jeffrey Frost	No	Male	Archaeologist
1.3	Myrna Rojas	No	Female	Archaeologist
1.4	Ricardo Vazquez	No	Male	Archaeologist
1.5	Mauricio Murillo	No	Male	Archaeologist
1.6	Francisco Corrales	No	Male	Anthropologist
1.7	Meo Leandro	Yes	Male	Shaman and spokesperson of the Bribri peoples

# 4.1.2 Screen time and time speaking

The first documentary can be categorised as a quest, where the host takes the audience on a journey to find answers about the past. This means that the host (character 1.1) will

be seen and heard the most in this movie. For this movie the host has 21 minutes and 37 seconds of screen time, which is 36% of the movie. The amount of time he can be heard speaking (on, as well as, off screen) is 37 minutes and 18 seconds which is 62% of the duration of the movie. This means that character 1.1 tells most of the story. The documentary includes six other characters, most of which are researchers. All of them have considerable less screen time or speaking time than character 1.1 (table 4).

Table 4: The 'screen time' and the 'time speaking' per character in percentages of the total duration of the movie.

Characters	Screentime in %	*	Time speaking in %
Character 1.1		36,1	62,8
Character 1.2		6,1	5,9
Character 1.3		1,7	2,3
Character 1.4		7,2	7,5
Character 1.5		1,8	2,4
Character 1.6		5,7	5,5
Character 1.7		2,5	0,7

Characters 1.2 through 1.7 are experts who only talk about a small subject in the movie and answer some of the host's questions, after which he gains more questions and moves on to the next expert (character). It is therefore logical that these characters have less screen time and speaking time than the host (character 1.1).

It is important to note that the hosts and narrators of the films have been left out of most graphs. The hosts of documentaries one and two (characters 1.1 and 2.1) have the most screen time compared to the other characters. The hosts of documentaries one and two, and the narrator of documentary three (character 3.1), can be heard talking the most throughout the films. Also, none of them were identified as Indigenous for this study. Since the differences in 'screen time' and 'time speaking' (and therefore also with the other variables which are related to 'screen time') with the other characters were too large, it would have distorted the graphs. Therefore, the hosts and narrators were not included in most graphs. The caption of the graph shows what characters were included.

In this first documentary the amount of time the experts can be seen or heard follows a certain editing tempo, as can be observed in figure 17. It shows that every other character is longer visible and audible. Characters 1.2, 1.4, and 1.6 are all between 5,5%

and 7,5% of the time visible and audible, whilst characters 1.3, 1.5, and 1.7 are between 0,7% and 2,5% visible and audible. The filmmakers have done this to maintain the pace of the film. If the movie has a certain pace, it makes it easier for the audience to follow that pace and follow the story.

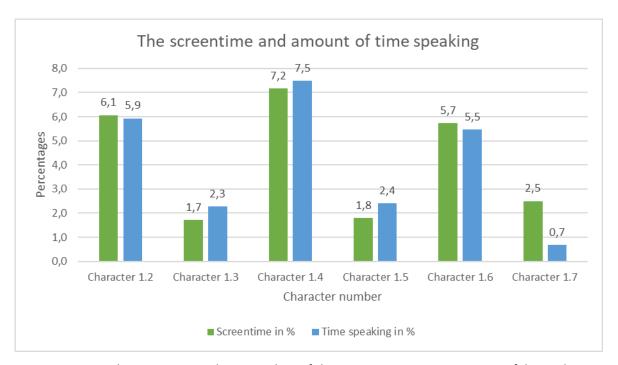


Figure 17: The screen time and time speaking of characters 1.2 - 1.7 in percentages of the total duration of the movie.

In this film only one of the characters is an Indigenous person, character 1.7 (his name is Meo Leandro). What is noticeable is that Meo Leandro (fig. 18) is the only character who is not a researcher or scholar. He is introduced as a shaman of the Bribri peoples of Costa Rica. The difference between 'screen time' and 'time speaking' is the highest with him. They film him whilst performing a treatment on a sick baby and afterwards the host interviews him briefly. What this shows is that the filmmakers try to incorporate an Indigenous perspective. However, because Meo Leandro has the least amount of speaking time it seems as though the filmmakers do not deem what he has to say as important as what the other characters have to say.



Figure 18: Character
1.7, Meo Leandro, the
only Indigenous
person in
documentary #1 (still
from the movie: Lost
Kingdoms of Central
America – Between
Oceans and Empires).

#### 4.1.3 Interview style

As can be observed from figure 19, the filmmakers used a variety of styles to film the characters whilst being interviewed. In order to calculate if there were any significant differences in the use of the different interview styles, the independent samples t-test was used. The first step was to calculate averages for every character in all categories and all variables. This needed to be done in order to compare the characters with each other. Here is an example of how the average use of interview style for character 1.2 was calculated from the raw data: 6 (the amount of turfs for 'talking head') + 1 (the amount of turfs for 'interaction') + 6 (the amount of turfs for 'voice over') = 24 interview styles used for this character in total.

The average use of 'talking head' is: 6/24\*100= 25%. This is the percentage of the amount of times 'talking head' was used by the filmmakers as an interview style for character 1.2. This method was used for all categories and variables, and in combination with every character. Of these averages, new tables were created and the graphs were made, for example figure 19.

The second step was to use the independent samples *t*-test. This test was used to compare the averages of all characters, per variable. With the category 'interview style': using the *t*-test in Excel, the variables were compared to each other. The results are in table 5. The x's in the table signify that either those two variables are the same and therefore cannot be compared (for example 'in action' and 'in action'), or that the result of the comparison between those variables is already elsewhere in the table (for example 'in action' and 'interaction').

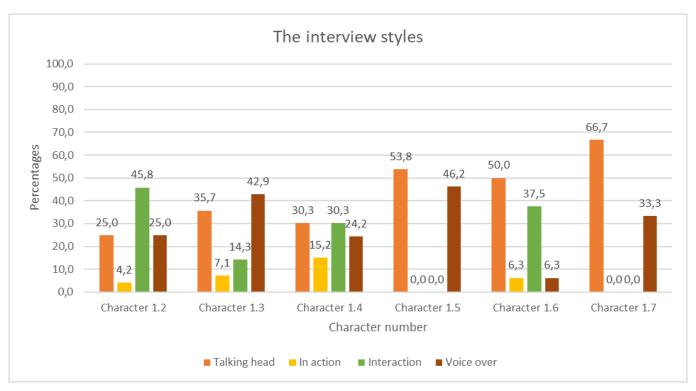


Figure 19: In percentages, these are the average amount of shots used for the different interview styles with characters 1.2-1.7.

For example, the result of the *t*-test comparing 'talking head' and 'interaction' was p-value=0,06. The p-value needs to be less than 0,05 (p-value<0,05) in order to show a significant difference between the two variables that are being compared. This means that between 'talking head' and 'interaction' there was no significant difference in how the filmmakers used these two variables. There was also no significant difference between 'talking head' and 'voice over', and between 'interaction' and 'voice over'.

Table 5: The p-values of the category 'Interview styles' of documentary 1.

Interview styles	In action	Interaction	Voice over
Talking head	0,00	0,06	0,14
In action	х	0,08	0,00
Interaction	х	x	0,42

In table 5, the results that showed significant differences are underlined. There were significant differences between the use of 'talking head' and 'in action', and between the use of 'in action' and 'voice over'. This is probably because the interview style 'in action' was used the least overall (fig. 19) even though all characters were filmed in the

field or in a museum. However, they gave the host and the audience a tour (fig. 20) of their work field instead of actually being filmed during work.

The fact that there are no significant differences in the use of the interview styles other than in combination with 'in action', means the filmmakers do not seem to have had a preference in how they would use the other interview styles to film the characters.

Two characters that stand out in figure 19 are characters 1.5 and 1.7. With them, the filmmakers only used 'talking head' and 'voice over'. With character 1.5, the reason for that is explained in paragraph 4.1.6. Character 1.7 is Meo Leandro, the Indigenous person. As was explained in 4.1.2, he was filmed whilst performing a treatment. However, this is not considered 'in action' because he did not explain his work himself. Instead, the host explained what Meo Leandro was doing, while he was doing it. Afterwards they interviewed him, which explains why he was only interviewed in the styles 'talking head' and 'voice over'.



Figure 20: Example of the interview style: interaction. Character 1.2 (Jeffrey Frost, left) giving character 1.1 (Jago Cooper, right) a tour of the site he is working on (still from the movie: Lost Kingdoms of Central America – Between Oceans and Empires).

#### 4.1.4 Placement in frame

The same method as explained in paragraph 4.1.3, was used to calculate significant differences between every category, such as placement in frame. There were significant differences between the variables 'foreground' and 'background, as well as 'foreground' and 'middle', where the p-values were less than 0,05 (table 6). This means that on average, every character is placed most often in the foreground of the shot (fig. 21). This shows the character who is most important in that shot at that moment. The audience should be looking at them, everything else is less important (Bordwell and Thompson 2013, 179). This helps the audience focussing on the character and what they are talking about. The filmmakers vary the position of the characters in shot, except with character 1.5. Why character 1.5 can only be seen in the foreground is explained further in paragraph 4.1.6.

Table 6: The p-values of the category 'Placement in frame' of documentary 1.

Placement in	Background	Middle
frame		
Foreground	0,00	0,00
Background	х	0,59

What is noticeable is character 1.7, the Indigenous person, has the most variety in where he is placed in the frame. The filmmakers show him in the middle and background more compared to the other characters. This can be explained by the fact that they film him whilst he is doing something rather than explaining something. They show him performing a treatment on a baby in a hut, so the crew may have been limited in the places where they could stand and film Meo Leandro.

What is important to note is the p-value=0,00 between the variables 'foreground' and 'middle'. The result from the t-test was p-value=0,0006, however this rounds off to 0,00. If the p-value=0,00 in other results shown in following figures, it is a matter of what decimals were used to round off. Two decimals were chosen because the p-value has to be <0,05, therefore it does not matter what digits are beyond the two decimals.

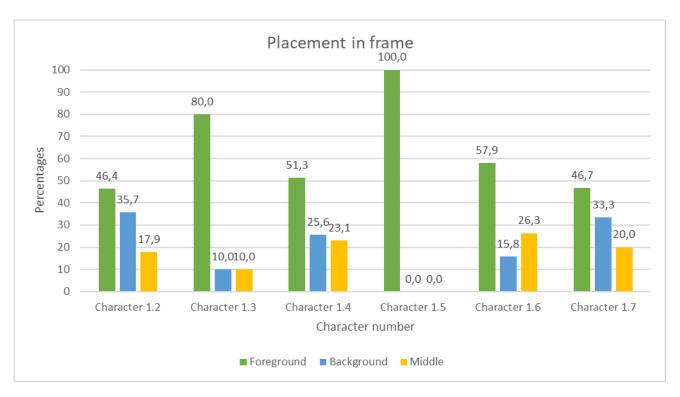


Figure 21: In percentages, these are the average amount of shots used of the different places in the frame with characters 1.2 -1.7.

### 4.1.5 Camera angles

Table 7 shows there were significant differences between the use of the camera angle 'eye-level' in relation to both the 'low facing up' and the 'high facing down' angle. Figure 22 shows the camera angle that was used the most with every character was 'eye-level'. That means the characters were filmed with a neutral camera angle. When filming someone at eye-level it shows that they are not more or less important than other people (Lievaart 2015, 52). They speak to the audience as an equal. This is important because it makes the audience feel spoken to as an equal. They will not be looked down upon by the experts, which would happen if the experts are filmed from a 'low facing up' angle. Likewise the characters are more convincing than when they are being filmed from a 'high facing down' angle because then the audience would literally look down on the experts. What is noteworthy is that the filmmakers seem to have applied this use of the camera angle 'eye-level' to the Indigenous character as well (fig 22). Therefore it seems the filmmakers tried to treat Meo Leandro the same way as the other characters with the use of their camera angles.

Table 7: The p-values of the category 'Camera angles' of documentary 1.

Camera angles	High facing down	Eye-level
Low facing up	0,45	0,00
High facing down	х	0,00



Figure 22: In percentages, these are the average amount of shots used for the different camera angles with characters 1.2 -1.7.

### 4.1.6 Type of shot

The types of shot used per character (fig. 23) does not tell us all that much at a first glance. When using the independent samples *t*-test, it shows that there are no significant differences between the variables in this category (table 8). For every character the filmmakers used a variety of the different shot types. Except for character 1.5 (Mauricio Murillo), who they mostly used 'close up' for. Not only did they mostly use close ups for him, he is also the only one exclusively shown in the foreground (fig. 21) and filmed at eye-level (fig. 22). The explanation for this can be found in the scene with Mauricio. When analysing this scene it seems as though the filmmakers did one interview with him on one spot of the site Guayabo de Turrialba. They have filmed this interview (fig. 24) and cut it during editing. Whilst you hear Mauricio explaining, the filmmakers show footage of the site (fig. 25), but they intersect it with shots of the character talking, so the audience can follow that it is still him who is explaining. All these factors combined make it seem like this character is treated differently from the

others. This was most likely not the intention of the filmmakers, since he is not one of the characters who gets more screen time or time to speak (table 4).

Table 8: The p-values of the category 'Type of shot' of documentary 1.

Type of shot	Medium shot	Long shot	Wide shot
Close up	0,35	0,09	0,09
Medium shot	х	0,18	0,18
Long shot	х	х	0,97

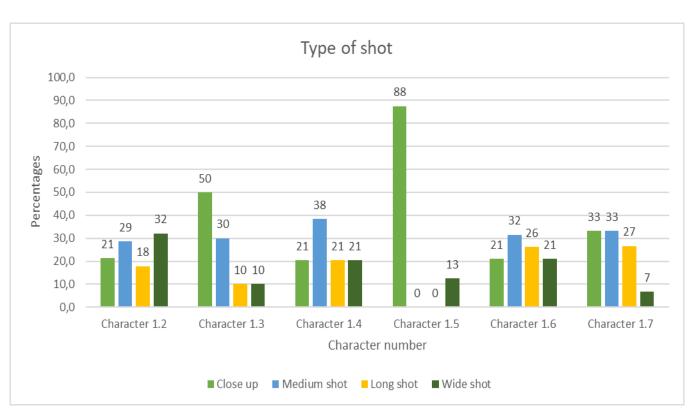


Figure 23: In percentages, these are the average amount of shots used for the different shot types with characters 1.2 -1.7.



Figure 24: Character 1.5 (Mauricio Murillo) is being interviewed about the site Guayabo de Turrialba (still from the movie: Lost Kingdoms of Central America – Between Oceans and Empires).



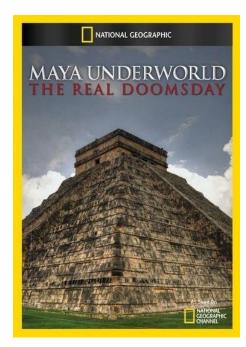
Figure 25: Aerial photo of the site Guayabo de Turrialba in Costa Rica (still from the movie: Lost Kingdoms of Central America – Between Oceans and Empires).

## 4.2 Documentary 2

Table 9: General information of documentary 2.

Title	Maya Underworld – The Real Doomsday
Director	Rick King
Production company	National Geographic
Production year	2012
Genre	Quest and reconstruction
Duration	00:44:58

#### 4.2.1 Abstract



This documentary can be categorised as a quest and a reconstruction. The host (character 2.1) takes the audience on a journey to find answers, therefore making it a quest. The filmmakers support the story with re-enacted scenes, therefore the movie is also a reconstruction.

Figure 26: The film poster of the movie: Maya
Underworld – The Real Doomsday (after
www.amazon.com/Maya-Underworld-RealDoomsday/dp/B00B8H1QZM).

The movie revolves around the prediction the Maya made that the world was going to end on 21<sup>st</sup> of December in 2012 (fig. 26). This idea came into the world from an interpretation of a Maya hieroglyph by a scholar in the 19<sup>th</sup> century. To figure out if this is actually going to happen, the host (character 2.1, Diego Buñuel) visits several archaeological sites. The question he wants answered is: Are we all doomed? Diego will try to answer this question by looking at human remains in Mexican *cenotes*. According to "The Oxford Essential Dictionary of Foreign Terms in English" a cenote is: "a natural under-ground reservoir of water, such as occurs in the limestone of Yucatan, Mexico" (Speake and LaFlaur 1999, 56). According to the movie, the Maya sacrificed captives by throwing them in these cenotes, to appease their gods. Amongst the remains they also find the remains of children, which shocks Diego the most. The host also visits other sites and experts, but the scenes involving the diving and the preparation for the diving

are the most important for the story. At first when the film crew and the archaeologists crew want to dive it starts to rain, making it impossible to see anything under water. Therefore, during the movie the filmmakers keep circling back to this event until the crew can actually make the dive. Even though this scene only partly answers the big questions of this movie, the filmmakers emphasize it for the drama and the suspense to keep the audience watching. Eventually, the movie ends with an expert at a totally different site. He gives the comforting idea of the Maya calendar being a cycle and therefore starting over again instead of being the end. What is noticeable when looking at table 10 is that none of the eight characters can be identified as an Indigenous person. This means the filmmakers did not use an Indigenous perspective in the making of this film, at least not that is visible to the public. They also did not make use of Indigenous Peoples as experts to answer this movie's questions.

Table 10: List of characters in documentary 2.

Character #	Name	Indigenous	Gender	Role in the movie
		person?		
2.1	Diego Buñuel	No	Male	Host and narrator
2.2	Guillermo de Anda	No	Male	Archaeologist
2.3	Becky Kagan Schott	No	Female	Underwater camera-
				operator
2.4	John Hoopes	No	Male	Archaeologist
2.5	David Stuart	No	Male	Archaeologist
2.6	Marshall Masters	No	Male	Doomsday prepper
2.7	William Saturno	No	Male	Archaeologist
2.8	Erin Harvey	No	Male	Camera-operator

### 4.2.2 Screen time and time speaking

This documentary has a host (character 2.1), similar to the first documentary, who takes the audience on a quest. However in this movie, the host has someone who acts somewhat like a sidekick: character 2.2. Table 11 shows they have the longest 'screen time' and 'time speaking'.

Table 11: Table of the 'screen time' and 'time speaking' in percentages of the total duration of the movie, per character.

Characters	Screentime in %	Time speaking in %
Character 2.1	20,7	61,2
Character 2.2	5,5	10,3
Character 2.3	0,7	0,6
Character 2.4	2,7	3,4
Character 2.5	0,4	0,1
Character 2.6	2,4	2,5
Character 2.7	1,3	3,1
Character 2.8	0,1	0,2

Character 2.2, Guillermo de Anda, can be characterised like a sidekick, because he is the hosts go-to expert in the main event of the movie (the dive into the cenote). This explains why Guillermo has more 'screen time' and 'time speaking' than the other characters. Guillermo de Anda is Mexican and worked at the Universidad Autónoma de Yucatán as a professor of archaeology. However, through the method explained in paragraph 3.1, he was not identified as an Indigenous person for this thesis.

## 4.2.3 Interview style

The *t*-test between the different interview styles, shows no significant difference between any of the interview styles (table 12). What is noticeable, is that characters 2.5 and 2.8 have only been filmed whilst 'in action' (fig. 27). Character 2.8 is only in shot once. In this scene it becomes clear he is one of the cameramen of this movie and whilst filming got hit on the head by some falling rocks. The filmmakers decided to show this event in the movie and let him explain briefly what happened to him. This explains why he has so little screen time (table 11) and why they only show him in shot once. It also explains why that one shot caused the 100% 'in action' at his character in figure 27.

Table 12: The p-values of the category 'Interview styles' of documentary 2.

Interview styles	In action	Interaction	Voice over
Talking head	0,48	0,54	0,51
In action	х	0,28	0,26
Interaction	х	Х	0,95

In figure 27, character 2.3 has been mostly interviewed using the style 'interaction'. Character 2.3 is Becky Kagan Schott and she is a camera-operator specialised in underwater videography. In the film they have a scene where they dive into a underwater cave. This is where she films everything. Before and after their dive attempts, the host talks to her about what they are going to do. This is why she is mostly interviewed in the style 'interaction'.

Character 2.5 is archaeologist David Stuart who has helped crack the Maya hieroglyphic system from a very young age. In this movie however, the filmmakers do not let him explain much about his expertise. They only show him whilst he is excavating. The filmmakers showed his skills rather than his knowledge. As opposed to character 2.6 (Marshall Masters). He is mostly interviewed in the style 'talking head', making it seem that what he has to say is very important. However, this character is not a scholar. He is a former CNN producer (appendix 3) and in the movie he talks about how he prepares for the impending apocalypse. He has 2% more screen time and 2,4% more speaking time than the archaeologist David Stuart (table 11). Even though Stuart is actually a scholar in the Maya hieroglyphs, the filmmakers chose to let the doomsday prepper talk more. A doomsday prepper is someone who prepares for the end of the world by equipping themselves with survival materials (www.newyorker.com). This shows that the movie focusses more on creating dramatic scenes and spreading fear amongst the viewers rather than convey actual archaeological theories. They want to keep the attention of the viewers up until the end of the movie where they explain the world will not end.

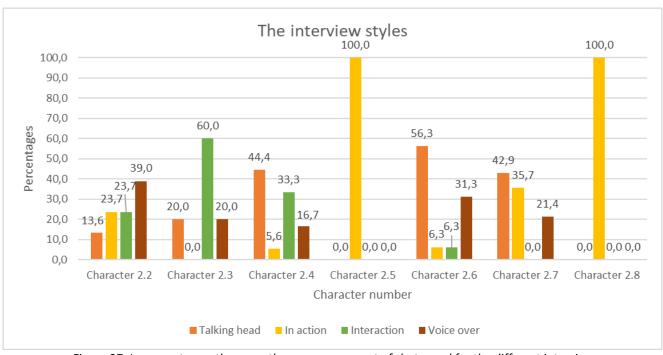


Figure 27: In percentages, these are the average amount of shots used for the different interview styles with characters 2.2 - 2.8.

#### 4.2.4 Placement in frame

Table 13, shows there are significant differences between the placement of the characters in the 'foreground' and in the 'background' or 'middle'. This means that on average the filmmakers placed the characters most often in the foreground during the movie. As explained previously in paragraph 4.1.4, this is to get the audience to focus on the character and what they are talking about.

Table 13: The p-values of the category 'Placement in frame' of documentary 2.

Placement in	Background	Middle
frame		
Foreground	0,00	0,00
Background	X	0,31

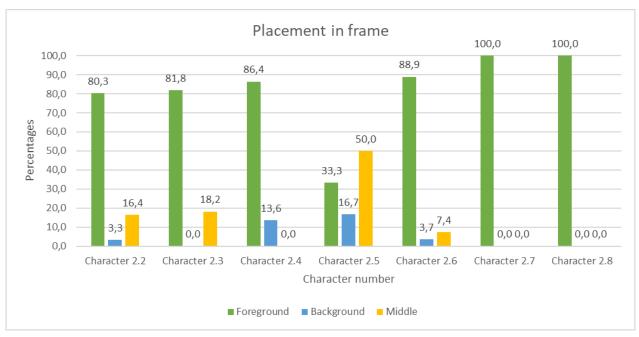


Figure 28: In percentages, these are the average amount of shots used of the different places in the frame with characters 2.2 - 2.8.

The most variety with 'placement in frame' can be seen with character 2.5 (fig. 28). This character is David Stuart, who is also a character in documentary #3. He has played a big role in the decipherment of Maya hieroglyphics (appendix 3). The variety in his placement in frame can be explained with the context of the scene. In this movie, the filmmakers show Stuart whilst he is working but they do not let him talk or explain much (table 11). For that reason, it is more difficult to film him in the foreground. They focus more on what he was doing rather than film him solely as a talking head. It is not necessary for that part of the movie to show him in the foreground of the shot.

### 4.2.5 Camera angles

Table 14 shows there are significant differences between the camera angle 'eye-level' and the other camera angles. As explained previously in this chapter (see paragraph 4.1.5) the characters are filmed at 'eye-level' to speak to the audience as an equal. The diving scene is the reason why there is more variety in the use of camera angles for character 2.2, Guillermo de Anda (fig. 29). De Anda has been filmed underwater by character 2.3 (Becky Kagan Schott), therefore it is much more difficult to film someone at eye-level. They have made multiple diving shots of de Anda (fig. 30 and 31). Since the importance of this scene is for the audience to be looking at the characters exploring, it is less important to film the characters at eye-level.

Table 14: The p-values of the category 'Camera angles' of documentary 2.

Camera angles	High facing down	Eye-level
Low facing up	0,79	0,00
High facing down	х	0,00

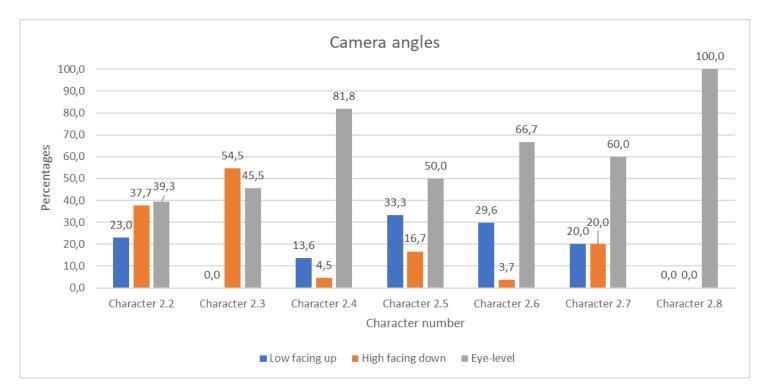


Figure 29: In percentages, these are the average amount of shots used for the different camera angles with characters 2.2 - 2.8.



Figure 30: Character 2.1 (Diego Buñuel, right) and character 2.2 (Guillermo de Anda, left) diving into cenote San Antonio in the Yucatan of Mexico. This shot is angled 'low facing up' (still from the movie: Maya Underworld – The Real Doomsday).



Figure 31: Character 2.1 (left) and character 2.2 (right) on their dive. This shot is angled 'high facing down' (still from the movie: Maya Underworld – The Real Doomsday).

## 4.2.6 Type of shot

With the category 'type of shot' in documentary 2, there was no significant difference in the use of close ups and medium shots (table 15), which both seem the most used when looking at figure 32.

'	abie 15: in	e p-vaiues	of the co	ategory	rype of si	not oj	aocumentary	/ 2.

Type of shot	Medium shot	Long shot	Wide shot
Close up	0,35	0,12	0,03
Medium shot	х	0,00	0,00
Long shot	х	х	0,10

There were significant differences between the 'close up' and the 'wide shot', between the 'medium shot' and the 'wide shot', and between 'medium shot' and the 'long shot'. Character 2.8 stands out as only being filmed in 'close-up'. That can be explained, because character 2.8 is only in shot once (see paragraph 4.2.3) which is why that one shot shows up as 100% in figure 32. All of this shows us that the filmmakers did not have a preference in how they wanted to film the characters in different shot sizes.

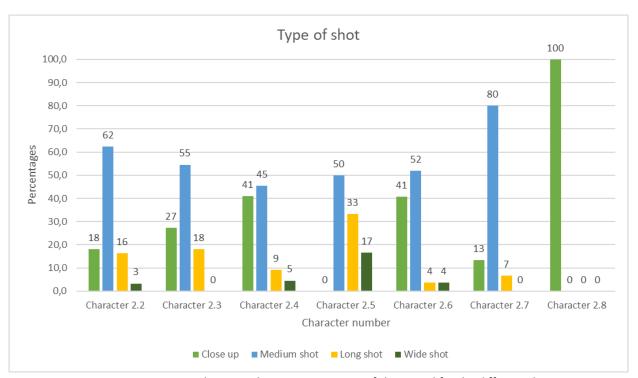


Figure 32: In percentages, these are the average amount of shots used for the different shot types with characters 2.2 - 2.8.

## 4.3 Documentary 3

Table 16: General information of documentary 3.

Title	Cracking the Maya code
Director	David Lebrun
Production company	PBS
Production year	2008
Genre	Reconstruction
Duration	00:52:48

#### 4.3.1 Abstract

This documentary is part of the NOVA series by PBS. In this movie they reconstruct how the Maya hieroglyphic script was deciphered. The Maya civilisation of Central America created its own language and hieroglyphic writing. They told their stories by carving them on monuments, painting them on pottery and on walls of important buildings, and they drew them in bark-paper books also known as codices. For a long time Western scholars could not decipher the Maya hieroglyphs (fig. 33).

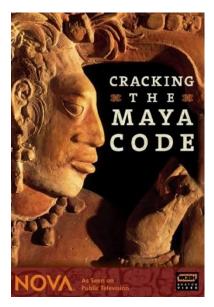


Figure 33: The film poster of the movie Cracking the Maya Code (www.amazon.com/Cracking-Maya-Code-NOVA/dp/B0019LLEW2).

The movie starts with an explanation of how the knowledge of this Maya script was lost, because it was destroyed by the Spaniards in the 16<sup>th</sup> century. It is estimated that by the 18<sup>th</sup> century nobody could write in this script anymore. The movie continues by showing how the decipherment of the Maya script developed, step by step. This started in the 19<sup>th</sup> century. The movie calls on experts to tell the story of the decipherment of the Maya script. Some of those experts helped deciphering the code. The movie shows

which hieroglyphs were deciphered in what order and how that led to a better understanding of the Maya civilisation and its history. The movie ends with how this newfound understanding can help the living descendants from the Maya understand their history better and learn the hieroglyphs and the language themselves. Out of the 14 characters in this movie, only one can be considered an Indigenous person (table 17), according to the method explained in paragraph 3.1. That character is character 3.13, Lolmay García Matzar. Even though the movie tells the story of the destruction of the Maya script and how that influences modern day descendants, and how the decipherment influences these descendants as well, the filmmakers did not chose to call on more Indigenous Peoples as experts to talk about their perspective on this story.

*Table 17: List of characters in documentary 3.* 

Character #	Name	Indigenous	Gender	Role in the movie
		person?		
3.1	Jay O. Sanders	No	Male	Narrator
3.2	George Stuart	No	Male	Archaeologist
3.3	Michael D. Coe	No	Male	Archaeologist/
				author
3.4	William Fash	No	Male	Archaeologist
3.5	Linda Schele	No	Female	Epigrapher
3.6	Simon Martin	No	Male	Epigrapher
3.7	David Stuart	No	Male	Archaeologist
3.8	Peter Mathews	No	Male	Archaeologist
3.9	Stephen Houston	No	Male	Archaeologist
3.10	Gillett Griffin	No	Male	Curator
3.11	Kathryn Josserand	No	Female	Archaeologist
3.12	Barbara Macleod	No	Female	Anthropologist
3.13	Lolmay García Matzar	Yes	Male	Linguist/ teacher
3.14	Nicholas Hopkins	No	Male	Anthropologist

# 4.3.2 Screen time and time speaking

As with the other 2 documentaries, the host, or in this case the narrator, can be heard the most throughout the movie. He talks for 47,9 % of the duration of the movie. The narrators script is written by the filmmakers to tie the stories of the experts into the

story the filmmakers want to tell (Pepe and Zarzynski 2012, 113). Everything the experts cannot explain or anything that cannot be shown in images will be told by the narrator in order to have a cohesive story.

Combined, all characters talk for 74,3% of the movie, but they are only shown for 9% of the movie. The filmmakers will use the remainder of the interviews as a voice-over. The reason for this is that a spectator does not like to look at an expert telling something. They want to be shown what is being talked about. Especially if the topic of the movie is visual, like the hieroglyphs, it is easier for an audience to understand what experts are talking about if the hieroglyphs are shown (Pepe and Zarzynski 2012, 130). This can be observed in figure 34. All characters either have more 'speaking time' than 'screen time' or the same amount of 'speaking time' and 'screen time'. Every time an expert starts talking the filmmakers show the expert's face. It is important for an audience to know who is talking, otherwise the audience can get confused. Therefore the expert's face will be shown for a few seconds when they start talking about their area of expertise. Then the remainder of the expert's story will be used as voice-over.

The two characters that stand out in figure 34 are 3.3 and 3.7. they have the most speaking time. Character 3.3 is Michael D. Coe. He is the author of the book 'Breaking the Maya Code' on which this movie is based. It therefore makes sense he is the character that talks most throughout the movie, apart from the narrator. Character 3.7 is David Stuart who was also a character in documentary 2. In that movie the makers did not let him talk much, but in this one they chose to let him explain more. He is an expert in Maya hieroglyphs and had a big part in their decipherment, as mentioned in paragraph 4.2.3. Most of the other characters in this movie also talk about how they worked with Stuart, so again it is logical he has more time to talk in the movie than some of the other characters.

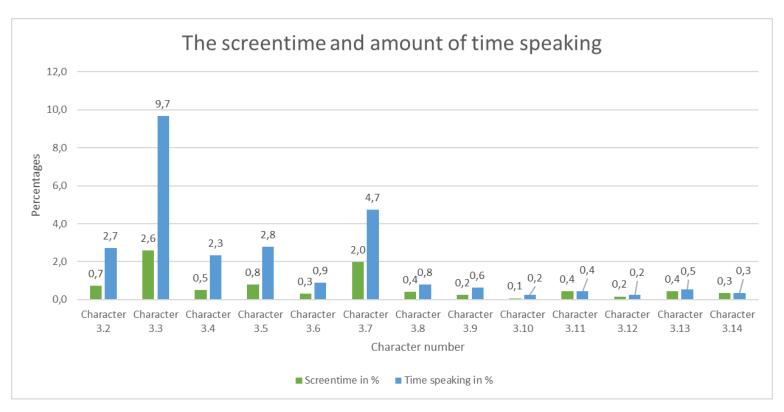


Figure 34: The screen time of characters 3.2 - 3.14 and the amount of time they speak in the movie, in percentages of the total duration of the movie.

### 4.3.3 Interview style

As can be seen from table 18 and figure 35, the most used interview style for this documentary was 'talking head', since there were significant differences with the other interview styles. As explained in chapter 2, a talking head is when someone is filmed with a focus on their head and shoulders (Danesi 2009). They are (usually) sitting down in their office and they are filmed from their waist up, making it somewhat look like they are a talking head (fig. 36). Experts are filmed this way in their office to make them look professional and like they know what they are talking about. The two characters (3.11, Kathryn Josserand, and 3.14, Nicholas Hopkins) that were also interviewed with the style 'interaction' were husband and wife. They were interviewed together, but the filmmakers also used shots of them not in frame together to alternate between in editing.

Table 18: The p-values of the category 'Interview styles' of documentary 3.

Interview styles	In action	Interaction	Voice over
Talking head	0,00	0,00	0,00
In action	х	0,92	0,18
Interaction	x	х	0,16

There are also two characters who were filmed whilst in action. One of them (character 3.7) is David Stuart, who was also in documentary #2. He was filmed while doing some archaeological work at a site. However in this movie, the makers let him speak more and explain what that work entails and what they can learn from it. The other character that is filmed in action is character 3.13, the Indigenous person Lolmay García Matzar. They interviewed him in the style 'talking head', but they also show him whilst he is teaching a class in his community on Maya hieroglyphic script and language. This is towards the end of the movie to show how the decipherment of the Maya script has impact on Maya communities today.

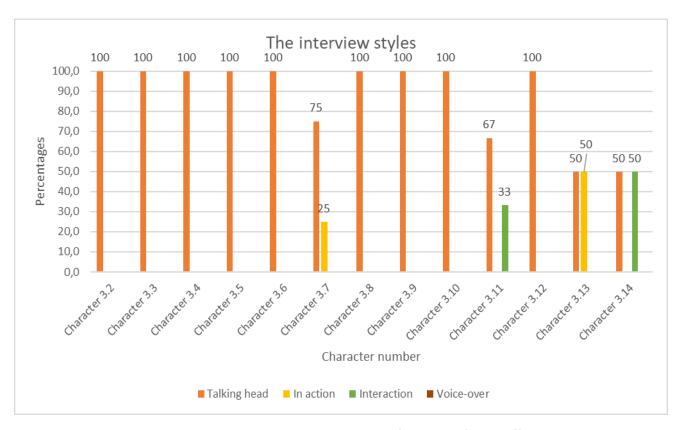


Figure 35: In percentages, these are the average amount of shots used for the different interview styles with characters 3.2 - 3.14.



Figure 36: Character
3.3 filmed and
interviewed in
'talking head' style
(still from the movie:
Cracking the Maya
code).

#### 4.3.4 Placement in frame

There were significant differences between the placement of the characters in the 'foreground' and their placement in the 'background' or 'middle' of the shot (table 19). When a character is in the foreground in a shot, the attention of the viewer goes to the character quicker than when the character is in the background. This was also observed in the other two documentaries. Character 3.6 (Simon Martin) was filmed differently (fig. 37). He was filmed behind his desk, placing him in the middle of the shot, instead of the foreground (fig. 38). However, this does not mean the focus is not on him. Since Martin is still filmed as a talking head, the audience will still focus on him. Character 3.13, Lolmay García Matzar, is the only one who is filmed in the background, because he was filmed in action (fig. 35). He was filmed while teaching a class. In that class he stands in the background of the shot (fig. 39). Here the focus should not necessarily be on him, but on the whole classroom to show the modern day descendants from the Maya learn about their heritage.

Table 19: The p-values of the category 'Placement in frame' of documentary 3.

Placement in	Background	Middle
frame		
Foreground	0,00	0,00
Background	х	0,21

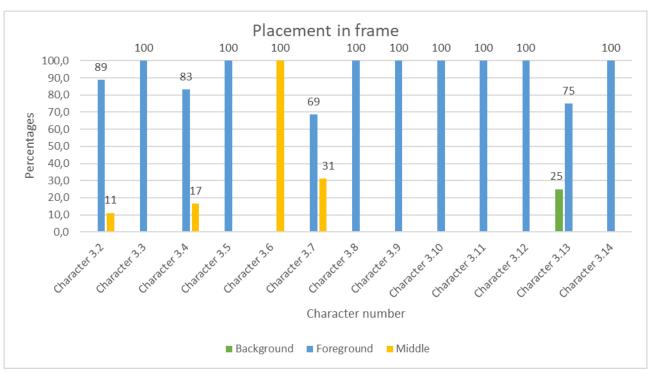


Figure 37: In percentages, these are the average amount of shots used of the different places in the frame with characters 3.2 - 3.14.



Figure 38:
Character 3.6
sitting behind
his desk, in the
middle of the
shot (still from
the movie:
Cracking the
Maya Code).



Figure 39: Character 3.13 in the background of the shot, because he is teaching a class (still from the movie: Cracking the Maya Code).

## 4.3.5 Camera angles

Figure 40 shows character 3.5 (Linda Schele) was the only character who was filmed using only the 'high facing down' camera angle. This was probably because the interview the filmmakers used, was filmed more than 10 years before the release of *Cracking the Maya Code*. The director David Lebrun interviewed Schele in 1997 (www.nightfirefilms.org) and she passed away a year later. In the ten years that followed, the narrative of the movie and what its purpose is have most likely changed. When a director starts working with a production company or tv channel, the companies have certain requirements for the movies they produce. The director has to collaborate with them to get his film on the air. Thus, the original interview was probably done with different intentions than the movie that it was ultimately used in.

There was no significant difference between the use of the camera angles 'low facing up' and 'eye-level' (table 20), the filmmakers alternated with filming some characters at eye-level and others from a lower perspective facing upwards.

Table 20: The p-values of the category 'Camera angles' of documentary 3.

Camera angles	High facing down	Eye-level
Low facing up	0,07	0,39
High facing down	х	<u>0,01</u>

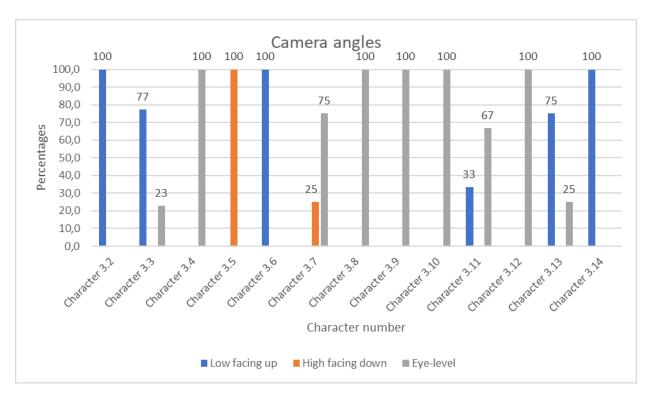


Figure 40: In percentages, these are the average amount of shots used for the different camera angles with characters 3.2 - 3.14.

### 4.3.6 Type of shot

In this movie they showed the characters in order of appearance, and did not cross cut them often. The shot sizes the filmmakers used the most for the characters were 'close up' and 'medium' shots. There was no significant difference in the use of these shot sizes (table 21). Figure 41 shows a build-up in the use of the medium shot for the first few characters (characters 3.2-3.6). After that the use of the medium shot decreases and there is a build-up in the use of the 'close up' (characters 3.7-3.12). The intentions behind this from the filmmakers can be explained with a combination of the use of camera work and editing. At the beginning of the movie they are setting up the story and use the most neutral shot size for the experts, which is the 'medium' shot. Later in the movie they want to build suspense to keep the audience's attention. They start to use 'close ups' on the characters. What this does is give a feeling of tension and the idea

that something exciting is about to be revealed by the characters about the Maya hieroglyphs (Bordwell and Thompson 2013, 193). It makes the audience pay close attention and give the idea that what is being said is very important for the story.

Table 21: The p-values of the category 'Type of shot' of documentary 3.

Type of shot	Medium shot	Long shot	Wide shot
Close up	0,09	0,00	0,00
Medium shot	х	0,00	0,00
Long shot	х	х	0,91

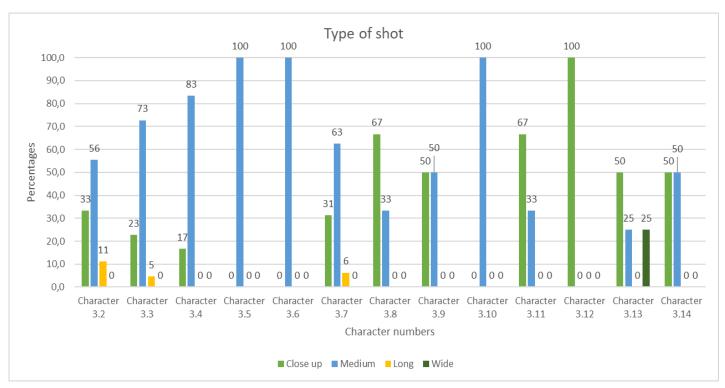


Figure 41: In percentages, these are the average amount of shots used for the different shot types with characters 3.2 - 3.14.

The Indigenous character in this movie (character 3.13) stands out in this figure because he is the only character shown in a 'wide' shot. As explained in paragraph 4.3.4 he was filmed whilst teaching a class. In these shots he stands in the far back of the room which explains why he is the only one filmed in a 'wide' framed shot.

All results have been analysed and have shown some important discoveries on how the filmmakers show their (Indigenous) characters and what characters they choose. The next chapter discusses these discoveries and answers the research questions.

### Chapter 5 - Conclusion and Discussion

#### 5.1 Research questions

The main research question is: How are Indigenous Peoples (re)presented in contemporary documentaries on the archaeology and heritage of Central America? The operational questions are:

- How can the cinematic language be used to present characters in a documentary?
- 2. How do documentaries include Indigenous Peoples or an Indigenous perspective?
- 3. Are Indigenous and non-Indigenous characters presented equally, or is there a difference?

Documentary filmmakers have different tools to present their characters. All these tools can be described as the cinematic language. Filmmakers can choose the camera angle, the shot size, where the characters are placed in the frame, what style to use for the interviews and how much screen time they give the characters.

The second and third sub questions can only be answered for the three documentaries that were analysed for this thesis. Those sub questions will be answered per documentary, starting with documentary #1 (paragraph 5.2). The goal was to qualitatively analyse three documentaries. This means that the results cannot give an answer that is applicable to all documentaries on the archaeology and heritage of Central America. However, the documentaries were sampled from three of the main Western production companies in order to have a varied sample. The results of this study do say something about the attitude of these companies in these examples, towards telling a complete story and using multiple perspectives (for example by incorporating an Indigenous perspective).

## 5.2 Discussing "Lost Kingdoms of Central America – Between Oceans and Empires"

As was shown in paragraph 4.1.1, this movie has seven characters, and one of them is an Indigenous person. Apart from that, four of the seven characters are researchers who studied and work at universities in Costa Rica (appendix 3). The remaining two characters are Western educated researchers, meaning they studied and work at universities either in Europe or the United States. When looking at these numbers, it seems that the filmmakers tried to use a variety of different perspectives on the subject

of the movie by using Western researchers, regionally educated researchers, and also an Indigenous perspective. To answer sub question two: the movie included an Indigenous Person, who gives his perspective on the subject of the movie. However, this was only one character out of seven. One person's perspective cannot represent a whole group of people, especially not such a diverse group such as all the different Indigenous Peoples. The filmmakers show five different archaeologists with different perspectives, so why not show multiple Indigenous characters with different perspectives? One Indigenous person out of seven characters is not equal representation.

The third sub question asks if this Indigenous character was treated equally or differently than the other characters. As shown in paragraph 4.1.2, the Indigenous character (Meo Leandro) was given the least amount of time to speak in this movie. The filmmakers showed what Meo Leandro does in his daily life, while the host explains it, rather than have Meo Leandro explain it himself. Later de host does interview him, but this was the shortest interview compared to the other characters. All other characters are shown explaining their research and what they are working on, except Meo Leandro. This means that in this movie, the Indigenous person is presented differently because he does not get to explain his work himself.

The filmmakers did not seem to have treated Meo Leandro differently in regard to the shot size, placement in frame, and the use of camera angles (see paragraphs 4.1.4 - 4.1.6). This movie did use an Indigenous person and showed his daily work and rituals. However by not letting him explain that work himself, but rather have the host explain it, the Indigenous perspective might get lost. It seems like Meo Leandro's work gets white-'splained by the host. White-'splaining can be defined as: "the paternalistic lecture given by white people toward a person of colour about that person's ethnicity or culture" (www.urbandictionary.com). It gives Meo Leandro less authority than the other characters, since they do get to explain their work themselves, but his everyday work needs to be explained by the 'white' host. This is how the Indigenous character was treated differently than the other non-Indigenous characters in the film.

## 5.3 Discussing "Maya Underworld – The Real Doomsday"

The answer to the second sub question for this movie can be found in chapter 4, paragraph 4.2.1. This movie has eight characters in total, but none of them could be identified as an Indigenous person. This shows that the makers of this documentary did

not include an Indigenous perspective on the topic of this movie. Since there were no Indigenous characters in this movie, it could not be analysed whether they were treated or presented differently than the other characters.

However, even though this movie did not include Indigenous Peoples, the filmmakers did seem to treat certain characters differently than others. They even did so in a way that seems unpreferable when it comes to how they showed and interpreted archaeological theories. The question of this movie was if there was going to be a big apocalyptic doomsday. This doomsday is said to have been predicted by the Maya. However, this prediction is a theory that is not necessarily supported by the whole archaeological community. The film ends with the counter arguments for this theory, but not after dramatizing this doomsday by creating scary scenarios. The filmmakers focus on creating fear and drama with the audience, to keep their attention (Kilborn 1997, 161). One way they do this is by giving character 2.6 (Marshall Masters) quite a lot of screen time, even though he is a doomsday prepper and not a researcher. They give him more screen time and time to talk, than character 2.5 (David Stuart). This is probably because Stuart is an archaeologist and does not explain things as dramatic as Masters. The focus of this movie was to create drama, to keep the audience's attention. However, this may have led to a movie that is not as archaeologically accurate, and certainly not inclusive when it comes to introducing an Indigenous perspective.

### 5.4 Discussing "Cracking the Maya Code"

As was previously shown in paragraph 4.3.1, the third movie analysed has 14 characters. Only one of those characters can be identified as an Indigenous person (character 3.13, Lolmay García Matzar). This means that this movie does incorporate an Indigenous perspective, however, it is only one character out of 14. All other characters are from Western countries and are Western educated researchers (appendix 3). The filmmakers also did not make use of regionally educated researchers and experts who might have different perspectives on the subject.

With regards to sub question 3, are the Indigenous and non-Indigenous characters presented equally, or is there a difference? In regard to the screen time and the time that García Matzar can be heard speaking he is not necessarily treated differently than other characters. He does not have that much screen time, but certainly does not have the least. He is interviewed as a talking head, like all other characters. The one thing that

is different is the filmmakers also show him whilst he is 'in action'. Because García Matzar was filmed 'in action', he is also the only character placed in the background in certain shots, and the only character who was filmed in a 'wide shot'. However this is to show what his work is and the impact his work has on the community, since he teaches Maya hieroglyphic workshops. Moreover, they let him explain that work himself, in the voice-over, unlike the first documentary where the 'white' host explains the work of the Indigenous character. Having García Matzar explain the work himself seems more respectful towards the character.

In this movie the makers probably wanted to highlight García Matzar's work to the audience to show the importance of the decipherment of the Maya hieroglyphic script for the current Maya communities. This makes it seem as if the filmmakers know that it is important to incorporate an Indigenous perspective on the topic of the movie. Nonetheless, it is only the perspective of one Indigenous person paired with the perspectives of 13 non-Indigenous characters. This one Indigenous person cannot speak for all the different Maya communities that are still present today (Cadena 2017, 12). Maya communities today have such a great variety of languages that it would certainly be interesting to hear their thoughts on the history of how the Maya hieroglyphic script came to a point where the knowledge on how to write it was wiped out and how it had to be deciphered again centuries later by Western scholars.

#### 5.5 Noteworthy observations

In all three movies the host or the narrator were Western males and they all have the most 'screen time' and 'time speaking'. This means that the subjects of the movies, which were partly about the history and heritage of Indigenous Peoples, were mostly told from a Western perspective.

Out of the three movies and 29 characters, only five characters were female. In the first movie this was one out of seven (character 1.3, Myrna Rojas). In documentary #2 this was one out of eight (character 2.3, Becky Kagan Schott). She was the underwater camera-operator in this movie. Similar to other industries, in the film industry most camera-operators are male, especially when they are specialised in filming in dangerous situations, like filming underwater. To hire a woman for this part in the movie seems like the filmmakers have a progressive mindset. Unfortunately, they did not use this same mindset regarding the use of Indigenous Peoples as experts in their movie. And, one

female character out of eight, is not equal representation. Especially because this character does not say anything about the subject of the movie. The filmmakers could have used female experts on the topic of the movie. In the third movie, out of the 14 characters, three were female, which means they were slightly better represented than the Indigenous characters in this documentary. What is noteworthy is that character 3.11, Kathryn Josserand, was mostly filmed and interviewed together with her husband, character 3.14 (Nicholas Hopkins). This is strange for an audience because in the movie they do not let the viewers know that they are married, so why would they be filmed together? Especially since none of the other characters were filmed in pairs. Why the filmmakers chose to interview them together is unknown.

The three movies also used music in different ways. The first and third documentary used sound in an overall calm way to enhance the mood of the scene. If a scene became a bit more exciting the tempo of the music would accelerate or the volume went up, but overall the music was calm and fitting to the stories. The second movie however used music quite differently. Since the second movie was focussed on creating drama and keeping the audience's attention, the music was also more dramatic. For example if there was a scene that focussed on human sacrifice, the drums would be louder and faster creating a sense of dread. This way the sense of dread is linked to what the movie explains about the Maya performing human sacrifices. This could be problematic for descendants of the Maya today if an audience believes everything the movie tells them. The modern day descendants and their respective Indigenous groups then might be more vulnerable to become a stereotype.

This study did not focus on researching sound or female representation in these movies in a qualitative way. However, these observations stood out whilst the movies were being analysed. It could be worthwhile to study these observations in future research.

#### 5.6 Collaborative filmmaking

Of the three documentaries in this study, Lost Kingdoms of Central America – Between Oceans and Empires was the movie that tried to present different perspectives by using locally educated researchers, Western educated researchers, and an Indigenous character. However, the filmmakers could have incorporated more Indigenous perspectives to have a more inclusive representation of the different Indigenous Peoples. The practice of including Indigenous Peoples in the making of movies about

their history or heritage is called *collaborative filmmaking*. There are groups and filmmakers that already practice this. An example of a collaborative documentary filmmaking effort is ACAMPADOC in Panama. This is a documentary film festival, but also a camp or residency for people who want to learn how to make documentaries (www.acampadoc.com) (fig. 42). The festival focusses on teaching (Indigenous) people how to make documentaries and promote stories that aim at heritage preservation.



Figure 42: An ACAMPADOC documentary in progress (www.filmfreeway.com/ACAMPADOC/photos).

The people of ACAMPADOC want to tell the stories that are not told in regular cinemas. This is an example of how Indigenous Peoples are picking up the camera more often to tell their own stories and rewrite history. However, not all Indigenous Peoples necessarily know the cinematic language and the best way to convey that story to broader audience. Or they might not have access to (expensive) filming equipment such as cameras, sound recording devices, and computers with editing software. If the big production companies (for instance BBC, National Geographic, or PBS) were to collaborate with Indigenous groups and initiatives it would be possible to reach a wider audience with Indigenous stories and perspectives. This could benefit Indigenous Peoples who are trying to rewrite history by including their stories and perspectives. It can also help Indigenous groups because it gives them a voice to show the world current problems they might be facing. An example of how collaborative filmmaking had an impact is the movie *Roma* by Alfonso Cuarón. The movie is about Cleo who has a Mixtec background. She is the help in a middle-class white family who live in Mexico in the 1970s (fig. 43).



Figure 43: Screenshot of the movie Roma. On the left is Cleo (played by Yalitza Aparicio) the Mixtec help of a middle-class white family (www.newsweek.com/roma-yalitza-aparicio-alfonso-cuaron-1299110).

The story is written and directed by Cuarón and it is heavily based on his own upbringing. He was one of the white children with a Mixtec nanny. Even though he is not an Indigenous person himself, the actress (Yalitza Aparicio) who plays Cleo is. Aparicio is actually the first Indigenous woman to be nominated for Best Actress at the Oscars, even though she has no previous experience in acting. Because of Cuarón's personal story and working closely together with his former Mixtec nanny, and with Aparicio, they were able to tell a story that resonates deeply with many Indigenous (domestic) workers (Valencia and Menta 2019). And apparently not only the story resonated with Indigenous Peoples but with a bigger audience since Roma had 10 Oscar nominations. This is exactly why collaborative filmmaking is important. When Indigenous Peoples get more access to the media of film it could help voicing their problems to a bigger audience and gain more support. It will also help to counteract any remaining stereotypes Indigenous Peoples might still be facing by allowing them to show the world how they really are instead of through the eyes of Western filmmakers.

#### 5.7 Conclusion

The answer to the main research question of this thesis, how are Indigenous Peoples (re)presented in contemporary documentaries on the archaeology and heritage of

Central America?, is that Indigenous Peoples are hardly represented in these three documentaries. Some of the filmmakers chose to incorporate a Indigenous perspective. Indigenous voices and perspectives can be used more in the making of these films and can contribute in the (re)writing of history. Some filmmakers do collaborate with Indigenous Peoples (ACAMPADOC with their classes and festival) and they show what impact it has on not only Indigenous communities, but also with a wider audience (Alfonso Cuaron with his movie Roma). Now it is up to the main, Western productions companies, such as, but not limited to BBC, National Geographic, and PBS, to start adding an Indigenous perspective. It is, after all, the duty of these production companies since the United Nations adopted UNDRIP in 2007.

BBC and PBS have tried to include an Indigenous perspective with *Lost Kingdoms of Central America* – *Between Oceans and Empires* and *Cracking the Maya Code*, however one Indigenous character out of seven or out of 14 is not an equal representation of such a vast group of different Indigenous Peoples who all look at the subjects of those movies from different perspectives. The movie *Maya Underworld* – *The Real Doomsday*, National Geographic does not include an Indigenous perspective at all.

Not only is the Indigenous perspective lacking, if it is included the Indigenous characters were sometimes presented differently than the other characters. In *Cracking the Maya Code* this made sense because of the cinematic language. The filmmakers filmed the Indigenous character whilst he was working. Therefore the shot sizes used to film him, his placement in frame, his interview style all differed from the other characters because of that scene. In other cases, the different treatment of the Indigenous character did not have a clear reason. For example in *Lost Kingdoms of Central America – Between Oceans and Empires*, where the Indigenous character gets the least 'speaking time'. Not only did he have the least speaking time, the non-Indigenous host explained the Indigenous characters work instead of having him explain it himself. All other characters did get a chance to explain their research and work themselves, so it does not make sense that the Indigenous characters does not get the same opportunity to do so.

UNDRIP was adopted by the UN in 2007 and all of these movies have been made in the period following that. As a filmmaker, to not include an Indigenous perspective in the movie that you are making about history or heritage that is partly theirs, means you did not do enough research on the subject. This leads to mistakes often made about

minority people in a faraway place and it is the reason why stereotypes on Indigenous Peoples in the media still remain (Alia 2010, 32). Representation and inclusiveness of Indigenous Peoples is important in the media to prevent stereotypes from developing further (Francis and Francis 2010, 211). This is why article 16 was implemented in UNDRIP:

- "1. Indigenous Peoples have the right to establish their own media in their own languages and to have access to all forms of non-Indigenous media without discrimination.
- 2. States shall take effective measures to ensure that State-owned media duly reflect Indigenous cultural diversity. States, without prejudice to ensuring full freedom of expression, should encourage privately owned media to adequately reflect Indigenous cultural diversity."

After watching and analysing these three movies it seems like a lot more can be done by Western filmmakers, who create documentaries on the history or heritage of Indigenous Peoples, to include Indigenous Peoples and their perspectives, because UNDRIP does not seem to have had any influence in the production of these three movies. It must be stressed that these three movies only represent a sample and this was a qualitative research project using content analysis methods to look at these three movies specifically. However, the way the filmmakers and the production companies made these movies does reflect their views on how to write and create documentaries and how they apply those views. Therefore it is possible to have some sort of notion on how they work and how they can improve that by incorporating different perspectives. Especially when they are making movies about the history and heritage of Indigenous Peoples.

#### Abstract

In the past, archaeologists and Indigenous Peoples did not always co-operate well. This has changed for the better, but is that also reflected in documentaries about archaeology? Indigenous Peoples have been mis- and underrepresented in the mainstream media. It is therefore important to show the relationship between Indigenous Peoples and archaeologists in a correct way. Thus the research question of this thesis is: How are Indigenous Peoples (re)presented in contemporary documentaries on the archaeology and heritage of Central America? This was studied by analysing three documentaries. The cinematic language was explained in chapter two in order to be able to analyse documentaries. Then ethnographic content analysis was used to set up categories and variables to collect data from the films by analysing the characters. A definition of if a character was considered Indigenous or not was set up by studying the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), and the discussion between scholars on different definitions for Indigenous Peoples.

The analysis of the data showed that from the three movies, with a total of 29 characters, only two characters could be considered Indigenous. This means that in these movies the Indigenous perspective was underrepresented. Also, some of the variables showed that these Indigenous characters were treated differently than other characters. Western filmmakers or production companies should be aware that they are not inclusive, which they should be according to UNDRIP. Western filmmakers should start collaborating with Indigenous Peoples when making movies about their history and heritage, because then Indigenous Peoples can regain control of their stories and represent themselves.

## **Bibliography**

Alia, V., 2010. *The New Media Nation. Indigenous Peoples and Global Communication.*New York: Berghahn Books.

Altheide, D.L. and C.J. Schneider, 2013. *Qualitative Media Analysis*. Los Angeles: SAGE Publications.

Bordwell, D. and K. Thompson, 2013. Film Art. An Introduction. New York: McGraw-Hill.

Bowen, C.J., 2018. Grammar of the Shot. New York: Routledge.

Butler, M.L., 2018. "Guardians of the Indian Image": Controlling Representations of Indigenous Cultures in Television. *The American Indian Quarterly* 42 (1), 1-42.

Cadena, M. de la, and O. Starn, 2007. Indigenous Experience Today. Oxford: Berg.

Cadena, M.L., 2017. *The Maya, For Sale! Negotiating Mayaness*. Ann Arbor (unpublished Ph.D. dissertation The Claremont Graduate University).

Corntassel, J., 2003. Who is Indigenous? 'Peoplehood' and ethnonationalist approaches to rearticulating Indigenous identity. *Nationalism and Ethnic Politics* 9 (1), 75-100.

Danesi, M., 2009. Dictionary of Media and Communications. New York: Routledge.

Francis, M. and S. Francis, 2010. Representation and misrepresentation: San regional advocacy and the global imagery. *Critical Arts: A Journal of South- North Cultural Studies* 24 (2), 210-227.

Garwood, I., 2013. *The Sense of Film Narration*. Edinburgh: Edinburgh University Press Ltd.

General Assembly, 2007. United Nations Declaration on the Rights of Indigenous Peoples, New York, 13 September 2007. *General Assembly of the United Nations* 61/295. www.un.org/development/desa/Indigenouspeoples/declaration-on-the-rights-of-Indigenous-peoples.html, accessed on 10 May 2019.

Kilborn, R. and J. Izod, 1997. An Introduction to Television Documentary. Confronting Reality. Manchester: Manchester University Press.

Krippendorf, K., 2019. *Content Analysis. An Introduction to Its Methodology*. London: SAGE Publications Ltd.

Liamputtong, P. and D. Ezzy, 2005. *Qualitative Research Methods*. Oxford: University Press.

Lievaart, R.B., 2015. Films Maken. Amsterdam: QQleQ Dramaprodukties.

Nichols, B., 2010. *Introduction to Documentary*. Bloomington: Indiana University Press.

Pepe, P. and J.W. Zarzynski, 2012. *Documentary Filmmaking for Archaeologists*. Walnut Creek: Left Coast Press, INC.

Speake, J. and M. LaFlaur, 1999. *The Oxford Essential Dictionary of Foreign Terms in English*. Oxford: Oxford University Press.

Valencia, R. and A. Menta, 2019. Yalitza Aparicio, the First Indigenous Woman Nominated for Best Actress, on 'Roma,' Representation and Politics, *Newsweek* 8 February 2019, online available at (https://www.newsweek.com/roma-yalitza-aparicio-alfonso-cuaron-1299110), accessed on 8 april 2019.

Verstraten, P., 2008. Handboek Filmnarratologie. Nijmegen: Vantilt.

### Internet pages

www.acampadoc.com/quienes-somos/, accessed on 8 April 2019.

www.alumni.harvard.edu/travel/leaders/jeffrey-frost, accessed on 2 August 2017.

www.anthropology.fas.harvard.edu/people/william-l-fash, accessed on 16 November 2018.

www.anthropology.ku.edu/john-w-hoopes, accessed on 8 August 2017.

www.anthropology.yale.edu/people/michael-coe, accessed on 16 November 2018.

www.artmuseum.princeton.edu/story/gillett-griffin-collector-curator-and-scholar-dies-87, accessed on 16 November 2018.

www.art.utexas.edu/about/people/david-stuart, accessed on 8 August 2017.

www.britishmuseum.academia.edu/JagoCooper, accessed on 2 August 2017.

www.coasttocoastam.com/guest/masters-marshall/6157, accessed on 8 August 2017.

www.erinharvey.com/about/, accessed on 8 August 2017.

www.famsi.org/research/josserand/josserand.htm, accessed on 16 November 2018.

www.famsi.org/research/schele/index.html, accessed on 16 November 2018.

www.imdb.com/name/nm0761587/, accessed on 16 November 2018.

www.imdb.com/title/tt0472043/, accessed on 28 June 2017.

www.independent.academia.edu/NickHopkins/CurriculumVitae, accessed on 16 November 2018.

www.informal.utexas.edu/instructors/barb-macleod, accessed on 16 November 2018.

www.liquidproductions.com/about/becky-kagan-schott/, accessed on 8 August 2017.

www.macfound.org/fellows/232/, accessed on 16 November 2018.

www.museocostarica.academia.edu/FranciscoCorralesUlloa, accessed on 2 August 2017.

www.museocostarica.go.cr/es\_cr/acerca-del-departamento/contacte-al-equipo-33.html?Itemid=76, accessed on 2 August 2017.

www.mx.linkedin.com/in/guillermo-de-anda-aa000a15, accessed on 8 August 2017.

www.nationalgeographic.com.au/history/diego-buuel.aspx, accessed on 8 August 2017.

www.news.nationalgeographic.com/news/2006/12/061208-apocalypto-mel\_2.html, accessed on 28 June 2017.

www.news.nationalgeographic.com/news/2014/06/140612-maya-archaeology-george-stuart-national-geographic-mesoamerica/, accessed on 16 November 2018.

www.newyorker.com/culture/culture-desk/what-drives-doomsday-preppers, accessed on 12 March 2019.

www.nightfirefilms.org/breaking-the-maya-code/, accessed on 13 May 2019.

www.nightfirefilms.org/breakingthemayacode/interviews/GarciaMatzar(English).pdf, accessed on 16 November 2018.

www.sas.upenn.edu/anthropology/people/simon-martin-0, accessed on 16 November 2018.

www.ucr.academia.edu/MauricioMurilloHerrera, accessed on 2 August 2017.

www.un.org/development/desa/Indigenouspeoples/declaration-on-the-rights-of-Indigenous-peoples.html, accessed on 20 February 2019.

www.urbandictionary.com/define.php?term=White-%27splaining, accessed on 3 April 2019.

www.utexas.academia.edu/DavidStuart, accessed on 16 November 2018.

www.vivo.brown.edu/display/shouston, accessed on 16 November 2018.

www.web.mit.edu/cmrae/faculty/saturno-william.html, accessed on 8 August 2017.

## Links to the full documentaries

Documentary 1: Lost Kingdoms of Central America – Between Oceans and Empires http://www.dailymotion.com/video/x276o4o

Documentary 2: Maya Underworld – The Real Doomsday https://www.youtube.com/watch?v=5EmGRTT1eHE

Documentary 3: Cracking the Maya code https://topdocumentaryfilms.com/cracking-maya-code/

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# Appendices

# Appendix 1 – Character form

	ary:								
Character:									
Screen tim	e:								
Time speak	king:								
Activities: Host	Interviewee	Das	searcher on	Da	esearcher	Tour	guide	Everyday	(Re-en)
11031	Interviewee	site			f site	Tour	guiuc	work	acting
						<u> </u>		l .	
Interview s Talking he		n actio	nn.		Interactio	n		Voice-over	
raiking ne	.00	II acti	JII		interactio	11		Voice-over	
							Middle		
			Foreground				i ivilonie	1	
Place in fra Backgrour			Foreground				Middle	!	
			Foreground				ivildale	:	
Backgrour	nd		Foreground				Middle	:	
Backgrour	nd gle:		Foreground  High facing		n		Eye-lev		
Camera an	nd gle:				n				
Backgrour	nd gle:				n				
Backgrour Camera an Low facing	nd gle:				'n				
Backgrour	gle:	Mediu			n Long shot				

# Appendix 2 - Explanation of the character form

## Definitions of the categories and variables of the character form

The categories that were used to analyse the characters:

Screen time	The total amount of time in the movie that the character can be
	seen on screen. This category was timed using a stopwatch.
	Every time a character came into shot the stopwatch was
	started, and when the character disappeared from shot, the
	stopwatch was paused.
Time speaking	The total amount of time in the movie that the character
	speaks, either on screen or in voice-over. Time speaking was
	recorded either by timing the character using a stopwatch, or
	writing down from which point until which point in the film they
	were speaking. Every time a character started speaking, that
	time code would be written down. When they would stop
	speaking, that time could would also be written down. The time
	in between those time codes was summed up to create a total
	amount.
Activities	What the character is doing on screen.
	This is counted every time they go somewhere new and they
	start doing something else.
Interview style	How the character is shown whilst being interviewed or whilst
	talking/ explaining.
	This is counted every time the character is in a new shot.
Place in frame	Where the character is placed in the frame.
	This is counted every time the character comes in shot.
Camera angle	The angle that the camera was in whilst it was filming a
	character, so the angle from which we see the character on
	screen.
	This is counted every time the character comes in shot.
Shot size	How much of the character we see in shot.
	This is counted every time the character comes in shot.

The variables within the categories:

## Activities

Researcher on site	The character partakes in research on site, for example
	excavations.
Researcher off site	The character partakes in research that happens off site, for
	example in a museum or a lab.
Tour (guide)	The character is giving a tour, or showing someone around.
Everyday work	The character is doing something ordinary and non-academic,
	such as chopping wood or carrying water.
(Re-en)acting	The character is (re-en)acting something from the past.

## Interview style

Talking head	Only the character is being filmed whilst they are being
	interviewed. They are filmed from the waist or shoulders up,
	showing mostly their head.
In action	The character is doing something whilst being interviewed, for
	example showing the host around the site or showing finds.
Interaction	The character is in a conversation with someone, usually the
	host.
Voice-over	The character is talking, but they are not in frame.

## Place in frame

Background	The character is in the part of the shot that is the furthest from
	the viewer.
Foreground	The character is in the part of the shot that is nearest to the
	viewer.
Middle	The character is in the middle between the background and
	foreground.

## Camera angle

Low facing up	When the camera is filming from a low point, facing upwards so
	the character is filmed from below.
High facing down	When the camera is filming from a high point, facing downwards
	so the character is filmed from above.

Eye-level	When the camera is filming at the eye-level of the character, so
	the character is filmed upfront.

## **Shot size**

Close-up	When a character is shown from the shoulders up.
Medium shot	When a character is shown from the waist up.
Long shot	When a character fully in shot.
Wide shot	When a character is fully in shot from a distance. There is will also be a lot of environment in shot.

## Appendix 3 – Background information of the characters

Documentary 1 - Lost Kingdoms of Central America – Between Oceans and Empires Characters:

Character 1.1: Jago Cooper

Writer, host, and narrator of the film. British archaeologist who specialises in archaeology of the Americas (www.britishmuseum.academia.edu). In the documentary he speaks English and Spanish. In this thesis he will not be considered an Indigenous person.

## Character 1.2: Jeffrey Frost

He is an American archaeologist who specialises in the prehistory of southern Central America and the Central Andes (www.alumni.harvard.edu). In this film he is interviewed about the archaeological site Rivas, Costa Rica. In the documentary he speaks English. In this thesis he will not be considered an Indigenous person.

### Character 1.3: Myrna Rojas

She is a Costa Rican archaeologist who works as the head of the department of anthropology and history at the Museo Nacional in Costa Rica (www.museocostarica.go.cr). In this film she is interviewed at the Museo Nacional about gold and jade artefacts. In the documentary she speaks Spanish. In this thesis she will not be considered an Indigenous person.

### Character 1.4: Ricardo Vazquez

He is also a Costa Rican archaeologist who works for the Museo Nacional in Costa Rica (www.museocostarica.go.cr). In the film he is interviewed about the site Las Mercedes, Costa Rica. In the documentary he speaks English. In this thesis he will not be considered an Indigenous person.

## Character 1.5: Mauricio Murillo

He is a Costa Rican archaeologist who works for the university of Costa Rica at the department of anthropology (www.ucr.academia.edu). In the film he is interviewed about the site Guayabo de Turrialba, Costa Rica. In the documentary he speaks Spanish. In this thesis he will not be considered an Indigenous person.

#### Character 1.6: Francisco Corrales

He is a Costa Rican anthropologist, also specialised in archaeology who works at the Museo Nacional (www.museocostarica.academia.edu). In the film he is interviewed about the site Finca 6, Costa Rica. In the documentary he speaks Spanish. In this thesis he will not be considered an Indigenous person.

#### Character 1.7: Meo Leandro

A shaman of the Bribri peoples in Costa Rica. In the film he is interviewed about his practices as a shaman and the beliefs of the Bribri. In the documentary he speaks the language of the Bribri. In this thesis he will be considered an Indigenous person.

### Documentary 2 - Maya Underworld - The Real Doomsday

#### **Characters:**

Character 2.1: Diego Buñuel

Host and narrator of the film. He is a French journalist who studied journalism in Chicago and he is the grandson of the renowned Spanish film director Luis Buñuel (www.nationalgeographic.com.au). In the film he speaks English. In this thesis he will not be considered an Indigenous person.

#### Character 2.2: Guillermo de Anda

He is a Mexican archaeologist, specialised in underwater archaeology (www.mx.linkedin.com). In this film he guides Diego Buñuel into the cenotes of Yucatán, Mexico. In the documentary he speaks English. In this thesis he will not be considered an Indigenous person.

### Character 2.3: Becky Kagan Schott

She is an award winning underwater videographer from the USA (www.liquidproductions.com). In this film she shoots the underwater scenes in the cenotes. In the film she speaks English. In this thesis she will not be considered an Indigenous person.

## Character 2.4: John Hoopes

He is a American archaeologist, specialised in archaeology of Central America (www.anthropology.ku.edu). In this film he is interviewed by Diego about the Maya

calendar and codices. In the film he speaks English. In this thesis he will not be considered an Indigenous person.

Character 2.5: David Stuart

He is an American archaeologist who specialises in the epigraphy of the Maya (ww.art.utexas.edu). In the movie he shows new proof of the Maya writing about the end of the 13<sup>th</sup> baktun. In the film he speaks English. In this thesis he will not be considered an Indigenous person.

Character 2.6: Marshall Masters

He is a former CNN Science Features news producer from the USA (www.coasttocoastam.com). In the movie he is one of the firm believers in the impending apocalypse as predicted by the Maya (according to some theories) and he shows how he prepares for it. In the film he speaks English. In this thesis he will not be considered an Indigenous person.

Character 2.7: William Saturno

He is a American archaeologist who specialises in the archaeology of Mesoamerica (www.web.mit.edu). In the film he shows the public the site Xultun in Guatamala where murals show Maya scribes. In the film he speaks English. In this thesis he will not be considered an Indigenous person.

Character 2.8: Erin Harvey

He is an American cinematographer who works for several big production companies such as: National Geographic, The Discovery Channel, and PBS (www.erinharvey.com). In the film he works as one of the film crew, but is also shown in shot when he gets hurt at the site Xultun. In the film he speaks English. In this thesis he will not be considered an Indigenous person.

#### Documentary 3 - Cracking the Maya code

#### **Characters:**

Character 3.1: Jay O. Sanders

The narrator of the film. He is an American actor but also works as narrator for multiple shows (www.imdb.com). In the film he speaks English. In this thesis he will not be considered an Indigenous person.

### Character 3.2: George Stuart

He is an American archaeologist, specialised in Maya archaeology. He worked for the National Geographic Society for nearly forty years, where he was also Editor for Archaeology of National Geographic Magazine and Chairman of the Committee for Research and Exploration (www.news.nationalgeographic.com). In this film he speaks English. In this thesis he will not be considered an Indigenous person.

#### Character 3.3: Michael D. Coe

He is an American archaeologist, specialised in Mesoamerican archaeology and wrote the book "Breaking the Maya Code" (www.anthropology.yale.edu). Throughout the movie he helps reconstruct the history of how the Maya code was deciphered. He speaks in English. In this thesis he will not be considered an Indigenous person.

#### Character 3.4: William Fash

He is an American archaeologist, working as a Professor of Central American and Mexican Archaeology and Ethnology at Harvard (www.anthropology.fas.harvard.edu). In the movie he speaks English. In this thesis he will not be considered an Indigenous person.

### Character 3.5: Linda Schele (deceased)

She was an American epigrapher and expert in the field of Maya epigraphy and iconography (www.famsi.org). In the movie they use an old interview of her where she explains how she was part of deciphering the Maya hieroglyphs. She speaks English. In this thesis she will not be considered an Indigenous person.

## Character 3.6: Simon Martin

He is a British epigrapher with a focus on the Maya (www.sas.upenn.edu). His focus is on social and political organisation of the Maya. In the movie he talks English. In this thesis he will not be considered an Indigenous person.

#### Character 3.7: David Stuart

He is an American archaeologist, specialised in the archaeology, art and epigraphy of Mesoamerica (www.utexas.academia.edu). In the movie they show how he found is interest in Maya hieroglyphs from a very early age on. He speaks English in the movie. In this thesis he will not be considered an Indigenous person.

#### Character 3.8: Peter Mathews

He is an Australian archaeologist, who is specialised in the Maya and epigraphy (www.macfound.org). In the movie he talks about how he worked together with Linda Schele on deciphering the Maya hieroglyphs. In het movie he speaks English. In this thesis he will not be considered an Indigenous person.

#### Character 3.9: Stephen Houston

He is an American archaeologist, specialised in the Maya (www.vivo.brown.edu). In the movie he speaks in English. In this thesis he will not be considered an Indigenous person.

## Character 3.10: Gillett Griffin (deceased)

He was a curator of Pre-Columbian art at the Princeton University Art Museum (www.artmuseum.princeton.edu). In the movie he speaks only once (in English), but makes a very valid point: he tells us about how an Indigenous guide proposed to give the Maya lords Maya names instead of English or Spanish names. In this thesis he will not be considered an Indigenous person.

### Character 3.11: Kathryn Josserand (deceased)

She was an American archaeologist who specialised in Maya hieroglyphic writing and also the modern Chol language, which is descended from ancient Maya (www.famsi.org). In the movie they interview her together with her husband Nicholas Hopkins (character 3.14). She speaks in English. In this thesis she will not be considered an Indigenous person.

## Character 3.12: Barbara Macleod

She is an American anthropologist, who is specialised in Mayan languages and writing (www.informal.utexas.edu). In the movie she speaks English. In this thesis she will not be considered an Indigenous person.

#### Character 3.13: Lolmay García Matzar

He is a Guatemalan Linguist at the OKMA Language Centre. He is a Kakchiquel Maya from the district of Solala and now teaches hieroglyphic workshops in Antigua. He speaks Spanish in het movie, but they put an English voice-over (with Spanish accent) over him when he speaks. In this thesis he will be considered an Indigenous person (www.nightfirefilms.org).

## Character 3.14: Nicholas Hopkins

He is an American anthropologist, who specialises in Mayan linguistics (www.independent.academia.edu). He has worked together with his wife Kathryn Josserand to create several Mayan dictionaries. In the movie he speaks English. In this thesis he will not be considered an Indigenous person.